

that underlies the ability to recognize correct judgment. To lack the former is to be deficient in the latter.

Imperfect Self-Assessments

their course performance (Moreland, Miller, & Laucka, 1981). Unskilled readers are less able to assess their text comprehension than are more skilled readers (Maki, Jonas, & Kallod, 1994). Students doing poorly on tests less accurately predict which ques-

We focus on the metacognitive skills of the incompetent to 1979; Sinkavich 1995) Drivers involved in accidents or flunking

explain, in part, the fact that people seem to be so imperfect in appraising themselves and their abilities.¹ Perhaps the best illustration of this tendency is the "above-average effect," or the tendency of the average person to believe he or she is above average, a result that defies the logic of descriptive statistics (Alicke, 1985; Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Brown & Gallagher, 1992; Cross, 1977; Dunning et al. 1990; Kler, Medding, & Saral, 1996; Weinstein, 1980; Wein-

a driving exam predict their performance on a reaction test less accurately than do more accomplished and experienced drivers (Kunkel, 1971). However, none of these studies has examined whether deficient metacognitive skills underlie these miscalibrations, nor have they tied these miscalibrations to the above-average effect.

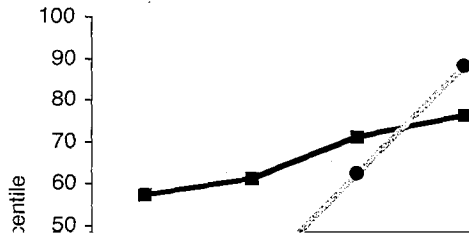
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and test performance. In all studies, we predicted that participants in general would overestimate their ability and performance relative to objective criteria. But more to the point, we predicted that those who proved to be incompetent (i.e., those who scored in the

Method

Participants. Participants were 65 Cornell University undergraduates from a variety of courses in psychology who earned extra credit for their

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focusing on intellectual rather than social abilities. We chose logical reasoning, a skill central to the academic careers of the participants we tested and a skill that is called on frequently. We wondered if those who do poorly relative to their peers on a logical reasoning test would be unaware of their poor performance.

Examining logical reasoning also enabled us to compare perceived and actual ability in a domain less ambiguous than the one we examined in the previous study. It could reasonably be argued

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.0001. Participants also overestimated the number of items they answered correctly, $M = 15.2$ (perceived) versus 13.3 (actual), $t(83) = 6.63, p < .0001$. Although participants' perceptions of their general grammar ability were uncorrelated with their actual

this claim to a test. Several weeks after the first phase of Study 3, we invited the bottom- and top-quartile performers from this study back to the laboratory for a follow-up. There, we gave each group the tests of five of their peers to "grade" and asked them to assess

Table 1
 Self-Ratings (Percentile Scales) of Ability and Performance on Test Before and After Grading Task
 for Bottom- and Top-Quartile Participants (Study 3, Phase 2)

Rating	Participant quartile					
	Bottom			Top		
	Percentile ability	Percentile test score	Raw test score	Percentile ability	Percentile test score	Raw test score
Before	66.8	60.5	12.9	71.6	69.5	16.9
After	63.2	65.4	13.7	77.2	79.7	16.6
Difference	-3.5	4.9	0.8	5.6*	10.2**	-0.3
Actual	10.1	10.1	9.2	88.7	88.7	16.4

* $p \leq .05$. ** $p < .01$.

The best acid test of our proposition, however, is to manipulate competence and see if this improves metacognitive skills and thus the accuracy of self-appraisals (Prediction 4). This would not only enable us to speak directly to causality, but would help rule out the regression effect alternative account discussed earlier. If the incompetent overestimate themselves simply because their test

answered correctly and compared themselves with their peers in terms of their general logical reasoning ability and their test performance.

Results and Discussion

Pretraining self-assessments. Prior to training, participants

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100
90
80

$F(3, 132) = 19.67, p < .0001$, indicating that the impact of training on self-assessment depended on participants' initial test performance. Table 2 displays how training influenced the degree

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phrase, Thomas Gray was right: Ignorance is bliss—at least when it comes to assessments of one's own ability.

Not only do they perform poorly, but they fail to realize it. It thus appears that extremely competent individuals suffer a burden as

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to a lack of metacognitive skills among less skilled participants. Bottom-quartile participants were less successful than were top-quartile participants in the metacognitive tasks of discerning what

their proficiency is not necessarily shared by their peers.

Incompetence and the Failure of Feedback

Limitations of the Present Analysis

We do not mean to imply that people are always unaware of their incompetence. We doubt whether many of our readers would dare take on Michael Jordan in a game of one-on-one, challenge

their ability. Instead, if people show any bias at all, it is to rate themselves as worse than their peers (Kruger, 1999).

Relation to Work on Overconfidence

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