Appendix C

Adjusting for Partially Correct Responses to Open-Ended Items

We calculate two different upper bounds for the knowledge hidden in the partially correct responses to open-ended knowledge items.

Effects on the Effect of Discouraging DKs

The first is part of our estimation of the effect of discouraging DKs. Some of the second-try responses produced by probing are partially correct, and giving them suitable part credit would increase the probing’s estimated effect. But by how much?

Let us make again some extremely generous assumptions. Mondak and Davis estimate the partially correct responses to the ANES-like open-ended knowledge items in their Tallahassee data to be “worth” almost three-quarters (.725) of a correct response. We see many partially correct responses (Rehnquist as merely “a judge,” e.g.) as worth less than that, but for argument’s sake, let’s score all partially correct responses at .725. Let us also assume, since we presently have no way of picking out the partially correct responses, that every response coded as incorrect is partially correct. Finally, let us ignore all the partially correct responses oppositely miscoded as correct (like the “English pres or whatever” or the “Head of England” for Tony Blair).1

Under these assumptions, discouraging DKs increases the percentage answering correctly by 6.1% for Blair, 5.6% for Lott, 7.7% for Rehnquist, and 4.2% for Reno. The average is 5.9%. But these numbers are (very high) ceilings. Many of the responses coded as incorrect are not even partially correct, some of those coded as correct are only partially correct, and it is far from clear that the partially correct answers deserve an average of nearly three-quarters of a point.
Effects on the Overall Percentage Answering Correctly

The second upper bound, cited in our concluding discussion of how much hidden knowledge may remain to be found, refers to the overall percentage answering correctly, once the partially correct responses are taken into account.

One ingredient in this calculation is again the percentage of the “incorrect” responses (as coded by the ANES) that are partially correct. We have a good idea of this percentage for the 2000 ANES’s Rehnquist item, thanks to Gibson and Caldeira’s (2009)’s recoding. On their account, 349 (71.8%) of the “incorrect” responses to the 2000 ANES’s Rehnquist item (22.4% of all the responses) are “nearly correct.” Applying Mondak and Davis’s (2001) part credit of .725 increases the overall percentage responding correctly from 10.5% to 26.8%. While this is a big increase, (1) it still leaves the percentage answering correctly quite low, and (2) there is reason to believe the Rehnquist item to be atypical, eliciting more partially correct answers than most. In Mondak and Davis’s Tallahassee survey, the Rehnquist item elicited more than twice as many partially correct responses as the average of the other three open-ended items (about Gore, Gingrich, and Lott).

We cannot perform quite this same calculation for the 2000 ANES’s other three open-ended knowledge items, because nobody has done what Gibson and Caldeira have done for the Rehnquist item, and so we do not know how many of the responses coded by the ANES as incorrect are partially correct. But let us assume, again generously, that the percentage is just as high for the other three items as for the Rehnquist item (71.8%). Again applying Mondak and Davis’s (2001) part credit of .725 increases the overall percentages responding correctly from 34.5% to 39.3% for Blair, from 8.7% to 23.0% for Lott, and from 55.1% to 64.2% for Reno. These too are big increases (except for Blair) to what are still low percentages (except for Reno).
For all four items, the mean adjustment is 11.1%, the mean adjusted percentage answering correctly 38.3%. Even taking both numbers at face value, the latter remains unimpressive. But again both are too high. The adjustment and thus the adjusted mean are both ceilings. Almost certainly fewer than 71.8% of the “incorrect” responses to the three non-Rehnquist items are partially correct, .725 may on average be too much credit for those that are, and some of the “correct” responses are only partially correct.

The actual increases to be expected may be suggested by Mondak and Davis’s (2001) Tallahassee data, which do distinguish the partially correct responses. The percentage of their DK-discouraged respondents giving partially correct responses to four ANES-type open-ended items was 0.6% for Al Gore, 3.9% for Newt Gingrich, 7.2% for Trent Lott, and 8.8% for William Rehnquist. The mean was 5.1%. Valued at .725, the partially correct responses increase the mean percentage responding correctly by only 3.7%.2
NOTES

The examples are from Krosnick et al. (2008). The first was coded as correct, the second sometimes so.

All calculated from Mondak and Davis’s (2001) Table 2.