# General knowledge norms: Updated and expanded from the Nelson and Narens (1980) norms 

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#### Abstract

The Nelson and Narens (Journal of Verbal Learning and Verbal Behavior 19:338-368, 1980) general knowledge norms have been valuable to researchers in many fields. However, much has changed over the 32 years since the 1980 norms. For example, in 1980, most people knew the answer to the question "What is the name of the Lone Ranger's Indian sidekick?" (answer: Tonto), whereas in 2012, few people know this answer. Thus, we updated the 1980 norms and expanded them by providing new measures. In particular, we report two new metacognitive measures (confidence judgments and peer judgments) and provide a detailed report of commission errors. Each of these measures will be valuable to researchers, and together they are likely to facilitate future research in a number of fields, such as research investigating memory illusions, metamemory processes, and error correction. The presence of substantial generational shifts from 1980 to 2012 necessitates the use of updated norms.


Keywords General knowledge questions • Metacognition • Commission errors

Over three decades ago, Nelson and Narens (1980) published normative information for a set of questions over multiple domains of knowledge. They created 300 questions and assessed several cognitive and metacognitive measures, including the probability of recall and the latency to generate a

[^0]response. Their norms have been used widely in research investigating the processes involved in long-term memory (e.g., Fazio \& Marsh, 2008; Hanley, 2011; Marsh, Meade, \& Roediger, 2003; Murayama \& Kuhbandner, 2011; Woltz, Gardner, \& Gyll, 2000), those involved in metacognition (e.g., Barber, Rajaram, \& Marsh, 2008; Metcalfe \& Finn, 2011; Nelson, Leonesio, Shimamura, Landwehr, \& Narens, 1982; Schwartz, 2001; Singer \& Tiede, 2008; Weinstein \& Roediger, 2010; Winne \& Muis, 2011), and how all of these processes change over the lifespan (e.g., Cosentino, Metcalfe, Butterfield, \& Stern, 2007; Dodson, Bawa, \& Krueger, 2007; MacDonald, Dixon, Cohen, \& Hazlitt, 2004; Mansueti, de Frias, Bub, \& Dixon, 2008; Marsh, Balota, \& Roediger, 2005; Metcalfe \& Finn, 2012). Given the continued reliance on these measures, our primary goals were to (a) update the 1980 norms and assess shifts in knowledge that have occurred over the 32 years since they were collected, and (b) expand the 1980 norms by providing new measures for the questions.

The three-decade gap warrants new data collection in part because knowledge is likely to have shifted in comparison with people's knowledge in 1980. For example, in 1980 most people knew the answer to the question "What is the name of the Lone Ranger's Indian sidekick?" (Tonto; 1980 probability of recall $=.87$ ). Given that the Lone Ranger was most popular in the early to mid-1900s, it is reasonable that people in 2012 would be less likely to know that Tonto was the Lone Ranger's sidekick. Conversely, for other information, generational differences may lead to increased knowledge in 2012 relative to 1980 . For instance, in 1980 very few people knew the answer to the question "Of which country is Baghdad the capital?" (1980 probability of recall = .07). Iraq, which is the correct response, has been in the news a great deal since the 1990 s, most notably in reference to the Iraq war, which began in 2003. Given such generational shifts, researchers should not rely on the 1980 norms.

We also identified several questions from the 1980 norms that were either outdated or incorrect. For instance, consider the question "What is the name of the company that produces Baby Ruth candy bars?" In 1980, the correct response was Curtiss, but now Nestle produces this candy bar. As an example of incorrect information, consider the question "What is the last name of the first American author to win the Nobel Prize for literature?" In the 1980 norms, the correct answer was listed as "Henry," but the correct answer is "Lewis."

In addition to updating the 1980 norms and correcting such errors, we also wished to provide three new measures: confidence judgments, peer judgments, and commission errors. We will discuss each in turn. After answering each question, participants made a confidence judgment about the likelihood ( $0 \%-100 \%$ ) that the response was correct. Confidence judgments provide an index of how certain people are that their knowledge is correct. To foreshadow, in some cases, people's confidence was in line with their knowledge: that is, high confidence for correct responses and low confidence for incorrect responses. However, for other questions, people's confidence was a poor indicator of knowledge. For decades, research has investigated illusions of memory such as confidently held false memories. Such research has commonly investigated false memories that have been created from word lists (e.g., Anastasi, Rhodes, \& Burns, 2000; Gallo, 2010; Roediger \& McDermott, 1995), produced by misinformation (e.g., Frenda, Nichols, \& Loftus, 2011; Loftus \& Hoffman, 1989), or implanted into one's past (e.g., Loftus, 1997). The expanded measures reported here provide researchers with information that will facilitate research on long-term false memories for general knowledge information by identifying questions with low probabilities of recall and high levels of confidence in errors.

We also created a new metacognitive measure, peer judgments, by having people predict how many peers would correctly answer each question. This measure provides normative information about people's sense of how their own knowledge compares with that of others, which will be useful within a number of research areas. For instance, researchers have increasingly focused on metacognitive judgments made for oneself, in comparison with judgments for another person (e.g., Kelley \& Jacoby, 1996; Koriat \& Ackerman, 2010; Nickerson, 1999). Such research has focused on the influence of one's subjective experience on metacognitive processes, and on the relationship between predictions made for oneself as compared with predictions made for someone else. The peer judgments reported here provide an index of the latter relationship. To preview, for some questions the confidence and peer judgments were strongly associated (e.g., Pearson's $r>.80$ ), whereas for other questions the measures were weakly associated (e.g.,

Pearson's $r<.30$ ). Thus, researchers can identify subsets of questions for which confidence and peer judgments are highly correlated, and other subsets for which the two measures are uncorrelated or weakly correlated.

Perhaps most importantly, we have provided a detailed assessment of the kinds of errors that people made when answering each question. In particular, we focused on commission errors by providing the most commonly reported incorrect responses and confidence in these errors. Information about commissions and normative confidence in these errors may support inquiry in numerous areas, such as in research investigating false memories and error correction. Concerning the latter area, researchers are currently investigating how people correct errors (e.g., Butler, Fazio, \& Marsh, 2011; Butterfield \& Metcalfe, 2001). To do so, the researchers use items for which people generate responses that are incorrect but are held in high confidence, as compared with errors that are held in low confidence. The commission errors reported here provide normative values for this kind of information by identifying questions for which commission errors are both frequent and associated with differing levels of confidence.

## Method

Participants, materials, and procedure

Six hundred seventy one students (age: $M=20.1, S E=0.14$, $n=639$ who reported age; 443 females, 207 males, $n=650$ who reported gender) from two large state universities participated in exchange for course credit. The participants were recruited from introductory psychology courses at Kent State University (KSU; $n=636$, who provided 51,245 responses included in the probability of recall), as well as from introduction to psychology and introduction to research methods courses at Colorado State University (CSU; $n=35$, who provided 1,628 responses included in the probability of recall). This sample was selected for comparison purposes with the student sample involved in the original 1980 norms. However, future research may profit by targeting a broader sample of participants (e.g., community samples) to evaluate the degree to which the 2012 norms extend to more diverse samples.

The materials were identical to those used in the Nelson and Narens (1980) norms. These questions tapped general knowledge in several domains, including art, body and health, entertainment, games, geography, history, literature, science and nature, and sports (see Table A1). The procedure was similar to that employed for the 1980 norms, with a few exceptions. The odd-numbered questions from the 1980 norms were assigned to Set A, and the evennumbered questions were assigned to Set B (150 questions
per set). Participants were randomly assigned to Set A or B. A small subset of participants $(n=56)$ completed one set and at least a portion of the second set of questions. For both sets, the entire experiment was computerized, and the questions were randomly ordered anew for each participant. Questions were presented in uppercase letters, one at a time in the center of the screen. Participants were given the following instructions:

This experiment will test your knowledge about general kinds of information. You will be asked a question, and you will type your best guess in the space provided below the question. The answer will always consist of exactly one word and will never be longer than one word. As each question is presented search your memory hard in an attempt to find the answer to the question. When you have determined the answer there is no need to waste extra time before typing in your response. However, if you do not locate the answer immediately, give yourself a chance to find it by searching your memory a bit more. Some questions may take a while before you locate an answer. The questions vary greatly in difficulty such that you will probably be able to answer some easily, while others will be harder, and still others you may not know at all. If, after searching your memory, you are sure you don't know the answer, then type the word "NEXT" and proceed to the next question. Please never leave an answer space blank; for every answer space, either fill in "NEXT" or fill in your best guess. However, there is no penalty for guessing, and incorrect answers will not affect your score, so be sure to take a guess, if you can, whenever you are unsure. We are only concerned that you get as many questions correct as you possibly can.

For each response, the total amount of time to read the question, search memory, and type a response was measured as an index of response latency. Following each question, participants made a confidence judgment on a scale from 0 to 100 , indicating their level of confidence that their answer was correct, such that $0 \%$ indicated not confident and $100 \%$ indicated absolutely confident. After the confidence judgment the participants made a peer judgment, given the following instructions:

Make a judgment about how well you think other people would do with that question. Specifically, if we gave the question to 100 students who were about your age, how many of them do you think would be able to answer the question correctly?

Participants based their judgments on a scale from 0 to 100 people, where 0 indicated that no other students would get the question correct, and 100 indicated that all 100 students would get the question correct.

The questions in most cases were administered after participants had finished an unrelated experimental protocol. Given that participants took different amounts of time to finish the initial protocol, they had different amounts of time remaining (given that they participated for a fixed amount of time overall) to answer questions and make their judgments. Also, with the time remaining, a participant might not have completed all of the questions in his or her assigned set. Thus, the number of observations varied per question. However, participants completed all responses (i.e., recall attempt, confidence judgment, and peer judgment) for each question that they attempted, which prevented reporting partial information per question. Confidence judgments were not measured for omission errors (i.e., typing NEXT), because confidence judgments for omissions should be 0 , and hence are uninteresting. However, for omission errors participants did provide a peer judgment, so more observations would typically be available for peer than for confidence judgments. Thus, given that the numbers of observations per question and per measure could vary for principled reasons, Table A1 includes the number of responses that contributed to each measure.

## Data scoring

As for the 1980 norms, the data were scored so that answers were considered correct if the first four letters of the response matched the correct answer. Due to our interest in commission errors, the data were then also hand scored by the first author, to adjust for spelling. The vast majority of the hand scoring was objective (e.g., WHODINI for HOUDINI, TERANCHALA for TARANTULA, and OSTERAGE for OSTRICH were all considered correct), but in the rare cases in which scoring was uncertain, the responses were discussed and resolved by the first three authors. Hand scoring also allowed us to adjust for cases in which the first four letters could indicate a correct or incorrect response (e.g., for Question 83, the correct response was METEORS, not METEORITES).

## Results and discussion

The results were collapsed across testing locations (i.e., KSU and CSU) because the Spearman correlation ( $\rho$ ) between the rank-ordered probabilities of correct recall across questions was high (.94, $p<.001$ ), indicating that the question orders were largely consistent across the two locations. On average, participants answered $79.0(S E=2.3)$ questions (range from 1 to 300), provided confidence judgments for $34.5(S E=1.1)$ questions (range from 1 to 214), and provided peer judgments for 80.6 $(S E=2.3)$ questions (range from 1 to 300 ). The total number of responses per question ranged from 126 to 232. Although this is somewhat lower than the total number of responses per item reported in the original norms $(N=270)$, the number of
responses per item in the present norms is nonetheless sufficient for establishing normative patterns of performance.

The results for each question are presented in Table A1. This table contains normative data for 299 of the original 300 questions (one question - "What is the capital of Czechoslovakia?"was dropped because it was outdated and had no correct answer). Questions are reported in rank order from the highest to the lowest probability of correct recall. For purposes of comparison, the 1980 rank order is provided as well. Most importantly, for each question Table A1 provides (a) the probability of recall, (b) the mean response latencies (in seconds) for correct and incorrect responses, (c) the proportions of commission and omission errors, (d) the mean confidence judgment across all nonomission responses, as well as the mean confidence judgment computed separately for correct responses and commission errors, (e) the mean peer judgment, and (f) the correlation between the confidence and peer judgments. With reference to point (b), response latencies for incorrect responses are provided only for commission errors, and not for omission errors.

As is detailed in the Method section, the number of responses varied for each measure. For example, when participants omitted an answer, they did not make a confidence judgment, but they did make a peer judgment. The number of responses also varied slightly due to the participants' typing errors. For example, given that participants were instructed (and reminded) that answers were one-word responses, if participants typed a number (e.g., " $5, "$ " 7 ," or " 12 "), this response was considered a typing error (as if the participant had accidentally proceeded from a question without getting a chance to respond) and did not contribute to the probability of recall. Accordingly, in Table A1, we report the number of responses that contributed to each measure.

To assess generational stability, a coarse-grained measure was the rank-order correlation between the new norms and the original ones. The Spearman correlation ( $\rho$ ) was $.83(p<.001)$, which suggests stability from 1980 to 2012. Even so, this value may overestimate stability, and it does not indicate that the new norms simply duplicated the original ones. For instance, consider that in 1980 the most challenging quartile of questions (the items ranked 225-300) contained only four questions that were impossible for participants to answer (i.e., the probability of correct recall was zero). By contrast, in 2012, the majority of the items ( $68 \%$, or 51 questions) in this last quartile were impossible. Thus, if researchers today wanted to select relatively difficult questions and used the original norms, they might instead be selecting questions with which many-if not all-of their college participants had no experience.

For a fine-grained measure of generational stability, we conducted an independent-samples $t$ test for each question to compare the current recall against the normative values from the 1980 norms. The $p$ value was set at .0002 to adjust for the 299 tests. The results revealed nonsignificant differences indicating generational stability for 157 questions, and significant
differences indicating generational instability for 142 questions. For the latter set, participants in 2012 had a higher probability of recall for only three questions, and a lower probability of recall for 139 questions (see Table A1). The shifts in knowledge for some questions were likely due to the content being dated, and people in 2012 having had less exposure to the information. This shift is most likely the case for many of the game questions-for example, "Which game uses a doubling cube?" (backgammon). In 2012, backgammon is apparently not a popular game among college-aged students.

Table A2 provides details about commission errors, including (a) the most common commission errors, (b) how often each commission error occurred out of all of the commission responses for that question, (c) how often the commission error occurred out of all responses for that question, and (d) the mean confidence in the commission error. Some commission errors were made with high confidence. For example, participants were highly confident ( $M=$ $86.5 \%$ ) that the correct answer to "What is the name of a dried grape?" is "prune." For other commission errors, participants were not confident. For example, they were not confident ( $M=3.1 \%$ ) that "Radium" is the correct answer to "What is the last name of the scientist who discovered radium?" In this particular case, participants may have been guessing.

As noted previously, we identified questions that were either outdated or incorrect from the 1980 norms. Table A3 provides details about these questions, including (a) the 1980 correct answer and (b) the 2012 correct answer. For a final subset of questions, the answer from the 1980 norms was correct, but participants provided alternative responses that were correct as well. For example, the 1980 correct answer to the question "What is the name of an airplane without an engine?" was "glider." This answer is still correct, of course, but participants provided two alternative responses that were also correct ("paper" and "model").

To conclude, the update to this set of norms is essential, because much has changed since the original norms were collected. As a final example, in 1980 the question "What was the last name of the man who was the voice of Mr. Magoo?" (answer: "Backus") was considered moderately difficult ( 1980 probability of recall $=.341$ ), but in 2012 this question was impossible, because none of our participants answered it correctly. Even so, the updated norms maintained variability in the question difficulty (range: .933-.000), and hence will remain a valuable research tool.

[^1]| 2012 Rank <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ | $r$ |
| 1 | 2 | WHAT IS THE NAME OF THE HORSE-LIKE ANIMAL WITH BLACK AND WHITE STRIPES? (ZEBRA) | . 933 | 196 | 14 | 6.3 | 14.7 | . 03 | . 04 | 95.0 | 96.2 | 58.2 | 6 | 89.4 | 213 | . $66^{*}$ |
| 2 | 3 | WHAT IS THE NAME OF THE LONG SLEEP SOME ANIMALS GO THROUGH DURING THE ENTIRE WINTER? (HIBERNATION) | . 890 | 137 | 17 | 9.6 | 11.8 | . 06 | . 05 | 92.5 | 95.6 | 49.5 | 10 | 83.8 | 154 | . $61{ }^{*}$ |
| 3 | 16 | WHAT IS THE NAME OF THE RUBBER OBJECT THAT IS HIT BACK AND FORTH BY HOCKEY PLAYERS? (PUCK) | . 888 | 198 | 25 | 6.7 | 10.3 | . 04 | . 08 | 93.8 | 96.3 | 29.9 | 8 | 83.1 | 226 | . 53 * |
| 4 | 15 | WHAT IS THE NAME OF THE REMAINS OF PLANTS AND ANIMALS THAT ARE FOUND IN STONE? (FOSSILS) | . 873 | 137 | 20 | 9.1 | 23.5 | . 06 | . 07 | 89.0 | 93.3 | 24.3 | 9 | 79.0 | 159 | . $65^{*}$ |
| 5 | 13 | WHICH PRECIOUS GEM IS RED? (RUBY) | . 849 | 141 | 25 | 4.6 | 11.2 | . 08 | . 07 | 8.6 | 90.8 | 33.4 | 14 | 77.6 | 166 | . $64{ }^{*}$ |
| 6 | 25 | WHAT IS THE NAME OF THE SEVERE HEADACHE THAT RETURNS PERIODICALLY AND OFTEN IS ACCOMPANIED BY NAUSEA? (MIGRAINE) | . 847 | 133 | 24 | 10.2 | 15.2 | . 07 | . 08 | 80.5 | 84.0 | 38.7 | 11 | 69.8 | 159 | . $64 *$ |
| 7 | 30 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "ROMEO AND JULIET"? (SHAKESPEARE) | . 843 | 172 | 32 | 10.8 | 14.5 | . 03 | . 13 | 89.3 | 90.8 | 45.0 | 6 | 79.9 | 210 | . $61{ }^{*}$ |
| 8 | 9 | WHAT IS THE NAME OF A DRIED GRAPE? (RAISIN) | . 835 | 116 | 23 | 6.8 | 6.5 | . 12 | . 05 | 87.7 | 91.0 | 64.1 | 16 | 83.9 | 140 | . $52^{*}$ |
| 9 | 1 | WHAT IS THE NAME OF THE COMIC STRIP CHARACTER WHO EATS SPINACH TO INCREASE HIS STRENGTH? (POPEYE) ${ }^{\text {b }}$ | . 824 | 112 | 24 | 8.5 | 12.7 | . 06 | . 12 | 91.5 | 94.1 | 56.3 | 8 | 73.4 | 141 | . 66 * |
| 10 | 93 | WHAT ANIMAL RUNS THE FASTEST? (CHEETAH) ${ }^{\text {a }}$ | . 816 | 115 | 26 | 5.6 | 12.8 | . 13 | . 05 | 76.2 | 83.5 | 32.1 | 19 | 71.1 | 141 | . 72 * |
| 11 | 33 | WHAT IS THE NAME OF THE PROCESS BY WHICH PLANTS MAKE THEIR FOOD? (PHOTOSYNTHESIS) | . 800 | 104 | 26 | 11.8 | 15.0 | . 04 | . 16 | 84.3 | 87.4 | 19.0 | 5 | 70.2 | 134 | . 40 * |
| 12 | 19 | WHAT IS THE NAME OF DOROTHY'S DOG IN "THE WIZARD OF OZ"? (TOTO) | . 799 | 123 | 31 | 6.7 | 16.9 | . 08 | . 12 | 89.6 | 97.0 | 13.9 | 12 | 80.7 | 154 | . $69{ }^{*}$ |
| 13 | 7 | WHAT IS THE NAME OF THE MOLTEN ROCK THAT RUNS DOWN THE SIDE OF A VOLCANO DURING AN ERUPTION? (LAVA) | . 793 | 119 | 31 | 8.6 | 11.7 | . 10 | . 11 | 87.2 | 90.7 | 59.7 | 15 | 77.1 | 150 | . $54 *$ |
| 14 | 37 | WHAT WAS THE NAME OF THE SUPPOSEDLY UNSINKABLE SHIP THAT SUNK ON ITS MAIDEN VOYAGE IN 1912? (TITANIC) | . 789 | 112 | 30 | 9.3 | 12.9 | . 05 | . 16 | 83.8 | 87.5 | 24.3 | 7 | 72.5 | 144 | . $81{ }^{*}$ |
| 15 | 8 | WHICH SPORT USES THE TERMS "GUTTER" AND "ALLEY"? (BOWLING) | . 788 | 164 | 44 | 6.6 | 11.5 | . 09 | . 12 | 86.1 | 93.5 | 22.1 | 19 | 75.0 | 210 | . 80 * |
| 16 | 57 | WHAT IS THE NAME OF A GIANT OCEAN WAVE CAUSED BY AN EARTHQUAKE? (TSUNAMI) | . 784 | 120 | 33 | 10.5 | 14.3 | . 09 | . 12 | 84.4 | 89.2 | 45.7 | 15 | 72.7 | 153 | . 63 * |
| 17 | 24 | WHAT IS THE TERM FOR HITTING A VOLLEYBALL DOWN HARD INTO THE OPPONENT'S COURT? (SPIKE) | . 784 | 163 | 45 | 7.2 | 11.3 | . 12 | . 10 | 86.9 | 91.1 | 59.4 | 25 | 74.9 | 214 | . $49^{*}$ |

Table A1 (continued)

| $\begin{aligned} & 2012 \text { Rank } \\ & \text { Order } \end{aligned}$ | 1980 Rank Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge <br> Corrs <br> $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\text {c }}$ | $\mathrm{RL}_{\mathrm{i}}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{0}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 18 | 73 | WHAT IS THE LAST NAME OF THE VILLAINOUS CAPTAIN IN THE STORY "PETER PAN"? (HOOK) ${ }^{\text {a }}$ | . 781 | 114 | 32 | 8.5 | 16.1 | . 03 | . 18 | 89.9 | 92.6 | 28.0 | 5 | 77.6 | 146 | . $61{ }^{*}$ |
| 19 | 5 | WHAT WAS THE NAME OF TARZAN'S GIRLFRIEND? (JANE) | . 781 | 121 | 34 | 4.3 | 18.7 | . 12 | . 10 | 85.9 | 96.5 | 14.8 | 18 | 74.0 | 156 | . $71{ }^{*}$ |
| 20 | 4 | WHAT IS THE LAST NAME OF THE BROTHERS WHO FLEW THE FIRST AIRPLANE AT KITTY HAWK? (WRIGHT) ${ }^{\text {b }}$ | . 751 | 151 | 50 | 8.6 | 11.5 | . 05 | . 19 | 81.1 | 83.5 | 48.2 | 11 | 65.4 | 204 | . 72 * |
| 21 | 17 | WHAT IS THE NAME FOR A MEDICAL DOCTOR WHO SPECIALIZES IN CUTTING THE BODY? (SURGEON) | . 748 | 101 | 34 | 11.5 | 8.7 | . 04 | . 21 | 70.7 | 74.0 | 15.0 | 6 | 59.0 | 139 | . 80 * |
| 22 | 53 | WHAT IS THE LAST NAME OF THE FIRST PERSON TO SET FOOT ON THE MOON? (ARMSTRONG) | . 741 | 100 | 35 | 11.0 | 16.2 | . 12 | . 14 | 74.6 | 77.6 | 55.8 | 16 | 72.0 | 135 | . $77^{*}$ |
| 23 | 6 | WHAT IS THE CAPITAL OF FRANCE? (PARIS) ${ }^{\text {b }}$ | . 730 | 157 | 58 | 5.8 | 9.3 | . 11 | . 16 | 68.0 | 71.9 | 42.6 | 24 | 68.0 | 219 | . $78 *$ |
| 24 | 11 | WHAT IS THE NAME OF THE CRIME IN WHICH A BUILDING OR PROPERTY IS PURPOSELY SET ON FIRE? (ARSON) ${ }^{b}$ | . 722 | 109 | 42 | 8.6 | 18.0 | . 14 | . 14 | 79.1 | 88.3 | 31.9 | 21 | 68.7 | 153 | . $72{ }^{*}$ |
| 25 | 79 | WHAT IS THE NAME OF THE SHORT PLEATED SKIRT WORN BY MEN IN SCOTLAND? (KILT) | . 717 | 99 | 39 | 6.7 | 13.9 | . 08 | . 20 | 87.9 | 95.9 | 15.4 | 11 | 70.1 | 138 | . $75 *$ |
| 26 | 18 | WHAT IS THE NAME OF AN INABILITY TO SLEEP? (INSOMNIA) | . 714 | 150 | 60 | 7.6 | 19.0 | . 18 | . 11 | 81.0 | 89.4 | 47.3 | 37 | 68.5 | 214 | . $65 *$ |
| 27 | 26 | WHAT IS THE NAME FOR A MEDICAL DOCTOR WHO SPECIALIZES IN DISEASES OF THE SKIN? (DERMATOLOGIST) | . 692 | 146 | 65 | 12.3 | 13.7 | . 09 | . 22 | 80.7 | 86.7 | 34.5 | 19 | 60.9 | 217 | . $66{ }^{*}$ |
| 28 | 43 | WHAT IS THE NAME OF THE LARGEST OCEAN ON EARTH? (PACIFIC) | . 685 | 98 | 45 | 8.1 | 13.4 | . 28 | . 03 | 65.4 | 72.2 | 48.9 | 40 | 70.3 | 144 | . $71{ }^{*}$ |
| 29 | 22 | WHAT IS THE NAME OF THE SHIP THAT CARRIED THE PILGRIMS TO AMERICA IN 1620 ? (MAYFLOWER) ${ }^{\text {b }}$ | . 663 | 130 | 66 | 8.5 | 17.6 | . 16 | . 18 | 77.7 | 86.6 | 40.3 | 31 | 66.5 | 202 | . $80{ }^{*}$ |
| 30 | 41 | WHAT IS THE NAME FOR A CYCLONE THAT OCCURS OVER LAND? (TORNADO) | . 641 | 82 | 46 | 8.0 | 10.8 | . 18 | . 18 | 79.3 | 86.9 | 52.3 | 23 | 68.4 | 128 | . $82{ }^{*}$ |
| 31 | 10 | WHICH SPORT IS ASSOCIATED WITH WIMBLEDON? (TENNIS) ${ }^{\text {b }}$ | . 619 | 135 | 83 | 5.4 | 10.4 | . 14 | . 24 | 80.2 | 91.5 | 29.0 | 30 | 58.7 | 224 | . $71{ }^{*}$ |
| 32 | 34 | WHAT IS THE NAME OF THE BIRD THAT CANNOT FLY AND IS THE LARGEST BIRD ON EARTH? (OSTRICH) ${ }^{\text {b }}$ | . 603 | 132 | 87 | 11.7 | 14.4 | . 29 | . 11 | 69.2 | 79.1 | 48.5 | 63 | 62.8 | 221 | . $68{ }^{*}$ |
| 33 | 63 | WHAT IS THE NAME OF THE ISLAND-CITY BELIEVED SINCE ANTIQUITY TO HAVE SUNK INTO THE OCEAN? (ATLANTIS) | . 593 | 86 | 59 | 11.7 | 16.4 | . 06 | . 34 | 78.5 | 85.1 | 15.4 | 9 | 57.6 | 147 | . $85{ }^{*}$ |
| 34 | 88 | WHAT IS THE NAME OF THE LIZARD THAT CHANGES ITS COLOR TO MATCH THE SURROUNDINGS? (CHAMELEON) | . 589 | 126 | 88 | 11.3 | 13.2 | . 34 | . 07 | 70.4 | 85.1 | 45.0 | 73 | 68.4 | 218 | . $69{ }^{*}$ |
| 35 | 35 | WHAT IS THE NAME OF THE THICK LAYER OF FAT ON A WHALE? (BLUBBER) ${ }^{\text {b }}$ | . 572 | 79 | 59 | 6.2 | 9.0 | . 17 | . 26 | 73.4 | 85.5 | 32.0 | 23 | 56.0 | 139 | . $87{ }^{*}$ |
| 36 | 49 | WHAT IS THE LAST NAME OF THE BASEBALL PLAYER WHO HAD THE MOST HOME RUNS IN A SINGLE SEASON PRIOR TO 1961 ? (RUTH) ${ }^{\text {b }}$ | . 568 | 84 | 64 | 12.3 | 16.8 | . 10 | . 33 | 48.6 | 49.6 | 43.1 | 15 | 46.8 | 151 | . $44^{*}$ |
| 37 | 59 | WHAT IS THE NAME OF A YOUNG SHEEP? (LAMB) | . 561 | 83 | 65 | 7.8 | 11.8 | . 22 | . 22 | 71.6 | 87.2 | 32.5 | 33 | 65.6 | 149 | . $74{ }^{*}$ |

Table A1 (continued)

| $2012 \text { Rank }$ <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | $\begin{aligned} & \begin{array}{l} \text { Judge } \\ \text { Corrs } \end{array} \\ & \hline r \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\mathrm{o}}$ | M | CJ ${ }_{\text {c }}$ | C $\mathrm{J}_{\mathrm{i}}$ | $N_{\text {ci }}$ | $M$ | $N_{\text {pj }}$ |  |
| 38 | 65 | WHAT IS THE LARGEST PLANET IN THE SOLAR SYSTEM? (JUPITER) | . 559 | 80 | 63 | 8.1 | 10.9 | . 38 | . 06 | 68.4 | 81.0 | 50.0 | 55 | 69.3 | 144 | . $75^{*}$ |
| 39 | 52 | WHAT IS THE NAME OF THE NAVIGATION INSTRUMENT USED AT SEA TO PLOT POSITION RELATIVE TO THE MAGNETIC NORTH POLE? (COMPASS) | . 526 | 103 | 93 | 11.7 | 15.9 | . 14 | . 34 | 61.2 | 68.2 | 34.4 | 27 | 47.5 | 204 | . $84 *$ |
| 40 | 75 | WHAT IS THE TERM IN GOLF REFERRING TO A SCORE OF ONE UNDER PAR ON A PARTICULAR HOLE? (BIRDIE) | . 523 | 81 | 74 | 12.2 | 17.6 | . 16 | . 32 | 60.2 | 66.9 | 38.7 | 25 | 49.9 | 158 | . $54 *$ |
| 41 | 77 | WHICH GAME USES A RUBBER BALL AND LITTLE METAL PIECES? (JACKS) | . 521 | 75 | 69 | 9.8 | 22.4 | . 15 | . 33 | 69.2 | 84.0 | 16.4 | 21 | 52.7 | 145 | . 70 * |
| 42 | 47 | WHAT IS THE NAME OF A DRIED PLUM? (PRUNE) ${ }^{\text {b }}$ | . 517 | 76 | 71 | 7.7 | 10.7 | . 27 | . 21 | 65.2 | 79.3 | 38.3 | 40 | 58.5 | 147 | . $61{ }^{*}$ |
| 43 | 40 | IN WHICH SPORT DOES A RIDER ON HORSEBACK HIT A BALL WITH HIS MALLET? (POLO) ${ }^{\text {b }}$ | . 510 | 106 | 102 | 9.8 | 17.4 | . 20 | . 29 | 69.5 | 85.7 | 28.7 | 42 | 55.7 | 212 | . $71{ }^{*}$ |
| 44 | 78 | WHAT IS THE NAME OF THE LEGENDARY ONE-EYED GIANT IN GREEK MYTHOLOGY? (CYCLOPS) | . 507 | 107 | 104 | 9.1 | 13.1 | . 11 | . 38 | 74.6 | 85.0 | 26.0 | 23 | 53.9 | 215 | . $71{ }^{*}$ |
| 45 | 36 | IN WHAT PARK IS "OLD FAITHFUL" LOCATED? <br> (YELLOWSTONE) ${ }^{\text {b }}$ | . 491 | 105 | 109 | 9.7 | 13.5 | . 17 | . 34 | 62.0 | 76.8 | 20.0 | 37 | 48.0 | 220 | . $75^{*}$ |
| 46 | 51 | WHAT IS THE NAME OF THE POKER HAND IN WHICH ALL OF THE CARDS ARE OF THE SAME SUIT? (FLUSH) ${ }^{\text {b }}$ | . 486 | 68 | 72 | 14.6 | 16.1 | . 25 | . 26 | 54.6 | 64.8 | 34.8 | 35 | 53.9 | 141 | . $39^{*}$ |
| 47 | 90 | IN WHICH SPORT IS THE STANLEY CUP AWARDED? <br> (HOCKEY) | . 481 | 103 | 111 | 5.8 | 9.2 | . 42 | . 10 | 69.7 | 87.7 | 49.0 | 89 | 63.8 | 216 | . $72 *$ |
| 48 | 89 | WHAT IS THE NAME OF THE CHAPEL WHOSE CEILING WAS PAINTED BY MICHELANGELO? (SISTINE) | . 475 | 67 | 74 | 12.7 | 17.7 | . 16 | . 37 | 73.2 | 83.6 | 41.5 | 22 | 53.4 | 142 | . $67 *$ |
| 49 | 241 | OF WHICH COUNTRY IS BAGHDAD THE CAPITAL? (IRAQ) ${ }^{\text {a }}$ | . 468 | 59 | 67 | 9.8 | 12.6 | . 40 | . 13 | 60.3 | 68.5 | 51.9 | 50 | 63.3 | 128 | . $58{ }^{*}$ |
| 50 | 76 | WHAT IS THE NAME OF THE LIQUID PORTION OF WHOLE BLOOD? (PLASMA) | . 468 | 94 | 107 | 10.3 | 12.7 | . 17 | . 36 | 47.4 | 53.9 | 29.2 | 34 | 38.0 | 206 | . 56 * |
| 51 | 55 | WHAT IS THE NAME OF THE CITY IN ITALY THAT IS KNOWN FOR ITS CANALS? (VENICE) ${ }^{\text {b }}$ | . 459 | 67 | 79 | 9.3 | 10.5 | . 26 | . 28 | 65.4 | 82.0 | 36.1 | 38 | 54.3 | 148 | . $72 *$ |
| 52 | 21 | WHAT IS THE NAME OF THE SPEAR LIKE OBJECT THAT IS THROWN DURING A TRACK MEET? (JAVELIN) ${ }^{\text {b }}$ | . 452 | 71 | 86 | 10.5 | 19.4 | . 29 | . 25 | 68.0 | 85.6 | 40.8 | 46 | 59.0 | 158 | . $39^{*}$ |
| 53 | 23 | WHAT IS THE LAST NAME OF THE MAN WHO RODE HORSEBACK IN 1775 TO WARN THAT THE BRITISH WERE COMING? (REVERE) ${ }^{\text {b }}$ | . 443 | 66 | 83 | 13.3 | 14.8 | . 12 | . 44 | 72.1 | 85.2 | 24.1 | 18 | 55.1 | 150 | . $67 *$ |
| 54 | 32 | WHO WAS THE EGYPTIAN QUEEN WHO JOINED FORCES WITH MARK ANTONY OF ROME? (CLEOPATRA) ${ }^{\text {b }}$ | . 443 | 93 | 117 | 11.0 | 19.4 | . 13 | . 43 | 57.3 | 70.4 | 12.3 | 27 | 39.1 | 215 | . 73 * |
| 55 | 67 | WHAT IS THE LAST NAME OF THE MAN WHO ASSASSINATED ABRAHAM LINCOLN? (BOOTH) ${ }^{\text {b }}$ | . 438 | 63 | 81 | 10.5 | 15.8 | . 20 | . 36 | 68.8 | 90.0 | 23.5 | 29 | 58.9 | 144 | . $65^{*}$ |
| 56 | 20 | WHAT IS THE LAST NAME OF THE MAN WHO SHOWED THAT LIGHTNING IS ELECTRIC? (FRANKLIN) ${ }^{\text {b }}$ | . 437 | 93 | 120 | 11.6 | 11.5 | . 34 | . 22 | 64.7 | 75.5 | 51.0 | 73 | 57.9 | 217 | . $67 *$ |
| 57 | 28 | WHAT IS THE LAST NAME OF THE FAMOUS MAGICIAN AND ESCAPE ARTIST WHO DIED OF APPENDICITIS? (HOUDINI) ${ }^{\text {b }}$ | . 436 | 95 | 123 | 12.8 | 16.9 | . 06 | . 50 | 52.5 | 58.7 | 10.7 | 14 | 37.3 | 225 | . 73 * |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | $\begin{aligned} & \begin{array}{l} \text { Judge } \\ \text { Corrs } \end{array} \\ & \hline r \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 58 | 83 | WHAT IS THE NAME OF DEER MEAT? (VENISON) ${ }^{\text {b }}$ | . 432 | 64 | 84 | 10.4 | 11.5 | . 30 | . 27 | 65.8 | 88.6 | 32.5 | 44 | 54.0 | 149 | . $59{ }^{*}$ |
| 59 | 45 | WHAT IS THE NAME OF THE LARGE HAIRY SPIDER THAT LIVES NEAR BANANAS? (TARANTULA) ${ }^{\text {b }}$ | . 429 | 63 | 84 | 13.8 | 15.9 | . 14 | . 43 | 42.8 | 48.8 | 24.7 | 21 | 36.5 | 149 | . 62 * |
| 60 | 82 | WHAT IS THE NAME OF THE OCEAN THAT IS LOCATED BETWEEN AFRICA AND AUSTRALIA? (INDIAN) ${ }^{\text {b }}$ | . 427 | 90 | 121 | 12.9 | 15.8 | . 47 | . 10 | 52.0 | 67.4 | 38.1 | 99 | 57.6 | 216 | . $62{ }^{*}$ |
| 61 | 27 | WHAT IS THE LAST NAME OF THE SINGER WHO RECORDED "HEARTBREAK HOTEL" AND "ALL SHOOK UP"? (PRESLEY) ${ }^{\text {b }}$ | . 424 | 61 | 83 | 11.5 | 12.4 | . 21 | . 37 | 72.5 | 80.9 | 55.3 | 30 | 52.5 | 146 | . $77 *$ |
| 62 | 81 | WHAT IS THE NAME OF THE CRIME IN WHICH A PERSON PURPOSELY BETRAYS HIS COUNTRY? (TREASON) ${ }^{\text {b }}$ | . 418 | 61 | 85 | 12.0 | 21.6 | . 20 | . 38 | 63.9 | 83.5 | 22.7 | 29 | 56.3 | 148 | . $62{ }^{*}$ |
| 63 | 109 | WHAT IS THE NAME OF THE FIRST ARTIFICIAL SATELLITE PUT IN ORBIT BY RUSSIA IN 1957? (SPUTNIK) | . 417 | 58 | 81 | 9.9 | 19.8 | . 08 | . 50 | 68.3 | 79.2 | 11.1 | 11 | 46.0 | 140 | . $62{ }^{*}$ |
| 64 | 127 | WHAT BRAND OF CIGARETTE WAS FIRST TO HAVE THE FLIP-TOP BOX? (MARLBORO) | . 399 | 55 | 83 | 10.8 | 10.0 | . 32 | . 28 | 27.8 | 26.7 | 29.3 | 44 | 31.8 | 140 | . 32 * |
| 65 | 29 | WHAT KIND OF METAL IS ASSOCIATED WITH A 50TH WEDDING ANNIVERSARY? (GOLD) ${ }^{\text {b }}$ | . 396 | 57 | 87 | 8.5 | 11.4 | . 38 | . 23 | 48.0 | 62.2 | 33.0 | 54 | 45.7 | 144 | . 73 * |
| 66 | 39 | WHICH TYPE OF SNAKE DO ASIAN SNAKE-CHARMERS USE? (COBRA) ${ }^{\text {b }}$ | . 391 | 54 | 84 | 9.7 | 10.3 | . 28 | . 33 | 60.0 | 74.8 | 39.5 | 39 | 40.9 | 140 | . $61{ }^{*}$ |
| 67 | 42 | WHAT IS THE ONLY LIQUID METAL AT ROOM TEMPERATURE? (MERCURY) ${ }^{\text {b }}$ | . 388 | 83 | 131 | 9.5 | 20.2 | . 21 | . 41 | 49.6 | 66.6 | 17.6 | 44 | 40.9 | 220 | . $65^{*}$ |
| 68 | 56 | WHAT IS THE NAME OF THE DESERT PEOPLE WHO WANDER INSTEAD OF LIVING IN ONE PLACE? (NOMADS) ${ }^{\text {b }}$ | . 352 | 74 | 136 | 12.1 | 21.7 | . 29 | . 36 | 47.4 | 69.1 | 20.7 | 60 | 36.1 | 216 | . $72 *$ |
| 69 | 121 | WHAT IS THE CAPITAL OF NEW YORK? (ALBANY) | . 331 | 49 | 99 | 12.8 | 16.6 | . 51 | . 16 | 68.2 | 89.0 | 54.6 | 75 | 66.1 | 153 | . $54{ }^{*}$ |
| 70 | 101 | WHAT IS THE NAME OF THE ORGAN THAT PRODUCES INSULIN? (PANCREAS) ${ }^{\text {b }}$ | . 327 | 49 | 101 | 13.8 | 21.1 | . 46 | . 21 | 54.1 | 78.1 | 37.0 | 69 | 49.5 | 151 | . 63 * |
| 71 | 140 | WHAT IS THE NAME OF THE COLLAR BONE? <br> (CLAVICLE) | . 324 | 70 | 146 | 8.6 | 13.7 | . 22 | . 46 | 57.4 | 78.6 | 25.7 | 47 | 39.6 | 222 | . 56 * |
| 72 | 104 | WHAT IS THE NAME OF THE EXTINCT REPTILES KNOWN AS "TERRIBLE LIZARDS"? (DINOSAURS) ${ }^{\text {b }}$ | . 315 | 63 | 137 | 11.2 | 15.1 | . 18 | . 51 | 32.5 | 42.8 | 14.0 | 35 | 28.7 | 207 | . $76 *$ |
| 73 | 54 | WHAT IS THE CAPITAL OF RUSSIA? (MOSCOW) ${ }^{\text {b }}$ | . 309 | 64 | 143 | 7.6 | 14.3 | . 09 | . 60 | 66.7 | 79.7 | 20.4 | 18 | 41.7 | 210 | . $77^{*}$ |
| 74 | 62 | WHICH BREED OF CAT HAS BLUE EYES? (SIAMESE) ${ }^{\text {b }}$ | . 308 | 66 | 148 | 9.4 | 8.2 | . 24 | . 45 | 48.5 | 59.1 | 34.8 | 51 | 33.3 | 217 | . $68{ }^{*}$ |
| 75 | 102 | WHAT IS THE LAST NAME OF THE SECOND U.S. PRESIDENT? (ADAMS) ${ }^{\text {b }}$ | . 303 | 63 | 145 | 10.0 | 12.7 | . 41 | . 29 | 46.5 | 61.0 | 35.8 | 85 | 54.6 | 215 | . 43 * |
| 76 | 152 | WHAT IS THE NAME OF THE CONSTELLATION THAT LOOKS LIKE A FLYING HORSE? (PEGASUS) | . 300 | 64 | 149 | 9.6 | 12.5 | . 22 | . 48 | 47.0 | 64.6 | 22.7 | 46 | 33.7 | 216 | . $71{ }^{*}$ |
| 77 | 106 | WHAT IS THE NAME OF THE KIND OF CAT THAT SPOKE TO ALICE IN THE STORY "ALICE'S ADVENTURES IN WONDERLAND"? (CHESHIRE) ${ }^{\text {b }}$ | . 300 | 63 | 147 | 10.4 | 16.8 | . 30 | . 40 | 51.3 | 84.9 | 18.3 | 64 | 47.3 | 213 | . $71{ }^{*}$ |

Table A1 (continued)

| $2012 \text { Rank }$ <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge <br> Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $M$ | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $\mathrm{RL}_{\mathrm{i}}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | $M$ | $N_{\text {pj }}$ | $r$ |
| 78 | 64 | WHAT IS THE LAST NAME OF THE MAN WHO PROPOSED THE THEORY OF RELATIVITY? (EINSTEIN) ${ }^{\text {b }}$ | . 297 | 68 | 161 | 9.9 | 11.8 | . 21 | . 49 | 53.8 | 65.3 | 37.2 | 47 | 43.3 | 232 | . $81{ }^{*}$ |
| 79 | 58 | WHAT WAS THE LAST NAME OF THE WOMAN WHO SUPPOSEDLY DESIGNED AND SEWED THE FIRST AMERICAN FLAG? (ROSS) ${ }^{\text {b }}$ | . 286 | 62 | 155 | 8.0 | 14.0 | . 24 | . 48 | 60.9 | 87.6 | 28.5 | 51 | 43.0 | 225 | . $68{ }^{*}$ |
| 80 | 124 | WHAT IS THE LAST NAME OF THE FIRST SIGNER OF THE "DECLARATION OF INDEPENDENCE"? (HANCOCK) | . 285 | 65 | 163 | 11.7 | 12.2 | . 44 | . 27 | 49.5 | 64.1 | 40.1 | 101 | 49.0 | 233 | . $68{ }^{*}$ |
| 81 | 187 | WHAT WAS THE NAME OF KING ARTHUR'S SWORD? (EXCALIBUR) | . 285 | 41 | 103 | 10.0 | 9.3 | . 12 | . 60 | 71.1 | 92.1 | 20.4 | 17 | 42.8 | 145 | . $86 *$ |
| 82 | 61 | WHAT IS THE WORD THAT MEANS A NAUTICAL MILE PER HOUR? (KNOT) ${ }^{\text {b }}$ | . 277 | 39 | 102 | 11.8 | 17.8 | . 27 | . 45 | 51.6 | 69.0 | 33.7 | 38 | 39.5 | 142 | . 75 * |
| 83 | 70 | WHAT IS THE NAME FOR THE ASTRONOMICAL BODIES THAT ENTER THE EARTH'S ATMOSPHERE? (METEORS) ${ }^{\text {b }}$ | . 271 | 54 | 145 | 14.8 | 16.4 | . 43 | . 30 | 46.6 | 48.7 | 45.3 | 86 | 45.7 | 205 | . $58{ }^{*}$ |
| 84 | 87 | WHAT IS THE LONGEST RIVER IN SOUTH AMERICA? $(\mathrm{AMAZON})^{\mathrm{b}}$ | . 267 | 40 | 110 | 9.8 | 9.3 | . 29 | . 44 | 57.9 | 79.9 | 38.0 | 44 | 45.3 | 152 | . 75 * |
| 85 | 86 | WHAT IS THE NAME OF THE AUTOMOBILE INSTRUMENT THAT MEASURES MILEAGE? (ODOMETER) ${ }^{\text {b }}$ | . 258 | 54 | 155 | 13.2 | 16.2 | . 39 | . 35 | 51.1 | 77.6 | 33.5 | 81 | 55.5 | 213 | . $59{ }^{*}$ |
| 86 | 145 | WHAT ITALIAN CITY WAS DESTROYED WHEN MOUNT VESUVIUS ERUPTED IN 79 A.D.? (POMPEII) | . 258 | 41 | 118 | 9.9 | 12.9 | . 26 | . 48 | 53.9 | 87.0 | 20.8 | 41 | 37.0 | 159 | .70* |
| 87 | 115 | WHAT IS THE LAST NAME OF BATMAN'S SECRET IDENTITY IN THE BATMAN COMICS? (WAYNE) ${ }^{\text {b }}$ | . 252 | 35 | 104 | 11.0 | 19.0 | . 18 | . 57 | 68.0 | 93.9 | 31.7 | 25 | 54.5 | 141 | . 78 * |
| 88 | 66 | WHAT IS THE LAST NAME OF THE MYTHICAL GIANT LUMBERJACK? (BUNYAN) ${ }^{\text {b }}$ | . 245 | 51 | 157 | 14.1 | 13.1 | . 23 | . 53 | 58.2 | 88.9 | 24.8 | 47 | 40.6 | 212 | . 72 * |
| 89 | 199 | WHAT IS THE NAME OF THE COMPANY THAT PRODUCES "BABY RUTH" CANDY BARS? (NESTLE) | . 245 | 34 | 105 | 10.7 | 10.2 | . 39 | . 37 | 42.8 | 45.1 | 41.3 | 54 | 44.0 | 140 | . $59 *$ |
| 90 | 103 | WHAT IS THE NAME OF SOCRATES' MOST FAMOUS STUDENT? (PLATO) ${ }^{\text {b }}$ | . 239 | 34 | 108 | 14.7 | 12.0 | . 35 | . 42 | 46.3 | 55.2 | 40.0 | 49 | 38.9 | 142 | . $57 *$ |
| 91 | 111 | WHAT IS THE NAME OF THE THREE-LEAF CLOVER THAT IS THE EMBLEM OF IRELAND? (SHAMROCK) ${ }^{\text {b }}$ | . 239 | 33 | 105 | 10.9 | 16.1 | . 25 | . 51 | 55.9 | 84.4 | 28.1 | 34 | 47.4 | 139 | . $82{ }^{*}$ |
| 92 | 110 | OF WHICH COUNTRY IS BUENOS AIRES THE CAPITAL? (ARGENTINA) ${ }^{\text {b }}$ | . 204 | 44 | 172 | 10.1 | 12.6 | . 50 | . 29 | 43.4 | 70.3 | 32.6 | 109 | 40.4 | 219 | . $66{ }^{*}$ |
| 93 | 60 | WHAT IS THE LAST NAME OF THE ACTRESS WHO RECEIVED THE BEST ACTRESS AWARD FOR THE MOVIE "MARY POPPINS"? (ANDREWS) ${ }^{\text {b }}$ | . 203 | 43 | 169 | 11.5 | 14.3 | . 14 | . 66 | 58.9 | 87.3 | 18.2 | 30 | 39.3 | 218 | . 73 * |
| 94 | 126 | WHAT IS THE NAME OF THE MOUNTAIN RANGE IN WHICH MOUNT EVEREST IS LOCATED? (HIMALAYAS) ${ }^{\text {b }}$ | . 198 | 41 | 166 | 13.8 | 14.3 | . 34 | . 46 | 42.6 | 64.4 | 30.0 | 71 | 43.4 | 213 | . $68{ }^{*}$ |
| 95 | 80 | WHAT IS THE UNIT OF SOUND INTENSITY? (DECIBEL) ${ }^{\text {b }}$ | . 190 | 40 | 171 | 8.8 | 14.2 | . 51 | . 30 | 46.1 | 73.1 | 36.1 | 108 | 41.0 | 218 | . 70 * |
| 96 | 207 |  | . 188 | 27 | 117 | 11.5 | 16.9 | . 14 | . 67 | 57.5 | 86.8 | 18.0 | 20 | 42.3 | 144 | . $71{ }^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge <br> Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\text {c }}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | CJi | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ | $r$ |
| 97 | 99 | WHAT IS THE NAME OF THE PROJECT WHICH DEVELOPED THE ATOMIC BOMB DURING WORLD WAR II? (MANHATTAN) | . 187 | 26 | 113 | 12.6 | 15.6 | . 32 | . 49 | 41.6 | 59.7 | 31.1 | 45 | 37.0 | 140 | . $61{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | REFERS TO A CURRENT OF ONE AMPERE AT ONE VOLT? (WATT) ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 98 | 132 | WHAT IS THE LAST NAME OF THE AUTHOR OF THE BOOK "1984"? (ORWELL) ${ }^{\text {b }}$ | . 185 | 37 | 163 | 12.9 | 13.0 | . 15 | . 67 | 66.0 | 90.5 | 34.7 | 29 | 34.5 | 204 | . $65^{*}$ |
| 99 | 69 | IN WHICH GAME ARE MEN CROWNED? (CHECKERS) ${ }^{\text {b }}$ | . 176 | 25 | 117 | 12.9 | 17.6 | . 32 | . 50 | 39.6 | 64.0 | 26.4 | 46 | 33.9 | 143 | $.71{ }^{*}$ |
| 100 | 97 | WHAT IS THE LAST NAME OF THE MAN WHO ASSASSINATED PRESIDENT JOHN F. KENNEDY? (OSWALD) ${ }^{\text {b }}$ | . 172 | 25 | 120 | 14.8 | 19.1 | . 26 | . 57 | 55.0 | 83.9 | 35.4 | 37 | 52.7 | 147 | . $47^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 101 | 137 | WHAT IS THE NAME OF BATMAN'S BUTLER? | . 163 | 23 | 118 | 11.4 | 13.4 | . 31 | . 52 | 51.8 | 93.0 | 30.2 | 44 | 50.6 | 142 | . $74 *$ |
| 102 | 117 | (ALFRED) WHICH COUNTRY WAS THE FIRST TO USE | 160 | 23 | 121 | 8.8 | 11.2 | 53 | 31 | 38.9 | 73.5 | 28.5 | 77 | 38.6 | 144 | 69* |
| 102 | 117 | GUNPOWDER? (CHINA) ${ }^{\text {b }}$ | . 160 | 23 | 121 | 8.8 | 11.2 | . 53 | . 31 | 38.9 | 73.5 | 28.5 | 77 | 38.6 | 144 | . 69 |
| 103 | 14 | WHAT IS THE NAME OF AN AIRPLANE WITHOUT AN ENGINE? (GLIDER) ${ }^{\text {b }}$ | . 157 | 30 | 161 | 11.8 | 13.7 | . 29 | . 55 | 33.9 | 55.8 | 22.2 | 56 | 29.1 | 196 | . $58{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 104 | 178 | WHAT IS THE NAME OF THE NORTH STAR? (POLARIS) | . 156 | 32 | 173 | 6.5 | 10.6 | . 21 | . 63 | 44.5 | 81.8 | 16.6 | 43 | 38.1 | 214 | . $71{ }^{*}$ |
| 105 | 159 | WHAT IS THE ONLY WORD THAT THE RAVEN SAYS IN EDGAR ALLEN POE'S POEM "THE RAVEN"? (NEVERMORE) | . 155 | 24 | 131 | 11.2 | 17.2 | . 37 | . 48 | 38.8 | 91.3 | 16.7 | 57 | 35.6 | 156 | . $66{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 106 | 46 | FOR WHICH COUNTRY IS THE YEN THE MONETARY UNIT? (JAPAN) ${ }^{\text {b }}$ | . 152 | 33 | 184 | 7.1 | 9.1 | . 62 | . 23 | 54.0 | 75.5 | 48.7 | 134 | 45.0 | 222 | . 70 * |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 107 | 139 | IN WHAT EUROPEAN CITY IS THE PARTHENON LOCATED? (ATHENS) ${ }^{\text {b }}$ | . 150 | 25 | 142 | 8.4 | 13.0 | . 40 | . 45 | 51.2 | 76.8 | 41.7 | 67 | 40.3 | 169 | . $68{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 108 | 113 | WHAT IS THE NAME OF THE FURRY ANIMAL THAT ATTACKS COBRA SNAKES? (MONGOOSE) ${ }^{\text {b }}$ | . 149 | 20 | 114 | 8.0 | 16.4 | . 36 | . 49 | 46.4 | 89.7 | 28.3 | 48 | 33.3 | 136 | . $61{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 109 | 166 | FOR WHICH COUNTRY IS THE RUPEE THE MONETARY UNIT? (INDIA) | . 147 | 31 | 180 | 8.6 | 13.3 | . 27 | . 58 | 35.7 | 71.1 | 16.8 | 58 | 24.5 | 216 | . $75^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110 | 154 | WHAT IS THE LAST NAME OF THE MAN WHO FIRST STUDIED GENETIC INHERITANCE IN PLANTS? (MENDEL) | . 144 | 30 | 179 | 9.9 | 11.2 | . 21 | . 65 | 49.5 | 85.2 | 24.6 | 43 | 29.2 | 217 | . $63{ }^{*}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 111 | 107 | WHAT IS THE LAST NAME OF THE MAN WHO WROTE THE "STAR SPANGLED BANNER"? (KEY) ${ }^{\text {b }}$ | . 141 | 20 | 122 | 8.9 | 14.8 | . 22 | . 64 | 46.2 | 85.0 | 21.1 | 31 | 42.9 | 141 | . $77 *$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 112 | 112 | WHAT IS THE NAME OF THE PALACE IN LONDON | . 141 | 29 | 177 | 16.0 | 19.4 | . 20 | . 66 | 46.0 | 72.9 | 26.9 | 41 | 32.9 | 211 | . $62^{*}$ |
|  |  | IN WHICH THE MONARCH OF ENGLAND RESIDES? (BUCKINGHAM) ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 113 | 125 | IN WHICH GAME ARE THE STANDARD PIECES OF | . 138 | 21 | 131 | 14.2 | 16.1 | . 14 | . 72 | 20.0 | 30.5 | 10.0 | 22 | 21.4 | 154 | . $53 *$ |
|  |  | STAUNTON DESIGN? (CHESS) ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 114 | 206 | WHAT ARE PEOPLE WHO MAKE MAPS CALLED? | . 138 | 29 | 181 | 9.3 | 12.4 | . 41 | . 45 | 34.1 | 73.2 | 20.8 | 86 | 32.0 | 216 | . $61{ }^{*}$ |
|  |  | (CARTOGRAPHERS) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A1 (continued)

| 2012 Rank <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 115 | 94 | WHAT WAS THE NAME OF THE ZEPPELIN THAT EXPLODED IN LAKEHURST N.J. IN 1937? (HINDENBURG) ${ }^{\text {b }}$ | . 134 | 29 | 188 | 20.2 | 12.5 | . 13 | . 74 | 40.6 | 68.8 | 11.3 | 28 | 24.0 | 223 | . $64^{*}$ |
| 116 | 167 | WHAT IS THE PALACE BUILT IN FRANCE BY KING LOUIS XIV? (VERSAILLES) | . 128 | 17 | 116 | 10.1 | 13.1 | . 16 | . 71 | 40.7 | 71.1 | 16.2 | 21 | 29.4 | 134 | . $38^{*}$ |
| 117 | 114 | IN WHICH CITY IS THE U.S. NAVAL ACADEMY LOCATED? (ANNAPOLIS) ${ }^{\text {b }}$ | . 127 | 27 | 185 | 11.3 | 20.4 | . 37 | . 50 | 39.0 | 75.6 | 26.4 | 79 | 37.8 | 216 | . $61{ }^{*}$ |
| 118 | 72 | WHAT IS THE NAME OF THE LIGHTEST WOOD KNOWN? (BALSA) ${ }^{\text {b }}$ | . 125 | 26 | 182 | 9.0 | 11.9 | . 45 | . 43 | 32.8 | 48.3 | 28.5 | 93 | 28.5 | 216 | . $66{ }^{*}$ |
| 119 | 31 | WHAT IS THE LAST NAME OF THE BOXER WHO LATER BECAME KNOWN AS MUHAMMAD ALI? (CLAY) ${ }^{\text {b }}$ | . 117 | 17 | 128 | 10.6 | 13.1 | . 25 | . 63 | 45.1 | 94.9 | 21.6 | 36 | 46.1 | 146 | . 69 * |
| 120 | 119 | WHAT ISLAND IS THE LARGEST IN THE WORLD EXCLUDING AUSTRALIA? (GREENLAND) ${ }^{\text {b }}$ | . 111 | 16 | 128 | 15.4 | 18.7 | . 60 | . 28 | 34.3 | 51.3 | 31.1 | 87 | 41.0 | 144 | . $55^{*}$ |
| 121 | 71 | WHAT IS THE NAME OF THE SMALL JAPANESE STOVE USED FOR OUTDOOR COOKING? (HIBACHI) ${ }^{\text {b }}$ | . 110 | 16 | 129 | 11.9 | 10.3 | . 32 | . 57 | 38.2 | 60.3 | 30.5 | 46 | 31.8 | 146 | . $65^{*}$ |
| 122 | 105 | WHAT IS THE LAST NAME OF THE WOMAN WHO BEGAN THE PROFESSION OF NURSING? (NIGHTINGALE) ${ }^{\text {b }}$ | . 108 | 16 | 132 | 13.4 | 10.6 | . 14 | . 75 | 41.9 | 66.9 | 22.8 | 21 | 26.9 | 148 | . $66{ }^{*}$ |
| 123 | 175 | WHO WAS THE LEADER OF THE ARGONAUTS? <br> (JASON) | . 107 | 15 | 125 | 5.0 | 11.6 | . 07 | . 82 | 52.2 | 81.6 | 8.2 | 10 | 23.5 | 141 | . $69 *$ |
| 124 | 214 | WHAT IS THE LAST NAME OF THE ARTIST WHO PAINTED "GUERNICA"? (PICASSO) | . 107 | 21 | 176 | 11.5 | 11.7 | . 16 | . 73 | 30.8 | 56.6 | 13.8 | 32 | 20.8 | 203 | . $74^{*}$ |
| 125 | 177 | IN WHAT ANCIENT CITY WERE THE "HANGING GARDENS" LOCATED? (BABYLON) | . 103 | 14 | 122 | 16.8 | 13.8 | . 38 | . 51 | 36.0 | 67.9 | 27.4 | 52 | 30.0 | 136 | . 60 * |
| 126 | 200 | WHAT ARE PEOPLE CALLED WHO EXPLORE CAVES? (SPELUNKERS) | . 100 | 21 | 188 | 14.7 | 12.6 | . 44 | . 45 | 27.7 | 61.2 | 20.1 | 93 | 30.8 | 214 | . $53 *$ |
| 127 | 168 | WHAT IS THE NAME OF THE CAPTAIN OF THE PEQUOD IN THE BOOK "MOBY DICK"? (AHAB) | . 097 | 20 | 187 | 11.7 | 12.0 | . 19 | . 71 | 41.3 | 90.9 | 16.6 | 40 | 33.4 | 212 | . 59 * |
| 128 | 258 | WHAT IS THE CAPITAL OF KENTUCKY? (FRANKFORT) | . 095 | 19 | 182 | 18.6 | 14.2 | . 34 | . 57 | 48.8 | 78.4 | 40.6 | 68 | 44.3 | 205 | . $56{ }^{*}$ |
| 129 | 85 | WHAT IS THE NAME OF AN ILLEGAL MOVE BY A BASEBALL PITCHER THAT RESULTS IN ALL RUNNERS ADVANCING ONE BASE? (BALK) ${ }^{\text {b }}$ | . 093 | 14 | 136 | 10.0 | 22.1 | . 45 | . 45 | 53.9 | 95.7 | 45.3 | 68 | 51.7 | 152 | . $51{ }^{*}$ |
| 130 | 129 | WHAT IS THE LAST NAME OF THE AMERICAN WHO STARRED IN THE 1936 OLYMPICS? (OWENS) ${ }^{\text {b }}$ | . 093 | 14 | 136 | 12.1 | 11.6 | . 17 | . 74 | 31.2 | 58.6 | 15.8 | 25 | 22.9 | 149 | . $59{ }^{*}$ |
| 131 | 174 | THE DEEPEST PART OF THE OCEAN IS LOCATED AT WHICH TRENCH? (MARIANA) | . 093 | 19 | 185 | 11.2 | 13.2 | . 29 | . 61 | 29.4 | 70.1 | 16.6 | 60 | 26.4 | 208 | . $62{ }^{*}$ |
| 132 | 169 | WHICH SPORT USES THE TERMS "STONES" AND "BROOMS"? (CURLING) | . 092 | 13 | 128 | 19.3 | 14.7 | . 48 | . 43 | 37.3 | 74.6 | 30.0 | 67 | 36.8 | 142 | . $61{ }^{*}$ |
| 133 | 182 | WHAT IS THE PROPER NAME FOR A BADMINTON BIRD? (SHUTTLECOCK) | . 091 | 20 | 200 | 9.8 | 10.0 | . 49 | . 42 | 49.6 | 88.5 | 42.4 | 108 | 37.1 | 225 | . $72 *$ |
| 134 | 128 |  | . 090 | 20 | 203 | 9.2 | 14.0 | 20 | . 71 | 43.2 | 87.5 | 23.0 | 44 | 35.1 | 229 | . $64{ }^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | $\begin{aligned} & \begin{array}{l} \text { Judge } \\ \text { Corrs } \end{array} \\ & \hline r \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | CJ ${ }_{\text {c }}$ | CJi | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
|  |  | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "OLIVER TWIST"? (DICKENS) ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135 | 196 | WHAT IS THE CAPITAL OF DELAWARE? (DOVER) | . 090 | 19 | 193 | 9.9 | 19.4 | . 15 | . 76 | 39.8 | 74.6 | 19.2 | 32 | 36.8 | 216 | . $60{ }^{*}$ |
| 136 | 120 | WHAT IS THE LAST NAME OF THE MAN WHO INVENTED THE PHONOGRAPH? (EDISON) ${ }^{\text {b }}$ | . 086 | 17 | 180 | 15.8 | 9.5 | . 24 | . 68 | 43.8 | 63.2 | 36.8 | 47 | 29.8 | 200 | . $76{ }^{*}$ |
| 137 | 48 | IN WHICH TYPE OF SKI RACE DOES THE DOWNHILL SKIER MAKE SHARP TURNS AROUND POLES? (SLALOM) ${ }^{\text {b }}$ | . 086 | 19 | 202 | 14.3 | 19.0 | . 29 | . 62 | 30.4 | 68.3 | 19.3 | 65 | 33.6 | 226 | . $55^{*}$ |
| 138 | 153 | IN WHICH CITY IS HEATHROW AIRPORT LOCATED? $(\text { LONDON })^{b}$ | . 083 | 12 | 133 | 8.1 | 14.6 | . 26 | . 66 | 31.4 | 90.8 | 12.6 | 38 | 24.2 | 145 | . $50{ }^{*}$ |
| 139 | 235 | WHAT IS THE CAPITAL OF JAMAICA? (KINGSTON) | . 081 | 12 | 137 | 10.5 | 13.3 | . 18 | . 74 | 34.1 | 77.5 | 14.7 | 27 | 30.5 | 150 | . $49^{*}$ |
| 140 | 44 | WHICH PLANET WAS THE LAST TO BE DISCOVERED? (NEPTUNE) ${ }^{\text {b }}$ | . 080 | 17 | 195 | 18.4 | 7.5 | . 77 | . 15 | 51.9 | 47.6 | 52.3 | 164 | 50.5 | 217 | . $76 *$ |
| 141 | 185 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "THE MURDERS IN THE RUE MORGUE"? (POE) | . 080 | 11 | 127 | 8.5 | 13.6 | . 11 | . 81 | 28.3 | 55.5 | 8.5 | 15 | 22.7 | 141 | . $82{ }^{*}$ |
| 142 | 205 | WHAT IS THE NAME OF THE SHIP ON WHICH CHARLES DARWIN MADE HIS SCIENTIFIC VOYAGE? (BEAGLE) | . 079 | 11 | 129 | 10.2 | 15.3 | . 16 | . 76 | 38.3 | 98.1 | 8.5 | 22 | 28.1 | 142 | . $54{ }^{*}$ |
| 143 | 213 | WHAT IS THE CAPITAL OF CHILE? (SANTIAGO) | . 077 | 11 | 131 | 15.3 | 11.6 | . 19 | . 73 | 35.2 | 70.0 | 21.0 | 27 | 33.8 | 143 | . $41{ }^{*}$ |
| 144 | 100 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "THE OLD MAN AND THE SEA"? (HEMINGWAY) ${ }^{\text {b }}$ | . 077 | 16 | 193 | 8.9 | 12.6 | . 11 | . 81 | 39.3 | 75.4 | 14.1 | 23 | 22.5 | 213 | . 73 * |
| 145 | 147 | WHAT IS THE LAST NAME OF THE MAN WHO WROTE "CANTERBURY TALES"? (CHAUCER) ${ }^{\text {b }}$ | . 076 | 11 | 134 | 10.1 | 15.5 | . 23 | . 69 | 37.0 | 93.2 | 18.8 | 34 | 33.6 | 148 | . $60{ }^{*}$ |
| 146 | 262 | WHAT IS THE NAME OF THE FOUNTAIN IN ROME INTO WHICH COINS ARE THROWN FOR GOOD LUCK? <br> (TREVI) | . 071 | 14 | 183 | 24.7 | 12.2 | . 32 | . 60 | 28.9 | 86.6 | 16.3 | 64 | 34.1 | 205 | . $52 *$ |
| 147 | 162 | WHAT WAS THE LAST NAME OF THE MAN WHO WAS PRESIDENT DIRECTLY AFTER JAMES MADISON? (MONROE) ${ }^{\text {b }}$ | . 068 | 15 | 205 | 11.7 | 14.7 | . 40 | . 53 | 29.3 | 64.3 | 23.3 | 88 | 35.3 | 221 | . $53 *$ |
| 148 | 143 | WHAT IS THE LAST NAME OF THE ASTRONOMER WHO PUBLISHED IN 1543 HIS THEORY THAT THE EARTH REVOLVES AROUND THE SUN? (COPERNICUS) ${ }^{\text {b }}$ | . 067 | 9 | 126 | 15.0 | 16.8 | . 50 | . 44 | 50.5 | 63.3 | 48.8 | 67 | 40.2 | 139 | . 69 * |
| 149 | 242 | WHAT IS THE LAST NAME OF THE CRIMINAL WHO WAS KNOWN AS "SCARFACE"? (CAPONE) | . 066 | 14 | 199 | 9.9 | 14.3 | . 38 | . 56 | 57.7 | 60.6 | 57.3 | 80 | 50.1 | 220 | . $78{ }^{*}$ |
| 150 | 12 | WHAT IS THE NAME OF THE LONE RANGER'S INDIAN SIDEKICK? (TONTO) ${ }^{\text {b }}$ | . 061 | 13 | 200 | 7.5 | 11.6 | . 17 | . 77 | 25.3 | 71.8 | 8.9 | 37 | 22.3 | 219 | . $52 *$ |
| 151 | 170 | WHAT IS THE CAPITAL OF DENMARK? (COPENHAGEN) ${ }^{\text {b }}$ | . 060 | 13 | 204 | 23.4 | 14.4 | . 18 | . 76 | 29.0 | 52.1 | 21.3 | 39 | 27.2 | 221 | . $51{ }^{*}$ |
| 152 | 96 |  | . 059 | 12 | 190 | 9.5 | 20.7 | . 13 | . 81 | 32.9 | 79.9 | 11.3 | 26 | 24.7 | 209 | . $44^{*}$ |

Table A1 (continued)

| 2012 Rank Order | 1980 Rank Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | CJ ${ }_{\text {c }}$ | CJ ${ }_{\text {i }}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ | $r$ |
|  |  | WHAT WAS THE LAST NAME OF THE MAN WHO WAS THE RADIO BROADCASTER FOR THE "WAR OF THE WORLDS"? (WELLES) ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 153 | 203 | IN WHICH CITY IS MICHELANGELO'S STATUE OF DAVID LOCATED? (FLORENCE) | . 058 | 8 | 129 | 14.5 | 10.0 | . 64 | . 30 | 39.3 | 60.0 | 37.4 | 88 | 43.0 | 138 | . $65{ }^{*}$ |
| 154 | 146 | WHAT WAS FRANK LLOYD WRIGHT'S PROFESSION? (ARCHITECT) ${ }^{\text {b }}$ | . 058 | 12 | 196 | 7.8 | 11.1 | . 45 | . 49 | 33.7 | 91.7 | 26.3 | 94 | 25.9 | 214 | . $65{ }^{*}$ |
| 155 | 135 | OF WHICH COUNTRY IS NAIROBI THE CAPITAL? $(\text { KENYA })^{b}$ | . 053 | 7 | 126 | 6.6 | 14.6 | . 34 | . 61 | 27.9 | 79.1 | 19.9 | 45 | 26.3 | 134 | . $53 *$ |
| 156 | 134 | WHAT IS THE NAME OF THE HILLBILLY FAMILY THAT HAD A FAMOUS FEUD WITH THE MCCOY FAMILY? (HATFIELD) ${ }^{\text {b }}$ | . 052 | 11 | 199 | 12.7 | 16.0 | . 22 | . 73 | 30.8 | 81.8 | 18.6 | 46 | 27.7 | 215 | . $69{ }^{*}$ |
| 157 | 156 | WHAT KIND OF POISON DID SOCRATES TAKE AS HIS EXECUTION? (HEMLOCK) ${ }^{\text {b }}$ | . 052 | 11 | 200 | 7.5 | 13.8 | . 27 | . 67 | 26.7 | 87.8 | 15.1 | 58 | 23.3 | 216 | . 63 * |
| 158 | 74 | WHAT IS THE LAST NAME OF THE FIRST PERSON TO COMPLETE A SOLO FLIGHT ACROSS THE ATLANTIC OCEAN? (LINDBERGH) ${ }^{\text {b }}$ | . 052 | 11 | 201 | 15.6 | 14.7 | . 38 | . 57 | 43.1 | 81.8 | 37.8 | 80 | 36.1 | 219 | . $66{ }^{*}$ |
| 159 | 38 | ANDY GRIFFITH WAS THE SHERIFF OF WHAT TOWN ON TELEVISION'S "ANDY GRIFFITH SHOW"? (MAYBERRY) ${ }^{\text {b }}$ | . 052 | 11 | 202 | 9.7 | 13.6 | . 15 | . 80 | 34.3 | 94.5 | 12.9 | 31 | 28.3 | 220 | . $64{ }^{*}$ |
| 160 | 142 | WHAT IS THE NAME OF THE ROMAN EMPEROR WHO FIDDLED WHILE ROME BURNED? (NERO) ${ }^{\text {b }}$ | . 052 | 11 | 202 | 10.6 | 14.8 | . 25 | . 70 | 33.8 | 72.3 | 25.8 | 53 | 23.4 | 220 | . $69{ }^{*}$ |
| 161 | 231 | WHAT IS THE CITY IN WHICH THE BASEBALL HALL OF FAME IS LOCATED? (COOPERSTOWN) | . 051 | 7 | 130 | 9.8 | 17.2 | . 41 | . 54 | 29.7 | 67.9 | 25.0 | 56 | 43.7 | 137 | . $51{ }^{*}$ |
| 162 | 98 | WHAT IS THE NAME OF THE UNIT OF MEASURE THAT REFERS TO A SIX-FOOT DEPTH OF WATER? (FATHOM) ${ }^{\text {b }}$ | . 051 | 11 | 206 | 19.2 | 17.0 | . 32 | . 63 | 34.9 | 70.9 | 29.3 | 70 | 29.8 | 221 | . $49^{*}$ |
| 163 | 108 | WHAT IS THE LAST NAME OF THE SCIENTIST WHO DISCOVERED RADIUM? (CURIE) ${ }^{\text {b }}$ | . 046 | 9 | 186 | 8.9 | 11.4 | . 19 | . 76 | 19.5 | 65.0 | 8.7 | 38 | 19.9 | 201 | . $74 *$ |
| 164 | 149 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "BRAVE NEW WORLD"? (HUXLEY) ${ }^{\text {b }}$ | . 045 | 7 | 149 | 10.9 | 14.2 | . 19 | . 77 | 32.9 | 98.6 | 17.1 | 29 | 32.3 | 157 | . $67 *$ |
| 165 | 164 | IN ADDITION TO THE KENTUCKY DERBY AND THE BELMONT STAKES WHAT HORSE RACE COMPRISES THE TRIPLE CROWN? (PREAKNESS) ${ }^{\text {b }}$ | . 044 | 10 | 218 | 21.0 | 21.9 | . 16 | . 80 | 33.4 | 96.5 | 15.9 | 36 | 26.2 | 233 | . $66{ }^{*}$ |
| 166 | 204 | WHAT IS THE LAST NAME OF THE CRIMINAL WHO WAS KILLED BY FBI AGENTS OUTSIDE OF A CHICAGO MOVIE THEATER? (DILLINGER) | . 044 | 9 | 197 | 17.4 | 20.6 | . 20 | . 76 | 31.8 | 81.1 | 20.9 | 41 | 22.4 | 211 | . $68{ }^{*}$ |
| 167 | 95 | WHAT IS THE NAME OF THE SINGER WHO POPULARIZED A DANCE KNOWN AS THE "TWIST"? (CHECKER) ${ }^{\text {b }}$ | . 041 | 6 | 139 | 21.4 | 12.8 | . 30 | . 66 | 31.4 | 63.5 | 27.0 | 44 | 32.5 | 146 | . 49 * |
| 168 | 221 | OVER WHICH RIVER IS THE GEORGE WASHINGTON BRIDGE? (HUDSON) | . 041 | 6 | 141 | 32.2 | 14.1 | . 37 | . 59 | 32.5 | 73.3 | 27.9 | 54 | 33.9 | 148 | . $39^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | $1980 \text { Rank }$ <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge <br> Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{i}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | CJ ${ }_{\text {c }}$ | CJ ${ }_{\text {i }}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ | $r$ |
| 169 | 189 | WHAT IS THE LAST NAME OF THE MAN WHO INVENTED DYNAMITE? (NOBEL) ${ }^{\text {b }}$ | . 040 | 6 | 143 | 7.4 | 11.3 | . 26 | . 70 | 24.6 | 95.0 | 13.8 | 39 | 25.8 | 149 | . $54{ }^{*}$ |
| 170 | 228 | WHAT IS THE NAME OF THE CHINESE RELIGION FOUNDED BY LAO TSE? (TAOISM) | . 040 | 8 | 192 | 13.0 | 13.0 | . 42 | . 54 | 37.9 | 56.3 | 36.1 | 84 | 28.6 | 207 | . $74 *$ |
| 171 | 84 | WHAT IS THE LAST NAME OF THE COMMANDER WHO LOST THE BATTLE OF THE LITTLE BIGHORN RIVER? (CUSTER) ${ }^{\text {b }}$ | . 038 | 8 | 201 | 11.0 | 12.5 | . 20 | . 77 | 31.9 | 76.3 | 23.2 | 41 | 26.5 | 212 | . $66{ }^{*}$ |
| 172 | 155 | WHAT IS THE NAME OF THE NAVIGATION INSTRUMENT USED AT SEA TO PLOT POSITION BY THE STARS? (SEXTANT) ${ }^{\text {b }}$ | . 038 | 5 | 127 | 14.9 | 19.4 | . 54 | . 42 | 32.3 | 62.2 | 30.2 | 71 | 36.8 | 134 | . $58{ }^{*}$ |
| 173 | 161 | WHO WAS THE MOST FAMOUS GREEK DOCTOR? (HIPPOCRATES) ${ }^{\text {b }}$ | . 037 | 5 | 131 | 16.2 | 15.3 | . 18 | . 79 | 27.1 | 83.0 | 15.5 | 24 | 23.3 | 139 | . $68{ }^{*}$ |
| 174 | 165 | IN WHICH CITY DOES THE COTTON BOWL TAKE PLACE? (DALLAS) ${ }^{\text {b }}$ | . 037 | 5 | 131 | 10.7 | 14.3 | . 36 | . 60 | 23.8 | 16.0 | 24.6 | 49 | 33.7 | 138 | . $56{ }^{*}$ |
| 175 | 192 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE THE SHERLOCK HOLMES STORIES? (DOYLE) | . 036 | 8 | 212 | 17.0 | 13.4 | . 18 | . 79 | 30.1 | 90.6 | 17.6 | 39 | 34.0 | 226 | . $59{ }^{*}$ |
| 176 | 225 | FOR WHICH COUNTRY IS THE DRACHMA THE MONETARY UNIT? (GREECE) | . 036 | 5 | 135 | 19.6 | 15.4 | . 31 | . 66 | 24.7 | 88.0 | 17.3 | 43 | 20.9 | 141 | . 27 |
| 177 | 148 | WHAT IS THE NAME OF THE MANSION IN VIRGINIA THAT WAS THOMAS JEFFERSON'S HOME? (MONTICELLO) ${ }^{\text {b }}$ | . 035 | 7 | 191 | 11.9 | 16.9 | . 15 | . 81 | 29.5 | 89.3 | 15.5 | 30 | 26.7 | 205 | . $51{ }^{*}$ |
| 178 | 236 | WHAT IS THE LONGEST RIVER IN ASIA? (YANGTZE) | . 035 | 7 | 191 | 17.3 | 10.0 | . 37 | . 59 | 33.4 | 32.1 | 33.5 | 74 | 32.2 | 202 | . $71{ }^{*}$ |
| 179 | 183 | WHAT IS THE LAST NAME OF THE ACTOR WHO RECEIVED THE BEST ACTOR AWARD FOR THE MOVIE "ON THE WATERFRONT"? (BRANDO) ${ }^{\text {b }}$ | . 034 | 5 | 143 | 11.3 | 7.3 | . 08 | . 89 | 31.7 | 100.0 | 3.3 | 12 | 24.7 | 151 | -. 06 |
| 180 | 91 | WHAT IS THE LAST NAME OF THE MALE STAR OF THE MOVIE "CASABLANCA"? (BOGART) ${ }^{\text {b }}$ | . 034 | 5 | 144 | 9.6 | 18.1 | . 27 | . 70 | 26.8 | 86.0 | 19.4 | 40 | 33.4 | 149 | . $55^{*}$ |
| 181 | 150 | OF WHICH COUNTRY IS BUDAPEST THE CAPITAL? (HUNGARY) ${ }^{\text {b }}$ | . 033 | 7 | 205 | 9.9 | 11.9 | . 43 | . 54 | 28.9 | 70.9 | 25.7 | 91 | 26.0 | 215 | . $64 *$ |
| 182 | 191 | WHO IS KNOWN AS "THE FATHER OF GEOMETRY"? (EUCLID) ${ }^{\text {b }}$ | . 033 | 5 | 148 | 20.7 | 13.2 | . 31 | . 66 | 25.5 | 70.0 | 20.7 | 47 | 30.4 | 153 | . $41{ }^{*}$ |
| 183 | 193 | WHAT IS THE LAST NAME OF THE HUSBAND-WIFE SPIES WHO WERE ELECTROCUTED IN 1951 FOR PASSING ATOMIC SECRETS TO RUSSIA? (ROSENBERG) | . 031 | 4 | 126 | 29.0 | 14.9 | . 17 | . 80 | 21.7 | 56.3 | 15.5 | 22 | 20.6 | 132 | . $42^{*}$ |
| 184 | 261 | WHAT IS THE LAST NAME OF THE COMPOSER WHO WROTE THE OPERA "DON GIOVANNI"? (MOZART) | . 030 | 4 | 128 | 10.1 | 12.1 | . 21 | . 76 | 18.3 | 13.8 | 18.9 | 28 | 18.5 | 132 | . 60 * |
| 185 | 190 | WHAT IS THE LAST NAME OF THE AUTHOR OF THE JAMES BOND NOVELS? (FLEMING) ${ }^{\text {b }}$ | . 030 | 7 | 225 | 11.4 | 9.6 | . 16 | . 81 | 19.0 | 80.7 | 7.6 | 38 | 29.1 | 234 | . $45^{*}$ |
| 186 | 122 | WHAT WAS THE LAST NAME OF BUFFALO BILL? (CODY) ${ }^{\text {b }}$ | . 030 | 6 | 196 | 14.2 | 10.2 | . 27 | . 70 | 29.0 | 79.8 | 23.5 | 55 | 26.0 | 207 | . $62{ }^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | CJ ${ }_{\text {i }}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 187 | 136 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE UNDER THE PSEUDONYM OF MARK TWAIN? (CLEMENS) ${ }^{\text {b }}$ | . 029 | 6 | 201 | 15.2 | 11.8 | . 16 | . 81 | 21.6 | 61.0 | 14.6 | 34 | 24.1 | 214 | . $68{ }^{*}$ |
| 188 | 233 | WHAT IS THE NAME OF THE ISLAND ON WHICH NAPOLEON WAS BORN? (CORSICA) | . 029 | 4 | 136 | 38.3 | 13.5 | . 28 | . 69 | 25.0 | 72.5 | 20.1 | 39 | 27.4 | 141 | . 40 * |
| 189 | 157 | WHAT IS THE LAST NAME OF THE DOCTOR WHO FIRST DEVELOPED A VACCINE AGAINST POLIO? (SALK) ${ }^{\text {b }}$ | . 028 | 4 | 137 | 16.1 | 19.8 | . 16 | . 82 | 26.2 | 80.0 | 16.4 | 22 | 29.3 | 143 | . $68{ }^{*}$ |
| 190 | 181 | WHAT IS THE LAST NAME OF THE MAN WHO BEGAN THE REFORMATION IN GERMANY? (LUTHER) ${ }^{\text {b }}$ | . 028 | 4 | 138 | 18.7 | 9.9 | . 53 | . 44 | 54.1 | 75.0 | 53.0 | 75 | 42.1 | 142 | . $64{ }^{*}$ |
| 191 | 211 | WHAT IS THE CAPITAL OF FINLAND? (HELSINKI) | . 026 | 4 | 149 | 14.0 | 10.4 | . 17 | . 80 | 19.2 | 67.3 | 11.8 | 26 | 28.4 | 154 | . $53 *$ |
| 192 | 188 | WHAT WAS THE NAME OF THE APOLLO LUNAR MODULE THAT LANDED THE FIRST MAN ON THE MOON? (EAGLE) ${ }^{\text {b }}$ | . 025 | 5 | 193 | 30.9 | 16.9 | . 37 | . 61 | 28.9 | 38.4 | 28.2 | 73 | 39.0 | 241 | . $67 *$ |
| 193 | 264 | WHAT IS THE LAST NAME OF THE COSMONAUT WHO WAS THE FIRST PERSON TO ORBIT AROUND THE EARTH? (GAGARIN) | . 024 | 5 | 207 | 10.9 | 14.6 | . 28 | . 69 | 31.0 | 70.0 | 27.8 | 60 | 26.2 | 217 | . $46{ }^{*}$ |
| 194 | 243 | WHAT WAS THE NAME OF ROY ROGER'S DOG? <br> (BULLET) | . 021 | 3 | 138 | 8.6 | 8.1 | . 23 | . 74 | 7.1 | 3.3 | 7.5 | 33 | 21.9 | 141 | . $48{ }^{*}$ |
| 195 | 171 | WHAT WAS THE NAME OF ALEXANDER GRAHAM BELL'S ASSISTANT? (WATSON) ${ }^{\text {b }}$ | . 021 | 3 | 139 | 12.5 | 13.7 | . 13 | . 85 | 22.6 | 26.7 | 21.9 | 19 | 23.1 | 146 | . 50 * |
| 196 | 176 | WHAT WAS THE LAST NAME OF THE COMPOSER OF THE "MAPLE LEAF RAG"? (JOPLIN) ${ }^{\text {b }}$ | . 020 | 4 | 196 | 9.8 | 9.5 | . 15 | . 83 | 14.3 | 75.0 | 6.2 | 30 | 16.7 | 207 | . $75^{*}$ |
| 197 | 216 | WHAT IS THE LAST NAME OF THE PLAYWRIGHT WHO WROTE "A STREETCAR NAMED DESIRE"? (WILLIAMS) | . 020 | 4 | 197 | 26.9 | 13.1 | . 13 | . 85 | 18.4 | 87.5 | 8.1 | 27 | 20.1 | 205 | . $77 *$ |
| 198 | 158 | WHAT IS THE LAST NAME OF THE AUTHOR OF "LITTLE WOMEN"? (ALCOTT) ${ }^{\text {b }}$ | . 020 | 4 | 198 | 6.4 | 11.4 | . 17 | . 81 | 20.0 | 72.5 | 13.9 | 34 | 25.3 | 205 | . $76{ }^{*}$ |
| 199 | 209 | WHAT IS THE LAST NAME OF THE FIRST PERSON TO CLIMB MOUNT EVEREST? (HILLARY) | . 020 | 3 | 149 | 8.4 | 9.9 | . 13 | . 85 | 22.8 | 96.7 | 11.8 | 20 | 25.5 | 155 | . $62^{*}$ |
| 200 | 68 | WHAT IS THE LAST NAME OF THE ACTOR WHO PLAYED RHETT BUTLER IN "GONE WITH THE WIND"? (GABLE) ${ }^{\text {b }}$ | . 020 | 4 | 199 | 22.7 | 16.0 | . 14 | . 84 | 17.0 | 68.8 | 9.6 | 28 | 23.9 | 208 | . 32 |
| 201 | 254 | IN WHICH COUNTRY IS ANGEL FALLS LOCATED? <br> (VENEZUELA) | . 020 | 4 | 199 | 17.2 | 12.7 | . 39 | . 59 | 27.4 | 76.3 | 25.0 | 80 | 24.7 | 206 | . $66{ }^{*}$ |
| 202 | 218 | WHAT IS THE CAPITAL OF CANADA? (OTTAWA) | . 019 | 4 | 207 | 18.1 | 11.8 | . 73 | . 25 | 41.5 | 65.0 | 40.9 | 154 | 44.8 | 215 | . $61{ }^{*}$ |
| 203 | 286 | WHAT IS THE LAST NAME OF THE TWENTY-FIRST U.S. PRESIDENT? (ARTHUR) | . 019 | 4 | 208 | 26.4 | 16.8 | . 49 | . 49 | 23.4 | 93.8 | 20.7 | 104 | 32.0 | 218 | . 53 * |
| 204 | 274 | WHAT WAS THE NAME OF THE GOLDFISH IN THE STORY OF PINOCCHIO? (CLEO) | . 019 | 4 | 212 | 16.0 | 10.9 | . 24 | . 74 | 15.8 | 90.0 | 10.0 | 52 | 30.1 | 221 | . $45^{*}$ |
| 205 | 282 | WHAT IS THE NAME OF THE VILLAINOUS PEOPLE WHO LIVED UNDERGROUND IN H. G. WELLS'S BOOK "THE TIME MACHINE"? (MORLOCKS) | . 018 | 4 | 219 | 19.5 | 16.4 | . 17 | . 81 | 13.5 | 75.0 | 7.1 | 38 | 19.6 | 228 | . $52 *$ |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | $R L_{i}$ | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | CJ ${ }_{\text {i }}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 206 | 224 | WHAT WAS THE LAST NAME OF THE CHARACTER PORTRAYED BY ROBERT STACK ON THE TELEVISION SHOW "THE UNTOUCHABLES"? (NESS) | . 015 | 3 | 195 | 11.4 | 14.9 | . 12 | . 86 | 10.8 | 63.3 | 4.2 | 24 | 24.0 | 203 | . $57 *$ |
| 207 | 284 | WHAT IS THE CAPITAL OF AUSTRALIA? (CANBERRA) | . 015 | 3 | 196 | 15.5 | 7.7 | . 63 | . 35 | 70.3 | 100.0 | 69.6 | 126 | 52.2 | 204 | . $62^{*}$ |
| 208 | 259 | WHAT IS THE LAST NAME OF THE ARTIST WHO PAINTED "THE PERSISTENCE OF MEMORY"? (DALI) | . 015 | 2 | 134 | 16.0 | 13.7 | . 21 | . 77 | 14.3 | 57.5 | 11.3 | 29 | 19.3 | 140 | . $48{ }^{*}$ |
| 209 | 144 | WHAT IS THE LAST NAME OF THE MAN WHO INVENTED THE TELEGRAPH? (MORSE) ${ }^{\text {b }}$ | . 014 | 3 | 210 | 9.1 | 12.0 | . 41 | . 58 | 41.8 | 83.3 | 40.3 | 87 | 35.8 | 218 | . $79 *$ |
| 210 | 160 | WHAT IS THE NAME OF THE RIVER ON WHICH BONN IS LOCATED? (RHINE) ${ }^{\text {b }}$ | . 014 | 3 | 210 | 17.5 | 12.1 | . 16 | . 83 | 12.9 | 43.3 | 10.2 | 34 | 17.5 | 219 | . 69 * |
| 211 | 247 | WHAT IS THE NAME OF THE SUBSTANCE DERIVED FROM A WHALE THAT IS USED TO MAKE PERFUME? (AMBERGRIS) | . 014 | 2 | 141 | 41.6 | 12.9 | . 45 | . 54 | 33.8 | 55.0 | 33.1 | 64 | 28.8 | 143 | . 73 * |
| 212 | 133 | WHAT IS THE NAME OF THE SUBMARINE IN JULES VERNE'S "20,000 LEAGUES BENEATH THE SEA"? (NAUTILUS) ${ }^{\text {b }}$ | . 014 | 2 | 143 | 8.4 | 11.0 | . 12 | . 86 | 15.7 | 100.0 | 6.3 | 18 | 23.8 | 146 | . $76 *$ |
| 213 | 223 | WHAT WAS THE NAME OF THE CLOWN ON THE "HOWDY DOODY" TELEVISION SHOW? (CLARABELL) | . 014 | 2 | 143 | 24.2 | 10.0 | . 18 | . 81 | 18.5 | 45.0 | 16.5 | 26 | 25.3 | 147 | . $89{ }^{*}$ |
| 214 | 226 | WHAT IS THE LAST NAME OF DAGWOOD'S BOSS IN THE COMIC STRIP "BLONDIE"? (DITHERS) | . 010 | 2 | 190 | 9.3 | 10.9 | . 10 | . 89 | 15.4 | 92.5 | 7.7 | 20 | 20.2 | 198 | . 29 |
| 215 | 184 | WHAT IS THE LAST NAME OF THE MOVIE ACTOR WHO PORTRAYED SPARTACUS? (DOUGLAS) ${ }^{\text {b }}$ | . 010 | 2 | 192 | 7.6 | 12.0 | . 27 | . 72 | 31.5 | 45.0 | 31.0 | 52 | 31.3 | 202 | . $67 *$ |
| 216 | 230 | WHAT IS THE LAST NAME OF THE WOMAN WHO FOUNDED THE AMERICAN RED CROSS? (BARTON) | . 010 | 2 | 198 | 14.1 | 15.6 | . 27 | . 73 | 18.0 | 87.5 | 15.4 | 53 | 26.4 | 206 | . $55^{*}$ |
| 217 | 292 | WHAT IS THE LAST NAME OF THE UNION GENERAL WHO DEFEATED THE CONFEDERATE ARMY AT THE CIVIL WAR BATTLE OF GETTYSBURG? (MEADE) | . 010 | 2 | 201 | 16.6 | 14.7 | . 44 | . 55 | 35.8 | 60.0 | 35.3 | 89 | 35.5 | 209 | . $55^{*}$ |
| 218 | 198 | WHAT IS THE NAME OF THE AVENUE THAT IMMEDIATELY FOLLOWS ATLANTIC AVENUE IN THE GAME OF MONOPOLY? (VENTNOR) ${ }^{\text {b }}$ | . 010 | 2 | 202 | 31.8 | 16.4 | . 38 | . 61 | 23.1 | 75.0 | 21.7 | 78 | 32.0 | 213 | . 63 * |
| 219 | 92 | WHICH GAME USES A DOUBLING CUBE? (BACKGAMMON) ${ }^{\text {b }}$ | . 010 | 2 | 208 | 26.7 | 15.7 | . 26 | . 73 | 23.6 | 25.0 | 23.5 | 55 | 27.6 | 213 | . 72 * |
| 220 | 296 | WHAT IS THE LAST NAME OF THE MAN WHO SUPPOSEDLY KILLED JESSE JAMES? (FORD) | . 009 | 2 | 215 | 9.4 | 16.6 | . 19 | . 80 | 13.2 | 47.5 | 11.5 | 42 | 25.2 | 222 | . 53 * |
| 221 | 245 | WHAT IS THE LAST NAME OF THE EUROPEAN AUTHOR WHO WROTE "THE TRIAL"? (KAFKA) | . 008 | 1 | 127 | 70.8 | 11.4 | . 13 | . 87 | 2.8 | 0.0 | 3.0 | 16 | 19.9 | 129 | . 27 |
| 222 | 255 | THE GENERAL NAMED HANNIBAL WAS FROM WHAT CITY? (CARTHAGE) | . 007 | 1 | 137 | 11.5 | 14.9 | . 28 | . 71 | 13.4 | 40.0 | 12.7 | 39 | 24.7 | 143 | . 43 * |
| 223 | 237 | WHAT IS THE LAST NAME OF THE BRITISH ADMIRAL WHO WON THE BATTLE OF TRAFALGAR? (NELSON) | . 007 | 1 | 138 | 6.9 | 13.4 | . 12 | . 88 | 8.6 | 100.0 | 2.9 | 16 | 18.4 | 141 | -. 12 |
| 224 | 265 | WHAT IS THE NAME OF THE INDIAN COLLEGE IN PENNSYLVANIA FOR WHICH JIM THORPE PLAYED FOOTBALL? (CARLISLE) | . 007 | 1 | 145 | 66.7 | 20.0 | . 17 | . 82 | 11.8 | 100.0 | 8.3 | 25 | 24.3 | 147 | . 08 |

Table A1 (continued)

| 2012 Rank Order | 1980 Rank Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge Corrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RLi | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | $M$ | $N_{\text {pj }}$ | $r$ |
| 225 | 273 | WHAT IS THE NAME OF THE PLAY IN WHICH ELWOOD P. DOWD IS A CHARACTER? (HARVEY) | . 007 | 1 | 145 | 6.8 | 21.8 | . 12 | . 88 | 16.8 | 100.0 | 11.9 | 17 | 20.2 | 147 | . $55^{*}$ |
| 226 | 251 | WHAT FAMOUS KNOT DID ALEXANDER THE GREAT UNDO? (GORDIAN) | . 007 | 1 | 148 | 4.5 | 12.6 | . 17 | . 82 | 8.0 | 100.0 | 4.5 | 26 | 24.0 | 151 | . 15 |
| 227 | 131 | WHAT WAS THE NAME OF THE UNSUCCESSFUL <br> AUTO THAT WAS MANUFACTURED BY THE FORD MOTOR COMPANY FROM 1957-1959? (EDSEL) ${ }^{\text {b }}$ | . 007 | 1 | 149 | 5.2 | 17.9 | . 15 | . 85 | 20.3 | 100.0 | 16.7 | 22 | 26.7 | 152 | . $67 *$ |
| 228 | 293 | WHAT IS THE LAST NAME OF THE SONG WRITER WHO WROTE THE SONG "I LOVE PARIS"? (PORTER) | . 007 | 1 | 149 | 35.9 | 10.9 | . 10 | . 89 | 10.9 | 50.0 | 8.3 | 15 | 20.0 | 153 | . $68{ }^{*}$ |
| 229 | 297 | WHAT IS THE LAST NAME OF THE FIRST AMERICAN AUTHOR TO WIN THE NOBEL PRIZE FOR LITERATURE? (LEWIS) | . 007 | 1 | 150 | 26.3 | 15.4 | . 24 | . 75 | 19.6 | 20.0 | 19.6 | 36 | 26.5 | 151 | .85* |
| 230 | 219 | WHAT IS THE LAST NAME OF THE INVENTOR OF THE WIRELESS RADIO? (MARCONI) | . 007 | 1 | 152 | 5.8 | 14.1 | . 24 | . 75 | 25.3 | 40.0 | 24.9 | 37 | 26.0 | 154 | . 22 |
| 231 | 267 | WHAT IS THE LAST NAME OF THE ARTIST WHO PAINTED "AMERICAN GOTHIC"? (WOOD) | . 007 | 1 | 152 | 18.8 | 14.0 | . 19 | . 80 | 18.5 | 100.0 | 15.7 | 29 | 24.6 | 153 | . $45^{*}$ |
| 232 | 195 | IN WHAT PROFESSION WAS EMMETT KELLY? $(\mathrm{CLOWN})^{\mathrm{b}}$ | . 006 | 1 | 153 | 3.9 | 9.8 | . 31 | . 68 | 15.6 | 100.0 | 13.8 | 48 | 22.8 | 157 | . 15 |
| 233 | 249 | WHAT IS THE NAME OF THE RIVER THAT RUNS THROUGH ROME? (TIBER) | . 006 | 1 | 154 | 3.5 | 18.1 | . 23 | . 76 | 22.8 | 100.0 | 20.6 | 36 | 32.0 | 157 | . $51{ }^{*}$ |
| 234 | 285 | WHAT IS THE LAST NAME OF THE POET WHO ORIGINALLY WROTE "DON JUAN"? (BYRON) | . 006 | 1 | 162 | 15.3 | 13.6 | . 17 | . 83 | 17.0 | 75.0 | 14.9 | 27 | 21.7 | 166 | . $44 *$ |
| 235 | 210 | WHAT IS THE LAST NAME OF THE FRENCH AUTHOR WHO WROTE "THE STRANGER"? (CAMUS) | . 005 | 1 | 188 | 7.4 | 10.8 | . 12 | . 88 | 8.8 | 100.0 | 4.6 | 22 | 17.8 | 198 | . $87 *$ |
| 236 | 250 | WHO WAS THE FIRST RULER OF THE HOLY ROMAN EMPIRE? (CHARLEMAGNE) | . 005 | 1 | 197 | 15.0 | 12.8 | . 47 | . 53 | 30.9 | 50.0 | 30.7 | 93 | 28.9 | 205 | . $59 *$ |
| 237 | 276 | WHAT IS THE LAST NAME OF THE MAN WHO IS REGARDED AS THE NATIONAL POET OF SCOTLAND? (BURNS) | . 005 | 1 | 198 | 6.0 | 12.8 | . 15 | . 84 | 9.6 | 70.0 | 7.6 | 30 | 14.3 | 202 | . 23 |
| 238 | 202 | WHAT IS THE LAST NAME OF THE FOOTBALL PLAYER KNOWN AS "THE GALLOPING GHOST"? (GRANGE) | . 005 | 1 | 199 | 6.6 | 12.7 | . 20 | . 80 | 6.4 | 100.0 | 4.1 | 40 | 27.9 | 205 | -. 08 |
| 239 | 118 | WHAT IS THE NAME OF ROY ROGERS' HORSE? (TRIGGER) ${ }^{\text {b }}$ | . 005 | 1 | 202 | 3.9 | 9.4 | . 24 | . 76 | 17.4 | 100.0 | 15.7 | 48 | 19.0 | 208 | . $30^{*}$ |
| 240 | 288 | WHAT WAS THE NAME OF THE NUCLEAR SUBMARINE THAT SUNK IN THE ATLANTIC IN 1963? (THRESHER) | . 005 | 1 | 204 | 42.6 | 16.7 | . 15 | . 84 | 11.8 | 90.0 | 9.3 | 31 | 22.1 | 211 | . 46 * |
| 241 | 248 | WHAT IS THE NAME OF THE MAN WHO REMOVED THE THORN FROM THE LION'S PAW IN THE STORY FROM AESOP'S FABLES? (ANDROCLES) | . 005 | 1 | 205 | 23.8 | 12.3 | . 19 | . 80 | 14.3 | 20.0 | 14.2 | 40 | 22.7 | 210 | . 72 * |
| 242 | 232 | WHAT IS THE NAME OF THE BRIGHTEST STAR IN THE SKY EXCLUDING THE SUN? (SIRIUS) | . 005 | 1 | 207 | 9.8 | 12.7 | . 71 | . 29 | 46.4 | 50.0 | 46.4 | 147 | 44.7 | 216 | . 69 * |
| 243 | 290 |  | . 005 | 1 | 207 | 21.9 | 13.3 | . 13 | . 86 | 10.7 | 80.0 | 8.2 | 28 | 25.9 | 211 | . $39^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
|  |  | WHAT IS THE NAME OF THE LAND OF THE GIANTS IN "GULLIVER'S TRAVELS"? (BROBDINGNAG) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 244 | 220 | WHAT WAS THE LAST NAME OF THE FEMALE STAR OF THE MOVIE "CASABLANCA"? (BERGMAN) | . 005 | 1 | 209 | 7.4 | 10.9 | . 19 | . 80 | 13.3 | 99.0 | 11.1 | 40 | 24.3 | 212 | . $44^{*}$ |
| 245 | 238 | WHAT IS THE LAST NAME OF THE ACTOR KNOWN AS "THE MAN OF A THOUSAND FACES"? (CHANEY) | . 005 | 1 | 210 | 8.3 | 15.9 | . 27 | . 73 | 18.0 | 95.0 | 16.6 | 56 | 26.3 | 218 | . $71{ }^{*}$ |
| 246 | 194 | WHAT IS THE NAME OF THE BASEBALL PLAYER WITH THE HIGHEST LIFETIME BATTING AVERAGE IN THE MAJOR LEAGUES? (COBB) ${ }^{\text {b }}$ | . 005 | 1 | 212 | 7.8 | 14.1 | . 68 | . 32 | 35.7 | 100.0 | 35.2 | 144 | 43.3 | 218 | . $52{ }^{*}$ |
| 247 | 116 | WHAT WAS THE LAST NAME OF THE ACTOR IN THE ROLE OF PERRY MASON ON TELEVISION? (BURR) ${ }^{\text {b }}$ | . 005 | 1 | 213 | 12.0 | 10.2 | . 12 | . 87 | 13.6 | 100.0 | 10.2 | 26 | 20.6 | 219 | . $49{ }^{*}$ |
| 248 | 212 | WHAT IS THE LAST NAME OF THE MOST POPULAR PIN-UP GIRL OF WORLD WAR II? (GRABLE) | . 004 | 1 | 225 | 15.5 | 14.0 | . 42 | . 58 | 39.9 | 100.0 | 39.2 | 94 | 30.5 | 233 | . $72 *$ |
| 249 | 50 | WHAT IS THE NAME OF THE LARGEST DESERT ON EARTH? (ANTARTICA) ${ }^{\text {b }}$ | . 000 |  | 203 |  | 8.7 | . 78 | . 22 | 59.4 |  | 59.4 | 159 | 54.5 | 208 | . $77 *$ |
| 250 | 123 | WHAT IS THE LAST NAME OF THE JOCKEY WITH THE MOST LIFETIME WINNERS IN HORSE RACING? (BAZE) ${ }^{\text {b }}$ | . 000 |  | 148 |  | 13.0 | . 15 | . 85 | 5.5 |  | 5.5 | 22 | 20.9 | 148 | . 25 |
| 251 | 130 | WHAT IS THE LAST NAME OF THE MAN WHO WAS THE VOICE OF MR. MAGOO? (BACKUS) ${ }^{\text {b }}$ | . 000 |  | 220 |  | 11.2 | . 17 | . 83 | 15.4 |  | 15.4 | 37 | 22.6 | 226 | . $46{ }^{*}$ |
| 252 | 138 | WHAT IS THE LAST NAME OF THE ACTOR WHO PORTRAYED SERGEANT FRIDAY ON "DRAGNET"? (WEBB) ${ }^{\text {b }}$ | . 000 |  | 211 |  | 10.4 | . 13 | . 87 | 2.3 |  | 2.3 | 28 | 17.4 | 214 | . $44 *$ |
| 253 | 141 | WHAT WAS THE LAST NAME OF THE ACTOR WHO PORTRAYED THE FATHER ON THE TELEVISION SHOW "FATHER KNOWS BEST"? (YOUNG) ${ }^{\text {b }}$ | . 000 |  | 150 |  | 13.8 | . 09 | . 91 | 19.7 |  | 19.7 | 14 | 27.7 | 153 | . $59{ }^{*}$ |
| 254 | 151 | WHAT WAS THE LAST NAME OF THE VENTRILOQUIST WHO PROVIDED THE VOICE FOR CHARLIE MCCARTHY? (BERGEN) ${ }^{\text {b }}$ | . 000 |  | 148 |  | 12.6 | . 14 | . 86 | 7.5 |  | 7.5 | 21 | 16.6 | 148 | . 70 * |
| 255 | 163 | WHAT WAS THE LAST NAME OF THE CAPTAIN OF THE BRITISH SHIP "BOUNTY" WHEN THE MUTINY OCCURRED? (BLIGH) ${ }^{\text {b }}$ | . 000 |  | 134 |  | 18.3 | . 13 | . 87 | 7.9 |  | 7.9 | 17 | 17.5 | 137 | . 20 |
| 256 | 172 | WHAT IS THE LAST NAME OF THE INVENTOR OF THE STEAMBOAT "CLERMONT"? (FULTON) ${ }^{\text {b }}$ | . 000 |  | 219 |  | 9.7 | . 23 | . 77 | 10.5 |  | 10.5 | 50 | 19.1 | 223 | . $49^{*}$ |
| 257 | 173 | WHAT IS THE NAME OF GERMANY'S LARGEST BATTLESHIP THAT WAS SUNK IN WORLD WAR II? (BISMARCK) ${ }^{\text {b }}$ | . 000 |  | 148 |  | 14.5 | . 15 | . 85 | 23.3 |  | 23.3 | 22 | 28.8 | 148 | . $59 *$ |
| 258 | 179 | WHAT IS THE LAST NAME OF THE JUDGE WHO WAS KNOWN AS "THE LAW WEST OF THE PECOS"? (BEAN) ${ }^{\text {b }}$ | . 000 |  | 156 |  | 9.1 | . 08 | . 92 | 2.1 |  | 2.1 | 13 | 18.4 | 157 | . $77 *$ |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response <br> Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | $\begin{aligned} & \begin{array}{l} \text { Judge } \\ \text { Corrs } \end{array} \\ & \hline r \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\mathrm{c}}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 259 | 180 | WHAT IS JOHN KENNETH GALBRAITH'S PROFESSION? (ECONOMIST) ${ }^{\text {b }}$ | . 000 |  | 219 |  | 10.6 | . 26 | . 74 | 8.4 |  | 8.4 | 58 | 18.7 | 224 | . $35^{*}$ |
| 260 | 186 | WHAT WAS THE NAME OF THE UNION IRONCLAD SHIP THAT FOUGHT THE CONFEDERATE IRONCLAD MERRIMACK? (MONITOR) ${ }^{\text {b }}$ | . 000 |  | 207 |  | 17.6 | . 14 | . 86 | 3.2 |  | 3.2 | 28 | 16.6 | 212 | . $38^{*}$ |
| 261 | 197 | WHAT IS THE LAST NAME OF THE DOCTOR WHO PERFORMED THE FIRST SUCCESSFUL HUMAN HEART TRANSPLANT? (BARNARD) ${ }^{\text {b }}$ | . 000 |  | 151 |  | 11.0 | . 13 | . 87 | 11.0 |  | 11.0 | 19 | 19.4 | 154 | . 79 * |
| 262 | 208 | WHAT IS THE LAST NAME OF THE MAN WHO SAID "I ONLY REGRET THAT I HAVE BUT ONE LIFE TO LOSE FOR MY COUNTRY"? (HALE) | . 000 |  | 206 |  | 18.3 | . 27 | . 73 | 17.9 |  | 17.9 | 56 | 28.3 | 212 | . $49^{*}$ |
| 263 | 215 | WHAT IS THE LAST NAME OF THE PILOT OF THE U-2 SPY PLANE SHOT DOWN OVER RUSSIA IN 1960? (POWERS) | . 000 |  | 144 |  | 12.7 | . 13 | . 88 | 10.6 |  | 10.6 | 18 | 24.6 | 147 | . $54{ }^{*}$ |
| 264 | 217 | WHAT IS THE LAST NAME OF THE ACTOR WHO PORTRAYED THE SHERIFF IN THE MOVIE "HIGH NOON"? (COOPER) | . 000 |  | 145 |  | 10.9 | . 19 | . 81 | 16.7 |  | 16.7 | 27 | 22.5 | 146 | . $51{ }^{*}$ |
| 265 | 222 | WHAT IS THE NAME OF THE MOUNTAIN RANGE THAT SEPARATES ASIA FROM EUROPE? (URAL) | . 000 |  | 212 |  | 14.0 | . 50 | . 50 | 33.8 |  | 33.8 | 107 | 35.1 | 217 | . $65^{*}$ |
| 266 | 227 | WHAT IS THE LAST NAME OF THE BOXER WHO WAS KNOWN AS THE "MANASSA MAULER"? (DEMPSEY) | . 000 |  | 140 |  | 10.5 | . 24 | . 76 | 14.6 |  | 14.6 | 33 | 25.0 | 144 | . $62{ }^{*}$ |
| 267 | 229 | WHAT IS THE LAST NAME OF THE MAN WHO CREATED THE COMIC STRIP "LI'L ABNER"? (CAPP) | . 000 |  | 146 |  | 13.5 | . 14 | . 86 | 3.9 |  | 3.9 | 20 | 19.6 | 150 | . 21 |
| 268 | 234 | WHAT IS THE LAST NAME OF THE BASEBALL PLAYER WHO PITCHED A PERFECT GAME IN THE 1956 WORLD SERIES? (LARSEN) | . 000 |  | 217 |  | 10.3 | . 36 | . 64 | 22.0 |  | 22.0 | 79 | 34.0 | 223 | . $56{ }^{*}$ |
| 269 | 239 | WHAT IS THE LAST NAME OF THE FIRST MAN TO RUN THE MILE IN UNDER FOUR MINUTES? (BANNISTER) | . 000 |  | 158 |  | 13.5 | . 25 | . 75 | 23.2 |  | 23.2 | 40 | 22.6 | 161 | . $59 *$ |
| 270 | 240 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE "BROTHERS KARAMAZOV"? (DOSTOYEVSKI) | . 000 |  | 200 |  | 10.9 | . 14 | . 87 | 7.5 |  | 7.5 | 27 | 15.0 | 208 | . $78{ }^{*}$ |
| 271 | 244 | WHAT IS THE NAME OF THE AUTHOR WHO RECEIVED A PULITZER PRIZE FOR HIS WRITINGS ABOUT ABRAHAM LINCOLN? (SANDBURG) | . 000 |  | 205 |  | 10.9 | . 10 | . 90 | 6.3 |  | 6.3 | 20 | 19.4 | 210 | . 41 |
| 272 | 246 | WHAT IS THE LAST NAME OF THE MAN WHO CREATED THE COMIC STRIP "WOODY WOODPECKER"? (LANTZ) | . 000 |  | 219 |  | 9.9 | . 21 | . 79 | 16.1 |  | 16.1 | 45 | 21.7 | 225 | . $69{ }^{*}$ |
| 273 | 252 | WHAT IS THE NAME OF THE INSTRUMENT USED TO MEASURE WIND SPEED? (ANEMOMETER) | . 000 |  | 207 |  | 13.7 | . 41 | . 59 | 27.8 |  | 27.8 | 85 | 31.6 | 213 | . $57 *$ |
| 274 | 253 | WHAT IS THE LAST NAME OF THE AUTHOR OF "OUR TOWN"? (WILDER) | . 000 |  | 142 |  | 11.1 | . 14 | . 86 | 11.0 |  | 11.0 | 20 | 23.2 | 147 | . 62 * |
| 275 | 256 | WHAT IS THE LAST NAME OF THE SINGER WHO MADE A HIT RECORDING OF THE SONG "WHO'S SORRY NOW"? (FRANCIS) | . 000 |  | 207 |  | 12.6 | . 15 | . 85 | 5.3 |  | 5.3 | 32 | 22.8 | 214 | . 33 |

Table A1 (continued)

| $2012 \text { Rank }$ <br> Order | 1980 Rank <br> Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer Judgments |  | Judge Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RL ${ }_{\text {i }}$ | $\mathrm{E}_{\text {c }}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\text {c }}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | M | $N_{\text {pj }}$ |  |
| 276 | 257 | WHAT IS THE LAST NAME OF THE CUBAN LEADER THAT CASTRO OVERTHREW? (BATISTA) | . 000 |  | 141 |  | 17.5 | . 12 | . 88 | 20.4 |  | 20.4 | 16 | 32.2 | 144 | . 33 |
| 277 | 260 | WHAT IS THE NAME OF THE RUBBER ROLLER ON A TYPEWRITER? (PLATEN) | . 000 |  | 200 |  | 13.4 | . 23 | . 77 | 7.8 |  | 7.8 | 46 | 19.5 | 205 | . $41^{*}$ |
| 278 | 263 | WHAT WAS THE NAME OF THE LARGEST CONFEDERATE MILITARY PRISON DURING THE CIVIL WAR? (ANDERSONVILLE) | . 000 |  | 139 |  | 18.3 | . 14 | . 86 | 24.8 |  | 24.8 | 19 | 29.6 | 138 | . $50{ }^{*}$ |
| 279 | 266 | WHAT IS THE LAST NAME OF THE AUTHOR OF "THE AGONY AND THE ECSTASY"? (STONE) | . 000 |  | 204 |  | 10.5 | . 10 | . 90 | 6.8 |  | 6.8 | 21 | 17.4 | 213 | . 44 |
| 280 | 268 | WHAT IS THE LAST NAME OF FLASH'S GIRLFRIEND IN THE COMIC STRIP "FLASH GORDON"? (ARDEN) | . 000 |  | 214 |  | 11.0 | . 20 | . 80 | 5.6 |  | 5.6 | 42 | 19.9 | 217 | . 04 |
| 281 | 269 | WHAT IS THE NAME OF THE FIRST MOVIE TO RECEIVE THE ACADEMY AWARD FOR BEST PICTURE? (WINGS) | . 000 |  | 127 |  | 17.8 | . 24 | . 76 | 23.8 |  | 23.8 | 30 | 19.6 | 130 | . $59{ }^{*}$ |
| 282 | 270 | WHAT IS THE LAST NAME OF THE DISCOVERER OF THE VACCINATION FOR SMALLPOX? (JENNER) | . 000 |  | 204 |  | 12.8 | . 19 | . 81 | 12.0 |  | 12.0 | 39 | 23.0 | 208 | . $84 *$ |
| 283 | 271 | WHAT IS THE LAST NAME OF THE BOY IN THE BOOK "TREASURE ISLAND"? (HAWKINS) | . 000 |  | 144 |  | 10.4 | . 20 | . 80 | 20.0 |  | 20.0 | 29 | 32.0 | 146 | . $48^{*}$ |
| 284 | 272 | WHAT IS THE LAST NAME OF THE BOXER WHO WON THE BOXING TITLE FROM JOHN L. SULLIVAN? (CORBETT) | . 000 |  | 211 |  | 10.6 | . 42 | . 58 | 24.7 |  | 24.7 | 88 | 28.0 | 215 | . 43 * |
| 285 | 275 | WHAT IS THE LAST NAME OF THE MAN WHO WROTE THE SONG "HOW DEEP IS THE OCEAN"? (BERLIN) | . 000 |  | 145 |  | 8.6 | . 12 | . 88 | 2.9 |  | 2.9 | 17 | 20.9 | 148 | . 27 |
| 286 | 277 | WHAT WAS THE LAST NAME OF BILLY THE KID? (BONNEY) | . 000 |  | 138 |  | 11.5 | . 25 | . 75 | 17.1 |  | 17.1 | 35 | 25.4 | 142 | . 23 |
| 287 | 278 | WHAT IS THE LAST NAME OF THE SINGER WHOSE THEME SONG WAS "WHEN THE BLUE OF THE NIGHT MEETS THE GOLD OF THE DAY"? (CROSBY) | . 000 |  | 214 |  | 11.7 | . 13 | . 87 | 8.3 |  | 8.3 | 28 | 17.9 | 219 | . 27 |
| 288 | 279 | FROM WHAT MUSICAL IS THE SONG "BAUBLES BANGLES AND BEADS"? (KISMET) | . 000 |  | 147 |  | 12.0 | . 16 | . 84 | 15.3 |  | 15.3 | 24 | 21.3 | 148 | . $55^{*}$ |
| 289 | 280 | WHAT WAS THE LAST NAME OF THE ACTOR WHO PORTRAYED DR. WATSON IN THE SHERLOCK HOLMES SERIES? (BRUCE) | . 000 |  | 204 |  | 14.2 | . 25 | . 75 | 36.6 |  | 36.6 | 50 | 32.1 | 211 | . $76 *$ |
| 290 | 281 | WHAT IS THE LAST NAME OF THE MAN WHO WAS MOST RESPONSIBLE FOR PHOTOGRAPHING THE U.S. CIVIL WAR? (BRADY) | . 000 |  | 142 |  | 14.9 | . 13 | . 87 | 12.4 |  | 12.4 | 18 | 19.5 | 145 | . 39 |
| 291 | 283 | WHAT IS THE NAME OF A NUMBER TWO WOOD IN GOLF? (BRASSIE) | . 000 |  | 149 |  | 15.0 | . 50 | . 50 | 26.8 |  | 26.8 | 74 | 37.0 | 151 | . $38^{*}$ |
| 292 | 287 | WHAT IS THE LAST NAME OF THE POET WHO WROTE THE LINE "INTO EACH LIFE A LITTLE RAIN MUST FALL"? (LONGFELLOW) | . 000 |  | 130 |  | 13.0 | . 19 | . 81 | 11.0 |  | 11.0 | 25 | 20.6 | 131 | . $49 *$ |
| 293 | 289 | WHAT WAS THE NAME OF GENE AUTRY'S HORSE? (CHAMPION) | . 000 |  | 154 |  | 11.7 | . 19 | . 81 | 9.2 |  | 9.2 | 29 | 14.7 | 159 | . $58{ }^{*}$ |

Table A1 (continued)

| 2012 Rank <br> Order | 1980 Rank Order | Question and Correct Response | Probability of Recall |  |  | Response Latency |  | Proportion of Errors |  | Confidence Judgments |  |  |  | Peer <br> Judgments |  | Judge <br> Corrs $\qquad$ $r$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | $N_{\text {rc }}$ | $N_{\text {ri }}$ | $\mathrm{RL}_{\mathrm{c}}$ | RLi | $\mathrm{E}_{\mathrm{c}}$ | $\mathrm{E}_{\text {o }}$ | M | $\mathrm{CJ}_{\mathrm{c}}$ | $\mathrm{CJ}_{\mathrm{i}}$ | $N_{\text {ci }}$ | $M$ | $N_{\text {pj }}$ |  |
| 294 | 291 | WHAT IS THE NAME OF THE TOWN THROUGH WHICH LADY GODIVA SUPPOSEDLY MADE HER FAMOUS RIDE? (COVENTRY) | . 000 |  | 138 |  | 16.5 | . 21 | . 79 | 11.7 |  | 11.7 | 29 | 22.0 | 140 | . $62{ }^{*}$ |
| 295 | 294 | WHAT IS THE LAST NAME OF THE FIRST WOMAN TO SWIM ACROSS THE ENGLISH CHANNEL? (EDERLE) | . 000 |  | 203 |  | 9.2 | . 15 | . 85 | 2.2 |  | 2.2 | 30 | 19.2 | 209 | . 14 |
| 296 | 295 | WHAT IS THE LAST NAME OF THE FIRST FLIER TO FLY SOLO AROUND THE WORLD? (POST) | . 000 |  | 145 |  | 19.5 | . 41 | . 59 | 37.9 |  | 37.9 | 60 | 39.0 | 145 | . $62{ }^{*}$ |
| 297 | 298 | WHAT IS THE LAST NAME OF THE MAN WHO WROTE THE POEM "IT COULDN'T BE DONE"? (GUEST) | . 000 |  | 223 |  | 10.1 | . 19 | . 81 | 6.9 |  | 6.9 | 43 | 15.7 | 228 | . $55^{*}$ |
| 298 | 299 | WHO WAS THE RACEHORSE OF THE YEAR FOR MANY SUCCESSIVE YEARS IN THE 1960S? (KELSO) | . 000 |  | 146 |  | 16.0 | . 49 | . 51 | 32.1 |  | 32.1 | 72 | 29.8 | 149 | . $64 *$ |
| 299 | 300 | WHAT IS THE HIGHEST MOUNTAIN IN SOUTH AMERICA? (ACONCAGUA) | . 000 |  | 202 |  | 12.8 | . 33 | . 67 | 32.5 |  | 32.5 | 66 | 29.8 | 210 | . $68{ }^{*}$ |

[^2]Table A2 Proportions of and confidence in commission errors, for errors with a proportion of .05 or greater of the total responses

| 2012 Rank Order | Question and Correct Response | Commission(s) | Proportion Out of Proportion Out of <br> Commissions |
| :--- | :--- | :--- | :--- | :--- |
| Total Responses |  |  |  |

Table A2 (continued)
$\left.\begin{array}{llll}2012 \text { Rank Order } & \text { Question and Correct Response } & \text { Commission(s) } & \begin{array}{l}\text { Proportion Out of Proportion Out of } \\ \text { Commissions }\end{array} \\ \text { Total Responses }\end{array}\right]$
Table A2 (continued)
$\left.\begin{array}{lllll}\hline 2012 \text { Rank Order } & \text { Question and Correct Response } & & \text { Commission(s) } & \begin{array}{l}\text { Proportion Out of Proportion Out of } \\ \text { Commissions }\end{array} \\ \hline \text { Total Responses }\end{array}\right]$
Table A2 (continued)

| 2012 Rank Order | Question and Correct Response | Commission(s) | Proportion Out of Commissions | Proportion Out of Total Responses | Confidence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 140 | WHICH PLANET WAS THE LAST TO BE DISCOVERED? (NEPTUNE) | PLUTO | . 84 | . 65 | 57.7 |
| 143 | WHAT IS THE CAPITAL OF CHILE? (SANTIAGO) | CHILE | . 41 | . 08 | 22.4 |
| 146 | WHAT IS THE NAME OF THE FOUNTAIN IN ROME INTO WHICH COINS ARE THROWN FOR GOOD LUCK? (TREVI) | YOUTH | . 31 | . 10 | 25.8 |
| 147 | WHAT WAS THE LAST NAME OF THE MAN WHO WAS PRESIDENT DIRECTLY AFTER JAMES MADISON? (MONROE) | JEFFERSON | . 20 | . 08 | 30.5 |
| 148 | WHAT IS THE LAST NAME OF THE ASTRONOMER WHO PUBLISHED IN 1543 HIS THEORY THAT THE EARTH REVOLVES AROUND THE SUN? (COPERNICUS) | GALILEO | . 51 | . 25 | 60.0 |
| 149 | WHAT IS THE LAST NAME OF THE CRIMINAL WHO WAS KNOWN AS "SCARFACE"? (CAPONE) | MONTANA | . 35 | . 13 | 86.0 |
| 151 | WHAT IS THE CAPITAL OF DENMARK? (COPENHAGEN) | DENMARK | . 26 | . 05 | 18.2 |
| 153 | IN WHICH CITY IS MICHELANGELO'S STATUE OF DAVID LOCATED? (FLORENCE) | ROME | . 56 | . 36 | 41.5 |
| 154 | WHAT WAS FRANK LLOYD WRIGHT'S PROFESSION? (ARCHITECT) | WRITER/WRITING | . 19 | . 09 | 17.2 |
| 155 | OF WHICH COUNTRY IS NAIROBI THE CAPITAL? (KENYA) | AFRICA | . 18 | . 06 | 29.4 |
| 156 | WHAT IS THE NAME OF THE HILLBILLY FAMILY THAT HAD A FAMOUS FEUD WITH THE MCCOY FAMILY? (HATFIELD) | BEVERLY/BEVERLY HILLBILLY | . 26 | . 06 | 31.2 |
| 158 | WHAT IS THE LAST NAME OF THE FIRST PERSON TO COMPLETE A SOLO FLIGHT ACROSS THE ATLANTIC OCEAN? (LINDBERGH) | AIRHEART/EARHART | . 51 | . 19 | 47.1 |
| 160 | WHAT IS THE NAME OF THE ROMAN EMPEROR WHO FIDDLED WHILE ROME BURNED? (NERO) | CAESAR | . 49 | . 12 | 35.3 |
| 161 | WHAT IS THE CITY IN WHICH THE BASEBALL HALL OF FAME IS LOCATED? (COOPERSTOWN) | CHICAGO | . 25 | . 10 | 22.6 |
| 162 | WHAT IS THE NAME OF THE UNIT OF MEASURE THAT REFERS TO A SIX-FOOT DEPTH OF WATER? (FATHOM) | LEAGUE | . 20 | . 06 | 57.5 |
| 163 | WHAT IS THE LAST NAME OF THE SCIENTIST WHO DISCOVERED RADIUM? (CURIE) | RADIUM | . 26 | . 05 | 3.1 |
| 166 | WHAT IS THE LAST NAME OF THE CRIMINAL WHO WAS KILLED BY FBI AGENTS OUTSIDE OF A CHICAGO MOVIE THEATER? (DILLINGER) | CAPONE | . 27 | . 05 | 44.5 |
| 167 | WHAT IS THE NAME OF THE SINGER WHO POPULARIZED A DANCE KNOWN AS THE "TWIST"? (CHECKER) | ELVIS | . 52 | . 16 | 33.3 |
| 168 | OVER WHICH RIVER IS THE GEORGE WASHINGTON BRIDGE? (HUDSON) | MISSISSIPPI | . 24 | . 09 | 30.2 |
| 169 | WHAT IS THE LAST NAME OF THE MAN WHO INVENTED DYNAMITE? (NOBEL) | DYNAMITE | . 44 | . 11 | 16.0 |
| 170 | WHAT IS THE NAME OF THE CHINESE RELIGION FOUNDED BY LAO TSE? (TAOISM) | BUDDHISM | . 60 | . 25 | 35.2 |
| 172 | WHAT IS THE NAME OF THE NAVIGATION INSTRUMENT USED AT SEA TO PLOT POSITION BY THE STARS? (SEXTANT) | COMPASS | . 42 | . 23 | 36.5 |
| 176 | FOR WHICH COUNTRY IS THE DRACHMA THE MONETARY <br> UNIT? (GREECE) | RUSSIA | . 19 | . 06 | 31.3 |

Table A2 (continued)

| 2012 Rank Order | Question and Correct Response | Commission(s) | Proportion Out of Commissions | Proportion Out of Total Responses | Confidence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 178 | WHAT IS THE LONGEST RIVER IN ASIA? (YANGTZE) | NILE | . 36 | . 14 | 39.3 |
| 181 | OF WHICH COUNTRY IS BUDAPEST THE CAPITAL? (HUNGARY) | INDIA | . 48 | . 21 | 30.4 |
| 182 | WHO IS KNOWN AS "THE FATHER OF GEOMETRY"? (EUCLID) | PYTHAGORAS | . 30 | . 09 | 30.9 |
| 184 | WHAT IS THE LAST NAME OF THE COMPOSER WHO WROTE THE OPERA "DON GIOVANNI"? (MOZART) | GIOVANNI | . 25 | . 05 | 24.4 |
| 185 | WHAT IS THE LAST NAME OF THE AUTHOR OF THE JAMES BOND NOVELS? (FLEMING) | BOND | . 37 | . 06 | 6.8 |
| 186 | WHAT WAS THE LAST NAME OF BUFFALO BILL? (CODY) | BILL | . 35 | . 09 | 36.7 |
| 187 | WHAT IS THE LAST NAME OF THE AUTHOR WHO WROTE UNDER THE PSEUDONYM OF MARK TWAIN? (CLEMENS) | TWAIN | . 53 | . 09 | 15.4 |
| 190 | WHAT IS THE LAST NAME OF THE MAN WHO BEGAN THE REFORMATION IN GERMANY? (LUTHER) | HITLER | . 83 | . 44 | 58.9 |
| 192 | WHAT WAS THE NAME OF THE APOLLO LUNAR MODULE THAT LANDED THE FIRST MAN ON THE MOON? (EAGLE) | APOLLO | . 22 | . 08 | 17.3 |
| 193 | WHAT IS THE LAST NAME OF THE COSMONAUT WHO WAS THE FIRST PERSON TO ORBIT AROUND THE EARTH? (GAGARIN) | ARMSTRONG | . 27 | . 08 | 34.2 |
| 201 | IN WHICH COUNTRY IS ANGEL FALLS LOCATED? (VENEZUELA) | CANADA | . 16 | . 06 | 20.9 |
| 202 | WHAT IS THE CAPITAL OF CANADA? (OTTAWA) | TORONTO | . 28 | . 20 | 49.8 |
| 203 | WHAT IS THE LAST NAME OF THE TWENTY-FIRST U.S. PRESIDENT? (ARTHUR) | BUSH | . 14 | . 07 | 21.7 |
| 204 | WHAT WAS THE NAME OF THE GOLDFISH IN THE STORY OF PINOCCHIO? (CLEO) | GOLDIE | . 23 | . 06 | 12.6 |
| 207 | WHAT IS THE CAPITAL OF AUSTRALIA? (CANBERRA) | SYDNEY | . 79 | . 50 | 80.3 |
| 208 | WHAT IS THE LAST NAME OF THE ARTIST WHO PAINTED "THE PERSISTENCE OF MEMORY"? (DALI) | DAVINCI | . 24 | . 05 | 11.4 |
| 209 | WHAT IS THE LAST NAME OF THE MAN WHO INVENTED THE TELEGRAPH? (MORSE) | BELL | . 40 | . 16 | 59.6 |
| 211 | WHAT IS THE NAME OF THE SUBSTANCE DERIVED FROM A WHALE THAT IS USED TO MAKE PERFUME? (AMBERGRIS) | BLUBBER | . 64 | . 29 | 36.4 |
| 213 | WHAT WAS THE NAME OF THE CLOWN ON THE "HOWDY DOODY" TELEVISION SHOW? (CLARABELL) | BOZO | . 42 | . 08 | 25.5 |
| 215 | WHAT IS THE LAST NAME OF THE MOVIE ACTOR WHO PORTRAYED SPARTACUS? (DOUGLAS) | BUTLER | . 23 | . 06 | 53.8 |
| 217 | WHAT IS THE LAST NAME OF THE UNION GENERAL WHO DEFEATED THE CONFEDERATE ARMY AT THE CIVIL WAR BATTLE OF GETTYSBURG? (MEADE) | GRANT | . 29 | . 13 | 66.7 |
| 218 | WHAT IS THE NAME OF THE AVENUE THAT IMMEDIATELY FOLLOWS ATLANTIC AVENUE IN THE GAME OF MONOPOLY? (VENTNOR) | PACIFIC | . 40 | . 15 | 26.2 |
| 233 | WHAT IS THE NAME OF THE RIVER THAT RUNS THROUGH ROME? (TIBER) | NILE | . 25 | . 06 | 21.6 |
| 236 | WHO WAS THE FIRST RULER OF THE HOLY ROMAN EMPIRE? (CHARLEMAGNE) | CAESAR | . 55 | . 26 | 38.5 |

Table A2 (continued)

| 2012 Rank Order | Question and Correct Response | Commission(s) | Proportion Out of Commissions | Proportion Out of Total Responses | Confidence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 242 | WHAT IS THE NAME OF THE BRIGHTEST STAR IN THE SKY EXCLUDING THE SUN? (SIRIUS) | NORTH/NORTH STAR | . 58 | . 41 | 47.1 |
| 246 | WHAT IS THE NAME OF THE BASEBALL PLAYER WITH THE HIGHEST LIFETIME BATTING AVERAGE IN THE MAJOR LEAGUES? (COBB) | BABE/BABE RUTH/ RUTH | . 71 | . 48 | 40.0 |
| 248 | WHAT IS THE LAST NAME OF THE MOST POPULAR PIN-UP GIRL OF WORLD WAR II? (GRABLE) | MONROE | . 40 | . 17 | 46.9 |
| 249 | WHAT IS THE NAME OF THE LARGEST DESERT ON EARTH? (ANTARTICA) | SAHARA | . 82 | . 65 | 63.9 |
| 256 | WHAT IS THE LAST NAME OF THE INVENTOR OF THE STEAMBOAT "CLERMONT"? (FULTON) | CLERMONT | . 54 | . 12 | 15.1 |
| 259 | WHAT IS JOHN KENNETH GALBRAITH'S PROFESSION? (ECONOMIST) | WRITER | . 21 | . 05 | 14.5 |
| 262 | WHAT IS THE LAST NAME OF THE MAN WHO SAID "I ONLY REGRET THAT I HAVE BUT ONE LIFE TO LOSE FOR MY COUNTRY"? (HALE) | WASHINGTON | . 34 | . 09 | 13.3 |
| 265 | WHAT IS THE NAME OF THE MOUNTAIN RANGE THAT SEPARATES ASIA FROM EUROPE? (URAL) | HIMALAYAS | . 34 | . 17 | 56.4 |
| 266 | WHAT IS THE LAST NAME OF THE BOXER WHO WAS KNOWN AS THE "MANASSA MAULER"? (DEMPSEY) | ALI | . 48 | . 11 | 23.1 |
| 268 | WHAT IS THE LAST NAME OF THE BASEBALL PLAYER WHO PITCHED A PERFECT GAME IN THE 1956 WORLD SERIES? (LARSEN) | RUTH | . 63 | . 23 | 28.9 |
| 272 | WHAT IS THE LAST NAME OF THE MAN WHO CREATED THE COMIC STRIP "WOODY WOODPECKER"? (LANTZ) | DISNEY | . 27 | . 05 | 28.8 |
| 273 | WHAT IS THE NAME OF THE INSTRUMENT USED TO MEASURE WIND SPEED? (ANEMOMETER) | BAROMETER | . 47 | . 19 | 43.3 |
| 281 | WHAT IS THE NAME OF THE FIRST MOVIE TO RECEIVE THE ACADEMY AWARD FOR BEST PICTURE? (WINGS) | TITANIC | . 43 | . 10 | 29.4 |
| 284 | WHAT IS THE LAST NAME OF THE BOXER WHO WON THE BOXING TITLE FROM JOHN L. SULLIVAN? (CORBETT) | ALI | . 42 | . 18 | 31.2 |
| 289 | WHAT WAS THE LAST NAME OF THE ACTOR WHO PORTRAYED DR. WATSON IN THE SHERLOCK HOLMES SERIES? (BRUCE) | LAW | . 36 | . 09 | 65.0 |
| 291 | WHAT IS THE NAME OF A NUMBER TWO WOOD IN GOLF? (BRASSIE) | DRIVER | . 22 | . 11 | 52.2 |
| 295 | WHAT IS THE LAST NAME OF THE FIRST WOMAN TO SWIM ACROSS THE ENGLISH CHANNEL? (EDERLE) | SMITH | . 33 | . 05 | 1.2 |
| 296 | WHAT IS THE LAST NAME OF THE FIRST FLIER TO FLY SOLO AROUND THE WORLD? (POST) | AIRHEART/EARHART | . 48 | . 20 | 52.4 |
| 298 | WHO WAS THE RACEHORSE OF THE YEAR FOR MANY SUCCESSIVE YEARS IN THE 1960'S? (KELSO) | SEABISCUIT | . 60 | . 29 | 40.8 |
| 299 | WHAT IS THE HIGHEST MOUNTAIN IN SOUTH AMERICA? (ACONCAGUA) | ANDES | . 24 | . 08 | 37.6 | Commission responses and mean confidence judgments in commission responses are provided for those questions with consistencies in errors for .05 or greater out of the total responses. When available, the top three commission errors are provided; otherwise, the top one or two commission errors are provided.

Table A3 Questions for which the correct response has changed from the 1980 norms

| 2012 Rank Order | Question | 1980 Correct Response | 2012 Correct Response |
| :---: | :---: | :---: | :---: |
| Questions for which the 1980 response was incorrect |  |  |  |
| 16 | WHAT IS THE NAME OF A GIANT OCEAN WAVE CAUSED BY AN EARTHQUAKE? | TIDAL ${ }^{\text {a }}$ | TSUNAMI |
| 89 | WHAT IS THE NAME OF THE COMPANY THAT PRODUCES "BABY RUTH" CANDY BARS? | CURTISS ${ }^{\text {b }}$ | NESTLE |
| 140 | WHICH PLANET WAS THE LAST TO BE DISCOVERED? | PLUTO ${ }^{\text {b }}$ | NEPTUNE |
| 229 | WHAT IS THE LAST NAME OF THE FIRST AMERICAN AUTHOR TO WIN THE NOBEL PRIZE FOR LITERATURE? | HENRY ${ }^{\text {a }}$ | LEWIS |
| 249 | WHAT IS THE NAME OF THE LARGEST DESERT ON EARTH? | SAHARA ${ }^{\text {a }}$ | ANTARTICA |
| 250 | WHAT IS THE LAST NAME OF THE JOCKEY WITH THE MOST LIFETIME WINNERS IN HORSE RACING? | SHOEMAKER ${ }^{\text {b }}$ | BAZE |
| - | WHAT IS THE CAPITAL OF CZECHOSLOVAKIA? | PRAGUE ${ }^{\text {c }}$ |  |
| Questions for which the 1980 response is still correct, but participants provided alternative responses that are also correct |  |  |  |
| 30 | WHAT IS THE NAME FOR A CYCLONE THAT OCCURS OVER LAND? ${ }^{\text {d }}$ | TORNADO | HURRICANE |
| 66 | WHICH TYPE OF SNAKE DO ASIAN SNAKE-CHARMERS USE? | COBRA | VIPER |
| 74 | WHICH BREED OF CAT HAS BLUE EYES? | SIAMESE | HIMALAYAN |
| 83 | WHAT IS THE NAME FOR THE ASTRONOMICAL BODIES THAT ENTER THE EARTH'S ATMOSPHERE? ${ }^{\text {d }}$ | METEOR | METEORITE |
| 103 | WHAT IS THE NAME OF AN AIRPLANE WITHOUT AN ENGINE? | GLIDER | PAPER, MODEL |
| 108 | WHAT IS THE NAME OF THE FURRY ANIMAL THAT ATTACKS COBRA SNAKES? | MONGOOSE | HONEY BADGER |
| 259 | WHAT IS JOHN KENNETH GALBRAITH'S PROFESSION? | ECONOMIST | PROFESSOR |
| 289 | WHAT WAS THE LAST NAME OF THE ACTOR WHO PORTRAYED DR. WATSON IN THE SHERLOCK HOLMES SERIES? | BRUCE | LAW |

[^3]
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[^2]:    
    
    
    
    
    
     norms included one additional question: "What is the capital of Czechoslovakia?" (Prague). This question was not included because it is outdated and has no correct answer.

[^3]:    ${ }^{\text {a }}$ The 1980 response was incorrect. ${ }^{\text {b }}$ The 1980 response was correct at the time, but is now incorrect. ${ }^{\text {c }}$ Outdated question: Czechoslovakia is no longer a country, so there is no correct response. ${ }^{\text {d }}$ The wording of the question is somewhat ambiguous, so the alternative response could be considered correct.

