

Table 2

*100 Extremely Eminent Psychologists (Ranks 1–100)*

Rank	Name	Awards	Text pages	Total citations	h-index	Highest cited article
1	BANDURA, Albert	2	40	218,219	144	33,888
2	PIAGET, Jean	2	39	152,723	148	8,056
3	KAHNEMAN, Daniel	2	23	152,529	107	24,780
4	LAZARUS, Richard	2	25	96,379	101	24,110
5	SELIGMAN, Martin	2	47	67,789	97	7,691
6	SKINNER, B. F.	2	43	66,603	83	9,162
7	CHOMSKY, Noam	2	11	191,030	123	19,447
8	TAYLOR, Shelley	2	40	50,243	88	8,675
9	TVERSKY, Amos	2	13	134,651	96	24,295
10	DIENER, Ed	2	22	67,882	110	6,853
11	SIMON, Herbert	2	6	191,431	147	16,045
12	ROGERS, Carl	2	27	56,980	78	8,462
13	SQUIRE, Larry	2	24	54,809	114	3,508
14	ANDERSON, John	2	12	72,008	98	9,004
15	EKMAN, Paul	2	24	59,121	87	3,000
16	TULVING, Endel	2	22	46,137	88	4,195
17	ALLPORT, Gordon	2	15	50,316	67	15,083
18	BOWLBY, John	2	8	72,122	81	23,681
19	NISBETT, Richard	2	20	42,852	76	6,955
20	CAMPBELL, Donald	2	8	84,135	85	14,036
21	MILLER, George	2	11	53,526	73	15,711
22	FISKE, Susan	2	16	37,054	79	8,671
23	DAVIDSON, Richard	2	22	45,549	107	1,395
24	MCEWEN, Bruce	2	6	91,872	153	3,371
25	MISCHEL, Walter	2	20	31,288	73	4,341
26	FESTINGER, Leon	2	10	49,677	54	21,077
27	MCCLELLAND, David	2	7	57,493	68	21,422
28	ARONSON, Elliot	2	31	22,720	67	2,054
29	POSNER, Michael	2	7	65,649	105	5,042
30	BAUMEISTER, Roy	1	36	55,303	108	5,685
31	KAGAN, Jerome	2	20	37,562	92	1,316
32	LEDoux, Joseph	1	32	47,806	107	7,329
33	BRUNER, Jerome	2	3	105,935	111	9,721
34	ZAJONC, Robert	2	18	26,109	50	5,687
35	KESSLER, Ronald	0	37	132,839	175	10,720
36	RUMELHART, David	2	5	67,470	60	17,787
37	PLOMIN, Robert	1	39	44,783	104	2,672
38	SCHACTER, Daniel	1	37	47,112	109	2,374
39	BOWER, Gordon	2	10	27,881	77	4,755
40	AINSWORTH, Mary	2	9	34,371	48	11,064
41	MCCLELLAND, James	2	5	49,109	77	8,263
42	MCGAUGH, James	2	8	37,777	95	2,300
43	MACCOBY, Eleanor	2	8	32,902	62	7,173
44	MILLER, Neal	2	15	20,811	55	3,588
45	RUTTER, Michael	1	9	102,356	164	4,233
46	EYSENCK, Hans	1	20	56,498	96	4,286
47	CACIOPPO, John	1	15	57,665	107	4,622
48	RESCORLA, Robert	2	11	17,277	59	4,272
49	EAGLY, Alice	1	25	36,664	69	7,010
50	COHEN, Sheldon	1	18	45,037	84	6,930
51	BADDELEY, Alan	1	21	36,322	78	7,037
52	BECK, Aaron	0	20	134,080	112	24,625
53	ROTTER, Julian	2	8	29,069	34	14,760
54	SMITH, Edward	2	8	28,307	74	2,430
55	LOFTUS, Elizabeth	1	25	31,835	76	5,160
56	JANIS, Irving	2	6	32,469	56	4,922
57	SCHACHTER, Stanley	2	16	14,212	36	4,409
58	BREWER, Marilyn	2	7	27,324	74	2,198
59	SLOVIC, Paul	1	4	82,046	114	24,575
60	STERNBERG, Robert	0	51	66,953	122	3,382
61	ABELSON, Robert	2	4	27,158	62	9,884
62	MISHKIN, Mortimer	2	4	29,188	83	4,267
63	STEELE, Claude	2	11	19,824	33	3,376
64	SHIFFRIN, Richard	2	7	23,981	49	5,120
65	HIGGINS, E. Tory	2	4	32,473	83	3,121
66	WEGNER, Daniel	2	10	19,927	58	1,743

*(table continues)*

Table 2 (continued)

Rank	Name	Awards	Text pages	Total citations	h-index	Highest cited article
67	KELLEY, Harold	2	4	34,578	57	6,698
68	MEDIN, Douglas	2	7	20,880	66	2,434
69	CRAIK, Fergus	1	15	30,981	79	6,643
70	NEWELL, Allen	2	2	49,836	68	12,004
71	HEBB, Donald	2	7	22,797	28	16,154
72	CRONBACH, Lee	2	2	56,968	53	18,248
73	MILNER, Brenda	2	5	25,771	63	3,921
74	GARDNER, Howard	0	25	70,002	95	16,253
75	GIBSON, James	2	3	37,850	48	13,181
76	THOMPSON, Richard	2	6	23,743	79	1,484
77	GREEN, David	2	5	17,288	51	8,241
78	BERSCHEID, Ellen	2	10	17,169	47	2,048
79	MARKUS, Hazel	1	11	37,031	68	9,530
80	JOHNSON, Marcia	2	4	22,444	79	2,685
81	HILGARD, Ernest	2	7	18,312	54	2,238
82	MASLOW, Abraham	0	29	60,284	58	24,900
83	DAMASIO, Antonio	0	15	84,297	112	14,374
84	ATKINSON, Richard	2	7	13,256	42	5,062
85	ERIKSON, Erik	0	18	77,585	72	24,352
86	BROWN, Roger	2	4	24,330	41	7,427
87	SPERRY, Roger	2	12	11,487	42	1,377
88	COHEN, Jonathan	1	6	56,146	101	4,055
89	ROSENZWEIG, Mark	2	5	25,292	85	653
90	TOLMAN, Edward	2	9	11,475	37	3,336
91	GREENWALD, Anthony	1	12	30,492	70	4,215
92	HARLOW, Harry	2	6	16,794	57	1,745
93	DEUTSCH, Morton	2	4	27,911	47	3,428
94	SPELKE, Elizabeth	2	5	20,673	72	1,076
95	GAZZANIGA, Michael	1	17	20,531	70	2,443
96	ROEDIGER, H. L.	1	19	19,989	69	1,951
97	GUILFORD, J. P.	2	2	31,315	61	5,561
98	HETHERINGTON, Mavis	2	5	18,755	67	1,036
99	PINKER, Steven	0	37	39,495	65	7,287
100	TREISMAN, Anne	2	2	27,248	58	6,655

areas listed (some scientists being listed in more than one area), the most frequent was social psychology (16%), biological psychology (11%), and developmental psychology (10%). The number of eminent individuals was not always proportional to the numbers in each field. For example, sensation and perception had the same percent in our list as did clinical psychology (both were 8% of the list), despite being a much smaller field. Overall, the scientists are quite spread out across the 16 subdisciplines.

### Golden Age for Eminent Psychologists?

Could our rankings be biased by time, with more recent psychologists having an advantage because of their current salience, and because the numbers of journals and scientists were smaller in the past (with the result being lower citation counts). Note, however, that scientists from earlier times have also had more years in which to have their work cited. Thus, those with a lasting influence should continue to be cited over time. We found a very small inverse correlation ( $r = -.10$ ) between birth years of scientists and their overall eminence scores. Birth year correlated  $-.60$  ( $p < .001$ ) with awards,  $.20$  ( $p < .001$ ) with citations, and  $.24$  ( $p < .001$ ) with text pages. It appears that recency has small positive associations with text pages and citations, but a negative association with awards. Thus, our combined eminence scores seem to include metrics that cancel time effects when they are combined. It appears that younger scientists have not yet had time to build quite the level of eminence as older scientists in terms of awards, but their work is recognized in the other two metrics.

Should we calculate a yearly citation metric to be fairer to younger scholars? We did not do so because we are interested in overall impact

rather than attempting to compute a metric of merit or productivity, or to predict the future. A young scientist might be prolific considering years since Ph.D., but this does not equate with overall eminence, which is recognition across the field. No matter how promising, young scholars are almost never as recognized as Piaget or Kahneman, for example.

We examined the validity of our eminence scores by analyzing their correlation with other metrics. In terms of the ratings made by 14 scientists the mean interrater agreement was  $r = .85$  and the Cronbach's alpha for the summed rating score was  $.99$ . Thus, the ratings showed a high degree of interrater agreement and provided a very reliable score. In Table 4 we present the mean scores on the validity criteria for the five groups of scientists based on rankings.

As can be seen, the groups differed in close accord with the eminence rankings, with only the closely ranked Groups 2 and 3 showing any reversals. The mean ratings by psychologists correlated for the five groups  $r = .97$  ( $p < .01$ ) with our overall eminence score. For the 50 individuals in the five groups our overall eminence score correlated  $.60$  ( $p < .001$ ) with the log of lines in Wikipedia. Thus, our external validity criteria provided substantial support for our eminence scores.

Other studies also point to the validity of the metrics on which we relied (see Simonton, 2002, for a comprehensive review). For instance, Smith and Eysenck (2002) found that ratings of psychology departments made by review panels in the United Kingdom correlated  $.91$  with the average citation rates of faculty members in those departments. Citation counts have also been shown to be associated with scientific awards (Endler, 1987). Baird and Oppenheim (1994)