

Classic papers in psychology: From theory to practice

James Hartley & Yu-Shan Ho

Who are the most prestigious authors cited in today's psychology textbooks and journals? And where are (or where were) they based? This short note reports on the answers gained to such questions by using the Web of Science to find the authors of over the most highly cited papers in psychology published between 1927 and 2012. The findings suggest that well-known historic figures of the past have now been replaced with tool makers.

Keywords: citation classics; famous psychologists; Web of Science.

DIFFERENT AUTHORS have published textbooks describing, chapter by chapter, the work of eminent psychologists (e.g. Butler-Bowdon, 2007) or by areas of research (e.g. Anon, 2011; Furnham, 2008; Simonton, 2000). Others have reported on the opinions of colleagues about who are famous psychologists, for example, departmental chairs, and members of Division 26 of the American Psychological Association (historians) (Korn, Davis & Davis, 1991). Some have employed early citation counts to arrive at their lists of eminent contributors

(e.g. Haggbloom et al., 2002; Myers, 1970) and still others have counted the citations of psychologists in introductory psychology texts (e.g. Griggs, Proctor & Cook, 2004; Haggbloom et al., 2002). Table 1 presents some of the data from some of these analyses.

In this paper we wish to present our own list of the top 10 classic psychologists in 2012. Here, using the *Web of Science*, we found that 176 documents (from 42,321,422) were listed as classic papers, that is papers that had been cited at least 1000 times since publication. These 176 documents included

Table 1: Previous rankings of highly cited psychologists of all time in 1990 (a) by historians (members of Division 26 of the APA), (b) by Departmental chairs, and (c) by fellow psychologists (in 2002).

(Table based on information provided by Haggbloom et al., 2012, and Korn, Davis & Davis, 1991.)

(a) All time rankings	(b) All time rankings by Departmental chairs in 1990	(c) Contemporary rankings by fellow psychologists in 2002
1. Wundt	1. Skinner	1. Skinner
2. James	2. Freud	2. Piaget
3. Freud	3. James	3. Freud
4. Watson	4. Piaget	4. Bandura
5. Pavlov	5. Hall	5. Festinger
6. Ebbinghaus	6. Wundt	6. Rogers
7. Piaget	7. Rogers	7. Schacter
8. Skinner	8. Watson	8. Miller, N.
9. Binet	9. Pavlov	9. Thorndike
10. Fechner	10. Thorndike	10. Maslow

Table 2: The number of citations for the top ten psychologists cited in the *Web of Science* in 2013.

Rank (No of citations)	Author	Title
1 (1068)	Cohen (1992)	A power primer
2 (715)	Bandura (1997)	Self-efficacy: Toward a unifying theory of behavioural change
3 (699)	Shrout & Fleiss (1979)	Intraclass correlations: Uses in assessing rater reliability
4 (687)	Bentler (1990)	Comparative fit indexes in structural models
5 (677)	Brainard (1997)	The psychophysics toolbox
6 (484)	Pelli (1997)	The VideoToolbox software for visual psychophysics: Transforming numbers into movies
7 (457)	Stroop (1935)	Studies of interference in serial verbal reactions
8 (395)	Miyake et al. (2000)	The unity and diversity of executive functions and their contributions to complex frontal lobe tasks: A latent variable analysis
9 (362)	Miller (1956)	The magical number seven, plus or minus two: Some limits on our capacity for processing information
10 (347)	Bentler & Bonett (1980)	Significance tests and goodness of fit in the analysis of covariance-structures

110 articles published between 1927 and 2002, 64 reviews, four sets of proceedings, and one classified as editorial material. Two-hundred-and-twenty authors had contributed to these 110 classic papers, and 210 of them were by single authors. Table 2 lists the top 10 papers and authors in this respect, and Table 3 lists where these classic articles originated from – in terms of their authors' institutions. It can be seen that the citations shown in Table 2 are now for articles published mainly in the 1990s and very few of the largely historic figures now remain. Ho and Hartley (2015) provide much more extensive details and more elaborate analyses. It is clear that, nowadays, methods and techniques predominate, rather than new ideas.

The Authors

James Hartley

School of Psychology,
Keele University.

Yung-Shan Ho

Trend Research Centre,
Asia University, No. 500,
Taichung County 41354,
Taiwan.

Correspondence

James Hartley

School of Psychology,
Keele University,
Staffordshire, ST5 5BG.
Email: j.hartley@keele.ac.uk

Table 3: The top ranking institutions.

Institute	Rank
University of Toronto, Canada	1
Harvard University, USA	2
Stanford University, USA	2
University of Colorado, USA	2
Carnegie Mellon University, USA	5
Columbia University, USA	5
Johns Hopkins University, USA	5
University of California, Los Angeles, USA	5
University of Illinois, USA	5
University of Michigan, USA	5

References

- Anon (2011). *The psychology book*. London: Dorling Kindersley.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191–215.
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Bentler, P.M. & Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance-structures. *Psychological Bulletin*, 88(3), 588–606.
- Brainard, D.H. (1997). The psychophysics toolbox. *Spatial Vision*, 10(4), 433–436.
- Butler-Bowdon, T. (2007). *50 psychology classics*. Boston, MA: Nicolas Brealey Publishing.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159.
- Furnham, A. (2008). *50 psychology ideas*. London: Quercus Publishing PLC.
- Gorenflo, D.W. & McConnell, J.V. (1991). The most frequently cited journal articles and authors in introductory psychology textbooks. *Teaching of Psychology*, 18(1), 8–12.
- Griggs, R.A., Proctor, D.L. & Cook, S.M. (2004). The most frequently cited books in introductory texts. *Teaching of Psychology*, 31(2), 113–116.
- Haggbloom, J. et al. (2002). The 100 most eminent psychologists of the 20th century. *Review of General Psychology*, 6(2), 139–152.
- Ho, Y.S. & Hartley, J. (2015). *Classic articles in the Psychology category of the Science Citation Index Expanded: A bibliometric analysis* (Paper in preparation).
- Jensen, A.R. & Rohwer, Jr., W.D. (1966). The Stroop color-word test: A review. *Acta Psychologica*, 24(1), 36–93.
- Korn, J.H., Davis, R. & Davis, S.F. (1991). Historians' and chairpersons' judgements of eminence among psychologists. *American Psychologist*, 46(7), 789–792.
- Miller, G.A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63(2), 81–97.
- Miyake, A., Friedman, N.P., Emerson, M.J., Witzki, A.H., Howerter, A. & Wager, T.D. (1999). The unity and diversity of executive functions and their contributions to complex 'frontal lobe' tasks: A latent variable analysis. *Cognitive Psychology*, 41(1), 49–100.
- Myers, C.R. (1970). Journal citations and scientific eminence in contemporary psychology. *American Psychologist*, 25(11), 1041–1048.
- Pelli, D.G. (1997). The VideoToolbox software for visual psychophysics: Transforming numbers into movies. *Spatial Vision*, 10(4), 437–442.
- Shrout, P.E. & Fleiss, J.L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86(2), 420–428.
- Simonton, D. K. (2000). Methodological and theoretical orientation and the long-term disciplinary impact of 54 eminent psychologists. *Review of General Psychology*, 4(1), 13–24.
- Stroop, J.R. (1935). Studies of interference in serial verbal reactions. *Journal of Experimental Psychology*, 18, 643–662.