## Obituary

## LLOYD GIRTON HUMPHREYS (1913-2003)

Lloyd G. Humphreys died on 7 September 2003, in Urbana, Illinois. He was born on 12 December 1913 in Lorane, Oregon.

Humphreys was among the most admired, respected, and talented differential psychologists and methodologists of the twentieth century. He had a well-deserved reputation for an uncompromising approach to socially important psychological phenomena, relying on data—typically large samples of it—and methodological and quantitative rigor to shape his views. He was anything but a dry-boned methodologist; he resonated to psychological substance. Following Truman Kelley, Hugo Munsterberg, and Lewis Terman, respectively, he had little time for "psychological factors of no importance", "precision without usefulness", or "elegant trivia".

Humphreys earned his undergraduate degree at the University of Oregon (1935), took a master's degree from University of Indiana (1936)—where he first leaned about factor analysis—and began his career as an experimental psychologist with a Stanford Ph.D. (1938, under Ernest Hilgard). His dissertation research on the partial reinforcement effect (or the "Humphreys effect") is a citation classic. Following a postdoctoral year with Clark Hull at Yale (1938–1939), Humphreys devoted his energies to methodology and assessing individual differences in human behavior.

Humphreys was a member of APA's 1954 committee on *Standards*. He played an important role in the early development of construct validity, which he initially called "psychological validity". His *Annual Review* (1952) chapter launched the idea of "systematic heterogeneity", a methodology for building measures of important psychological constructs. In other writing he championed the idea that predictive validity is a critical component of construct validity; his note on the multitrait multimethod matrix (*Psychological Bulletin*, 1960) underscores a reoccurring theme in his writings: the idea that statistical unidimensionality does not necessarily reflect psychological unidimensionality. He also anticipated what is now commonly accepted about the hierarchical organization of cognitive abilities (*American Psychologist*, 1962), and inspired Schmid and Leiman's (1957) *Psychometrika* article on the hierarchical orthogonalization of factor matrices.

Humphreys served on the faculty at Northwestern University (1939–1945), the University of Washington (1946–1948), Stanford University (1948–1952), and the University of Illinois (1957–1984). He was a Carnegie Fellow in Anthropology (1941–1942, Columbia University), and Research Director, Personnel Laboratory, for the U.S. Air Force (1951–1957). Other posts included: President of the Psychometric Society (1959–1960), Member of the Organizing Committee of the Psychonomics Society (1959–1960), first Chairman of the Conference of Chairman of Graduate Training Departments of Psychology (1962–1966), Vice President of AAAS (1963), and APA Board Member (1975–1977). In 1970–1971 he received a Presidential appointment as Assistant Director of Education (National Science Foundation), and served as Head of Psychology (1959–1969) and Acting Dean of the College of Liberal Arts and Sciences (1979–1980) at the University of Illinois.

While Humphreys was editor of the *Psychological Bulletin* (1964–1969), he accepted four of the top 10 most widely cited articles ever to appear in that outlet (*Psychological Bulletin*, 1992, Vol. 112, p. 387); he also started its Quantitative Methods Section, which subsequently evolved into *Psychological Methods*. Before beginning his appointment as editor of the *American Journal of Psychology* (1968–1979), Humphreys received a letter from E.G. Boring pointing out that Titchener (Boring's advisor) founded this journal and expressing the hope that Humphreys would accept the responsibility of maintaining standards (which he of course did).

In the 1970s, Humphreys chaired the APA Task Force on ability and achievement testing. The conclusions drawn in their final report (Cleary, Humphreys, Kendrick, & Wesman, 1975) continue to be confirmed by modern empirical findings. This report contains one of the clear-

est and most cogent treatments of achievement versus ability tests found in the psychological literature.

In the 1980s, Humphreys introduced the concept of inadequate learning syndrome (ILS), and argued compellingly that ILS constitutes a more important social problem than the AIDS epidemic (*Intelligence*, 1988). During this decade, a *Festschrift* for Humphreys, edited by Robert Linn (1989), was published by University of Illinois Press, with contributions by Lee Cronbach, Ernest Hilgard, John Horn, and Sandra Scarr, among others. This volume is a must read. (It also contains a bibliography of Humphreys' publications up to that time.)

In the 1990s Humphreys published a series of articles on the utility of the group contrast approach for examining the construct validity of psychological tests and how this methodology complements the prediction of individual differences in criterion performance. Substantively, this was documented by illustrating the importance of spatial visualization for becoming an engineer, physical scientist, or artist (e.g., Humphreys, Lubinski, & Yao 1993). Among other honors, he received the AERA Counseling and Human Development Award (1995), the ETS Distinguished Service to Measurement Award (1995), and the Saul Sells Award (1999) from the Society for Multivariate Experimental Psychology.

Not everyone could work with Humphreys; he placed a premium on science (as opposed to ideology and politics). He was fair, generous, and absolutely brilliant quantitatively. His scientific integrity was as distinguished as his penetrating intellect. A dedicated and helpful colleague and mentor, Humphreys was all business, serious, and passionate about psychological knowledge; let the chips fall where they may, even if they should fall on the wrong side of controversial issues (cf. American Psychologist, 1972; American Journal of Psychology, 1991; Psychological Science, 1992; Intelligence, 1997).

Lloyd Humphreys married Dorothy Windes in 1937. They had been married for 58 years when Dorothy passed away in 1995. Along with their four children, John, Michael, Margaret, and Susan, they are survived by seven grandchildren and two great-grandchildren.

David Lubinski Vanderbilt University November 4, 2003

## References

Cleary, T.A., Humphreys, L.G., Kendrick, S.A., & Wesman, A. (1975). Educational uses of tests with disadvantaged students. American Psychologist, 30, 15–41.

Gottfredson, L.S. (1997). Mainstream science on intelligence: An editorial with 52 signatories, history, and bibliography. *Intelligence*, 24, 13–23.

Humphreys, L.G. (1939). The effect of random alternation of reinforcement on the acquisition and extinction of conditioned eyelid reactions. *Journal of Experimental Psychology*, 25, 141–158.

Humphreys, L.G. (1949). Test purity. American Psychologist, 3, 245.

Humphreys, L.G. (1960). Note on the multitrait-multimethod matrix. Psychological Bulletin, 57, 86-88.

Humphreys, L.G. (1962). The organization of human abilities. American Psychologist, 17, 475-483.

Humphreys, L.G. (1985). General intelligence: An integration of factor, test, and simplex theory. In B.B. Wolman (Ed), *Handbook of intelligence: Theories, measurements, and applications* (pp. 201–224). New York, NY: Wiley.

Humphreys, L.G. (1988). Trends in levels of academic achievement of blacks and other minorities. *Intelligence*, 12, 231–260.

Humphreys, L.G. (1991). Limited vision in the social sciences. American Journal of Psychology, 104, 333-353.

Humphreys, L.G. (1992). Commentary: What both critics and users of ability tests need to know. *Psychological Science*, 3, 271–274.

Humphreys, L.G., Lubinski, D., & Yao, G. (1993). Utility of predicting group membership and the role of spatial visualization in becoming an engineer, physical scientist, or artist. *Journal of Applied Psychology*, 78, 250–261.

Humphreys, L.G., & Parsons, C.K. (1979). Piagetian tasks measure intelligence and intelligence tests assess cognitive development. Intelligence, 3, 369–382.

Humphreys, L.G., Rich, S.A., & Davey, T.C. (1985). A Piagetian tests of intelligence. Developmental Psychology, 21, 872–877.

Linn, R.L. (1989). Intelligence: Measurement, theory, and public policy. Urbana, IL: University of Illinois Press.

Page, E. (1972). Behavior and heredity. American Psychologist, 27, 660–661.

Schmid, J., & and Leiman, J.M. (1957). The development of hierarchical factor solutions. *Psychometrika*, 22, 53–61. Sternberg, R.J. (1992). *Psychological Bulletin*'s top 10 "hit parade". *Psychological Bulletin*, 112, 387–388.