MEMORIAL RESOLUTION

QUINN McNEMAR
(1900 – 1986)

Quinn McNemar, who was Professor Emeritus of Psychology, Statistics, and Education, with a primary base in the Department of Psychology, died on July 3, 1986. Born on February 20, 1900, he was 86 at the time of his death.

While still a graduate student in Psychology at Stanford he had already served as a research assistant and statistical advisor, and after receiving his Ph.D. in 1932 he became a regular member of the psychology faculty, rising through the ranks to become a full professor, then retiring as an emeritus professor in 1965, according to the then established retirement age. He spent the next five years as Professor of Psychology and Education at the University of Texas, Austin, returning to reside again in Palo Alto until his death. His widow, Olga, herself with a psychology Ph.D., long associated with him in his professional work, survives him after their marriage of 55 years.

McNemar's expertness in statistical theory and methods, and his contributions to the field of psychological statistics, cover an era of expanding knowledge during which he took every opportunity to remain abreast of developments, to examine them critically, and to propose constructive improvements.

After a somewhat limited set of educational opportunities beginning in rural West Virginia, he remained in grade school until age 18 because no other school was available. He then entered the Preparatory Branch of West Virginia University in Keyser, working his way, and as the school changed status he completed a college freshman year there at the age of 22, serving as class president. From there he went to Juniata College in Pennsylvania, and graduated in 1925 with a secondary teaching certificate. After two years of teaching mathematics and science in a high school in Charleston, West Virginia, he was inspired by some enthusiastic Stanford graduates to enroll for graduate study here, and in 1927 he entered Stanford for graduate study in psychology, a field selected because of some inspiration received from a teacher at Juniata. He had more training in mathematics than in psychology, so that statistics became a natural emphasis, although it was essentially a new field for him.

His introduction to statistics during his first year at Stanford was through three one-quarter courses under Truman Kelley, whose 1924 book on Statistical Method was then the standard advanced text for students of psychology and education. Kelley was not a good expositor in the classroom, with the result that the competent serious students, such as McNemar, eventually understood things better for themselves because they had struggled with the complexities of the derivations. When Kelley left for Harvard, McNemar was his successor, knowing what Kelley stood for but making such knowledge more accessible to a larger fraction of students.

Beginning with a postdoctoral fellowship from the Social Science Research Council in 1933, McNemar continued to build his firsthand knowledge of developments in the new areas of factor analysis and analysis of variance. While still a graduate student in 1929, he had traveled

to the International Congress of Psychology at Yale University and heard a paper by Charles Spearman, the British founder of factor analysis. On entering his fellowship year, he spent the summer with L. L. Thurstone at the University of Chicago where he was privileged to hear the alternative positions of factor analysis presented in person by four of its distinguished leaders: Spearman, Holzinger, Thurstone, and Hotelling. Then at Columbia University during the remainder of the year, he came abreast of analysis of variance, recently introduced by R. A. Fisher of England. He was aided in this by studying with Harold Hotelling, who had traveled to Oxford to get the story directly from Fisher. Hence, McNemar was well prepared to be Kelley's successor when he returned to Stanford at the end of his fellowship year. His eagerness to learn new developments and to test his own initiatives against established authorities led to a summer at Princeton in 1938 to work closely with a mathematical statistician, S. S. Wilks.

During the war years, 1941-1944, he had further opportunities to widen the scope of application of statistical and sampling techniques in working with Samuel Stouffer and others in the initial stages of what later became the American Soldier volumes, studies of the morale of the men in the Armed Forces. During the years 1941 to 1943 and into the winter of 1944, he was on the staff of the Social Science Research Council in New York, in charge of the fellowship program and grants-in-aid. That year gave Olga the chance to pursue further her graduate study in psychology at Columbia.

A university-wide interest at Stanford in statistics led to the establishment of a Department of Statistics under the chairmanship of Albert Bowker in 1947, and it was then that McNemar became a faculty member of that department in addition to his faculty status in psychology and education.

A sabbatical year in 1949-50 permitted further study at Columbia University, where Quinn worked with Scheffe, an important expert in analysis of variance, and other mathematical statisticians, while Olga was able to complete her Ph.D. in psychology.

The first edition of McNemar's influential Psychological Statistics appeared in 1949, to be followed by revisions in 1955, 1962, and 1969. Although he made many other contributions to the literature of statistics, his influence reached a wider audience through this book that taught many generations of students training to become psychologists.

A great many opportunities for the use of his skills in public service followed after the war years, including consultant relationships with the Veterans Administration, the Office of Naval Research, the National Science Foundation, the National Institute of Mental Health, and the United States Office of Education. He also served on the Board of Directors of the Psychological Corporation, 1949-1953, the American Psychological Association, 1960-1963, and the Social Science Research Council, 1964-1966.

McNemar held many elective offices that indicated the esteem bestowed upon him by his fellow psychologists. These included several presidencies: that of the Psychometric Society in 1951, the Division of Evaluation and Measurement of the American Psychological Association in 1952, and of the Western Psychological Association in 1959. These presidencies were crowned by his election as president of the American Psychological Association in 1964, the national body including qualified psychologists of all persuasions.

Many of McNemar's contributions were substantive, in such fields as the measurement of intelligence and public opinion surveys, not confined, therefore, to statistical methodology abstractly conceived. The substantive field in which he became best known was the measurement of intelligence, in which he worked closely with Professor Lewis M. Terman, then the head of the Department of Psychology. He worked closely with Terman and Maud Merrill in the revision of the Stanford Binet that appeared in 1937, and later (in 1942) published a background book on the methodology employed in the revision of that intelligence scale. A new Terman-McNemar test of mental ability appeared in 1941.

McNemar's role as a critic also bore upon the intelligence field. In 1938 he produced a critical review of twin studies reported in a book by Newman, Freeman, and Holzinger, and in 1940 attacked some studies of the environmental influences upon IQ from the University of Iowa. His presidential address before the American Psychological Association, entitled "Lost: Our Intelligence? Why?" was widely republished, including a translation in a French psychological journal.

When he published his autobiography in 1977, in a series entitled A History of Psychology in Autobiography, McNemar justified his role as a critic, including his use of his critical skills in editing papers submitted to journals with which he was associated as one of the editors, such as the Journal of Applied Psychology, and the Annual Review of Psychology. He repeatedly struck out against signs of ineptitude or bias. He attributed his stance in part to the incisive comments by Lewis M. Terman to which he had long listened as Terman brought graduate students to task if they showed any signs of shoddiness in the reports that they gave before his weekly seminar. For example, in his presidential address before the Psychometric Society in 1951, entitled "The Factors in Factoring," McNemar tore apart 73 studies using factor analysis for ten types of errors that he found repeatedly committed among these studies.

McNemar was greatly admired as a teacher and as a consultant to graduate students, no matter who their primary faculty advisor might be. He was always willing to assist them in the design of their investigations and in the analysis and presentation of their data. His (and Olga's) interest in the students was personal as well as professional. Without children of their own, Quinn and Olga entertained many students in their homes, lent them money when they needed it, and continued to correspond with them as they established their careers elsewhere. Many tributes to the lasting influence of McNemar as teacher and friend have been received since his death. The Department has established a fund to honor him; the Quinn McNemar Fund will be used to assist graduate students. Numerous appreciative comments accompanied the many gifts to the fund.

In his death, Stanford University lost an able teacher and a distinguished research worker, with a host of friends among his colleagues and among those who had the privilege of being his students.

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