

History

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THE SHORT HISTORY OF PEDIATRIC PSYCHOLOGY¹

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It may seem too early to recount the history of so young a field as pediatric psychology since officially it is only seven years old. But I ask your indulgence in my interest in the early developmental milestones of this product of a "new marriage" of pediatrics and clinical psychology.

The fields of clinical psychology and pediatrics have, of course, their own distinct histories. As every reader knows, the existence of clinical psychology was first declared by Lightner Witmer in 1896 (Watson, 1953). The professional activities of Witmer at the University of Pennsylvania had a curious resemblance to many of the current ones of pediatric psychologists. For example, Witmer dealt almost entirely with children, was quite concerned about how they coped with school tasks and with the management of their behavior, and quite frequently collaborated with nonpsychiatric physicians. Some readers may not be quite so familiar with the history of pediatrics. The Section on Pediatrics of the American Medical Association was founded in 1880 (Schlutz, 1933), but evidently not more than half a dozen physicians practiced pediatrics exclusively as a specialty before about the turn of the century (Holt, 1923). Richmond (1967) dates the origin of truly scientific pediatrics at about 1900 and mentions as advances of the early 20th century period the pasteurization of milk and the administration of cod liver oil and orange juice to infants and children (on an empirical basis) for the prevention of rickets and scurvy. About the only such scientific advance dating from this time that clinical psychology can claim was the development of Binet and Simon's test of intelligence in 1905 (Boring, 1957).

The Flexner report in 1910 was associated with a distinct rise in the scientific standards in medical instruction in the U.S. (Moll, 1968). The German scientific model was imported by Johns Hopkins University and other leading institutions of the time, but many existing medical schools found that they did not have the resources to meet the new expectations. Of the 160 medical schools in the U.S. in 1905, only 85 were left by 1920 and only 76 by 1929. Presumably in response to the new scientific emphasis in medical schools, the American Psychological Association in 1911 established a committee on the relations between psychology

and medical education (Fernberger, 1932). A questionnaire was sent to 116 medical schools, of which only 71 replied. The respondents were reported to view both general psychology and clinical psychology as having something to offer medical education and recommended that such instruction be added to the medical curriculum, but it was a long time before anything of the kind was to happen. At about this same time (1915) the Perkins laws were enacted, and the federal government began funding programs for crippled children. This provided one impetus to the formation of departments of pediatrics as separate entities within many medical schools. In the large children's hospitals such as those in Boston and Philadelphia, of course, separate instruction in pediatrics goes back much further.

The era beginning about 1925 in pediatrics is characterized by Richmond (1967) as one emphasizing laboratory investigation and the delineation of specific etiologies and therapies for childhood diseases. This was also the time when many child development institutes were established by universities and when the interdisciplinary Society for Research in Child Development was founded. During this period Anderson (1930), the director of the Institute of Child Development at the University of Minnesota, wrote an article in which he suggested some contributions which child psychology might have to make to pediatrics. Two which he particularly emphasized were intelligence testing and help with advice to parents about child rearing.

The era beginning about 1940 in pediatrics was characterized by a dramatic decline in the rates of disease and death in infants and children, and by an increase in the number of children who survived but with delayed or impaired development. Richmond (1967) mentions among the pediatric advances of this time prophylactic immunization, the widespread use of vitamins, development of nutritional knowledge, the study of water and electrolyte balance, the advent of antibiotics, the isolation and synthesis of hormones, and the discovery of tranquilizers and diuretics. Psychological research could report nothing so dramatic during the corresponding decades. There were some refinements in testing, for example, the publication in 1949 of the relatively well-standardized Wechsler Intelligence Scale for Children. There was also a large amount of research relating to animal learning which was later to produce applications in human children and adults (for example, Skinner's book, *Behavior of Organisms*, was published in 1938).

In 1946 the Veterans Administration began its training

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program in clinical psychology with funding that went beyond anything previously available. This was of great importance in establishing clinical psychology as a profession but did have the unfortunate side effect of directing it away from its historic focus on children. In 1947 the National Institute of Mental Health established training grants in clinical psychology. In 1949 the Boulder Conference on training in clinical psychology was held, establishing the scientist-professional model as the conventional one for training in clinical psychology for many years to come. During the post-war period, an increasing number of psychologists began to be employed in medical schools in various capacities. The 1951-52 survey by Mensh (1953) indicated that 143 psychologists were employed in medical schools in the U.S.; indeed 80 percent of the schools surveyed employed psychologists. Mensh did not mention in this survey whether any of these psychologists were employed in departments of pediatrics, but from later information it can be presumed that most were associated with departments of psychiatry.

Fortunately for the ultimate development of pediatric psychology, post-war federal funds for training in psychology were not all directed toward the needs of adults. In the mid-1950s a doctoral program in the psychology of mental retardation was funded by the National Institute of Mental Health at George Peabody College. It is probably no coincidence that two of the seven presidents of the Society of Pediatric Psychology and the current editor of its Newsletter have Peabody degrees in psychology.

By 1960 pediatrics in the U.S. had entered a new era. There was a general leveling off of the gains in the battle against infant and child mortality and morbidity. With the general shift of the population from small towns to urban and suburban areas, the pediatrician was called upon more and more to give childrearing advice previously available from aunts, grandmothers, and close neighbors. The popular books of Gesell and Spock also contributed to the professionalization of advice about child rearing. Responding to these new demands being made on the pediatrician, Wilson (1964) in a presidential address to the American Pediatric Society asked the question, "Who is to attend to the common emotional or behavioral problems of children?" Wilson thought that psychologists were part of the answer. He went on to say:

I feel very strongly that one of the things I would do if I could control the practice of pediatrics would be to encourage groups of pediatricians to employ their own clinical psychologists Such an approach, it seems to me, is the only practical step to aid us in solving many of the problems in childhood and adolescence . . . (p. 988)

U.S. government policies were sensitive to these new developments. In 1962 came the founding of the National Institute of Child Health and Human Development, which has subsequently supported much medical and psychological research related to child development and some professional training in pediatric psychology. In 1963 federal legislation was passed establishing the network of University Affiliated Facilities for clinical training in professional fields related to developmental disorders (Routh, 1973). It has been estimated that whereas in the 1940s the average department of pediatrics in a medical school had little more than three full time *pediatricians* (Wilson, 1964), a survey in 1960 showed that there were now 40 psychologists working in departments of pediatrics in the 84 medical schools in the U.S. (Buck, 1961).

In 1965 Kagan wrote an article heralding a "new marriage" between pediatrics and psychology. Like Anderson (1930) before him, Kagan (1965) was mainly concerned with contributions that developmental psychology might make to pediatrics, particularly in the early detection and treatment of developmental and behavioral problems. However, unlike Anderson's article, the one written by Kagan struck a responsive chord among professional clinical psychologists. Writers since that time (including the present one) have been unable to resist the aptness of Kagan's metaphor of a "new marriage."

Clinical psychologists, of course, had long worked together with pediatricians, especially in the large, urban children's hospitals. Many clinical psychology trainees had completed practicums or internships in such settings, but none of this had ever been formally identified as "pediatric psychology." In 1966, perhaps somewhat prematurely, the first formal graduate program to train "pediatric psychologists" was begun by the Departments of Pediatrics and Psychology at the University of Iowa (Routh, 1969), with funding from the National Institute of Child Health and Human Development. The grant request for this program had been initiated by psychologist Leonard Eron and pediatrician Gerald Solomons. This program attempted to train scientist-professionals within the context of a clinical psychology program, using the resources of a Child Development Clinic and other pediatric facilities and those of the Institute of Child Behavior and Development at Iowa. During the five years of the program approximately 10 graduate fellows received training, some of whom are indeed clearly identifiable as pediatric psychologists since their graduation.

Also in 1966 informal discussions were begun among a group of clinical child psychologists at the meetings of the American Psychological Association on the need for formation of some kind of interest group in pediatric psychology. The year 1967 was a landmark for pediatric psychology. In that year Logan Wright's article, "Pediatric Psychology: A Role Model," appeared in the *American Psychologist*. Judging by its frequent citation in the subsequent literature, this article has probably been the most influential one in conceptualizing pediatric psychology as a professional field. Wright (1967) defined a pediatric psychologist as ". . . any psychologist who finds himself dealing primarily with children in a medical setting which is nonpsychiatric in nature" (p. 323). In discussing the training of such a professional, Wright stated, "Ideally the pediatric psychologist is a person who is competently trained in both child development and in the child clinical area" (p. 323). Wright also suggested that ". . . some formal organization such as a special interest group [within A.P.A.] would seem to be in order. A newsletter would be invaluable" (p. 324). Another frequently cited article appearing in that year was that of Smith, Rome, and Freedheim (1967) describing the role of the psychologist in the private pediatric office.

At the A.P.A. meetings in 1967 George Albee, then president of the Division of Clinical Psychology, suggested that note be made of the expansion of psychology within pediatric settings. The outgoing and incoming presidents of the Section on Clinical Child Psychology then appointed a Committee on Pediatric Psychology consisting of Logan Wright (chairman), Dorothea Ross, and Lee Salk. In 1968 this committee sent letters to the chairmen of pediatrics departments in all medical schools in the U.S., asking for the names of any psychologists associated with the departments. Over 250 names were turned up. The formation of the interest group,

the Society of Pediatric Psychology, the next natural step, also took place in 1968; later it became affiliated with Section I.

In 1969 the first issue of the newsletter, *Pediatric Psychology*, was published under the editorship of G. Gail Gardner. At the meeting of A.P.A. in Washington, D.C. in 1969, the first of what were to become annual symposia sponsored by the Society was held. Logan Wright was elected President of the Society at the first business meeting; Lee Salk was made President-elect; and Dorothea Ross was elected the first secretary-treasurer. The subsequent presidents of the Society have included David Rigler, Arthur Wiens, Donald K. Routh, David Vore, and Thomas Kenny. The newsletter, *Pediatric Psychology* was edited briefly by Allan Barclay and subsequently by Diane J. Willis with Arlene Schaefer as associate editor. Others who have subsequently held office in the Society have included Richard A. Brown, Marilyn Erickson, Donald K. Freedheim, H. Elizabeth King, Carolyn S. Schroeder, Milton F. Shore, Zanwil Sperber, Joseph Weaver, and Kathryn West.

Surveys were made of pediatrics departments in the 100 medical schools in the U.S. in 1968-69 (Routh, 1970); the same departments were surveyed again in 1970-71 (Routh, 1972). It was found that during this two year period the number of pediatrics departments with some kind of ongoing activity involving psychologists increased from 65 to 73. Those involved in training graduate practicum students in psychology increased from 24 to 32, those participating in psychology internship training from 26 to 30, and those offering psychology postdoctoral training from 6 to 12. Not all the psychologists receiving professional training in departments of pediatrics came from standard clinical psychology backgrounds. A significant minority of both psychology trainees and pediatric psychologists themselves had backgrounds in school psychology, while others received postdoctoral clinical training after preparation in areas such as developmental or experimental psychology. One recent development is the initiation of an M.A. level training program in pediatric psychology at the University of Colorado at Denver, the first graduates of which are just beginning to emerge.

In summary, pediatric psychology has developed since 1968 into self-awareness as a field in which professional psychologists work with children in nonpsychiatric medical settings such as children's hospitals, developmental clinics, and pediatric offices. There are currently over 300 members in the Society of Pediatric Psychology. Historical perspective is impossible to achieve after only seven years, especially for one who has been personally involved in the effort to help the field grow and thrive. Perhaps it is sufficient at this point to share with you my delight that pediatric psychology has survived infancy and seems to be a healthy child. Both of its parents can be proud.

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REFERENCES

- Anderson, J.E. Pediatrics and child psychology. *Journal of the American Medical Association*, 1930, 95, 1015-1018.
Boring, E.G. *A history of experimental psychology*. New York: Appleton-Century-Crofts, 1967.

- Buck, R.L. Behavioral scientists in schools of medicine. *Journal of Health and Human Behavior*, 1961, 2, 59-64.
Fernberger, S.W. The American Psychological Association: a historical summary, 1892-1930. *Psychological Bulletin*, 1932, 29, 1-89.
Holt, L.E. American pediatrics: a retrospect and a forecast. *Journal of the American Medical Association*, 1923, 81, 1157-1160.
Kagan, J. The new marriage: pediatrics and psychology. *American Journal of Diseases of Childhood*, 1965, 110, 272-278.
Mensch, I.N. Psychology in medical education. *American Psychologist*, 1953, 8, 83-85.
Moll, W. History of American medical education. *British Journal of Medical Education*, 1968, 2, 173-181.
Richmond, J.B. Child development: a basic science for pediatrics. *Pediatrics*, 1967, 39, 649-658.
Routh, D.K. Graduate training in pediatric psychology: the Iowa program. *Pediatric Psychology*, 1969, 1, 4-5.
Routh, D.K. Psychological training in medical school departments of pediatrics: a survey. *Professional Psychology*, 1970, 1, 469-472.
Routh, D.K. Psychological training in medical school departments of pediatrics: a second look. *American Psychologist*, 1972, 27, 587-589.
Routh, D.K. The psychologist in the University Affiliated Facility. *Pediatric Psychology*, 1973, 2, 5-7.
Schlutz, F.W. The first half century of the section on pediatrics. *Journal of the American Medical Association*, 1933, 101, 417-420.
Smith, E.E., Rome, L.P., & Freedheim, D.K. The clinical psychologist in the pediatric office. *Journal of Pediatrics*, 1967, 71, 48-51.
Watson, R.I. A brief history of clinical psychology. *Psychological Bulletin*, 1953, 50, 321-346.
Wilson, J.L. Growth and development of pediatrics. *Journal of Pediatrics*, 1964, 65, 984-991.

