
Presidential Address

Evolution of Pediatric Psychology: Historical Roots to Future Trends

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The brief history of pediatric psychology is reviewed, emphasizing the early descriptions and conceptualizations. The current status of the field is then evaluated with special emphasis on continuity with pediatric psychology's historical roots. A discussion of promising future trends follows highlighting the historical traditions that have not been fully developed. More research on problems specific to pediatric psychology, greater involvement in normal childrearing, more emphasis on prevention, and training seem the most fruitful directions for future expansion. The field of pediatric psychology is a rapidly developing area which is meeting important health service needs and the future seems bright if we can continue to focus on relevant issues.

KEY WORDS: pediatric psychology; child-rearing; prevention; health services.

As indicated in my Presidential message at the beginning of this year, the Society of Pediatric Psychology is stronger than ever. Memberships are on the rise, our financial status is healthy, we have a respected journal, and the field of pediatric psychology is gaining wider and wider acceptance. The daily crises that characterized the earlier years of our organization have been replaced by a sense of stability and indications of growth and acceptance. What better time is there to examine ourselves as a professional group, to reestablish our roots, and to consider where we are going. In this address I shall try to begin this process by outlining the brief history of pediatric psychology, describing current trends, and suggesting what these might be able to tell us about future pursuits.

HISTORY OF PEDIATRIC PSYCHOLOGY

The potential role of child psychologists in the medical system was first described by Anderson (1930). He was impressed by developmental psychology's potential to empirically derive knowledge about human behavior and concluded that this could be applicable to the assessment and treatment of medical patients. However, Anderson's thoughts were rather general. Jerome Kagan (1965) was the first person to specifically articulate the role that a psychologist might play in a pediatric setting. In describing the "new marriage" between pediatrics and psychology, Kagan emphasized the early detection of childhood disorders and especially each of the following: (a) the relationship between prenatal and perinatal abnormalities and future behavioral disturbance; (b) the early detection of severe childhood disturbance, especially the schizophrenias; (c) the early detection of psychosocial problems including academic retardation, psychopathy, delinquency, psychosomatic disturbances, and phobias during the preschool and early school years; and (e) the application of theoretical knowledge and empirical generalizations to therapeutic regimens for children. Kagan viewed the application of theoretical knowledge to treatment programs as being especially helpful in clinical work with phobias, symptoms produced by excessive guilt (obsessions, nightmares, psychosomatic disorders), symptoms involving distrust of people (childhood schizophrenia), and negative identifications with inadequate parents.

Shortly after Kagan's paper appeared, Logan Wright coined the term "pediatric psychologist" (1967), describing those psychologists working in medical settings that are not primarily psychiatric. Wright saw pediatric psychologists as more behaviorally oriented than clinical-child psychologists and involved in different kinds of activities. In comparing clinical-child with pediatric psychologists, he saw pediatric psychologists as doing different assessments (especially IQs), dealing more with child-rearing questions, dealing less with severe pathology and more with positive mental health, normal personality development, and prevention, doing time-limited and high-volume procedures, and doing applied as compared with basic research.

As Logan Wright's paper appeared, the American Psychological Association appointed a committee on pediatric psychology, chaired by Logan Wright and including Dorothea Ross and Lee Salk. This committee eventually led to a special-interest group which evolved into what we know of now as the Society of Pediatric Psychology. Salk's role was crucial because he highlighted the clinical role of the pediatric psychologist which had not received much emphasis in the earlier work of Kagan and Anderson.

Along with highlighting the clinical role, Salk's (1970) contribution was in describing this role quite specifically. He viewed pediatric psychologists as working directly with pediatricians and not through psychiatrists as intermediaries. In this capacity pediatric psychologists would generally be involved in the following activities: (a) immediate screening for developmental difficulties; (b) early diagnosis of problems; (c) transmission of current knowledge of child development to pediatric staffs; (d) transmission of knowledge about child-rearing practices; and (e) sensitization of medical staff to the emotional needs of children. The scientist-practitioner role of the pediatric psychologist was also highlighted at that time by Schofield (1969), who emphasized the particular sophistication of this specialty in working with physical diseases and their concomitants.

CURRENT TRENDS

The scientist-practitioner model (Schofield, 1969) is a useful one for describing the current work of pediatric psychologists. However, because the work setting of most pediatric psychologists is in medical settings or developmental clinics, the emphasis has been more on the practitioner than the scientist. This emphasis has caused the partners in Kagan's "new marriage" to assume slightly different roles than Kagan had suggested.

In conceptualizing the work of pediatric psychologists in medical settings, Kagan viewed this role as research-oriented. However, he underestimated the problem-solving nature of medical settings and overestimated the potential contributions of developmental psychological research. Kagan did not realize the direct service that would be required of psychologists in developing specific plans for children with difficulties or that most developmental psychological research would not be of immediate assistance in implementing these plans. For example, research on the early detection of schizophrenia or of academic retardation does not usually determine what to do with a child who presents himself in a medical clinic with major behavior problems resulting from either of these difficulties. Although this research is important and often supported by medical settings, the person doing this research must also be able to solve the day-to-day problems that are presented by children with difficulties.

The need to solve immediate problems and the inability of developmental research to provide specific answers has led psychologists in medical settings to take more of the clinical orientation that was described by Logan Wright (1967). Wright was the first person to recognize the important clinical role that pediatric psychologists would play in medical settings. The areas he highlighted have proven to be important ones and his

ability to foresee the growth of this field was extraordinary given the few pediatric psychologists around in 1967. However, there have also been several developments that Wright did not foresee.

Wright did not fully anticipate the large role that developmental problems would play in working with children in medical settings. A large percentage of pediatric psychologists work with children with mental retardation, learning disabilities, cerebral palsy, autism, and related developmental problems. By underestimating the amount of work that would be done with this population, Wright also underemphasized several tasks pediatric psychologists actively pursue. These include parent training, interdisciplinary work, long-term follow-ups, and program development.

Because parent training is the topic of this year's Society of Pediatric Psychology invited symposium (Eyberg, 1983), those interested in that topic can refer to those papers.

Interdisciplinary work is crucial with children experiencing developmental problems because of the complex nature of their difficulties. Medical, language, motor, and/or a variety of other difficulties often accompany the developmental problems. Therefore pediatric psychologists have been forced to learn about these other complex difficulties and to interact extensively with professionals knowledgeable in each of these areas.

Wright accurately predicted more short-term intervention approaches in comparison with the long-term psychotherapy that frequently characterized clinical-child psychology in the 1960s. However, the chronic, life-long nature of developmental and other pediatric problems has caused his philosophy to be altered a bit. Therapy with these children is still short-term in the sense that limited problem-oriented therapy has become the rule and most problems are worked on in under 3 months. However, given the chronic nature of these disabilities, different problems appear at different times during a child's life. Therefore, a 3-month intensive intervention might be followed 6 years later by another intensive effort for a slightly different problem.

Finally, the work with developmentally handicapped clients has required more of a community focus than Wright had anticipated. Much of what is needed for these youngsters are more appropriate and relevant programs and pediatric psychologists have taken an active role in developing these. The passage of P.L. 94-142 in the late 1970s further accelerated the process of community development.

Although most of these changes have been described in regard to children with developmental problems, they have influenced the entire field of pediatric psychology. Work with chronic medical conditions like cystic fibrosis and juvenile diabetes includes more interdisciplinary work, long-term follow-ups, and a stronger community focus as well.

FUTURE PURSUITS

First described as a research specialty in the late 1960s, the field of pediatric psychology has gradually developed a balance between research and clinical work with an emphasis on clinical applications. This is a result of the problem-solving orientations of the medical settings in which we generally work and also the inability to directly translate developmental research into individualized clinical interventions. However, pediatric psychologists have generally retained the research orientation that characterized their training and there is strong evidence that the field is beginning to generate its own research that is more specifically applicable to the clinical problems pediatric psychologists confront (Routh, 1982). There are numerous examples of this development. One of the earliest is the work of Don Routh and his colleagues with hyperactivity and their development of a research-based assessment tool which they described as an activity room (Routh, Schroeder, & O'Tuama, 1974). Other examples include the work of Gerry Koocher (Koocher & Sallan, 1978) with cancer in children, Denny Drotar (1977) with families, and my own work with Eric Schopler (Schopler & Mesibov, 1983) in developing assessment and intervention techniques for children, adolescents, and adults with autism. Moreover, the rapid growth of our *Journal of Pediatric Psychology* is another sign of this trend which appears to be accelerating and further corroborates Wright's prediction that pediatric psychologists will be involving themselves in more applied research.

A second trend that was predicted by Kagan and Wright and described by Salk has been the involvement of pediatric psychologists in transmitting knowledge about normal child-rearing practices. Although Salk has been involved with this for some time (1972), this activity has only recently gained much wider acceptance. There are several reasons for this. First, when pediatric psychologists were beginning to establish themselves in medical settings, physicians solicited their advice for more crisis-oriented activities. Only after resolving these were pediatric psychologists allowed the time to turn to problems of normal child development. Second, the developmental psychology research base has been generally weak in terms of its applicability to child-rearing problems. The empirical base that Kagan had described was large but not directly relevant to many of the practical child-rearing questions parents ask, such as should my two boys sleep in the same room, or how can I help my child get over his/her nightmares? Therefore, it has taken a while to generate a more applicable data base for these issues. Third, pediatricians frequently saw child-rearing questions as their domain. After all, Dr. Spock was a pediatrician. Pediatricians have only recently turned away from these activities because of the changes in

pediatric practice emphasizing shorter (under 15-minute visits) contacts with large numbers of children.

There is strong evidence that psychologists are becoming more and more involved with normal child-rearing questions. The continued and increasing popularity of Lee Salk and his appearances on national television are one indication. Pediatric psychologists are also more frequently found in normal primary care settings in pediatric departments. In addition, the work of Carolyn Schroeder (1979) with a private pediatric practice is the start of a much more extensive involvement of pediatric psychologists in these settings.

Related to the work with normal child-rearing practices is the emphasis Wright predicted on positive mental health and prevention. However, unlike with normal child-rearing issues, pediatric psychologists have not yet begun to scratch the surface in this area of inquiry. George Spivack and Myrna Shure (1974) are among the earliest and best known investigators in this area. Spivack and Shure have been teaching normal preschool and early schoolchildren problem-solving skills to use as alternatives to less appropriate ways of dealing with interpersonal conflicts (e.g., fighting). Their basic intervention involves teaching these children how to generate alternative solutions to various interpersonal dilemmas and how to evaluate the consequences of these solutions. Their data suggest that children engaging in these programs have fewer behavioral difficulties later on in their school years. A similar project has been implemented in the Rochester, New York, Public Schools with equally positive results (Gesten, de Apodaca, Rains, Weissberg, & Cowen, 1979).

Another approach to the problem of prevention in children has been to examine those at high risk for some form of psychopathology but who do not in fact develop the difficulties that one would expect given their genetic and environmental backgrounds. Most notable for their work in this area are Rutter and Garmezy. Rutter (1979) argues that important variables leading to "invulnerability" include patterning of stresses, individual differences, experiences outside of the home, self-esteem, environmental structure and control, coping skills, and the availability of personal bonds. Obviously each of these areas could form the basis for productive and important research.

Garmezy, Masten, Nordstrom, and Ferrarese (1979) have examined invulnerability in children who are at high risk for schizophrenia. Garmezy et al.'s, longitudinal research focused on identifying those characteristics that are most predictive of the later development of psychopathology. This approach has been quite fruitful in identifying important intervention areas.

Another example of potentially important prevention research is the work on psychological aspects of health and illness in children. One

example is the research on accidents which continue to be the leading cause of death in children past infancy. Although very preliminary, this research suggests that both family and child factors contribute to the likelihood of accidents. Sobel (1970), examining household poison hazards, found that psychopathology in the father and mother, marital difficulties, and histories of stressful life events increase the possibility of accidental poisonings. Child characteristics of high activity level, social extroversion, and being described as "daring" were more likely to be associated with having accidents in a study by Manheimer and Mellinger (1967). Other studies on helping children to cope with pain, minimizing the stresses of hospitalization (Peterson & Ridley-Johnson, 1980), and developing prehospital preparation programs for children and their families (Melamad, Myer, Gee, & Soule, 1976) seem fertile grounds for future research.

Although pediatric psychologists have been more caught up in the day-to-day needs of their medical and developmental centers, clinical work in prevention could be a most fruitful area to pursue. For example, the strong emphasis on child-rearing of both normal and developmentally handicapped children places us in an excellent position to determine the effectiveness of positive child-rearing practices on the development of psychopathology. As Rutter (1979) pointed out, most child-rearing studies to date have only emphasized negative effects.

In addition, longitudinal studies could identify risk factors in conditions such as diabetes or asthma. By following children who develop these conditions, a more preventative approach might help us to highlight which children will have more difficulty with compliance and/or which families will have more difficulty managing a chronically ill child. Research across disabilities is another strong possibility. For example, are child-rearing practices effective with mentally retarded children the same ones that promote invulnerability in normal developing children?

Finally, the issue of training promises to occupy considerable attention in the years ahead. There are two important reasons for this. First, although there are pockets of excellent experiences in pediatric psychology, such as courses, practicum sites, and internship settings, as yet there is no coherent integrated training program in this speciality. Second, the visibility, acceptance, and impact of any group is directly related to its training programs. It is hard to identify a professional group as a separate entity unless that group has a separate certification and training sequence. For these reasons pediatric psychologists will be spending considerable time in the years ahead identifying the competencies necessary to do the wide range of services they are called on to perform. These efforts, if successful, should also result in increased visibility for the profession and practice of pediatric psychology.

SUMMARY

Although the field of pediatric psychology was originally conceptualized as a research specialty, the demands of clinical settings plus the paucity of applicable data have moved pediatric psychologists into more of a clinical role. This role involves direct work with pediatricians as outlined by Lee Salk, plus much of the high-volume short-term assessment work that was highlighted by Logan Wright. More parent training, interdisciplinary work, long-term follow-ups, and involvement in community program development has occurred than was originally foreseen.

Some of the trends for the future appear to include more applied research directly applicable to clinical settings. In addition, the future will probably include more involvement of pediatric psychologists in the primary care of normally developing children. The area of prevention which was first highlighted by Wright seems an obvious one for the application of pediatric psychologists' skills and abilities. Finally, issues related to training will continue to be a major concern of those in the field.

The next decade promises to be a stimulating one for those of us who identify ourselves as pediatric psychologists. I look forward to it with great optimism and excitement.

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