PSYCHOLOGY OF INFANCY
AND
EARLY CHILDHOOD

BY
ADA HART ARLITT, PH. D.
Professor of Child Care and Training,
University of Cincinnati

SECOND EDITION
SECOND IMPRESSION

McGRAW-HILL BOOK COMPANY, INC.
NEW YORK AND LONDON
1930

PREFACE TO THE SECOND EDITION

Few fields have had a greater number of investigations in progress during the past three years than child development. The contributions of these investigations to health and health habits, language, learning, play, and particularly to the field of emotional development have been so great that a revision of this text has been necessary in order to include the results of the major researches.

ADA HART ARLITT.

CINCINNATI, OHIO,
April, 1930.

PREFACE TO THE FIRST EDITION

From the point of view of health, of education, of personality development, and of mental hygiene, recent studies have proved that the most important period of the child's life is the first five years. Among the most important of the studies have been the laboratory researches in child behavior and the observations of the behavior of individual children. These studies have added enormously to our knowledge of child psychology, at the same time that researches in mental hygiene, in child health, and in education have shown us the need of as complete a knowledge of the psychology of the preschool period as can be obtained.

Only one instance out of many may be cited to prove the relation of psychology to child health. Malnutrition constitutes by far the most common physical defect of the preschool period. Emerson cites as the second, fourth, and fifth on the list of the five causes of malnutrition: "lack of home control, faulty food habits and improper food, and faulty health habits." Each of these three causes listed by Emerson is traceable in a large measure to a lack of knowledge of child psychology, or to a lack of appreciation of the general principles of habit formation. The best diet list is useless if the child, because of improper training or suggestion, refuses to eat. Apparently eating in itself is inadequate if the other health habits do not accompany it.

Just as parent and teacher alike must meet the problems which arise in connection with health habits,

so both must meet problems of discipline, problems of rewards and punishments, problems in moral and ethical training, and the whole series of problems, which arise in giving a standard of education to children; while at the same time both must have respect for individual differences. To meet each of these groups of problems, a knowledge of the psychology of early childhood is essential. This is so not only where the child with whom one deals is five years old or under, but also when the children under consideration have passed beyond that period. The behavior of a child in the kindergarten and in the primary grades, and his ability to take the education which is offered at that time, are based, in large measure, on the experiences which he has received in the period before school age, and on the attitudes and capacities which he has developed because of these experiences. The best school is seriously handicapped in helping a child to learn if he brings to his classes a stubborn and antagonistic attitude, or such great timidity that he refuses to take part in any work, be it group or individual, or so poor a background of experience that the words used in his group have little or no meaning for him.

This book has been written for the purpose of so presenting those principles of psychology, derived from early studies and the material drawn from later researches, that they can be used by parents, teachers, and others interested in young children—all of whom must meet the problems listed above and also those problems which, though treated later, have, for lack of space, not been included in the preface.

It would be impossible to state in detail in the introduction to this volume all of those on whose work the text is based. Such statements are made in the

body of the text. The author wishes, however, to acknowledge her debt to the work of Dr. John B. Watson and his students, and to the work of Dr. Bird T. Baldwin, Dr. Arnold Gesell, and Dr. Helen T. Woolley.

The writer is deeply indebted to Dr. Harvey A. Carr for reading this manuscript and for innumerable suggestions as to material to be included. The writer is also indebted to Dr. C. Judson Herrick for reading and criticising the section of the manuscript which deals with the nervous system. To Miss Berta Harper, who has edited this manuscript with a view to its form and to Miss Elizabeth Dyer, Dr. Constance Dowd, and Miss Flora Thurston, who have given valuable suggestions as to content, the author wishes to express thanks.

The writer wishes to acknowledge her indebtedness to the following authors and publishers for their courtesy in permitting material from their books to be reprinted: Dr. Bird T. Baldwin, Dr. H. A. Carr, Dr. W. B. Cannon, Dr. A. I. Gates, Dr. Arnold Gesell, Dr. Walter S. Hunter, Dr. Carl Murchison, and D. Appleton & Company, The Pedagogical Seminary and Journal of Genetic Psychology, Henry Holt & Company, Longmans, Green and Company, Alfred A. Knopf, Inc., The Macmillan Company, Rand, McNally & Company, and The University of Chicago Press. Selections from L. M. Terman and Jessie C. Fenton are used by permission of and by arrangement with Houghton Mifflin Company.

ADA HART ARLITT.

CINCINNATI, OHIO,
March, 1928.

CONTENTS

PSYCHOLOGY OF INFANCY AND EARLY CHILDHOOD

CHAPTER I

PROBLEMS PRESENTED BY THE PRE-SCHOOL-AGE CHILD

Though interest in the education and training of young children is no new thing, as evidenced by the fact that it was apparent as early as the century in which Comenius wrote, it is more widespread at the present time than it has been at any preceding period.

Physicians, psychologists, social workers, philanthropists, parents, and indeed many of the lay public are concerning themselves today with the problems which the pre-school period presents. The period is significant from so many aspects that it is not to be wondered at that interest in it is felt by people in many lines of work and with many divergent lines of interest.

The Problems of the Pre-school Child.—Those who deal immediately with the care and training of the child have to meet such problems as the following:

What shall be expected of the child as to health standards?

Which things produce satisfying results and cause an act, however good or bad, to be repeated and become a habit?

What things that we do will be imitated to the benefit or detriment of a child's behavior?

How can desirable activities be perpetuated and undesirable ones eradicated?

What general considerations underlie the choice of games, occupations, stories, and songs to meet the educational needs of young children?

What environment shall be provided to insure adequate social adjustments?

What constitute the health and hygiene habits which must be set up to insure good health?

What measures must be taken to determine and correct physical defects?

What cooperation can be expected from the child?

What must we provide to insure an equal opportunity for all children?

What types of environment stimulate social tendencies and cause them to become habits?

What resources are necessary if health and mental hygiene standards are to be such that the number of problem children shall be reduced to a minimum, and the number of adequately adjusted individuals increased in proportion?

The above questions indicate some of the specific difficulties which must be met and solved. They indicate, as well, the number of fields in which problems present themselves.

For the purpose of classification, the problems which the pre-school period presents to the individual immediately concerned with rearing children, and to society as a whole, may be subsumed under six headings, *viz.*, their significance for physical welfare, for education, for parents, for philanthropy, for psychological research, and for mental hygiene.

Significance of the Pre-school Period for Physical Welfare.—The health of the child seems to depend upon two factors: the tendencies existing in the stock from which he comes; and the environment with which he comes in contact, both in the pre-natal and the post-natal period. Whatever the deficiencies in the stock from which the child comes, it is a well-established fact that environmental factors have their largest importance in the period preceding school age. This is preeminently the period for developing resistance to diseases of all kinds. It is even the period for developing resistance to dental decay. Dentists seem fairly well agreed that many of the cases of dental caries in children of school age can be prevented by the proper nutrition and care of children under six. Malnutrition occurs in 27 per cent of pre-school children. It is a well-known fact that rickets is essentially a disorder of this period. The mortality rate is far higher for the period from birth to six years of age than for any succeeding period. Gesell states that "even physical accidents like being scalded, burned, injured, and being run over by automobiles bear with exceptional weight on the pre-school child."[1] The period is not only important because of the large death rate and the number of

[1] GESELL, "Mental Growth of the Pre-school Child," p. 10.

accidents which occur, but it is even more important for its effect on the health of the children who survive.

No factor is more important in preventing the onset of illnesses of various sorts than proper habits of health and hygiene. No period is more important for setting up these habits than is the period from infancy to six years of age. The whole range of bedroom and bathroom habits must be set up by kindergarten age if the child's health is to be normal, and if his attention is to be freed from his physical self sufficiently to enable him to acquire the material which the school presents. If he has not acquired toilet habits, habits of sleep and rest, and habits of eating which insure that he will eat correct foods in adequate amounts, he will function below par, be more prone to disease, and be less able to attend to and react normally in both home and school situations. None of the sets of habits listed can be acquired easily after school age. In many cases they are acquired only after tremendous effort and struggle on the part of teacher, parent, and child; in many other cases they are never acquired, and the child goes through life with a severe handicap.

Significance for Education.—Educators must recognize the importance of the pre-school period, because much that the child is able to acquire from his school contacts depends upon the experiences which he has had before school age, and because those social attitudes which make for good or poor adjustment to school situations are well developed before the age at which most children enter school. If a child's experience has been rich and varied, if he comes to school with relatively well-developed motor coordina-

tions, a good vocabulary, and a store of ideas based upon concrete experience, the material which he gets in school is both more valuable to him and more interesting. If his social attitude is such as to make him unwilling to make good contacts with the other children and with the teacher; if he has learned to dominate adults by means of the temper tantrum; if he comes in with unusual fears; if, in a word, he comes in with any of the unfortunate forms of behavior listed above or with any others which might be listed, he is handicapped in his relation to the teachers, and the teachers in the school are equally handicapped in their relation to him. To discuss fully the importance to the educator of the period from infancy to school age would be to point out much of the material contained in later chapters of this volume. The material given above is merely suggestive of the great importance of the early period for later education.[1]

Significance for Parents.—Parents are interested in this period because this is the one for which the home is primarily responsible. Not only does the home contribute enormously to the social development of children before school age, but it is also responsible for much of their physical and mental development as well. The period of early infancy is the only time during which the child is completely under control of his parents. They decide which toys shall be brought into the house, what language he shall hear, and which acts of his shall be punished and which rewarded. In

[1] The kindergarten does much to prepare children for school entrance, but, according to Gesell, the kindergarten reaches only about one child out of ten. The other 90 per cent reach the grades without that valuable all-round training which the kindergarten gives.

a word, they control absolutely those things which shall serve as stimuli to responses, and those responses which shall be perpetuated through reward or eliminated through punishment or disuse. Habits set up at this time, through wise control, condition the child against undesirable responses when he has reached the age at which he comes in contact with persons and things outside of his home. This stage is reached between two and a half and four years of age, depending somewhat on the extent to which the parental control over the child may be limited through his size and the number of attendants who watch over him.

The period of most rapid growth, both mental and physical, is from infancy to five years. A knowledge of the psychology of this period is as essential to the formation of good habits, and to the insurance of normal mental growth, as is a knowledge of physical health and hygiene to mature normal physical growth. Children are born with countless tendencies to activities and with but a few predetermined reactions. From the moment of birth on, some of the tendencies result in activities which tend to be perpetuated because of the treatment which the infant receives, whereas other activities, because of other sorts of treatment, tend to be inhibited.

The beginnings of habits of acting in one way rather than in another date from the moment of birth, if not from that period still more or less unexplored by psychologists—the later pre-natal period. Parents must be fully informed both as to the care of children at birth, and as to the best means of setting up desirable habits and insuring that undesirable ones shall not develop.

Significance for Philanthropy.—From the point of view of the philanthropist, the early period is of importance in that, if children are to develop normally, they must have such opportunities for development as are provided in the best homes. If the philanthropist could insure that every child born in a state would have provided for him, in the first five years of his life, opportunities equal to those which could be provided for him in the best home, all children would be assured of the possibility, at least, of developing good social attitudes, sound health, and such a basis for later education as is now possible only under the most favorable home conditions. Children brought up under the best conditions for the first five or six years of their lives have a much better basis for developing those qualities which make for the best type of citizenship than have most children brought up under present conditions. There would be fewer juvenile delinquencies, and fewer children going through mental-hygiene clinics, if philanthropy or the state could so provide for them in the formative period.

Significance for Psychological Research.—From the point of view of the psychologist, there can be no doubt that the pre-school period is the most important one in the child's life. This is true not only because it is during this early period that habits may be formed most easily and because habits set up in this period may preclude the setting up of other habits far more desirable from the point of view of a child's later adjustment, but also because habits set up in infancy carry a great deal of emotional content which may transfer to new situations. Fears and other emotional

states are easily set up in this period and easily transferred.

Research directed toward the study of all types of reactions in infancy and early childhood has given extremely valuable material to the science of psychology as a whole. Heretofore much of our psychology of the emotions was based on introspective analysis, by adults, of the situations through which they pass and the studies made by the physiologists. The psychology of the emotions as based on the behavior of adults left much to be desired. In the first place, many of the sources from which the emotional activities sprang had been lost sight of, since the stimuli which had given rise to the responses dated far back in the lives of the individuals. One hears, for example, statements to the effect that fears of fur of various animals are inherited, a statement which later research has proved to be wholly erroneous.

Until recently there were no data as to what constituted the original stimuli to fear, the objects or situations of which the child was born afraid. At the present time, there are data which give both the original stimuli to fear, to anger, and to love, and the reactions which accompany these stimuli. Later research will probably serve to build up a psychology of the emotions which will differ widely from the one current some ten years ago. The study of the growth and nature of mental functions in general, from infancy to school age, will probably yield as valuable material for the psychology of imagination and memory to the introspectionist as it does to the behaviorist. Child psychology is rapidly passing out of the anecdotal

stage, a fact which is largely due to such psychological research as is being conducted by Watson, Baldwin, Gesell, and others. At the present time it would be impossible even to mention in detail the contributions which the study of the psychology of early childhood can and will make.

Significance for Mental Hygiene.—As a final reason for the emphasis on the early period of childhood, we may cite the fact that authorities seem agreed that the basis for those traits which make up the personality of the individual is laid during this time, particularly during the first two years. Tendencies to worries, fears, sullenness, even shut-in personality, and other serious variations from normal behavior seem clearly to be traceable to treatment received during the first six years. Often such a social tendencies may be traced to treatment received during the first year.

Contrariness, tendencies to temper tantrums, to feelings of inferiority, to lack of initiative and independence, as well as the more desirable character traits, appear to have as their basis the influences by which children have been surrounded during the period from infancy to school age.

References

BALDWIN, BIRD T., and STECHER, "The Psychology of the Pre-school Child," chaps. II–VII.

GESELL, ARNOLD, "The Mental Growth of the Pre-school Child," chap. I.

———, "The Pre-school Child."

GROVES, ERNEST, "Wholesome Childhood," chap. I.

CHAPTER II

INHERITANCE FROM THE NEAR ANCESTRY

Hereditary versus Environmental Factors.—Those who deal with the education of children of any age are constantly faced with questions as to the extent to which behavior is influenced by hereditary predispositions. If a child behaves as he does solely because of a physical and mental make-up inherited directly from his ancestors, then education can influence his behavior only in so far as it modifies such inherited make-up. If, on the contrary, behavior is solely the result of environment, then the educator is the sole determiner of the behavior of the children under his charge. Such a point of view would hold that even mental level is the result of the type of training and the degree of richness of environment with which the children come in contact, particularly in the early period of their lives.

Authorities tell us that the period of most rapid growth of the brain is from infancy to five years of age. Those who hold the point of view that environment is the sole determiner contend that the environment has the greatest effect during this period of rapid growth; and this position would seem to be logical.

Few hold the first point of view in its extreme form. A number of recent authorities have taken the second point of view. For the most part, opinions as to the

relative effects of nature and nurture lie between the extremes. Whatever the point of view in regard to the relative effects of nature and nurture held by the individual who deals with the child, it is his business to provide for that child the education indicated by the child's capacities and by the stage of development which it has reached at the time at which the education begins.

Biological Explanation of Variation.—Explanations as to the variability among children in the same family are not difficult to find. If one goes through the family stocks to determine the exact number of ancestors which each child possesses, one finds eight great grand-parents, sixteen great great grand-parents, and so on, the number of ancestors doubling as one goes back for each generation unless there has been intermarriage between members of the family, for example, marriage between cousins. Popenoe[1] states that if William the Conqueror were separated from his descendants of today by twenty-four generations, any infant of British extraction has had to date 16,000,000 ancestors. This, as Popenoe states, is greater than the number of inhabitants in Britain and France together at that time. The possible number of permutations and combinations of traits which have appeared in these ancestors and which may now appear in the present generation is, of course, literally innumerable in spite of the fact that some branches have died out through lack of fertility. Popenoe also states that even though only thirty-three of the members of the band of Pilgrims landed

[1] POPENOE, PAUL, "The Child's Heredity," p. 10.