

Temperament and Behavior Disorders in Children

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DISORDERS IN CHILDREN

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PREFACE

Writing this book was a long but pleasant task for the authors, who have spent a considerable portion of their professional lives concerned with children and their problems. One of the frustrations of practical work is the absence of detailed information on children and their development before they are brought to clinical notice. The clinician, of course, seeks to reconstruct the past, but even the most elaborate and carefully bolstered reconstruction must leave him with the nagging doubt that the edifice may well be constructed of fancies joined together by the cement of strongly held theories. It was, therefore, most refreshing to be able to deal with clinical cases whose past histories were known and did not have to be inferred. The knowledge of the past helped to illuminate the present and to provide a new and hopefully sounder basis for understanding the developmental course of behavioral disturbance in children. The purpose of this book is to share this experience with our colleagues.

The task of conducting the longitudinal study which makes this report possible has been arduous, not only for ourselves, but for our many associates in the venture. It is only fitting that we acknowledge our indebtedness at this time. In the first place, we must give thanks to the parents who unstintingly gave of their time and energies to this study of their children. We are grateful, too, to the teachers and directors of nursery and elementary schools who inconvenienced themselves beyond the call of duty to make us welcome, to provide the opportunity to observe the children in school settings, and to submit to detailed interviews about their pupils.

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Special thanks are due to Sophie Ladimer, clinical psychologist, who carried through the program of psychological testing and participated in a number of the data analyses, as well as to Marguerite Rosenberg, psychiatric social worker, whose responsibilities included participation in the psychiatric evaluations, in the selective analysis of the anterospective information, and in the follow-up of the clinical cases.

At another level, we wish to thank Dr. Sam Korn and Dr. Mar-

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The preparation of the text and its features of readability owe much to the editorial activities of Abby Hand and Janet Sillen. Segments that are obscure are entirely the responsibility of the authors.

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Chapter XIII represents an expansion of a previously published paper, "Behavioral Development in Brain-Damaged Children," which appeared in the *Archives of General Psychiatry*, 11:6 (1964). Appreciation is extended to this journal for permission to incorporate portions of this paper in the present volume.

CONTENTS

Preface v

1	Behavior Disorders and the Concept of Temperament	3
2	The Background: The New York Longitudinal Study	12
3	The Clinical Sample	29
4	Strategy of Data Analysis	48
5	The Relation of Temperament to Disturbance: A Quantitative Analysis	53
6	The Interaction of Temperament and Environment in the Development of Behavioral Disturbance	71
7	Difficult Children	75
8	Easy Children	85
9	Children Who Are Slow to Warm Up	92
10	Persistence	100
11	Distractibility	109
12	Activity Level	116
13	Three Children With Brain Damage	124
14	Stress: Consonance and Dissonance	137
15	The Developmental Dynamics of Symptom Formation and Elaboration	157
16	Treatment and Follow-Up	171
17	Theoretical Implications of the Findings	182
18	Practical Implications of the Findings	191
	Appendix A	205
	Appendix B	207
	Index	301

**TEMPERAMENT AND BEHAVIOR
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1

BEHAVIOR DISORDERS AND THE CONCEPT OF TEMPERAMENT

In the present volume we are concerned with examining certain of the factors which contribute to the development of behavior disorders in young children. The particular focus will be on the child's temperament and on the role it plays in the emergence and elaboration of behavior problems. Despite this focus, however, we will not and cannot consider temperament in isolation as the cause for disturbed development. Together with all serious workers in psychiatry and psychology we recognize that both normal development and disturbances in development, rather than being the products of any single factor, result from complex interactions between the child and his environment. Our concern with temperament and our divergence from other theories, therefore, do not derive from a disagreement with the concept of behavioral development as the consequence of the continuous interaction between an organism and its environment, but rather from a different view of the variables which are interacting.

Our concern with the role of temperament as an organismic contributor to the course of behavioral development is not new. Beginning over fifteen years ago, we came increasingly to be impressed with the contribution made to behavioral development by reactive characteristics of the child, particularly his pattern of temperamental organization. Our own clinical experience, as well as that of others,^{1, 2, 3, 4, 5, 6} suggested that an exclusive concern with environmental influences could not explain the range and variability in developmental course exhibited by individual children. Nor could it explain the marked differences in the responses of children to similar patterns of parental attitudes, values, and child-care practices.^{7, 8, 9, 10} It was evident, too, that parents frequently showed significant variations in their response patterns to their different children,¹¹ suggesting that the child's own characteristics as an individual could and did act as specific stimuli for the parent.

To test the validity of these personal and clinical impressions, we mounted a longitudinal study in 1956, the central aims of which were the objective definition of temperamental characteristics in children and the delineation of the contributions which such characteristics made to both normal and aberrant behavioral development. Although we started to study each child in our sample of 136 children during early infancy and so had no sound basis for predicting which child would develop in an

abnormal way, we anticipated that a sizable number of the children in the study population would develop behavioral disturbances. This indeed happened and made the present report possible.

Since the children were studied from early life onward, and both their temperaments and environments were repeatedly assessed, the data make it possible to deal with two issues of importance for child psychiatry: 1] the manner in which temperamental patterns influence the likelihood that a behavior disorder will develop, and 2] an anterospective view of the emergence of behavioral disturbance, together with the factors contributing to symptom formation and evolution.

Before entering upon the substance of this inquiry, it is of value to consider the place of our main variable, temperament, in the behavioral scheme. Temperament may best be viewed as a general term referring to the *how* of behavior. It differs from ability, which is concerned with the *what* and *how well* of behaving, and from motivation, which seeks to account for *why* a person does what he is doing. When we refer to temperament, we are concerned with the *way* in which an individual behaves. Two children may each eat skillfully or throw a ball with accuracy and have the same motives in so doing. Yet, they may differ with respect to the intensity with which they act, the rate at which they move, the mood which they express, the readiness with which they shift to a new activity, and the ease with which they will approach a new toy, situation, or playmate.

Thus, temperament is the *behavioral style* of the individual child—the *how* rather than the *what* (abilities and content) or *why* (motivations) of behavior. Temperament is a phenomenologic term used to describe the characteristic tempo, rhythmicity, adaptability, energy expenditure, mood, and focus of attention of a child, independently of the content of any specific behavior. A formal analysis of behavior into the *why*, the *what*, and the *how* has also been utilized by other workers, such as Guilford¹² and Cattell,¹³ the latter of whom identifies “the three modalities of behavior traits” as: 1] “dynamic traits or interests . . . [including] basic drives plus acquired interests such as attitudes, sentiments,” etc.; 2] “abilities, shown by how well the person makes his way to the accepted goals”; and 3] temperament, “definable by exclusion as those traits which are unaffected by incentive or complexity . . . like highstrungness, speed, energy and emotional reactivity, which common observation suggests are largely constitutional.”¹⁴

Temperament is not immutable. Like any other characteristic of the organism, its features can undergo a developmental course that will be significantly affected by environmental circumstances. In this respect it is not different from height, weight, intellectual competence, or any other characteristic of the individual and, as is the case for all such characteristics, the initially identified pattern of the young child may

be relatively unchanged by environmental influences, or it may be reinforced and heightened, diminished, or otherwise modified during the developmental course.

The need for studying the child's own characteristics and the contribution these might make to his psychological development were highlighted by the paucity of information available on temperament when we began our longitudinal study in the mid-1950's.¹⁵ The contribution of other factors to the development of behavior disorders had been examined through many lines of inquiry in the previous decades. Important insights had been provided by these studies on the role of heredity, pre- and perinatal brain damage, biochemical and neurophysiological disturbances in development, unfavorable parental practices and attitudes, intrafamilial conflict, conditions of social stress and deprivation, and distortions of the learning process involved in the child's socialization. On the other hand, little attention had been paid to the nature of the child's own characteristics as a reactive organism and in particular to the possibility that the manner in which his individual pattern of reactivity is organized may affect his development. It is true that in 1937 Freud had asserted that "each individual ego is endowed from the beginning with its own peculiar dispositions and tendencies,"¹⁶ and that in the 1930's two pioneer workers in child development, Gesell¹⁷ and Shirley,¹⁸ had reported significant individual differences in the behavioral characteristics of infants. Somewhat earlier, Pavlov and his followers¹⁹ had postulated the existence of congenitally determined types of nervous systems as basic to the course of subsequent behavioral development. They had classified different types of nervous systems according to the balance between excitation and inhibition, and had attempted to explain features of both normal and abnormal behavioral states on this basis.

In the 1940's and 1950's, a number of studies appeared which reported observations of individual differences in infants and young children in specific, discrete areas of functioning such as motility,²⁰ perceptual responses,²¹ sleeping and feeding patterns,²² drive endowment,²³ quality and intensity of emotional tone,²⁴ social responsiveness,²⁵ autonomic response patterns,^{26, 27, 28} biochemical individuality,^{29, 30} and electroencephalographic patterns.³¹ These various reports emphasized that individual differences appeared to be present at birth and are not determined by postnatal experience. Although studies of this kind provided valuable data and leads for further investigation, they were too narrow in focus to provide a basis for systematic and comprehensive understanding of behavioral individuality in early childhood, and of the significance of such individuality for psychological development.³²

A number of factors were responsible for the neglect of temperament as an area of investigation. Important among these was the general disrepute of earlier constitutionalist views that had ascribed heredity and

constitution as causes for complex personality structures and elaborate psychopathological syndromes. It was our repeated experience in the early and mid-1950's to find most of our colleagues reproaching us for returning to an outdated and discredited constitutionalist position when we expressed the idea that individual organismic behavioral differences important for development might exist in young children. In a period when behavioral disturbance was most generally considered to be produced by the environment, to pay attention to the intrinsic characteristics of the reactor was viewed as a return to a static and almost Lombrosian constitutional typology. It was indeed the period of the "empty organism" for many workers and thinkers in psychiatry.

In spite of the prevailing atmosphere, however, a set of facts could not be neglected. These were: 1] the lack of simple relationship between environmental circumstances and their consequences; 2] individual differences in susceptibility to stresses and pressures; 3] differential responses to similar patterns of parental care. These facts could not be denied, and increasingly led a number of workers^{33, 34, 35, 36, 37} to concern themselves with attributes of the individual as an organism which, in their view, could significantly contribute to his idiosyncratic responsiveness to environmental events. Different workers emphasized different attributes of the individual. Independent of the attribute stressed, the most important result of these studies was a rekindling of concern with, and interest in, the contributions which organismic individuality made to development.

This concern with the child's own characteristics as a force in development has accelerated sufficiently in the past few years so that currently there is a broad consensus among investigators in child psychiatry and child development that the consideration of both organismic and environmental factors, as well as their mutually interactive influences, is required for any comprehensive study of a child's normal or aberrant development.

However, there is still a need to convert agreement in principle to agreement in practice. For the child's individuality to be incorporated seriously into psychiatric theory and practice, detailed information on specific patternings of interaction between organismic and environmental factors in development is required. Such information can be obtained only from a longitudinal study that identifies temperamental patterns and follows the dynamics of the interaction of temperament and environment over a significant segment of the developmental course. Though such a study makes special demands for sample maintenance and long term devotion to data collection and analysis,^{38, 39, 40, 41, 42} it is uniquely effective for the exploration of the relation between the early characteristics and the later development of the individual, and for the delineation of individual behavioral sequences. For most other questions, serial sampling of appropriate populations at different ages represents an en-

tirely adequate and more efficient study design. For example, a determination of the types of behavior problems characteristic of children at different ages can be made by the simultaneous study of representative samples drawn from different age groups. If, however, one is concerned with developmental questions involving the relationship between specific attributes of the young child and the emergence of behavioral disturbance at an older age or with the identification of the factors leading to specific patterns of symptom formation and evolution, one is forced to study the same individual at more than one point in time—that is, to pursue a longitudinal investigation.

Furthermore, such a longitudinal study must be anterospectively oriented if the distortions of retrospective recall by parents or other reporters are to be minimized. The vast majority of investigations into the origins of behavior disorders in childhood have relied upon retrospective reports of events in early childhood obtained either from older children, from the parents of younger children, or from adults suffering from behavioral disturbances. For a number of decades, the assumption that retrospectively obtained histories of early childhood events, feelings, and fantasies represented a valid body of data on which to base theories of child development went virtually unquestioned. In recent years, however, this assumption has been challenged by the findings of several investigations that question the accuracy of mothers' retrospective reports on the early developmental histories of their children. Several studies, both from our own and other centers, have revealed significant distortions in the accuracy of such reports even when the child's development has been normal.^{43, 44, 45} Wenar, in a recent review of these studies, has concluded that "A good deal of past research has leaned heavily on the slenderest of reeds. It may well be that mothers' histories mislead more often than they illuminate and, as yet, we are in a poor position to know when they are doing one or the other."⁴⁶

If retrospective parental reporting of the child's normal development is unreliable, the unreliability will undoubtedly be even greater when the child presents a behavior disorder. In such cases, the inaccuracy of parental recall will be magnified by defensiveness, by the search for plausible explanations, or by the influence of popular theories about the causes of psychopathology. The accuracy of parental histories describing the development of behavior problems in their children was tested in our New York Longitudinal Study.⁴⁷ The parent's retrospective report of the child's behavioral development was compared with the information collected anterospectively in the course of the longitudinal study. Significant distortions of parental recall were found in one-third of the cases. The distortions included: 1] revisions of timing to make the sequence of events conform to prevalent theories of causation; 2] denial or minimization of the problem; and 3] inability to recall pertinent past behavior. Of additional interest was the lack of systematic relationship

between the degree of internal consistency and fluency of the parent's retrospective report and the correlation of this report with the corresponding anterogressive data.

It is true that the clinician must, on many occasions, utilize retrospective data obtained from patients and parents. He must evaluate the patient's problem and institute treatment on the basis of whatever data are available. In addition, the issues emphasized by a patient in his retrospective recall, even if factually inaccurate, may provide useful clues as to his significant concerns and preoccupations. On the other hand, the research worker has a different responsibility. His obligation is not immediate action or patient care, but the accumulation of pertinent and accurate data. In this task, retrospective histories, if utilized at all, must be evaluated with great caution.

The need for anterogressive longitudinal studies in the investigation of the origins and evolution of behavior disorders in children has been recognized by a number of workers at Berkeley,⁴⁸ the Fels Institute,⁴⁹ Yale,⁵⁰ and Topeka.⁵¹ Longitudinal studies at these centers have made a number of contributions to our knowledge of normal and aberrant behavioral development. The possible significance of temperamental characteristics of the child in interaction with parental functioning has been indicated. A lack of correlation between the child's patterns of psychodynamic defenses and the occurrence of behavioral dysfunction has been found. Symptoms typical of various age-periods have been tabulated, their vicissitudes over time traced, and correlations among different symptoms determined. However, each of these studies has been limited either by small sample size, which has not permitted generalization of the findings, or by the absence of systematic psychiatric evaluation of the children, which has severely restricted the possibility of categorizing the behavior disturbances and making meaningful correlations with the longitudinal data on behavioral development.

The identification of the limitations for interpretation intrinsic to earlier studies helped us to formulate the issues and problems with which we had to be concerned in our own longitudinal study. The problem was threefold:

- 1] Methods for studying temperament and for following a substantial number of children for a long period of time by these methods had to be developed.

- 2] A procedure for identifying children in the group who develop behavior disorders had to be established.

- 3] The conditions of care, environment, and stress confronting these children had to be determined and recorded. With these data it would be possible to determine the differential risks that attach to specific temperamental patterns and to study the temperamental characteristics and environmental features involved in the production of normal or disordered behavior.

Neither in theory nor in fact would we expect a one-to-one relation to exist between a specific pattern of temperament and the emergence of a behavior problem; temperament, in and of itself, does not produce a behavior disorder. We would anticipate that in any given group of children with a particular patterning of temperamental organization, certain of these children would develop behavior disorders and others would not. Hopefully, this variability in consequence could be identified as deriving from differences in the patterns of care and other environmental circumstances to which the children were exposed. However, we also would anticipate that given a uniform environment and set of stresses, certain patternings of temperament are more likely to result in behavior disorders than are others. We are therefore concerned with the identification of both the differential likelihoods for the development of disturbances that attach to different temperamental patterns, and the specific environmental factors that interact with each temperamental type to result in a pathologic consequence. These tasks have represented the major goals of the study and are reported in the present volume.

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