CHAPTER ONE

Introduction

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HOW a child develops a desire to do well in activities he undertakes, and how he becomes apprehensive about the possibility of doing poorly are problems of both theoretical and practical significance. This volume presents reports of four extensive research projects that deal with achievement-related motivation in children. New theories and methods of investigation concerning achievement motivation, anxiety about achievement, and expectancies of success and failure are described. Developmental trends dealing with both the stability and change of achievement-related motives over time are studied as well as the expression of these motivational dispositions at particular stages of development. That is, at any one age what situational and personality factors influence children's goal setting, persistence at tasks, performance in achievement situations, and reactions to success and failure?

"Achievement-related motivation" refers to the personality factors that come into play when a person undertakes a task at which he will be evaluated, enters into competition with other persons, or otherwise strives to attain some standard of excellence. Under such circumstances a variety of motivational dispositions and cognitive assessments of the situation are activated and influence a person's tendency to behave (e.g., his tendency to work more or less hard, to persist or to give up and turn to another activity, his thoughts of doing well or poorly, and his physical manifestations of stress). Specifically, the determinants of performance dealt with include approach and avoidance motives (the motive to achieve, and anxiety about failure or the motive to avoid failure), expectations (subjective estimates of the likelihood that one's efforts will lead to success or failure), and the incentive values of success and failure (e.g., the pleasure of winning, or making a good grade, or executing a difficult task flawlessly, or the pain and humiliation of criticism, of not being good at something, of doing less

well than one's companions). How these personality determinants of motivation develop in children, how they can be measured, how they operate in specific settings, and their implications for education and childrearing are the concerns of this book.

There are a number of reasons for bringing together a set of papers on achievement-related motivation in children. Assertiveness, competition, and excellence are important aspects of behavior, particularly in our society, yet these kinds of behavior have been studied primarily in adults. The relatively small number of studies of achievement-related motivation in children have been seized upon eagerly even though they barely reveal the outlines of the problem. The early studies were provocative but by no means definitive, and as the material included in the present volume demonstrates, the topic is far more complex than had been recognized.

There have been three major traditions of research on these topics. Research on achievement motivation was begun by David McClelland, John W. Atkinson, and their colleagues at Wesleyan University[1] and has been continued at Harvard University by McClelland and his colleagues, and at the University of Michigan by Atkinson, Feather, Veroff, and their colleagues.[2] Another center for research on achievement behavior and achievement motivation has been the Fels Research Institute. This group of researchers, including Vaughn and Virginia Crandall, Howard Moss, Jerome Kagan, and their colleagues, has had a somewhat different theoretical orientation;[3] the work of several members of this group stems in part from the social learning theory of Julian Rotter. The third major center of research on achievement-related motivation has been at Yale University with the activities of Seymour Sarason and his colleagues and their research on test anxiety.[4] There have, of course, been other individual investigators such as Pauline Sears and Elizabeth French, who have carried out noteworthy research on achievement-related motivation over a period of years, but they have been less clearly identified with one of these three main traditions of research.

The papers included in this volume represent the influence of the Michigan approach (see chapters by Atkinson, Smith, and Veroff), the Fels ap-

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[1] D. C. McClelland, J. W. Atkinson, R. A. Clark, and E. L. Lowell, *The Achievement Motive* (New York: Appleton-Century-Crofts, 1953).

[2] J. W. Atkinson and N. T. Feather (eds.), *A Theory of Achievement Motivation* (New York: John Wiley & Sons, 1966).

[3] Cf. V. J. Crandall, "Achievement," in H. W. Stevenson (ed.), *Child Psychology* (The 62nd Yearbook of the National Society for the Study of Education Part I [Chicago: University of Chicago Press, 1963]), 416–459; and H. A. Moss and J. Kagan, "The Stability of Achievement and Recognition Seeking Behavior from Childhood to Adulthood," *Journal of Abnormal and Social Psychology,* 62 (1961), 543–552.

[4] S. B. Sarason *et al., Anxiety in Elementary School Children* (New York: John Wiley & Sons, 1960).

proach (see chapters by Crandall and Moss), and the Yale approach (see chapters by Feld and Lewis and by Sarason). Advocates of these approaches have not previously communicated as fully as might be desirable, and it is the intent of the present volume to bring about a confrontation of these viewpoints and to point up the common concerns and the differences among them so that future communication and integration will be improved. The concluding chapter is specifically addressed to this task.

The wide variety of themes covered in this volume should be of interest to students of personality, human motivation, and child development as well as to sociologists and persons interested in elementary school education. There are discussions of the components of children's achievement anxieties, childrearing practices that influence the development of motivation, the influence of reference groups on effective performance, male-female differences in motivation, Negro-white differences, the influence of motivation on academic performance, and the effect of desegregation on the achievement motivation of Negro children.

Generally speaking, there is a much greater body of published material on cognitive development than on motivational development. This is probably attributable to the greater ease with which cognitive variables can be manipulated and measured. One of the potential contributions of the present volume is the array of new or improved techniques for investigating and assessing achievement-related motivation described in the research reports. To maximize this contribution methodological considerations are dealt with in some detail and various assessment devices are included in appendixes.

The distinctive features of each of the chapters will be reviewed briefly to alert the reader to some of the noteworthy contents of the ensuing reports. Employing such questions as "What grade do you expect to make in this course?" and "What is the most difficult task in this series that you expect to be able to perform?" Virginia Crandall investigates motivation for academic and intellectual achievement. She deals with situations in which personal skill rather than external factors determines the outcome of events, that is, where reinforcement is contingent on performance; and she places special emphasis on *expectancy of reinforcement* as an important motivational variable. Her chapter summarizes a number of studies which bear on two major issues: the relationship of expectancies to performance, and sex differences in expectancies.

Crandall reports that sex differences in expectancy show up in the elementary school years and are still present in college-age men and women. The mystery is why girls should have lower expectancies of intellectual and academic accomplishment when their performances are typically as good

as, or better than, those of boys; and the investigation of this problem reads like a detective story. Obviously sympathetic to the invidious situation in which her female subjects find themselves, the author pursues a variety of clues, checking out one inference after another. Are the girls' lower expectancies due to their giving what they consider to be socially desirable estimates? That is, are they concerned to have the approval of other persons and do they feel that girls are supposed to be modest and diffident while boys are expected to appear bold and prepossessing? Or is the sex difference due to differences in values for intellectual and academic attainment? Are the expectancy estimates of boys and girls affected in different ways by positive and negative reinforcement of their efforts at a task? These and other possibilities are explored.

At one point the trail leads to a consideration of a controversial educational issue—ability grouping. Crandall asks "What is the effect of ability grouping on a child's estimation of his own ability?" Does daily comparison of skills among classmates of similar aptitude help the low-ability child to maintain confidence in his ability? Crandall concludes her chapter with a discussion of the relevance of her findings for the psychological adjustment and future achievement of both boys and girls.

In the second paper Joseph Veroff elaborates on the importance of social comparison with respect to skills. Like Crandall, he deals with activities in which the child feels personal responsibility for the outcome. Veroff points out that responsiveness to the achievement standards of others (social comparison) and competition do not typically become important determinants of behavior until children enter school. He distinguishes between *autonomous* achievement motivation which involves internalized personal standards of excellence, and *social* achievement motivation which involves external standards of excellence. Although a particular individual normally develops both kinds of achievement motivation, some persons manifest more internally directed achievement striving whereas other individuals appear to be more responsive to external pressures for achievement.

In a three-stage theory of the development of achievement motivation Veroff describes an early period (approximately the first 6 years) which is critical to the development of autonomous achievement motivation. In this period exploration and coping lead to mastery and a sense of effectiveness. When the child comes to *evaluate his own efforts,* he may be said to have a sense of "achievement." If conditions prevent the development of autonomous achievement motivation during these years, or if emphasis on social comparison is introduced prematurely, then a mature form of achievement motivation can never develop.

In the second stage, during the elementary school years, the child learns

to respond to standards of accomplishment set by others. By comparing himself with other children, and by becoming aware of their standards, he is helped to define both the difficulty of tasks and his own level of ability. A certain amount of success in competition with these social standards is necessary for the child to acquire a disposition to strive for achievement in social settings.

In a third and final stage of development, which takes place during adolescence, autonomous achievement again becomes important. The child must regain a sense of independence and learn how to integrate the two kinds of achievement orientations. He must learn when to rely on internal standards and when to be responsive to external standards (e.g., knowing when to compete with others and when not to).

Satisfactory development in each stage, according to Veroff, depends on successful completion of the preceding stage. Different stages of completion define different motivational typologies; for example, persons can be high in both autonomous achievement motivation and social achievement motivation, or high in autonomous motivation but low in social motivation, or low in both. A study of the characteristics of these types of persons sheds light on some important but relatively neglected questions: Why do some persons turn every situation into a competitive one? What accounts for the apparent fear of success that some persons, especially women, display? Why are some people achievement-oriented in individual activities but unable to face competition with others?

In bringing evidence to bear on his three-stage theory, Veroff summarizes a number of studies carried out by himself and his students, and he describes in detail two new measures of autonomous and normative (social) achievement motivation. He provides data which indicate clearly that when presented with a range of alternatives, preschool children tend to select the easiest tasks in terms of socially defined difficulty (e.g., "Most children your age can do this task") while older children select more difficult tasks to work on. He suggests that willingness to compete does not play an important role in task selection until about the 2nd grade.

Veroff applies his theory to a wide range of socially relevant topics including sex differences (e.g., girls may remain more dependent on social comparison than boys), religion (e.g., Roman Catholics may have higher social achievement motivation and lower autonomous achievement motivation than Protestants), disadvantaged social groups (e.g., Negroes and females are perhaps less likely to complete the autonomy stage successfully), and education (e.g., the effect of school desegregation on the adjustment and achievement motivation of Negroes is considered; Negro boys tend to fare better than Negro girls).

Finally, Veroff illustrates the utility of his typology of achievement motivation by comparing groups of subjects with different combinations of autonomous and social achievement motivation. In a finding which complements the sex difference in expectation reported by Virginia Crandall, Veroff reports that boys select more difficult tasks than girls, but he finds that this is particularly true of boys with low autonomous achievement motivation. These boys (and his male Negro subjects frequently manifest this pattern of motivation and behavior) tend to overaspire impulsively. Low autonomy girls, on the other hand, tend to be more cautious in their goal setting. Veroff concludes with a provocative series of studies concerning children's reactions to experimentally induced success and failure, and shows which types of children profit most by success and failure and which motivational types profit least.

In addition to dealing with children's achievement motivation, the third paper by Charles Smith investigates another achievement-related personality disposition, test anxiety (conceived as a measure of motivation to avoid failure). Data obtained from 4th and 5th grade boys and their parents are brought to bear on McClelland's theory of how achievement motivation develops[5] and on Sarason's theory of how test anxiety develops.[6] The relationship between these two motives, the other personality variables to which they are related (e.g., self-esteem, defensiveness), and the ways in which they are manifested in goal setting and reading performance are also investigated.

Motives are viewed by Smith as learned dispositions to strive to attain positive incentives and to avoid negative incentives. Individual differences in the strength of motives are attributed to differences in childrearing and other learning experiences in the early life of the child. For example, the study examines the extent to which early independence training is associated with high achievement motivation and late independence training is associated with high test anxiety. With regard to another aspect of childrearing, parents were asked to describe the extent to which their children possessed certain personality characteristics and also the extent to which they would *like* them to possess these characteristics (childrearing values). These descriptions were examined to see if parents of boys with high achievement motivation and low test anxiety hold a more favorable view of their competence than parents of boys with low achievement motivation and high test anxiety. The results suggest that the parents of children with high test anxiety are dissatisfied with their children's dependence and lack

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[5] D. C. McClelland, *Personality* (New York: Dryden Press, 1951) and *The Achieving Society* (Princeton: D. Van Nostrand Co., 1961). See also McClelland *et al., op. cit.*
[6] Sarason *et al., op. cit.*

of assertiveness, and that they put more pressure on their children to achieve than parents of boys with low test anxiety.

Smith's analysis of the childrearing values indicates that parental values for independence and achievement do not necessarily go together. That is, a parent can value independence highly and not achievement, or vice versa, which raises the possibility that these two aspects of childrearing may make different contributions to the development of achievement motivation. The results also indicate that parental values for achievement are not unitary. The achievement value items fall into two distinct groups labeled "assertive achievement" and "conscientious achievement," which suggests the distinction between competitive and individual achievement highlighted in Veroff's paper.

Paralleling the theoretical expectations regarding parental views of their children is the question of how the children view themselves. Is a positive self-concept associated with high achievement motivation and low self-esteem associated with high test anxiety? The results suggest that a negative view of his own competence is held by the child with high test anxiety, an attitude which probably makes him less responsive to education, and that the child with high achievement motivation holds a view of his "ideal self" that should make him more responsive to education.

The behavioral manifestation of these motives is studied in Smith's paper with respect to goal setting and reading performance. Atkinson's Motive $\times$ Expectancy $\times$ Incentive theory[7] is employed to investigate whether boys with high motivation to achieve and low motivation to avoid failure set more realistic goals for future performance than boys with low motivation to achieve and high motivation to avoid failure. Smith's study represents a related but somewhat different approach to goal setting than is presented in Crandall's study of expectancy and performance and Veroff's study of level of aspiration. The results show the importance of an additional variable, defensiveness, in accounting for unrealistic goal setting and suggest that it becomes more important as the child gets older.

Reading performance is selected by Smith as a way of investigating some of the task properties and situational factors involved in the influence of motivation on academic learning and performance. Two kinds of reading procedures are studied, the conventional reading curriculum and semi-programed reading materials which are intended to encourage self-directed learning. On the latter materials self-evaluation of performance is encouraged and social comparison among children with respect to reading

[7] J. W. Atkinson, "Motivational Determinants of Risk-Taking Behavior," *Psychological Review*, 64 (1957), 359–372.

proficiency is played down in order to reduce the pressure of competition and to enable each child to work at his own level and pace. An analysis of the properties of the programed reading materials led to the expectation that the deemphasizing of competition and external evaluation might make these materials more effective than the conventional reading curriculum for the highly anxious child. The results suggest that the self-directed materials have conflicting properties with respect to the role of anxiety—that they minimize the effect of anxiety in some respects and accentuate it in others.

In the fourth paper Sheila Feld and Judith Lewis deal exclusively with anxieties aroused in achievement situations and investigate three major issues: (1) Is an acquiescence response set a major determinant of answers to the Test Anxiety Scale for Children? (2) Does the Test Anxiety Scale for Children have a stable multidimensional structure, and if so, how does the content of the different dimensions affect the interpretation of the meaning of test anxiety scores? (3) What are the demographic correlates of the Test Anxiety Scale for Children, especially those pertaining to sex and race?

In approaching the response set problem the authors want to find out if a subject's position on the anxiety scale changes when the content is presented in a different form. In a methodological tour de force they devise a reversed item for each item of the original scale, determine the adequacy of the reversals, and then factor analyze the original and reversed items to see whether the resulting factors give evidence of a content or response set interpretation. Representing an unusually broad range of social and economic backgrounds, the subjects are all the 2nd grade boys and girls in an entire county public school system consisting of 111 schools and 8,875 pupils. The results indicate that while some minimal effect of response set cannot be discounted, the children's responses are primarily determined by the content of the items.

The factor analysis also reveals four dimensions for each sex within the original Test Anxiety Scale for Children: (1) anxiety about tests per se, (2) persistent thoughts about school when the child is away from school, (3) somatic symptoms of anxiety, and (4) negative self-evaluation in comparison with other persons. The latter factor again calls attention to social comparison with respect to a child's evaluation of his own competence. The high degree of similarity in the factor structures for boys and girls suggests that the sexes do not differ in the types of anxiety they experience.

As Feld and Lewis point out, the original Test Anxiety Scale for Children was intended to assess anxiety about academic evaluation, but it appears that the items deal with at least two different kinds of anxiety-arousing evaluation situations: taking tests, and performing in front of one's class-

mates. It may be important in understanding how anxiety influences school performance to distinguish between children who respond differently to these stimulus situations. We are again reminded of the distinction between individual achievement and competitive achievement. Some children may be anxious about both, some about neither, and some about one and not the other. For example, a child may not be apprehensive about written tests, but he may be terrified at the thought of being asked to work a problem on the blackboard in front of the entire class. Similarly it may be important to know the different ways in which different children experience anxiety. The authors note that a teacher may react differently to a child who shows somatic signs of anxiety than to an apprehensive child who suffers more covertly, or to a child who voices self-derogatory feelings.

Using the items with high obtained factor loadings, Feld and Lewis present subscales that can be used to assess the four different types of anxiety revealed by the factor analysis. Interesting sex and race differences emerge regarding these various dimensions of test anxiety. There is no difference between the test anxiety scores of Negro boys and girls, but for white children, girls have higher anxiety scores than boys—a fact which may help to account for the sex difference in expectancy reported by Crandall (or it may be that the lower expectancies found in girls produce their higher test anxiety).

Sizable differences attributable to race are found, with Negro children scoring significantly higher on all four test anxiety subscales than white children. These results provide some important information about the attitudes of Negroes toward education. Certainly there is no indication of indifference to school in these data, since Negro children not only report apprehensiveness about schoolroom evaluation, but also they report having a high degree of concern about school *even when they are away from school* (e.g., by dreaming at night of poor work on a test). The methodological contributions of this paper open the way for a more discriminating measurement of achievement anxieties, and the substantive findings provide a better understanding of the stimulus conditions which elicit anxiety and the range of anxiety responses to these situations which even a 2nd grade child can develop.

Following the research reports is an important set of commentaries which provide perspective on the investigations reported here. John W. Atkinson discusses the papers by Virginia Crandall and Joseph Veroff, Seymour Sarason comments on the chapters by Charles Smith and by Sheila Feld and Judith Lewis, and Howard Moss reacts to all four contributions. In an authoritative way these discussions propose theoretical refinements, suggest

additional variables for consideration, and call attention to methodological issues of importance to all investigators interested in children's achievement-related motivation. The concluding chapter attempts to summarize and integrate the major findings, points up the methodological advances reported in this volume, calls attention to unresolved theoretical problems, and discusses the importance of the findings for education and childrearing.