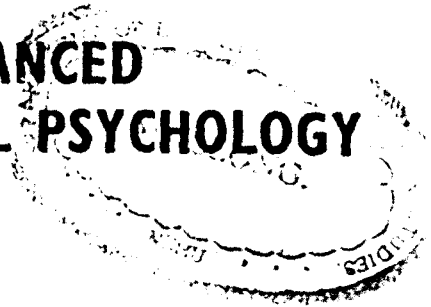
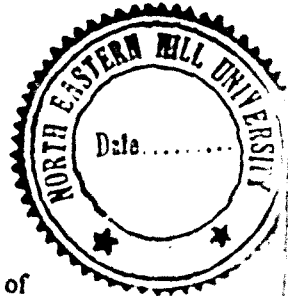


ADVANCED EDUCATIONAL PSYCHOLOGY



Edited by
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G-2, Cunningham Apartments, Cunningham Road, Bangalore-560052.

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Advance Educational Psychology
© 1990 Sterling Publishers (P) Ltd.
Reprint 1984, 1986, 1988, 1990

PRINTED IN INDIA

Published by S K. Ghai, Managing Director, Sterling Publishers (P) Ltd.,
L-10, Green Park Extension, New Delhi-110016, and Printed at Print India,
New Delhi-110064.

PREFACE

The rapid advance in Secondary Education in the last two decades has led to a tremendous increase in the number of teacher's colleges in the country. This has resulted in the great need for those with the Master's Degree in Education. In the recent years many Universities have started the M.Ed. Courses. Consequently the need for text books and additional reading material for this level of teacher training is growing.

It is to meet this need that this book on "Advanced Educational Psychology" has been prepared. The work was undertaken by the late Prof. R.R. Kumria. He drew up the scheme and fixed up the contributors. In the middle of the work he passed away and the Publishers requested me to complete the task.

The first two chapters are introductory, the first giving the scope of Educational Psychology and the second a brief historical sketch of Educational Psychology in Ancient India. Next we have seven chapters: the third and the fourth deal with the nature and aspects of growth, the fifth and sixth with the problems of learning and the next three with the problems of Development.

The next part deals with the problem of individual differences, the growth and measurement of intelligence and educational measurement and evaluation in general. The next two chapters are devoted to the problems of the backward child and the problems of the gifted child.

In the last section we have chapters on development and assessment of personality, psychoanalysis, group processes, mental hygiene, maladjusted children and the problem of discipline. The last chapter deals with the problems in connection with the educational and vocational guidance.

I am grateful to the various contributors for readily cooperating with me in completing this work. I thank them for patiently waiting for the publication of the book.

While going through the various contributions, I was pained to find that very little reference has been made to the work done in the country. Progress in scientific education implies that there is progress in scientific investigation. It is my fervent hope that when this book is to be revised the contributors will find more Indian investigations to include in the chapters.

It is my hope that this book will be found useful by the teachers as well as the students who take courses in Educational Psychology in the M.Ed., and M.A., classes in the various institutions. I am aware of the deficiencies in this, the first attempt. I hope the teachers who give these courses will offer their suggestions for making this book more useful.

B. Kuppuswamy

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Part I

THE SCOPE OF EDUCATIONAL PSYCHOLOGY

THE IMPORTANCE OF PSYCHOLOGY FOR STUDENTS IN EDUCATION

It is a well known fact that the great Swiss educationist Pestalozzi was among the first few persons to emphasize that the mind of the pupil is a primary concern of the teacher. Since then other educationists have stressed the importance of the knowledge of child development, principles of learning and principles of mental hygiene, for improving one's work as a teacher. With the development and use of the experimental methods in psychology at the turn of the last century, several investigators have worked in the field of learning and memory the results of which have found a place in the general principles of education. It is now generally agreed that the education process must be based upon an accurate knowledge of child development as well as the principles of learning.

During the last 60 years our knowledge of child development increased considerably. It is necessary for the teacher to know with what innate endowment and equipment the new-born child starts its life, how the child develops in the various aspects of its behaviour like intelligence, sensory-motor development, language, thinking, etc., what effect the environment has on the development of the child and the growth of its character and personality.

One of the impressions, particularly with respect to teacher's training for the Secondary schools, is that a knowledge of child development is not necessary for that level. But this is an erroneous impression and the sooner this is eliminated the greater the fruitfulness of educational effort. The basic aim of education is to modify behaviour. Any modification of behaviour pre-supposes a knowledge of the development of behaviour.

A brief consideration of the relationship between education and psychology will be useful in the present context. Education is normative in its outlook, since it is concerned with aims, ideals, values and standards. On the other hand psychology is a positive science, trying to ascertain the facts of behaviour, how it develops and how it is modified. Thus psychology is to education what physics and chemistry are to engineering, and chemistry and biology are to medicine. While it is true that psychology cannot formulate the aim of education, it must be recognized that it can help us to find out whether a given aim is practicable and possible of achievement. In fact, as we shall see in another section, the school today is looked upon as a testing place of the knowledge gained by psychological research.

Ancient Indian teachers applied some psychological principles in educating the young learners from pre-school age to adolescence. It is proposed to discuss here, in brief, these psychological principles before tracing their application to the teaching process.

The *Uvasagādasao*, the Jaina treatise, describes the following eight stages of human life each with a characteristic of its own: *manda-bhumi* or dull-stage, *khidda-bhumi* or playful-stage, *vimamsa-bhumi* or experimental-stage, *ujugata-bhumi* or erect-stage, *sekha-bhumi* or learning-stage, *samana-bhumi* or ascetic-stage, *jina-bhumi* or jina-stage, and *punna-bhumi* or prostrate-stage. Nilakantha, the famous commentator of the *Mahabharata* speaks of ten stages of human life as follows: the embryonic stage, the birth, the infancy, the childhood, the boyhood, the early adolescence, the adolescence, the middle age, the old age and death.

The *Uvasagādasao* tells us how a child remains inactive for a period of seven days from its birth. Its sense organs remain inert and it does not respond to external stimuli. This is the dull-stage. The *Nyayasutra* also tells us how a new born infant is utterly helpless in the performance of any act after it is born of the mother's womb. According to the *Adipurana* the sense organs of the new-born baby remain inert. Gotama in his *Nyayasutra* tells us that a new-born baby expresses joy, fear and sorrow though its sense organs are not functioning. Charaka, the famous physician of the first century A.D. is of opinion that the new-born baby acts instinctively such as the sucking of mother's breast. It also expresses joy and fear. Emotions of joy and fear must be expressed in the playful-stage. The *Aitareya Brahmana*, however, holds the view that the sense of hearing functions properly during this stage.

In the playful-stage the sense organs of the growing child begin to function properly when it responds to light, sound and music. During this period the child is physically active, indicative of motor activity. *Anguttaranikaya* or the Book of the Gradual Sayings, a Buddhist text, tells us of the ripening of the sense-faculties with the physical growth of the growing child. The *Nighantu* and the *Nirukta* mention the attempts of the child for free movements during the period of physical growth and motor development. The *Aitareya Brahmana* supports the same view. From the above views it is evident that the child had to wait for physical growth and motor

development to gather strength for free movements and walking. In the third stage the child learns to walk with the help of parents and other surrounding objects. In this stage the child attempts to walk after repeated failures. Hence this period of the child's growth is called experimental stage. During this period, it attempts to speak. It is evident from the *Chandyogyopanisad* and the *Aitareya Brahmana* that speech development in a growing child coincides with its physical growth and motor development. It learns to talk when it learns to walk. Kalidasa tells us in his *Raghuvamsam* about the speech development of the young prince, Raghu, who learns to walk and to speak under the careful guidance of the nurse. Both the *Adipurana* and the *Avadanakalpalata* refer to the development of speech in a growing child. In the next stage of physical growth the motor activity continues with unabated vigour when the child grows restless and it is rather a difficult task for the nurse to control her ward. During this period, it stands on its legs unaided. The *Uvasagadasao* calls it the erect stage, the fourth stage of human growth. Hemacandra, the great Jaina scholar of the twelfth century A. D., tells us in his *Trisastisalakapurusacaritra* of the physical restlessness of the growing child. During this period 'cruelty' trait appears in the growing child when he takes pleasure in harassing birds and harmless animals. Kalidasa tells us in the last act of his drama, *Sakuntala*, how Sarvadamana, the son of Sakuntaia tormented the cub of the lioness in the hermitage of sage Atri to force open its mouth for counting its teeth. Here the spiritual atmosphere in the holy hermitage could not inhibit the 'cruelty' trait of the growing child. In the next stage of physical growth the child upon reaching boyhood shows cruelty to others, including brothers and sisters. We learn from the *Mahabharata* how Bhima was cruel to his cousins. Fighting tendency is also manifest in children during this period. It is evident from the record of Kalhana Misra in his *Rajatarangini* that the children of the aristocracy, particularly of the royal family, take delight in associating with the brave and shun the company of the mean and lowly.

Children upon reaching their boyhood imitate adult occupations in games. They constantly change their sportive occupations. Sometimes they imitate adult occupations related to the lower and the higher needs of life. This is evident from Hemacandra's *Sthaviravalicaritra* and Kalhana Misra's *Rajatarangini*. During this stage girls also freely play with boys. In their games boys and girls sometime show violence. This is recorded by Kavi Karnapurana in his *Anandavrndavana-campuh* while describing the sports of *Krsna* with his companions. It is evident from our discussion that the motor activity of the experimental stage is continued with full vigour in the erect stage when physical restlessness and the cruelty trait are manifest. During this stage children rehearse adult occupations which they constantly change.

Part II

ANCIENT INDIAN VIEWS

Ancient Hindu thinkers referred to four broad factors that influence man's life and conduct : (i) *Desha* (place or region), (ii) *Kala* (time), (iii) *Shrama* (effort), and (iv) *Guna* (innate traits) (36). It is not necessary for us to take into account, at the present moment, the influence of the factors of place, time and innate traits. Ancient Indian thinkers developed the concept of *ashrama dharma* to indicate that the individual has four distinct stages in his growth in any society. "The whole of the life of an individual is, for the Hindu, a kind of schooling and self-discipline. Now, during the course of this schooling, he has to pass through four stages or four grades of training, called the *ashramas*. These *ashramas* are (i) *Brahmacharya*, that of a celibate student, (ii) *Grihastha*, that of a householder with a family and occupation, (iii) *Vana Prastha*, retiring from occupational and family responsibilities and (iv) *Sanyasa*, complete renunciation of worldly relations and attachments. "The word *ashrama* is originally derived from the Sanskrit root *shrama*, to exert oneself" (8).

In a broad way the different stages of development of an individual are indicated as follows :

(1) *Shaishava*, from birth to 3 years, (2) *baalya*, from 3 to 12 years, (3) *Kaumara*, from 12 to 18 (4) *Youvana*, from 18 to about 50 and (5) *Vardhakya*, 50 years and over.

The *Grihya Sutas* which describe in detail the various Hindu ceremonies also indicate the awareness of the growth (30). For example the *Sankhyana Grihya Sutra* described two ceremonies or *samskaras* which are to be performed before the birth of a child : (i) the *garbhaadaana* or foetus-laying ceremony at the consummation of marriage and (ii) *Pumsavana samskara* or the "male making ceremony" that is performed during the third month of the pregnancy. Next we have (iii) the *Jatha karma* ceremony which is performed when the child is born, (iv) after 10 days the *namakarana* ceremony is performed (v) in the sixth month *annaprasana* ceremony is performed when the child is given the first feeding of solid food. (vi) The *chudakarma* is performed in the first or the third year. The first tonsure of the hair is thus looked upon as an important phase in the child's growth and its introduction to the rules of bodily hygiene. (vii) Next there is the most important ceremony, *upanayana* in the 8th year. With this ceremony the individual has a right to know and

STAGES AND ASPECTS OF GROWTH

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In the previous chapter we have seen, in general, the nature of growth and some of the principles of growth. In this chapter an attempt will be made to describe the various stages and aspects of growth. As we have seen above the human organism passes through a number of stages from before birth to death. Of course it must be remembered that the division into the various stages of growth is merely a device to help us to understand the growth process. As a matter of fact, it is one continuous process from before birth to death.

THE STAGES OF GROWTH

The following classification is one that is most widely used :

<i>Name of period</i>	<i>Approximate age</i>
1. <i>Pre-natal</i>	... from 0 to 250 or 300 days
(a) <i>Germinal</i>	... from 0 to 2 weeks
(b) <i>Embryonic</i>	... from 2 weeks to 10 weeks
(c) <i>Foetal</i>	... from 10 weeks to birth
2. <i>Childhood</i>	... from birth to 12 years
(a) <i>Infancy</i>	... from birth to 3 years
(b) <i>Early childhood</i>	... from 3 to 6 years
(c) <i>Later childhood</i>	... from 6 to 12 years
3. <i>Adolescence (teenage)</i>	... from 13 to 19 years
4. <i>Adulthood and old age</i>	... from 20 years and beyond

These age groupings are made for purposes of convenience to study the various stages in the growth of the individual and also because there are certain common developmental or practical characteristics belonging to each stage in the growth. We will also find that these stages are intimately related to the various stages of education. However, it must be borne in mind that there are great individual differences and so we should not imagine that every child will necessarily have each stage according to the approximate ages indicated above. The growth is more rapid or delayed according to the individual.

1. *Pre-natal Period* :

One of the important points in the study of behaviour is to trace the time at which behaviour begins. As Carmichael writes, "A

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NATURE AND PROCESS OF LEARNING

Learning is the focus of the educational programmes. The main aim of education is to produce desired changes in behaviour in children. The teacher tries to accelerate the process of acquisition of such changes by the pupils and tries to make them a part of the child. In other words, one major aim of education is to maximize learning.

✓ What is learning ?

We all know what we mean by learning. We talk of learning in connection with animals like the dog. In schools we talk of learning of children. Some children seem to be learning faster than others. Those children who learn faster show certain changes more rapidly than other children. Learning takes place outside the school also. Children have different kinds of experiences, both in and out of schools, and show varying changes in behaviour. We designate such changes by the general term 'learning'. Learning, thus, is acquiring changes in behaviour as a result of experience.

This short and simple definition of learning is sometimes not helpful in indicating the psychological nature of the process. Learning is a complex process. The following definition of learning is suggested to draw attention to the complexity and the nature of this process.

Learning is the process by which an organism, as a result of its interaction in a situation, acquires a new mode of behaviour, which tends to persist and affect the general behavioural pattern of the organism, to some degree.

There are many things to which the definition draws attention.

This chapter will discuss the various aspects of this process. The definition suggests that learning takes place when an *organism reacts in a situation*. Learning consists in the *acquiring of new modes of behaviour or adjustment*. Such a change in behaviour is *retained* by the organism to some degree, and is *utilised in other situations* to some extent.

The definition will become clear as we proceed with discussion of the process and nature of learning.

Learning in school

The main concern of the teacher in one way or the other is learning. The teacher wants to ensure quick and lasting learning in the pupils. In a school situation various elements are involved in the process of learning. In the first place, the learner or the pupil is involved. Unless the pupil is prepared or enabled to learn, learning cannot be effective. The second element is the experience, or the situations providing such experiences. Pupils learn in interacting in some situations. These situations are provided by the school and the teacher organises them for the pupils. The teacher is, therefore, the third important element. However, the school is a useful agency in learning not only because of the teacher as an organiser of learning experiences, but also, and more so, because it provides an environment in terms of the groups of pupils and teachers. This constitutes the 'climate' i.e. the environment which may stimulate or retard learning. The school climate is the fourth element in school learning.

The task of the teacher is to organise learning experiences for children and to help prepare stimulating group climate. The teacher cannot *make* a child learn. He can, however, provide appropriate situations for the child who would learn by reacting in such situations. Such situations, and the group climate of the classroom and the school, help in making learning more effective.

Learning is not confined to school subjects alone. The school strives to provide opportunities for many-sided learning of the pupil. There are various kinds of learning in a school.

Cognitive learning : The school fosters cognitive learning in the pupils. The pupils attend school to learn new concepts and their inter-relationships. All subjects deal with concepts and generalisations.

The concepts help children in developing thinking. The school curriculum widens learning in terms of the concepts. The concepts enable pupils to understand their experiences in a perspective. Learning of concepts can be made more effective if the related concepts are presented to the child. This is the function of the curriculum to prepare learning units composed of concepts which are related to, and grow out of, the concepts already familiar to the child. The concepts, in that case, do not hang loose, but are well coordinated and woven into systems which become more meaningful. Concepts can be acquired effectively if these are accompanied with meaningful experience. By associating a concept with real experience, it is made part of the child's life. The concepts evolve from simpler to more complex ones. The concepts, whether simple or complex, are better learned, if these are expressed by the child in some form or the other. The concept of helicopter can be better learned if its picture is drawn by the child, or if its model is prepared, or it is described in words.

MOTIVATION, EMOTION AND LEARNING

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Motivation ; Their Importance

Parents usually find difficulty in persuading their children to do their home-work in time. Such is the case with Asoka, a little boy of seven. He forgets his food while playing. His mother sometimes gives him a spanking but he appears reluctant to sit at his lessons. His mother, therefore, was surprised one evening, seeing him busy with his lessons immediately after his return from school. She asked Asoka to go and play. 'No mummy', prompt came the reply, 'I shall do my lessons ; Madam gave me 'very good' today and I will get another 'good' tomorrow. He gladly showed his work to his mother. Something happened in the situation which converted Asoka from a reluctant to a willing scholar. That was the satisfaction from success, pleasure in praise of his work and prospects of future success, praise and satisfaction. The teacher's little praise proved dynamic inasmuch as it energised the boy to work. In other words, the boy was motivated.

Human behaviour is hardly possible without motivation which is a most important factor in learning. A pre-condition of all good learning is an urge from within and a clear picture of the goal outside.¹

Motivation in education means inculcating and stimulating interest in studies and other such activities in pupils. It involves the understanding and use of natural urges of the child and also assisting him in acquiring new desirable motives.

Motives, Their meaning and Classification ; Motives are variously described. They are called urges, drives, will, determination, incentives and the like. There is an urge from within the thirsty man to take water. This is a sort of subjective or internalised or natural motive. Such motives are mostly biophysical based on the urge for self-preservation and growth. The child is born with certain needs and wants, mostly for its growth and preservation. These needs undergo constant modification because of the impact of social

1. "Learning takes place when there is : (a) need, drive, or motive, and (b) an appropriate goal, the attainment of which would satisfy the motive." *Forty Ninth Year book.*—National Society for the Study of Education. Part I Chicago : University of Chicago Press. 1950. P. 34.

DEVELOPMENT OF MOTOR-SKILLS & KNOWLEDGE

7

I. INTRODUCTORY

One of the impressive features of human behaviour is the ability to build new behaviour patterns. When the human being meets a situation for which he has no adequate response, either through innate equipment, or through the development of habits due to his upbringing, he mobilises his resources and varies his behaviour making a number of alternative movements out of which, by trial and error, new action patterns arise and become a part of his behaviour. This is learning. Thus in a broad way we may assert that learning involves modification of behaviour. But there is more than that. Man not only preserves his experiences but also transmits his skill and knowledge to others. Thus man learns not only from his own mistakes but also from the mistakes of others around him and the mistakes of past generations. It is because of his ability to learn quickly he can acquire many skills and much knowledge which enable him to lead an effective and fruitful life.

In a broad way we can distinguish between motor skills and symbolic skills. Motor skills are those which involve the direct movements of the body and its parts. There is considerable individual variation. Some people can acquire a new motor skill easily and well, while others can attain only a moderate degree of it. There are also variations with respect to physical strength and quickness. Symbolic skills include language and numbers and drawing. By means of these symbolic skills man is able to short-circuit the physical trial and error process and solve problems more quickly and easily. Man is not only a learning animal, he is also a speaking animal. With his spoken and written symbols he can transmit experience to others. That is why it is asserted that symbols constitute the greatest invention of man. As we know, in ancient India the vast multitude of Vedic hymns were transmitted, from generation to generation, through thousands of years, through speech. Even with respect to the acquisition of symbolic skills there are individual differences. For instance, some people can use symbols easily and fluently while others speak slowly and with hesitation. Some have great knowledge while others have very little. There are also individual differences with respect to the ability to think. Through thinking human beings can anticipate situations and prepare for further possibilities so that they can control themselves, the external world, as well as the other human beings more effectively. In this Chapter we shall try to understand how these motor skills as well as symbolic skills are acquired, and what their course of development is.

When we try to analyse the process by which the sense-impressions are formed we find that they are integrated, organised and differentiated into perceptions by the central nervous system. How this organisation takes place is too intricate and so far has been beyond human understanding. However, the effect and the growth-changes of perceptual functions are well understood by now. A great deal of research has been conducted on the overt aspects of the perceptual process, without much success at the understanding of antecedent neurological dynamics.

Attempts at differentiation between sensation and perception go far back into the history of philosophical and psychological thought. A simple discrimination between the two functions can be expressed thus : sensations are the elementary impressions gathered by sense-organs with little or no interpretation given by the central nervous system while perceptions are the result of interactions between the sensory and central nervous system processes. In perceptions the sensory impressions are interpreted in accordance with specific social and psychological variables. Concepts, in this context, may be explained as identifiable and more or less stable perceptions which help the individual in his adjustment with the environment. Thought processes are not directly observable and as such can be interpreted as perceptual processes when the sensory data originate within the individual's neurophysiological structures.

With the above definitions of sensation, perception, concept, and thought processes it becomes clear that perceptual and conceptual development of an individual plays a vital role in adjustment with the environment. Sensory-perceptual and conceptual processes together with the motor outlet determine the total pattern of an individual's life, his interaction with his environment and his adjustment with his setting. As such, the study of perception and concept formation and their role in problem-solving behaviour becomes necessary for the psychologist before he can hope to understand the individual. In this chapter we shall discuss these phenomena in some detail.

Perception : We have defined perception as the result of interaction between the sensory and central nervous system processes. In simpler words, perception is the impression made by an object, through processes of a sensory organ and the central nervous

system. Besides this interaction between the sensory and central nervous system processes perception involves an interpretation given to these impressions by the individual. These interpretations are determined by specific social and psychological variables.

Experiments have been designed to determine the role of these social and psychological variables in determining the perception of a specific object. Bruner and Goodman (2) showed different coins to children coming from a poor background and also those coming from a rich background and asked them questions about the size of those coins. They found that the poor boys consistently perceived those coins as much larger than the estimates of the other group. Carter and Schooler (3) conducted a very well-designed and controlled follow-up of the study conducted by Bruner and Goodman and found that poor children on the basis of memory alone perceived coins as being larger than did the rich children. Thus these studies proved the important role played by the needs, social status and the background of a subject in determining his perception of an object. Precisely the same situation has been found to be perceived quite differently by people coming from different social backgrounds.

Direct and indirect social instruction is another factor that makes a difference in our perceptions. Parents are always telling children what to do and what not to do; they are instructing them as to what is appreciated and what is not appreciated in the circumstances under which they are living. On the other hand, when no direct instruction is given unconscious change in the facial expressions, moving away from certain people, turning away from certain things and sudden dismissal of certain topics, all leave a lasting effect on the children. All these aspects of adult behaviour influence the perceptual development of children.

Certain Characteristics of Perception: If we accept the influence of social learning on perceptions then the natural conclusion is that perception is selective. Every moment of our life we are presented with a multitude of objects, people and situations but a little analysis will make it clear that we do not perceive all of them. Occasional complaints from friends that we did not return their greetings at a particular moment illustrate the fact that perception being selective at that particular moment we must have been perceiving something else which proved to be more important according to our interest of the moment. Besides, perception being selective in nature it has certain other qualities as well which are important and worth discussing here. We have a tendency of perceiving objects as wholes. Very often one would notice that even when a three-sided figure is presented to the subject with the fourth side broken half-way, the subject would call it a square. It is true that all these sides are equal and meet each other at right angles, yet the fact is that fourth side is incomplete and unless it is complete the figure cannot be called a

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DEVELOPMENT OF INTERESTS, ATTITUDES, IDEALS AND CHARACTER

Everyone possesses certain interests due to which he likes certain activities or prefers to spend his leisure hours in a certain manner. He also reacts in characteristic ways to social, political or religious issues, has some ideals or life-goals which he cherishes, and displays some concept of right and wrong, virtue and vice, good and evil. No one is born with any of these predispositions. In course of his life experience, they develop and make the individual selectively oriented towards certain aspects of the environment. Though it may not be very accurate to equate these built-in predispositions with personality, it can be said that they provide an important source of *dynamics* in our behaviour, and thereby occupy a significant place as a motivational variable. What a person is interested in would be pursued even without external pressure; and a person's attitude is likely to find expression in his behaviour if there are no deterrents or obstacles in the way. Moreover, pursuit of one's interest is always satisfying. As such, there is often a close association between interest and job satisfaction.

These predispositions bring order to individual's reactions to the environment. Instead of reacting indiscriminately to every stimulus that impinges upon him, he reacts to limited groups of stimuli and in a manner that is characteristic of him. He exhibits an amount of personal autonomy or self-regulation which circumscribes his reactions and puts them into an orderly picture. As James (p. 402) has very aptly said, ".....without selective interest, experience is an utter chaos. Interest alone gives the accent and emphasis, light and shade, background and foreground intelligible perspective, in a word". Thus, a person known to be interested in physics or chemistry is likely to be more receptive to things of the scientific world than to poets or writers; or, a person with pro-Congress attitude is likely to view the actions of the Congress Government in a more favourable light than a person known for his anti-Congress tendencies.

Moreover, these predispositions are significant because they determine the social, political and other influences to which the individual voluntarily exposes himself. The type of amusement or hobbies which an individual seeks largely depends upon what he is interested in, and it in turn influences the individual... Radio programmes and films are not merely entertainment, they profoundly mould individual's beliefs, attitudes, values and overt behaviour.

Attitudes have been found to affect perception, judgement and other cognitive processes of the individual as well as selectively to orient the person to the sort of propagandá he will voluntarily believe and expose himself to. Thus, the study of the development of interests and attitudes will illustrate how cultural, biological, and intellectual influences affect behaviour (26, p. 190).

There is, however, a distinction between interests and attitudes. The former are always positively directed and are usually more active than passive. The person usually likes the things in which he is interested, or the hobbies he pursues. And the thing that interests is also actively sought. "An interest is accompanied by pleasant feeling and by a dynamic tendency to seek the object or do something about it (47, p. 9). Interests are acquired in early childhood or may develop even later. They are usually developed in relation to and remain allied to, more basic motives of man.

Attitudes, on the other hand, may be positively or negatively directed. Thus the individual is either favourably or unfavourably oriented towards certain social institutions, nation, caste, race or a political party. They are also broader in scope and comparatively more passive. The person may possess attitudes but may do nothing about them, while this is less likely in the case of interests. However, attitudes come into play as determining tendencies the moment he is called upon to express his views, act, or make a decision. The attitudes that are negative and cause the individual to view people of other nations, races, castes or classes in an unfavourable light and to discriminate against them are designated as social prejudices. Their nature is similar to other attitudes and are acquired by the individual in course of his development.

Many of the attitudes have as their object the ego or the self of the individual. He also develops attitudes towards the concepts of right and wrong, virtue and vice and other moral values. These are incorporated into his ego, and he develops a characteristic tendency to act honestly, with sincerity, courage or perseverance. The constellation of such ego-attitudes and traits developed by the individual is often referred to as *character*. As defined by English and English character is "an integrated system of traits or behaviour tendencies that enables one to react, despite obstacles, in a relatively constant way in relation to mores and moral issues." (11)

Interests, attitudes and character are not inborn, but are acquired by the individual in course of his development. In the process, both the factors of maturation and learning operate. As learning enters into the picture, it is obvious that persons reared in different cultures will exhibit certain distinct patterns of interests, attitudes and the type of character which is considered *normal* or *typical*. However, extensive studies on the subject have not been made in our country. Most of the information on them has come from investigations done in the West. Therefore, the pattern of development presented below

Part III

PSYCHOLOGY AND METHODOLOGY OF INDIVIDUAL DIFFERENCES

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The universe reveals an underlying unity in the multitudinous variety of the manifest phenomena of our normal experience. This underlying unity is in fact the objective of almost all philosophical speculation. Science starts by concerning itself with the observable facts of the universe whether within or around us. In the process of analysing each entity the constituents are broken down into finer and subtler constituents until in the end an absolute indivisible energetic content is identified as the common underlying physical basis of all existence. Science too in this analytical manner reaches a point where differences among physical forms of existence are reduced to a minimum and a basic unity is postulated and proven. There are however, other branches of science which do not enter into such analytical processes. In this second kind of approach science accepts things as they are, no two of them being exactly the same. The universe is made up of an infinite number of relevant orders of things animate and inanimate, organic and inorganic. It is significantly the business of biological sciences to study these orders of things, without necessarily seeking to analyze them into their ultimate components. In accepting things in their wholeness and existential completeness the scientist seeks to study their external characteristics and by these to classify, order and inter-relate them. It is this study of the relational bonds and contacts among various orders of phenomena that justifies Comte's claim that "Science is foresight and foresight is power", and enables us to forge causal links by a process of experimentation and inference.

Differences, therefore, are the pith of the multitudinous life of our universe and without these all scientific activity will be starved of its staple grist. These differences run criss-cross in all directions and may be studied along any lines of classification or principles of gradation we want. In fact differentiation has proven itself to be of considerable importance as a principle underlying evolution. If things, do not change and produce differences, there is no progress. It is by a process of differentiation that the sensitive outer covering of an amoeba which is equally sensitive to light, heat, food and other such stimuli differentiates itself into the highly specialized and complex sensory organs of the primate. Are these evolutionary changes of a qualitative nature? This is a question not easily answered. It is increasingly being shown that what looks like a difference in quality may result from underlying changes in quantity. It is surprising

THEORIES OF INTELLIGENCE

The Concise Oxford Dictionary informs us that the term intelligence means 'intellect' and 'understanding'. Intelligence is generally guessed from the way a person appears to understand a fact or a group of facts, and the manner in which he responds to those facts. Supposing two children A and B, of the same age and locality see a horse. If A understands *more* than the other, this would indicate that he is more intelligent than B. If A sees just a horse, but B also knows that it is a riding-horse, or a pack-horse; the additional facts of his understanding would go to show that he is more intelligent than A. Let us take another example. On seeing a railway-engine, one boy may know it as a Diesel, electric or steam engine; or he may be able to know that the given engine is used for a long-distance mail train, or as a short-distance shunting engine: the person that knows more of the given object's qualities and functions, and its relations with other objects, would show a better-developed or superior intelligence. In the same way, when we are dealing with complex facts, or complex relations among facts the comprehension of the given situation, as well as the character of the response to the total situation, would express our intelligence.

Intelligence has been considered by ancient thinkers as a process of abstraction, or a faculty. Its most common expression was noted in the exercise of the individual's reasoning. Man as a rational being was believed to be endowed with intelligence. He could reason out the pros and cons of a given situation, and would be held responsible for his behaviour in relation to that situation. Lower animals meet their various problems of living through instinctive activities. But man can use his reason, and the quality of his reasoning indicates his intelligence. If the conclusions drawn by him happen to be wrong, it would express not only a defect of reasoning but also point to a lack of intelligence. From this point of view intelligence is eminently analytic and discursive. It is interested in distinctions, it is keen to note differences, and is alert to judge objects and events as similar or different, as fit or unfit. (*Vivek-atmika buddhih*).

Traditions of every country are full of anecdotes in which more or less complex riddles are asked to test the standard of intelligence in an individual, or to determine his fitness for an important task. There is the ancient tradition about the riddle of the Sphinx: the animal that is known to walk at first on four legs, later on two legs,

Alfred Binet of France is regarded as the father of Measurement of Intelligence. When he was assigned the task of finding out the causes of backwardness among the students of Parisian Municipal schools, he began to look for a method to determine the intelligence of children. He asked some teachers to observe some children who were unfamiliar to them and to discover their intelligence. He found that the teachers used very different methods for eliciting information from the given children. One of them wanted to know the purposes of canals and sluices; another asked for comments and interpretations of some pictures; a third enquired about details regarding the reports of the recent funeral of King Edward VII; while a fourth asked for the names of neighbourhood streets, or the shortest path to the railway station. Another wanted to know whether factory walls should be thick or thin. In short, the basic method was to ask for information that was not available in school text-books, but which could be picked up from the neighbourhood, or through observation and understanding of contemporary events. Binet is reported to have remarked that the teachers were using a very excellent method in a very awkward way (39). The method was excellent as it probed into the habits of observation, reasoning; remembering and the development of intelligent curiosity. But the method was very awkward, as one could not compare the different types of replies and assess the relative merits of various individuals. Thus Binet decided to refine the teachers' techniques by elaborating and standardizing the procedures for asking information and for measuring the worth of given answers.

Binet had assumed three characteristics of intelligent activities : the ability to take and maintain a definite direction in thinking, to adapt one's behaviour in order to attain a goal; and the capacity for self-criticism (39). Indeed in some of his non-verbal items, one can find an activity with all the given characteristics. This is notably so in the "Plan for search items" (XIII years) (44). But there are several other items of vocabulary, memory and comprehension, which cannot be conveniently approved in the light of the given three criteria. It seems that in practice each attempt to measure intelligence follows the theoretical criteria to some extent, and also incorporates other types of problems that are considered promising in general. In his first attempt, Binet used a set of 30 items. He tested a small number of children with varying school-experiences. This experience convinced him that some increase in the number of

Need of Educational Measurement and Evaluation : The measurement and evaluation point of view is quite in keeping with our changing philosophy and psychology of education. Modern education requires that each pupil be given the opportunity to advance as fast as he can or as slowly as he must. Education is a continuous process in which the teacher guides the progress of his pupil at every stage after ascertaining the rate, direction, and extent of previous development. Having accepted the directive educational principle that maximum growth of each student is to be secured according to his individual needs and capacities, periodic measures of each child's abilities, levels of readiness and previous attainments and speed become obligatory. Only when we measure and know his progress and potential are we in a strategic position to guide his advance along the road to the desired educational goals.

In the case of a given child what techniques of teaching are likely to be most effective? What strong and weak points of his require individual attention and special consideration in planning his educational course? Under the present guidance and teaching, is his progress accelerated or retarded? In which directions? Only the results of a well-made examination and a sound evaluation programme can provide adequate answers to these questions.

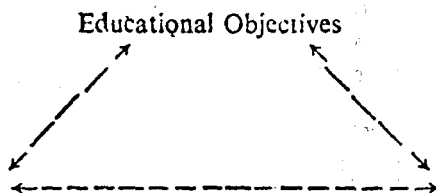
Sometimes, a distinction is made between mere measurement and proper evaluation, in that, whereas the former suggests only a precise quantitative marking of the outcomes of teaching, the latter implies a broader, more inclusive and continuing process of assessment of student growth. Evaluation is a basic and an integral part of the whole educative act, designed to improve teaching and learning, as well as, to measure student achievement.

Evaluation and Educational Objectives : Evaluation is a basic task of education and its aim is to determine the extent to which the diverse course objectives are being attained. Education is a process of changing behaviour patterns of human beings and evaluation procedures try to determine the effectiveness of the educational course in bringing about such desired changes.

The whole educational process should be informed by a proper evaluation point of view. It fosters an objective, critical and creative approach to problems of teaching. The teacher has to plan his

teaching work in the light of the kind of behaviour he wishes to bring about in his pupils, as a result of his teaching. He cannot self-complacently presume that he has done his duty, when he has covered a certain prescribed portion in the class. He has to ask himself constantly 'what behaviour changes can I bring through this unit of instruction ! Such desirable changes in student behaviour concretely define his educational goals and objectives. An educational objective is a planned-for change sought through educational activity.

Learning situations are planned to bring about the intended behavioural changes in children. The effectiveness of learning experiences can be assessed only in terms of the change and development taking place in children as a result of their classroom experiences. Thus, evaluation is process of determining the extent to which an educational objective is being accomplished. There is an intimate interrelatedness between objectives which are the ends of the educative act, learning experiences which are the means thereto, and evaluation which provides evidence that objectives are being reached through learning experiences. Objectives occupy a central and pivotal position with respect to both learning experiences and evaluation. The interrelations between educational objectives, learning experiences, and evaluation procedures may be illustrated by the following figure :



Learning Experiences

Evaluation Procedures.

An integrated understanding of the whole problem of evaluation in the context of our educational objectives and learning and teaching methods is necessary. We must realize the crucial influence of the type of examination upon student preparation and on teacher's methods of preparing students. Examination results should be analysed to find out the strengths and weaknesses, successes and failures of both the students and the teachers. Well-made examinations serve as mirrors reflecting faithfully good and bad points of the entire educational system. A creatively constructed evaluation tool can feed back significant information for improvement of instruction. Sound evaluation procedures are academic barometers that indicate whether the educational atmosphere and climate are fair or clouded.

The problem of evaluation is far more fundamental than is commonly recognized. The basic and crucial question is : what is it that we are measuring and what are we examining for ? What are

The problem of dealing with and educating the backward child has bothered the teacher and the parent since times immemorial. Philosophers, physicians and teachers have explained the problem in their own way, in regard to its causation and treatment. Dr. Johnson thought that stupidity usually resulted from stubbornness : hence, he recommended the continuation of severity till negligence was cured. On the other hand, Hobbes held that the fool could not be mended by flogging and he who flogged was the greater fool.

With the advent of democracy in most countries and the consequent acceptance of the principle of "education for all the children of all the people", the problem has gained vast dimensions. The number of dull and backward pupils has increased, making the problem doubly intense and difficult. But in spite of these difficulties, the work of investigating systematically the causes of educational backwardness and assessing the remedies as advocated by various workers in the field, has received momentum during the last few decades.

Who Are Backward Children ? Backward children are slow learners. They show inability to progress normally in school work. They are unable to do the work of the class in which they are placed or even of the class below that. "They, compared with other pupils of the same chronological age, show marked educational deficiency." (23 ; 55) They, usually, do not respond to the ordinary school curriculum and to the common methods and procedures of the classroom teacher. According to Barton Hall, "backwardness in general, is applied to cases where their educational attainment falls below the level of their natural abilities (3 ; 102)."

A similar idea is expressed in the well-known educational pamphlet published by His Majesty's Stationery Office, London. The authors of this pamphlet remark, "In any school or community there is a sort of a forward movement always in progress and that the backwards are those who fail to adapt themselves to the pace at which the majority of their fellows of the same age are moving..... When we consider this in relation to education we think of this forward movement in terms of the intellectual growth and progress in achievement. In schools this term is most commonly used in relation to the three R's. (15 ; 6)."

Burt described "a backward child as one who in mid-school career is unable to do the work of the class next below that which is normal for his age (8 : 77)." In his latest book on backwardness, Burt gives a more precise definition, in terms of 'educational ratio' or 'educational quotient'. This can be obtained by first ascertaining the average attainment level or age in all the subjects and then dividing it by his chronological age. Thus educational quotient is = $\frac{\text{Attainment Age}}{\text{Chronological Age}}$. According to him, a backward child is one whose 'educational ratio' is below 85 whereas a medium child has 'educational ratio or quotient' between 85 and 155 (9 ; 37)."

Whatever the manner of describing backwardness, the characteristic feature is 'educational impoverishment'. This may be shown in one or two specific subjects or in all subjects. Accordingly, backwardness may be either *specific* or *general*. General backwardness is due primarily to intellectual deficiency or dullness, but there are many pupils who are backward but not dull. Their backwardness may not be due to intellectual retardation but to some acquired or extrinsic conditions such as absence from school, frequent change of school, ineffective teaching methods or unfavourable temperamental and emotional attitudes towards the teacher or teachers, or illnesses and poor physical conditions.

Before the causes and factors that contribute to scholastic backwardness are discussed, it is necessary to realise that backwardness, even though, primarily an intellectual or scholastic condition, is a psychological characteristic that arises from and affects the pupil's entire personality—"that complex integrated resultant of innate equipment and environmental influences attained by an individual in the course of his development built up from intellectual abilities, temperamental traits, motor capacities, sentiments, complexes, habits, and physical characteristics, which through a variety of experiences, are moulded into a personal pattern which distinguishes one individual from another" (22 ; 1).

'Scholastic failure, in the words of Uday Shankar, is essentially the psychological failure since the simple intellectual experience cannot be separated from the total mental life of the child. (25 ; 58) Investigations and studies on the problem of scholastic backwardness show that it is not merely an educational problem, but is equally a personal and social problem. The scholastically backward suffer from deep frustrations in life and quite a number of them relapse into delinquency and other anti-social ways of living. Burt writes that "most of the paupers, criminals and the never-do-wells are recruited from the educationally sub-normal." (9 ; 16) Many of them become problem children and behave like the mentally sick or the maladjusted. The failure to keep up a standard of scholastic achievement compatible with intellectual capacity, blocks the flow of life and creates conditions of mental illness.

EDUCATING THE GIFTED CHILD

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It has been emphasized by Psychologists and Educationists alike that the gifted child is getting very little attention in the educational set-up as compared with the attention given to normal or deficient children. This allegation refers to Western countries and to the provisions made for the education of the gifted in that set-up, more so to the United States of America where education has made advances far enough to recognize the needs and difficulties of handicapped and disturbed or deprived children. A great deal of time, money and energy is being spent on providing special facilities for such children. The handicapped or deficient children attract attention of the educationists and others because of the defect that they suffer from or by their inability to keep pace with the normal children. The mere fact that they lag behind in class is enough to attract attention of the teacher. On the other hand a gifted child fails to attract the same attention simply because he can keep ahead of the average child in the class. He can do the tasks expected from him in the class so that the need for special attention is not felt acutely.

Who is a Gifted Child?

Before going into the type and amount of work done by way of special education for the gifted child, let us see what we mean by the term—gifted child. Who is a gifted child? How do we identify him? The concept of giftedness includes intellectual superiority as well as special ability or talent in other fields which may not necessarily involve intellectual superiority. Such talents or abilities may be exhibited in art, music, dance, drama, leadership, mechanics, science, or social relations. Thus the gifted child is the one who exhibits superiority in general intelligence or the one who is in possession of special abilities of high order in the fields which are not necessarily associated with high intelligence quotient.

The above definition brings out the fact that there are many factors which enter into the making of a gifted child. His environment and the enrichment of environment determines, to a great extent, the development of the abilities and the talents that the gifted child may possess. Surveys have been made of the gifted which have often brought out the importance of early environment by bringing out the number of those children who were gifted in the beginning but could not develop their special talent due to the mere lack of opportunities for stimulating the ability. The same situation is

Part IV

DEVELOPMENT AND ASSESSMENT OF PERSONALITY

16

Introduction :

Man's interest in personality is as old as his interest in the supernatural. Thus, some ideas about personality may be found in primitive folk-lore, myths and superstitions as well as in all the great religions of the world. In literature, since the days of the great epics, character-writers have presented interesting personality types. Ancient medicine in India and Greece had a theory of personality types.

Psychology of personality, however, is of recent growth. Though psychologists have been always concerned with personality, it was not till Galton and Freud that the study of personality became scientific. Psychology of personality, in a sense, is, thus, very old and at the same time, has a brief history. In the last two decades, however, there has been a very rapid development in this field—in concepts, techniques, findings, applications, publications and number of workers. Because of the rapid rate of work and the variety of theory and techniques, it presents a challenge to any student in this field.

In this chapter we shall indicate some of the problems in defining personality and then go on to discuss the methods of studying it. The story of development of personality is a long one and only a bare outline will be presented here with an emphasis on determinants of personality and the processes involved in its development. This discussion will be followed by a brief description of some of the disorders of personality. At the end, we shall consider how personality factors may affect education. The objective of this chapter is to provide an orientation to the advanced student of educational psychology. Thus, the student will not find here a history of the psychology of personality, nor will he find the various theories of personality. The various considerations in typology and trait measurement have been omitted from discussion here. The interested reader should refer to some of the books mentioned in the list at the end of the chapter.

What is Personality ?

Definitions of abstract terms are difficult, because in a logical definition a reference has to be made to a more inclusive abstract

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PSYCHO-ANALYSIS AND EDUCATION

What is Psycho-analysis ?

Psycho-analysis is a term often misunderstood and loosely used. It is, for example, associated with the names of Freud, Adler and Jung, although in the correct sense, it should be associated only with the name of Freud and those who use his methods. Freud himself insisted that the name 'psycho-analysis' should be restricted to the theory and practice developed and named by him.

'Psycho-analysis' now represents a school of psychology which, curiously enough, had its origin in the medical practice of Freud rather than in any previous school of Psychology. It revolts against all other schools, specially those representing the academic psychology which lay emphasis on learning, perception and thinking—structuralism, associationism and the Gestalt school. It regards all these schools and even purposivism as abstract and intellectualistic dealing with surface mental phenomena. It claims for itself the unique position of "delving deep, beneath and beyond into the real roots and springs of human action" (12) and of "unravelling for us the natural history of mental growth and thus placing within our ken, the means for its conscious direction and control..... (45). Its founder Freud therefore, can be easily ranked with those scientists who have tried to correct our conception of ourselves, the scientists like Galileo and Darwin. Galileo tells us that we are not the centre of the universe. Darwin makes us more humble by discovering that we were just higher animals. Freud has made us still more humble by laying the major emphasis on our animal nature and by his assertion that deep down in our minds is a desire to return to the inorganic state. Thus he has pricked the bubble of human vanity and has shown and made us feel that the so-called divinity of man, spoken of throughout the ages, is a mere illusion.

Its two meanings :

The term 'psycho-analysis' has two accepted meanings.

Firstly, it means a method of treatment designed by Freud for the cure of a certain class of nervous disorders through a technique for investigating deep layers of the mind.

Secondly, it represents a system or school of psychology which has grown and has crystallised itself into a series of important and systematised theories as a result of using 'psycho-analytical therapy'.

We shall use the term 'psycho-analysis' in the second sense alone. To look upon it as a method of treatment or a mode of therapy is not within the scope of this chapter; nor will it be possible to describe it here as a technique for investigating the deeper layers of the human mind (the unconscious). In other words, we shall deal with the main tenets or doctrines of psycho-analysis.

II. Fundamental Principles of Psycho-analysis :

(i) The Unconscious, the Pre-conscious and the Conscious.

Freud refers to the unconscious, the preconscious and the conscious as the topographical aspects of the mind or self or psyche. He assumes the existence of mental processes of which we are totally unaware but which have an enormous influence on our thoughts, feelings and actions. Freud, however, was not the first to have thought like this. Some speculative philosophers like Leibnitz, Hartmann, Schopenhaur and Nietzsche had used the idea of 'unconscious mental phenomena' in their writings. The conscious represents what we are immediately aware of. It comprises all the thoughts and feelings we are aware of at a given moment. The pre-conscious, or fore-conscious, comprises "thoughts that can become conscious in appropriate circumstances (28)." The preconscious is a sort of ante-chamber to consciousness. It is that portion of the mind that is readily recallable either through an effort of will or through association. The unconscious comprises material which we cannot recall at all. It consists of thoughts and feelings that we can become conscious of only through a special technique.

For Freud, the unconscious is the true psychic reality. The conscious is only a fraction when compared with the vast unconscious. In it are stored and found millions of infantile wishes, unsatisfied desires, cravings and urges. Some, rather, most of these cravings and wishes are legacies from childhood. Sometimes, they lie dormant; at other times, they are active. The experiences that the unconscious contains are highly charged with mental energy, they are libidinal in nature—experiences of a traumatic and passionate type, occurring in early childhood.

Freud postulates the existence of the unconscious because of the following facts :

- (a) there are many experiences that we cannot recall and are lost to consciousness,
- (b) the phenomenon of somnambulism,
- (c) the phenomenon of post-hypnotic suggestion,
- (d) solution of problems during sleep,
- (e) dreams,
- (f) morbid forgetfulness,
- (g) slips of pen and tongue,

GROUP PROCESSES IN THE CLASS-ROOM

18

Introduction

Treatment of the classroom as a functioning group has been conspicuous by its absence in Educational Psychology text-books. Group process is a comparatively new field of study and has not yet substantially influenced the theoretical as well as practical aspects of education. However, in recent years attention is being increasingly paid to the importance and study of group processes, as is evident from comparatively larger number of studies reported in this area and from the publication of a yearbook on this problem.

Education is essentially a social process and the effectiveness of educational programmes in schools would depend on a number of things—functioning of classroom as a good learning group, teacher's success in arousing and sustaining pupils' interest in setting goals for themselves and achieving them, developing initiative and sense of responsibility in the pupils, better and more effective understanding between the teacher and the pupils, adjusting with new ways of learning and so on. All these are related to the group life in the school in which the teacher and the pupils are equally important partners. Education can be made more effective through better understanding of the processes underlying group life in the school.

In school programmes, the class-room group has a special place of importance because the success of instruction is strongly influenced by the way this group functions. The teachers being in a position of leadership in these groups will be able to handle them effectively, if they have the necessary knowledge of the functioning of groups. The purpose of this chapter is to contribute to this understanding.

We have to work in groups. It is only for a short time that we are alone while working or recreating ourselves. These groups may be large or small, formal or informal. Some knowledge

*The author wishes to acknowledge his indebtedness to two main sources (3, 9) While he was preparing the chapter. Both these were made available to him through the courtesy of Dr Stephen M. Corey, Professor of Education, Teachers College, Columbia University, who, in addition, has himself been a source of inspiration for this chapter.

Mental Hygiene Approach to Education

The concept of mental health in and through education has come to stay. There are forces, movements and trends in modern educational practice which are indicative of this new approach in education. Teachers, for example, are increasingly becoming aware of the part played by feelings and emotions in growth and development including learning. The traditional approach lays greater stress on intelligence and will. It assumes that children always know why they do what they do, and can control their behaviour if they want to. Thus the child who misbehaves, according to this viewpoint, can control or inhibit his misbehaviour by exercising his will. On the other hand, the mental-hygiene approach assumes that behaviour is complex and its causes lie deep within the emotions. It recognises that the deepest and most powerful currents of human motivation are emotional. Hence, the emphasis as shown in books and articles written recently for parents and teachers, has changed from being concerned with the physical conditions of children, or with techniques for direction and control, to concern for their emotional health.

Teachers are being helped to think of behaviour in terms of causes rather than in a symptomatic fashion in their dealings with children. They are being advised to follow the dynamic rather than the surface approach. The dynamic approach will enable them to attain a better understanding of the background, attitudes, feelings, worries of children they supervise and to work more effectively with them. A study made by Wilkinson and Ojemann (26) gives evidence that supports this hypothesis. They write "when teachers come to understand the emotional basis of their pupils' behaviour better, the children's attitudes towards the school becomes more favourable—and they make better progress in their school work."

Another indication of the mental hygiene approach is the importance that is being attached to personal and human factors in education. The older or traditional approach to education tends to *depersonalise* the classroom situation as well as to deny the importance of emotions and feelings. It ignores the significance of interpersonal relations that are an important part of what goes on in the classroom, and in the school. It looks upon the children in the class as a sort of *captive audience*. The truth, however, is that classes

do not behave like captive audiences. They are far more than collections of unrelated individuals. They have an organic life of their own, above and beyond the lives of the individuals who compose them.

The emphasis on this sound perspective is found in another way also. Teachers are making attempts to provide adequately for individual differences in interest and ability and to give children opportunities for finding satisfaction in creative work. The mental hygiene approach assumes that expression and release, through worthy creative endeavour are demanded by growing minds and bodies. This urge for creativity is being satisfied in many ways—through handwork, music, writing, dramatisation and other play and recreational activities. This is applicable both to students and teachers.

From the brief discussion above, it may be seen that the emphasis on mental health or hygiene in and through education is in accord with the objectives stressed by progressive-minded people in education. These forward-looking people seek, as the goal of education, the maximum development of every boy according to his unique nature and his needs. It is in accord with the consideration that is given to basic human needs in the development of curricula and with the insistence that subject matter and experience be selected to satisfy developmental tasks. (11)

Mental Health—Its Meaning and Nature

It may be necessary here to define and discuss the meaning and nature of mental health before we see what and how educational practices can be utilised in our classrooms and schools for the attainment of the optimum development of the child or his complete health, which is our goal in education.

A healthy individual is not only physically healthy, but is also mentally healthy. (The modern concept of health extends beyond the proper functioning of the body.) (It includes a sound, efficient mind and controlled emotions.) (Health is a state of being hale, sound or whole in body and mind.) It means that both body and mind are working efficiently and harmoniously. (Man is an integrated psychosomatic unit, whose behaviour is determined by both physical and mental factors.)

(Mental health which today is recognised as an important aspect of one's total health status, is a basic factor that contributes to the maintenance of physical health as well as social effectiveness.)

It is the normal state of well-being, and in the words of Johns, Sutton and Webster, "is a positive but relative quality of life. It is a condition which is characteristic of the average person who meets

In ordinary life some deviations in the process of growth and development are of common experience. These deviations, so far as the normal health is concerned, can be either physical or mental, but generally parents and guardians feel more concerned about physical ailments and take their children to hospitals or private doctors for treatment. Mental ill-health characterised by various symptoms is ordinarily ignored. In the modern world remarkable progress has been made in the field of medicine which caters to the bodily needs and although some progress has been made also in the understanding and treatment of mental illness, in this century this is comparatively a new field. So far as deviations from normal mental health in children are concerned, the ignorance and apathy is still great and parents consider themselves quite competent to look after the mental health of children and resent very much being reminded that some of them are not capable of bringing up mentally healthy and happy children.

Basic Needs. The child is like a plant posited in the social soil of the community. He draws nourishment of various sorts by spreading roots, as it were, in the social soil. These roots are the relationships or connections which he establishes with other members of the family or the community at large, and by analogy, the more roots or the relations and the more harmoniously they are established, the more abundant the nourishment will the child draw in and thrive and blossom. Just as the plant requires the satisfaction of its needs for air, water, minerals, sunshine and protection against adverse weather conditions so also the child requires the satisfaction of the various needs for his healthy and full growth. There are various physical and fundamental psychological needs. On the psychological side, the child needs food, water, air, rest and change and on the mental side are the needs for security, affection, freedom, play, creative contribution, satisfaction of curiosity, thirst for knowledge and understanding. The child is ordinarily said to be selfish but the child not only wants to get love and affection he also wants to give love and affection. In fact human beings from the very beginning are both selfish and selfless as self-seeking and self losing go and grow together. Many studies and researches in psychological medicine in recent times have brought out that the most fundamental need is the need for love, both to receive love and to give love, and many symptoms of mental ill-health are traced back to deprivation of love at some stage in the life of the individual at

the hands of some dear and near one. In like manner there is the great need for feeling free and independent. Even a little baby whose hands and feet are caught hold of, will wriggle and squeeze and fret and fume and will try to extricate himself from even such momentary bondage. Children and, for that matter, all human beings, long to feel free though tied to the tether, as it were, by their physical, mental or emotional limitations. Children, likewise, have a craving for play, to exercise their limbs and minds and to spend their extra energy. There is the curiosity to learn and to know new things and to jump into the unknown. Children wish to know the why of every-thing and their constantly questioning mind shows the thirst for understanding the nature of things and to have insight regarding the cause and effect sequence. There is also the basic need of creating, of making some contribution which will have the stamp of one's individuality and which one can call one's own. Children, like adults, want to have a name for themselves and to be counted as somebody and to be accepted and appreciated by the members of the family or the group and to be remembered by their achievement or contribution, howsoever small it may be.

These are some of the important basic psychological needs, with the satisfaction of which the child will grow normally and healthily to his full stature, and with the frustration of which will be found the causes of many mental symptoms or aberrations.

Place of Heredity. Sometimes it is said that children are born with certain inherited mental difficulties or problems, as if, they are passed on to them by their parents like property. But recent studies confirm that children are not born 'problem' but are made 'problem' by problem parents; in particular, as Neil asserted "there never was a problem child; there have always been problem parents." Every child grows from the fertilised ovum or "Zygote" in which there are twenty four pairs of chromosomes, which are further divided into genes. Although on the physical side there is evidence of parental features and traits being inherited by the offspring through the genes as far as mental, emotional or social character traits are concerned, heredity does not seem to play so great a part. Whatever evidence there may be of children taking after their parents with regard to mental or character traits, they can be explained by recourse to the process of social influence. Children have a very uncanny sense of drawing in, as it were, both the good and bad social and emotional traits of their parents. In ordinary parlance, we hear statements, that he is stubborn like a mule as is his father or how could he learn or behave decently as his father never did so. From some such statements the inference is ordinarily drawn that emotional or temperamental qualities or defects of parents are inherited by children. But as already pointed out the evidence is more to support the idea that emotional or social character traits are acquired, as a result of upbringing, and the explanation of various

The fundamental urge of life is to exist and to grow: every living creature has the inner impulse to grow to its full stature and to be its best self unless it is thwarted by the exigencies of outer conditions. This fact is found to operate equally in plant life and in animal life, including human life. All events of living beings, in fact all cosmic events, are regulated and controlled by certain rules and regulations or natural laws. Nothing in nature is capricious or whimsical; otherwise instead of a cosmos there would be a big chaos. There is a system everywhere and the flow of the life current is controlled and regulated by certain laws. Such a mode of life in accordance with certain rules may be termed as disciplined life. Discipline means life organised or lead according to rules.

But the question arises whether the individual is free in himself to follow any rules of his own, or in other words, has he the licence to do any thing he fancies or which is the creation of his moods and impulses? It does not seem to be so. If it were so and if every individual being were free to follow the momentary moods and impulses or self-made rules, there would be the law of the jungle and anarchy. As there are so many beings and as the wishes and impulses of one will come into clash with those of others it will only lead to destruction. Such a view of unbridled and absolute freedom is not warranted even by nature as under such conditions life will come to a standstill. Certainly in a society this is impossible if every individual on the road, pedestrian, cyclist, vehicle driver etc. were to move on the road on any side and in any manner he liked, the result would obviously be the stoppage of the traffic and all life on the road would come to a stop. Unchecked and complete freedom is not in the interest or the good of the individual himself or the society. Nature has put limitations on us and animal desires and impulses in living beings have to be controlled and regulated, otherwise one is led to one's doom. One cannot, for example, go on indulging in the satisfaction of hunger, lust and such animal desires indiscriminately and freely as illness caused by exhaustion or by poisoning may result in death. For the mental and physical health of the individual, therefore, reason has to come in to play its part in putting a check on animal desires and impulses. In a similar manner for healthy social life certain rational codes of conduct, rules and regulations have to be instituted.

The rules and regulations both for the individual and social life should not be forcible impositions from outside. The individual and social living is not to be directed by any outside authority which is not a partner, and who has no share in such a living. Rules and regulations given by outside authority may in some way lead to order or discipline but such an order or discipline will be dictatorial or authoritarian and such rules and regulations will not be assimilated by the inner being of the individual and will produce indigestion, as it were, since they are forced down the throat of the individual without his understanding and cooperation. Social and individual life have essentially to be according to certain rules and regulations which are accepted by the person or persons concerned who identify themselves with the purpose of such living and who know their best interest. Man-made rules, therefore, which emanate from within the individual for his self-regulation and for being his best self or from the group itself for proper control of group life and group functions, will really be for true disciplining. There is no contradiction in following such rules and regulations and being truly free. Sometimes discipline is called as the gateway to freedom which means that to be really and truly free we have to follow certain rules and disciplining situations. In order to come out e. g. from a room into the open compound outside, we shall have to willy-nilly come through the already ordained and regulated provision of a door and not to butt our nose against the wall. The passing through the door in order to come out into the open is metaphorically explaining the dictum that in order to be truly free we have to follow certain rules or to pass through disciplining situations and be disciplined.

The above brief statement brings out the meaning of what we mean by discipline. It is neither the following of one's whims and impulses nor to be directed or goaded by some external authority. It means training, learning and living in an organized way, in accordance with rules and regulations which are constituted by the persons concerned and which are in the best interest of their mode of life. Such rules, are warranted by the true nature of the individuals themselves and emanate from their own beings. For this reason discipline really speaking, is not an imposition of extraneous rules and regulations but is the self-imposition of self-emanating rules and regulations in the following of which the true nature of the individual manifests itself and one becomes his best self. True discipline, therefore, really means self-discipline, and it is for the individual to acquire knowledge, habits, interests and ideals which conduce to his well being, that of his fellow beings and that of the society as a whole. Such an acquisition, of course, is helped by the others who live in close and benevolent relationship with the individual.

In various fields of life the word discipline is in ordinary parlance used and individuals are, so to say, disciplined in different

I. NATURE AND PHILOSOPHY OF GUIDANCE

What is guidance ?

Guidance is the process of helping a person with his adjustment problems. An adjustment problem arises when a person confronts a demand made by his environment which he cannot fulfil. Adjustment may be described as a state of harmony between the needs, abilities and resources of a person on the one hand, and the conditions obtaining in his environment on the other. Absence of harmony between the two creates a problem of adjustment. The harmony can be brought about in one of two ways. First, by changing the conditions in the environment ; second, by modifying the state of the person. The first process has been described as 'aloplastic', that is, changing what is 'other' to the self, namely, the environment. The second process has been called 'autoplastic', that is, modifying the self or the person to suit the conditions of the environment.

A child is attracted by a doll possessed by another child. The need to possess the doll is not in harmony with the environment as the doll is in possession of the other child. The child adjusts to the environment by snatching the doll from the other child, if the other child happens to be weak and timid. The environment gets into harmony with the child's yearning to possess the doll by changing from the one 'with the doll in the possession of the other child' to that 'with the doll in the possession of self.' This mode of adjustment is aloplastic.

Maybe, the second child is stronger and is not prepared to give way to the first child. A battle ensues between the two and the second child successfully repulses the attack by the first child. The first child starts crying, or surrenders and shows friendly gestures to the second. In either case a change has taken place in the state of the first child himself. The 'attack' has changed into the 'cry' or the 'desire to possess' has changed into the 'wish to share'. The adjustment is autoplastic.

The problem of adjustment arises every day in the life of an individual. The environment is in a state of constant flux. The individual too is changing every moment. The harmony between the two is also being constantly disturbed. Change affects the outer environment of man. His internal environment is also in a

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