

BOOK REVIEWS

MOVEMENT ACTIVITIES, MOTOR ABILITY AND THE EDUCATION OF CHILDREN. Bryant J. Cratty, Ed.D., Namiko Ikeda, Ph.D., Sister Margaret Mary Martin, M.S., Clair Jennett, Ph.D., Margaret Morris, Ph.D.

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This is a book in which Dr. Cratty, his administrative assistant and three post doctoral students present a rational approach to the understanding of the role of movement in the total learning process; and in so doing bring a breath of fresh thinking and sound common sense to the distorted view that movement *per se* can improve either intelligence or reading (academic) skills. Dr. Cratty's view is that "movement will aid intelligence to the extent to which the child is encouraged to think about the movements in which he is engaged". Reported are four research studies carried out in the Perceptual-Motor Learning Laboratory, University of California at Los Angeles.

The book comprises three parts, the first chapter presenting research studies dealing with self-concept of children with co-ordination problems. The concept that clumsiness affects ego-strength and personality development is in itself thought provoking. The point is clearly made that activities must be combined with academic processes such as reading in order for transfer to be effective. The improvement in I.Q. in retardates, in whom self-concept is generally low, is due to positive shifts in self-concepts and perceived changes in physical capabilities. A criticism can be made of the demands of the questionnaire that required reading from five and six year olds, but the researcher was aware of this difference so that many of the questionnaires relating to these age groups were, in fact, discarded and did not affect the research design. One wonders why they were included in the first instance.

The reviewer questions whether young children can be expected to rate themselves in the same way as the older child, the skills of the young child being different and undeveloped. Body concepts would also be influenced by growth changes at, or near, puberty. The effect of emotion on self awareness seems also not to be given sufficient stress. The more demands made of the older child give rise to a different self-evaluation as compared to the younger child.

The second chapter deals with game choices of children with movement problems and analyses the sex differences in determining choice. Motor problems or clumsiness influence the choice of games. The boys with motor problems avoided vigorous participation and chose the more passive games enjoyed by normal girls. The type of emotion identification chosen by such boys should be recognised by all who work with clumsy children. The research design would aid in designing school programmes and playground activities to serve the emotional and physical needs of such children.

The third chapter forces a reappraisal of perceptual-motor training and questions the research studies and claims of its proponents of success. Teaching towards the test is avoided and the importance of control groups in research studies is emphasised. The interpretation of perceptual motor model is questioned — the "blurred" definition that has led to extravagant claims that educational visual perceptual and personality deviations can be corrected with such programmes is questioned. Little or no transfer can be expected in fine motor skills from gross motor training and all such skills are more easily modified in the early years of life. Input and output are seen as separate entities and acknowledgement is made of the low level perceptual

tasks given to the child. This chapter leaves the reviewer with the suspicion that what the child may respond to is a simple conditioning process and demand for performance often avoided by parents in the subconscious over-protection of the subnormal child.

Again in Chapter Four which deals with total body movement as a Learning Modality, the question comes to mind that in the sample of children from culturally deprived homes the responses may well be to the attention and care and concern rather than the specifics of the programme. Dr. Cratty substantiates this view in an independent way on page 146.

Of all the chapters in the book, this one most seriously challenges the validity of the various theories of perceptual-motor training. The sample comprised children of low I.Q. and introduces some dynamic concepts into current programmes designed for these children, such as arousal and inhibition. The reduction of hyperactivity may be in itself the opening of the door to learning.

The absence of a proper control group whilst deplored by the author seems in no way to detract from a valuable and thought provoking treatise. The reviewer would have liked to see a breakdown of the tasks into verbal and non-verbal.

Chapter Five deals with selected essays by Dr. Cratty which provide sensible and stimulating reading. Dr. Cratty has a refreshingly critical and honest attitude and the courage to question seriously the validity of those claiming to raise children's I.Q.s by exposing them to movement experiences. He points out that the variables such as attention (time) and personality may be more influential of change than the programmes *per se*. Reaction time and movement speed are more important during the final stages of learning than are motor factors, and Dr. Cratty confirms the suspicion of physical therapists who have worked with physically handicapped children that movement is not the basis for intellect. "To ignore the role of cognitive processes in the acquisition of skills seems as naive as attempting to improve reading by walking balance beams."

In his essay on movement activities, motor ability and education he points out some important factors in school success, such as the extent of physical passivity in static learning tasks, the adaptability required for activation and passive "control". Inhibition and fitness levels are related to frustration and movement needs. Constant motion may well be a factor to be avoided in training devices.

In the last essay on "Reading and the role of motor training," Dr. Cratty strongly attacks the "jargon" employed by various "educationalists" purporting to remediate reading problems "by employing some type of perceptual-motor panacea".

Over the question of improving reading by increasing speed of eye movements he again reveals his understanding of the physiology of the human nervous system and doubts that the involuntary micro-saccadic movements can be improved through visual or visual-motor training, and goes on to examine some of the factors involved in reading. He takes the Kephart programme to task and it gives reference from other research studies to confirm his hypotheses that it exerts no effect on reading proficiency.

This book comes at the right time before physical therapists (O.T.s and physiotherapists) are fallaciously carried away by the idea that perceptual motor training is the panacea for learning ills and whilst, as a physical educationalist, Professor Cratty clearly recognises the value of physical-motor training he has a wholistic view of learning that serves as a model for any therapist or teacher working with children with learning problems.

The book is highly recommended to medical, paramedical and educational personnel working with physically, intellectually and/or educationally handicapped children.

Freda Muller.