**The Background Theory related to Creative Ability which leads to Work Capacity within the context of the Occupational Therapy for the Cerebral Palsied**

**Vona du Toit, 1972**

In order to relate the concept creative ability to the treatment of the cerebral palsied, I propose to define creative ability and then to highlight the problems of the cerebral palsied in order to indicate why the stimulation and growth of creative ability in the cerebral palsied has become a matter of paramount importance. In my next lecture, I will try to indicate how the concept of creative ability may be applied in an Occupational Therapy programme which aims at stimulating and establishing the creative ability of the cerebral palsied child.

Creative ability in an individual is made up of two components:

1. an inner motivation or drive towards action, and
2. the externalisation or expression of that motivation in action which results in the creation of a product.

Any assessment or treatment programme aimed at the stimulation of creative ability must, therefore, consider both components, i.e. the level of the individual's motivation and the nature of his actions.

Motivation has been defined by Coleman as "any inner condition of the organism that initiates or directs its behaviour towards a goal".

Action, for the purposes of this paper, will be defined as the exertion of drive, or mental and physical effort which results in the creation of a tangible or intangible product.

Creative ability in an individual, therefore, is a combination of motivation and action which results in the formation of a product. The product may be tangible or intangible but it must be perceivable by others, i.e. there must be evidence of effort.

As it is only possible to express or externalise in action that which exists within oneself, it may be said that the quality and level of action reflects the quality and level of motivation. Other factors which form an integral part of creative ability, and therefore will grow as creative ability grows, will be enumerated. An evaluation of these factors will therefore provide an indication of the level of creative ability attained by an individual at any moment in time. These are:

1. The ability to form a relational contact with materials, people and situations;
2. The ability to control the effects of anxiety;
3. The ability to think and act with initiative or originality; and
4. The ability to exert maximum creative effort to meet a challenge in any sphere of action, whether this action be related to the personal, interpersonal, recreational or work spheres of living.

This means that assessment of the level of creative ability in an individual will, of necessity, involve evaluating the products created by the individual, the quality of his ability to relate to materials and objects, people and situations; his ability to control the negative effects of anxiety; the degree of initiative or originality which he is capable of infusing into thought and action; and his ability to make maximum effort to meet the challenges and tasks set him in all spheres of life.

It is necessary also to define two other concepts which surround that of creative ability:

Creative response is each single positive attitudinal reaction which the individual displays towards an opportunity or challenge; it is a preparedness to make maximum effort or to inspan all his resources - "to try his hardest".

Creative capacity is the creative potential available to an individual. Creative capacity must obviously be influenced by degree and quality of intelligence and by the personality structure. When an individual appears to have reached the highest level of creative ability of which he is capable, it could be said that he has fulfilled his creative capacity.

To summarise then, any individual has a certain creative capacity which is determined by genetic and environmental factors. That area of his creative capacity which he has actualised, and which is reflected by the quality of his motivation and his actions, is his creative ability. In order to increase creative ability the individual has to respond creatively, i.e. be prepared to make maximum effort to implement action.

As I am selecting theory which has practical implications and significance, let us examine these three concepts from a practical point of view:

1. creative capacity;
2. creative ability; and
3. creative response

It is obviously significant to prognose the creative capacity of each child provided prognosis is not so rigid that it prejudices the child's opportunities to prove to you that your estimate of his creative capacity was inaccurate.

However, if a child's intelligence is low, if he has severe behavioural problems or irreversible physical incapacity, it would be unwise and untherapeutic to hitch your programme to an unrealistic star. I would say that of these factors it is the IQ that most devastatingly influences creative capacity. The other two factors will influence creative ability, and I believe they prove a very real challenge to us. Often personality disorders are, in fact, due to a lack of creative experience and creative fulfilment, and in these cases, a well structured creative ability programme would be the treatment of choice. Where physical incapacity is concerned, I have confidence that we will develop cognitive, verbal and audio-visual opportunities for the child who reaches the level of active participation. Our problem always is the grossly physically affected cerebral palsied child with a low IQ who is destined for occupational centres or protected workshops.

The determination of a child's current level of creative ability is obviously of inestimable importance, it will affect the content, the method of structuring and the method of presenting every programme, be it in the schoolroom, in the paramedical section, or on the sports grounds. The creative ability of a child will also drastically affect the perceptual programme for each child and the method of handling used.

Here I would like to point out the difference between arbitrarily selecting an activity which momentarily excites the fleeting interest of a child, and selecting an activity which contains the demands and the norms appropriate to the child's level of creative ability. The latter approach would obviously have the potential of stimulating a motivated response in the child which would lead to general growth of motivational capacity. The activities selected and method of presenting the activities to coincide with the level of creativity must accommodate for more than just capturing the momentary interest of the patient, it must take into account the nature of the product, the relational and interpersonal demands, the anxiety level, the work-related content and the intellectual demands which, in essence, determines the presence or absence of original reactions in the individual. The former method of selecting activities is of significance for that moment in time and may, coincidentally, positively affect creative growth. The latter method of selecting activity is planned to stimulate creative growth and therefore, is far more likely to overflow into the total motivational and action content of the child's life.

It is significant to identify the creative response of a child because it is this response which merits praise from the Therapist. It is only a maximum effort that will result in increasing creative ability. It is untherapeutic and confusing to the child to be over-praised for minimal effort. It is important for the growth of a child's self expectations to be praised appropriately and particularly for maximum effort.

Now let us look at the cerebral palsied child in order to identify the problems before we continue with background theory. Firstly, it is necessary to remind ourselves of a few general facts. Cerebral palsy results from malfunctioning of motor centres and pathways of the brain, so in most of the children diagnosed as cerebral palsied one finds multiple handicaps. These children present with a variety of manifestations of organic brain damage. Apart from the overt motor dysfunction, seizures are found in at least 25% of cases, there are significant visual problems in at least one fifth of affected children, and many, particularly those with athetosis, have a loss of hearing perception. A high percentage suffer perceptual and learning defects, and various levels of intelligence impairment is found. Estimated very conservatively, it may be stated that at least 60% to 70% of these children afflicted with cerebral palsy of all types and degrees function at a significantly retarded level, which means that their creative capacity will be limited and that, in general, the level of creative ability attained, and work capacity achieved, will be on a relatively low level.

I do not intend to elaborate on the medical background because I want to focus attention rather on the fact that the as yet unrealised and undeveloped total "child potential" is encased in a pathetically inadequate body in which virtually none of the physiological systems are intact.

There is a great difference between the problem of restoring creative ability in an adult whose creative ability has been directly or indirectly interrupted, distorted or apparently destroyed by physical or mental pathology and that of encouraging the growth of creative ability in a developing child. In the cerebral palsied child the growth of creative ability has to be stimulated and nurtured, it is a process of new discovery rather than rediscovery and re-stimulation. The child is a developing entity with immature physical, mental, spiritual and psychological capacities, whereas the adult has attained maturity, has lived, has created and has retained a multitude of associations.

Purely biologically, the cerebral palsied baby is an as yet undeveloped specimen of the genus man and, as is the case with every other human baby, totally helpless, but again, as with every other baby, the cerebral palsied baby is immediately bombarded by stimuli which are designed to set the phylo-genetic developmental sequence into motion. The great difference between the baby with cerebral palsy and the normal baby is that in the cerebral palsied baby, there are the ever present fundamental frustrations resulting from the inescapable obligation to tolerate the bizarre biological responses which, in turn, result in distortion and retardation of the developmental growth sequence.

Perhaps even more important than the biological impairment which distorts the emergence of the developmental growth pattern is the distortion of ontogenetic growth. The physical treatment programme may be planned to recapitulate the physical development pattern, but it is impossible to compensate for the massive frustrations which the emerging ontogenetic "being" of the child has to suffer. It is impossible to recapitulate the ontogenetic pattern of development. The as yet totally undeveloped "child potential", striving to find, establish and fulfil himself as a unique individual in his inescapable ontogenesis, finds himself in a grossly ineffectual expressive mechanism which results in perpetual failure and frustration, which results in motional and behavioural maladjustment and curtailed creative ability. After all, how else can we human beings express ourselves if we cannot command or control our neuro-muscular or sensory-motor mechanism - our hands, our limbs, our speech?

How can we become intact and fulfilled individuals if we have no reliable means of expressing our individuality, of expressing unique capacities, incapacities, devastatingly intense joys or sorrows, or light-hearted whims and fancies?

If we remember further that motor development initiates and extends all other facets of development, then we have isolated the enormity of the spiritual and psychological problems of the cerebral palsied child which accompany the physical problems.

If even the most intense and desperate desire "to do" or to express results in failure because of biological and mechanical impairment, then the cerebral palsied child may be forgiven for developing the self-defensive reaction of "withdrawing" from making effort. Often then he becomes passive and unmotivated.

This lack of motivation has long been isolated as one of the most significant qualitative problems which prevents the cerebral palsied child from attaining maximal independence in any sphere of life.

The effects of this lack of motivation become most devastatingly obvious when the child, now adolescent or adult, has to find some niche in the community, be it in an occupational centre or in protected, sheltered or open labour employment. It is an unchangeable fact that work does not "happen" to anyone. Performing work or holding down a job is the result of motivation, decision and maintained personal effort and action. This then spells out the reason why the stimulation and direction of creative ability, which is motivation and action, is so imperatively important for the cerebral palsied child.

In analysing the clinical reactions or psychotic patients, cerebral palsied children, quadriplegic and paraplegic and emotionally disturbed children, including a small group of autistic children, we have found the following:

1. The growth and recovery of motivation or volition appears to follow a constant sequential pattern.
2. Likewise, the growth and recovery of action (participation in handling materials, performing task components, whole tasks, activities and then work) appears to follow a constant and sequential pattern.
3. The stages of volitional growth and those of action appear to be interdependent and to relate to one another in a constant fashion.
4. The highest stage of motivation and action (creative ability) attained by the child provides an indication of the employment potential of each child.

I would like to show the following slides and explain:

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| **Stages of Volitional Growth** | **Stages of Activity Participation** |
| **Being - in - Becoming** | **Doing - in Becoming** |
| Positive Tone  Self Differentiation  Self Presentation  Participation:   * Passive * Imitative * Active * Competitive   Contribution  Competitive Contribution | Pre-destructive Action  Destructive Action  Incidental Creative Action  Explorative Action  Participative Action:   * Passive * Imitative * Originative * Product Centred   Contributive Action  Competitive Contributive Action |

**Phases of Progression at each stage of Creative Ability:**

Therapist Directed

Patient Directed

Transition

|  |  |  |
| --- | --- | --- |
| **Stages of Volitional Growth** | **Stages of Activity Participation** | **Employment Potential** |
| Positive Tone | Pre-destructive Action  Destructive Action | Total Institutional Care |
| Self Differentiation | Incidental Creative Action | One step guided activity - occupational centre or home |
| Self Presentation | Explorative Action | Sheltered workshop - low production - 50% |
| Participation:   * Passive * Imitative * Active * Competitive | Participative Action:   * Passive * Imitative * Originative * Product Centred | * Sheltered workshop - higher production - 50%+ * Repetitive imitative work in sheltered workshop or in selected open labour market * Open labour market - further study or technical training * Open labour market - professional training |
| Contribution | Contributive Situation-Centred Action | Managerial and high responsibility employment |
| Competitive Contribution | Competitive - Contributive Society Centred Action | Research |

There are a few general facts which are important to understand. The stages are not rigidly demarcated. A general forward flow of creative ability is discernable but there may be a backwash to a previous stage or the flow may lap over further than the stage on which the patient most consistently functions.

So a child will inevitably show evidence of functioning over a range of 2 - 3 stages of creative ability but for assessment purposes, it is important to determine the level of creative ability over the widest range of the child's reaction, i.e. the quality of his motivation and actions for the greatest part of his day and in the most representative range of activities.

One must avoid drawing conclusions from isolated situations because the elements of consistency, predictability and reliability of the child's action are, in fact, the determining factors. Creative ability in the cerebral palsied child will not emerge like a gift from heaven, it must be Therapist stimulated and nurtured, it must lead to a patient "takeover" and where the child has further creative capacity, signs of readiness for the next stage will emerge. The implementation of this programme is a demanding one, requiring perceptiveness, knowledge and ingenuity.

It is necessary to be conscious of a total change of priorities in the implementation of this programme.

Whereas the treatment programme is, of necessity, planned to minimise or control physical dysfunction (obviously in the context of the Occupational Therapist's view of the child as a totality), the emphasis and strict priority in the programme planned to stimulate creative ability must be on the child's attainment of success and pleasure in the appropriate creative experience. The educational principle of building on success and incorporating positive associations is of paramount importance.

It is not necessary for me to state that neurophysiological treatment techniques which will release inhibiting reflexes and compensate for muscular imbalance or in-coordination, in order to make action possible, will automatically be incorporated by Occupational Therapists.

To conclude the first part of my presentation, I would like to point out the following advantages of this programme:

1. Characteristics of motivation and action at each stage of growth or recovery may be analysed.
2. The direction and content of treatment aimed at restoring motivation by means of action may be clearly defined.
3. Demands made of the patient interpersonally, socially and in respect of material and activity handling may be systematised.
4. Criteria for selecting, presenting and grading activities at each stage of motivational recovery may be extracted.
5. The stage of motivational growth and action attained by a patient may be stabilised and the next stage stimulated by the clinical application of the criteria and graded demands.
6. The stage of "work readiness" in a patient is detectable.
7. A total treatment programme based on the growth of motivation and action enables the Occupational Therapist to systematise her approach to the patient from the earliest stage of illness and motivational deficit to the stage of work readiness and reintegration into appropriate work.

See Charts:

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| --- | --- |
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