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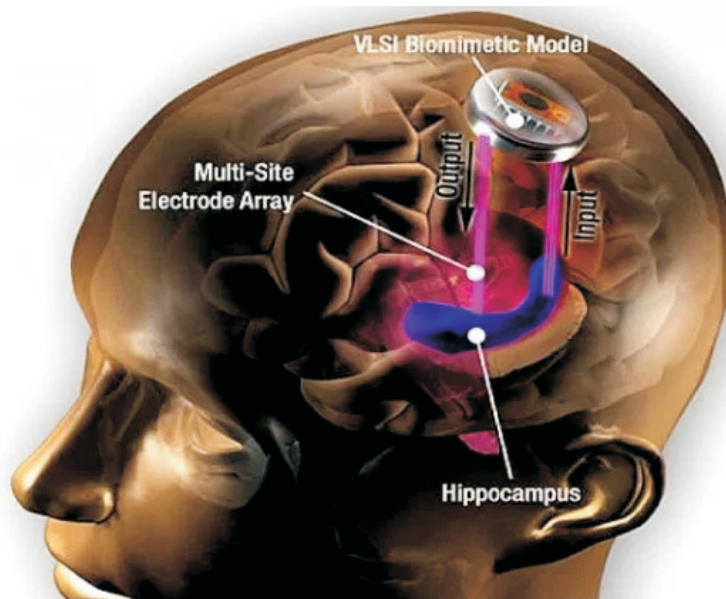
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INTELLIGENCE AND ITS CONCEPTIONS



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ABSTRACT:

The critical question of this period of human history- the answer to which must also come from the critical use of man's mind - is whether or not human intelligence as traditionally defined offers any reliable assurance of human survival. This question may seem hopelessly abstract, even trite. But nothing could be more concrete. Is pure intelligence enough to protect man from self - inflicted destruction? Among a group of children at play, we spot those who seem to be bright and those who seem to be dull in catching on to the

rules of the game and as we watch them at school, we make a distinction also between bright and dull. We frequently encounter representatives of the extremes.

KEYWORDS

human intelligence, human history, man's mind.

INTRODUCTION

In popular understanding, intelligence means mental abilities enabling one to think rationally, learn readily, act purposefully, and deal effectively with one's environment. In psychological testing, it is a term that has been given many different technical meanings concerned with mental abilities such as verbal reasoning, quantitative thinking, abstract analysis, manipulation of geometric shapes, recognition of similarities and differences between pictured objects.

Four types of contents are :

Figural (F) : Information in concrete form, as perceived or as recalled possibly in the form of images. The term "figural" minimally implies figure-ground perceptual organization. Visual spatial information is figural. Different sense modalities may be involved e.g., visual kinesthetic.

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Symbolic (S) : Information in the form of denotative signs, having no significance of in and of themselves, such as letters, numbers, musical notations, codes, and words, where meanings and forms are not considered.

Semantic (M) : Information in the form of meanings to which words commonly become attached, hence most notable in verbal communication but not identical with words. Meaningful pictures also often convey semantic information.

Behavioural (B): Information, essentially nonverbal, involved in human interactions, where awareness or attention, perceptions, thoughts, desires, feelings, moods, emotions, intentions, and actions of other persons and of ourselves are important.

Description of the Cognition Tests

Here we shall list factors, define them and give examples of representative tests.

I. Cognition : The Figural Dimension

1. Cognition of Figural Units – Visual (CFU – V)

It is the ability to recognize a figural entity, that is, to “close” figural information or perceive a complete visual form.

Letters of the alphabet can be used as figural units, and they constitute the material for four of Thurstone’s tests : Perceptual Span S (E identifies letters flashed in the periphery of vision) ; Dark Adaptation (speed of seeing dim letters after bright stimulation) ; Mutilated Words (E recognize words with parts of letters erased).

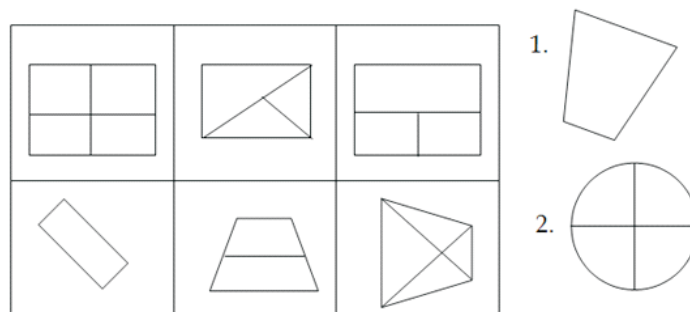
2. Cognition of Figural Classes (CFC)

It is the ability to recognize classes of figural items of information.

i. Figure Classification : Recognize classes of three sets of figures each, then assign given figures to the classes.

ii. Picture Classification : Assign pictures to classes each defined by a group of three pictures

Sample test classes



Answers :

Figure 1 belongs in Class B;

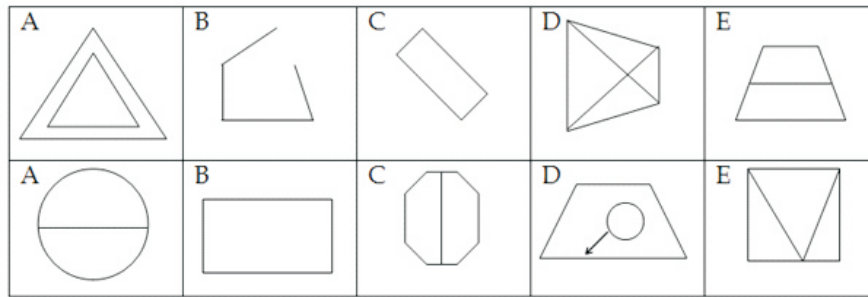
Figure 2 belongs in Class A.

iii. Figural Class Inclusion : Assign, from five alternatives, one figure that contains the same properties

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as two given figures.



Answers : 1 – D ; 2 – E

MODELS OF INTELLIGENCE

Any serious investigator in basic science or technology finds a good frame of reference very helpful. The one which is close to a scientific theory is the most useful to the investigator of a particular domain - for example, intelligence.

A good frame of reference to serve the investigator's purpose has three important specifications; it should be comprehensive, systematic and empirically based.

Human understanding of natural phenomena establishes the fact that there are regularities in nature. They offer the possibilities of establishing principles and scientific laws, which provide a short hand type for apprehending information. In the pursuit of further simplification, model building becomes possible. Model building is theory construction. Piaget points out that there is growth in conceptions of what he calls seriation. By seriation he means the arrangement of items of information in linear order, each item related to the next in line in the same manner, as for example larger than, harder than, or more beautiful than. In the adult, particularly the educated adult, thinking in terms of abstract dimensions becomes more or less natural.

There are dimensional models, which are most widely applied in mathematics and the physical sciences. The second type of model is hierarchical model, in which there is a parallel development in the recognition of classes and of classes within classes. This type of model has been strongly advocated for an encompassing theory of intellectual abilities and other traits of personality.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is now recognised as one of the major scientific endeavours of the twentieth century. In the last decade, there has been an extraordinary growth in the practical application of AI to many fields : expert systems in industry, natural language understanding systems, robotics and so on. This growth has been fuelled by unprecedented support from American, European and Japanese governments.

AI is the science of designing computers to do things which would be considered intelligent if done by people. It can solve the problems in all the areas including education. Like all other new fields, Intelligent Computer Aided Instructions (ICAI) is both derivative and innovative. On the one hand, ICAI researchers bring with them or adopt theories and methodologies from associated disciplines such as psychology and computer science. On the other hand, ICAI is innovative in that it contributes ideas back to associated disciplines and also-as it must if it is to justify its own label - generates research guessflow

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of its own.

Intelligent machines are often referred to as self-organizing systems. In the strict sense of the words, such machines cannot exist since they would have to operate without external motivation of any kind. However, if external motivation is allowed, so that the system can be provided with criteria with which to evaluate its response, learning can occur.

REFERENCE

1. R. Gene and Howes : The concise Dictionary of Education (Van Nostrand Reinhold Company Inc., New York, 1982.) pp.119-120.
2. Sunila Sharma and : Dictionary of Psychology (Anmol R. B. Bhatia (Eds.) Publication, New Delhi, 1989.) p.139.
3. C. Burt : "The Evidence for the Concept of Intelligence" The British Journal of Educational Psychology, 1958, p.160.
4. J. P. Guilford : The Nature of Human Intelligence (McGraw Hill Book Co. Inc., New York, 1967.) p.12.
5. R. Printer : Intelligence Testing : Methods and Results (Henry Hold & Company New York, 1957.) p.47.
5. J. P. Guilford : Op.cit, p.12.
6. J. H. Shah : Quoted in "Adaptation of the Stanford Binet Intelligence Scale (1960 Revision) for Gujarati population" {Unpublished Thesis, Gujarat University, 1971.) p.44.
7. Rex Knight : Intelligence and Intelligence Tests (Methuen & Company Ltd., 1956.) p.22.
8. Quinn McNemar : "Lost; Our Intelligence ? Why ?" American Psychologists, XIX, 12, p.871.
9. G. D. Stoddard : The Meaning of Intelligence (The McMillan and Co., New York, 1956.) p.4.
10. F. S. Freeman : Theory and Practice of Psychological Testing (Oxford and IBH Publishing Co., New Delhi, 1968.) p.152.

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