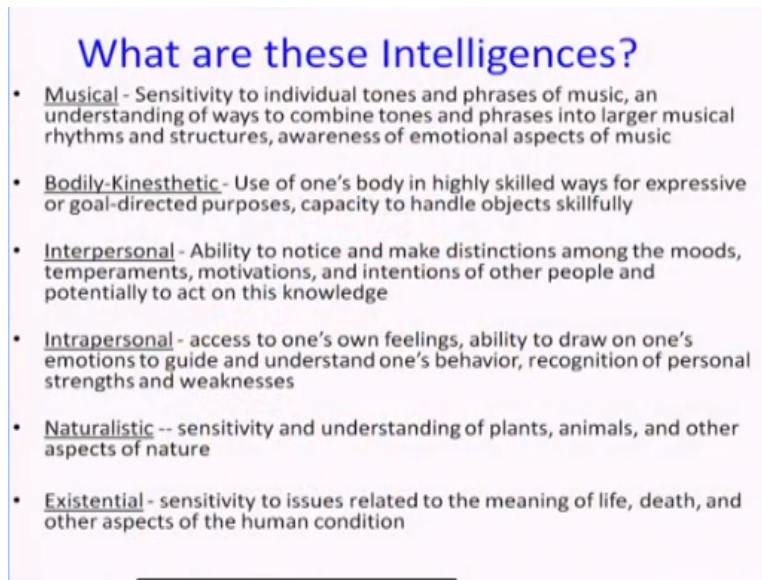


Emotional Intelligence
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Module No # 2
Lecture No # 06
Meaning, Nature, Scope, Types of Intelligence

Well welcome back we are discussing about what are these intelligence different types of intelligence we discussed musical intelligence bodily kinesthetic abilities the two important intellectual ability that was introduced in the domain of multiple in the framework of multiple theory of intelligence that is interpersonal and intrapersonal and this two are very important to be discussed in the context of emotional intelligence.

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What are these Intelligences?

- **Musical** - Sensitivity to individual tones and phrases of music, an understanding of ways to combine tones and phrases into larger musical rhythms and structures, awareness of emotional aspects of music
- **Bodily-Kinesthetic** - Use of one's body in highly skilled ways for expressive or goal-directed purposes, capacity to handle objects skillfully
- **Interpersonal** - Ability to notice and make distinctions among the moods, temperaments, motivations, and intentions of other people and potentially to act on this knowledge
- **Intrapersonal** - access to one's own feelings, ability to draw on one's emotions to guide and understand one's behavior, recognition of personal strengths and weaknesses
- **Naturalistic** -- sensitivity and understanding of plants, animals, and other aspects of nature
- **Existential** - sensitivity to issues related to the meaning of life, death, and other aspects of the human condition

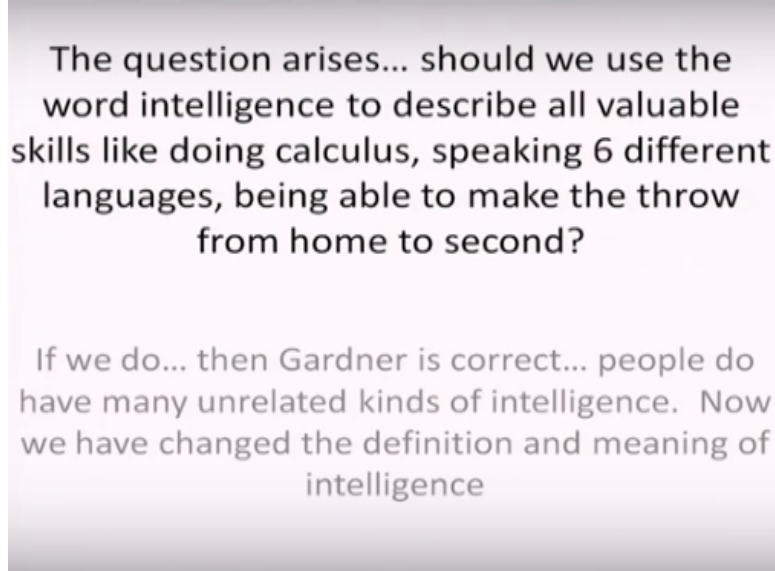
Interpersonal intelligence refers to one's ability to notice and make distinction among the moods temperaments motivations intentions of other people potentially to act on this knowledge as a whole it refers to one's self understanding and self-management which Goldman's and many other theorists of mixed model of emotional intelligence than passages and the importance the self is more related to the concept what we call managing self-knowing our own feelings etc..

But interpersonal ability always empowers a person to know about others neighbor others reactions intentions people around a person in terms of naturalistic intelligence there are people

who have got natural abilities like they are very sensitive to understanding of plants animals and other aspects of nature's.

So a people those who are fond of nature are they have the natural ability to make a good understanding of the nature that is prevailing around them. And there are people who are also good at n sensing the issues related to the meaning of life death and other aspects of the human conditions these are called otherwise the existence of abilities.

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The question arises... should we use the word intelligence to describe all valuable skills like doing calculus, speaking 6 different languages, being able to make the throw from home to second?

If we do... then Gardner is correct... people do have many unrelated kinds of intelligence. Now we have changed the definition and meaning of intelligence

However the question arises should we use the word intelligence to describe all variable skills like calculus speaking six different languages being able to make the true from home to second. So these are certain questions remain on some unanswered but if we do then gardener is correct that there is not a single ability. There are multiple ability people do have many unrelated kinds of intelligence now we have change the definitions and meaning of intelligence.

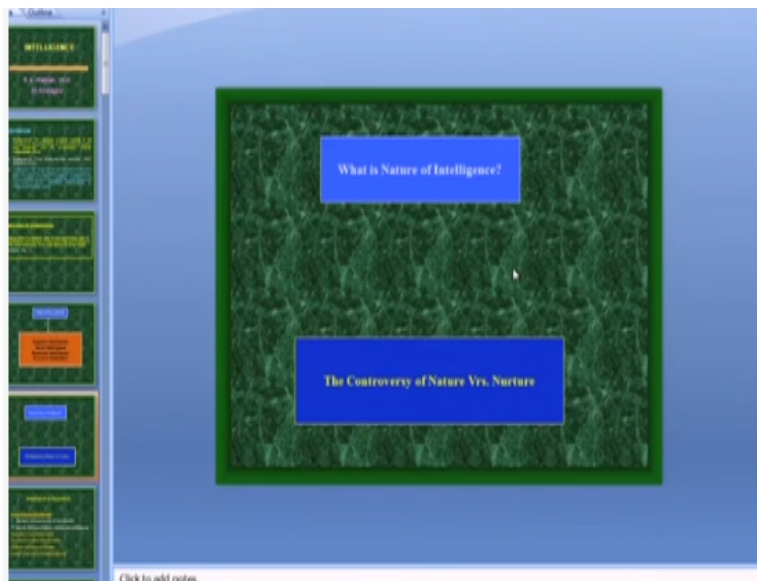
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Gardener's theory has prompted researchers to begin examining other nontraditional aspects of intelligence

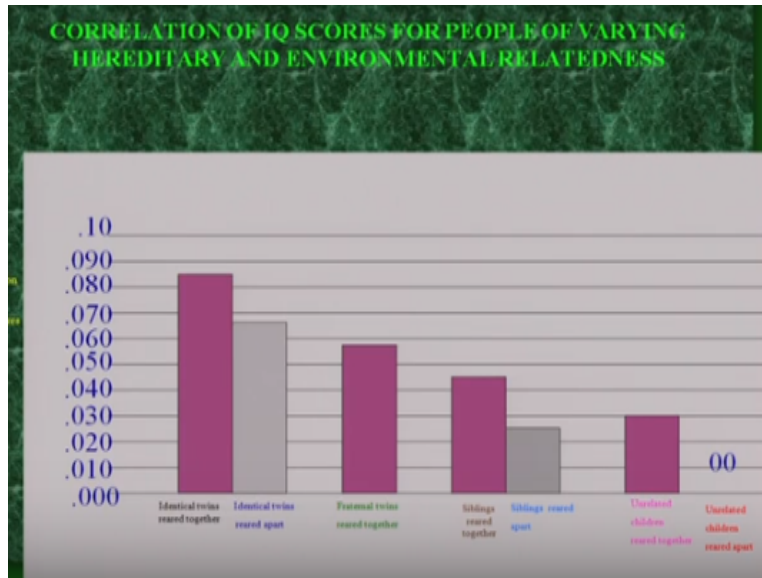
The best known is emotional intelligence

Gardener's theory has prompted researcher to begin and examining other non-traditional aspects of intelligence what we call emotional intelligence. But the concept of intelligence whether it is traditional or untraditional the development of intellectual ability depends on to important principles as earlier we also discuss or try to highlight them the importance of nature and nutshell. So the nature is referring to the heredity aspects and the nature referring to the environmental influences.

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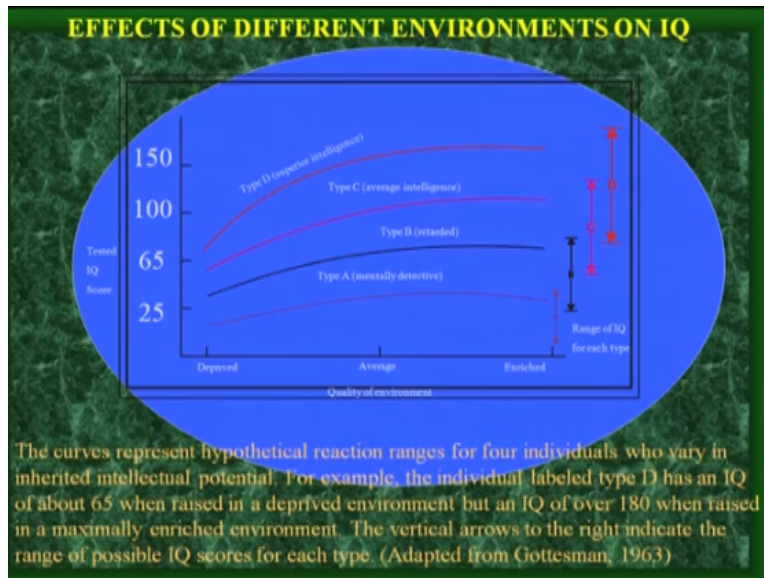
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So how these two has impacted let us have a look at the study that has these are two studies that shows the influence of heredity and environment from this study this diagram shows that correlations of IQ scores for people of varying heredity and environmental related ness.

If we look at the two colors of this histograms that represents the identical twins reared together and identical towards its rear apart. So that means when even they are psychologically similar in their biological makeup the still react differently they still behave differently their intellectual profile their IQ scores are different. So this shows that even if your hereditary genetic makeups are same environment plays a very important role. But in case of others also like siblings react together also shows the similar kind of factors unrelated like children reacted together that the emphasize the role of biological factors.

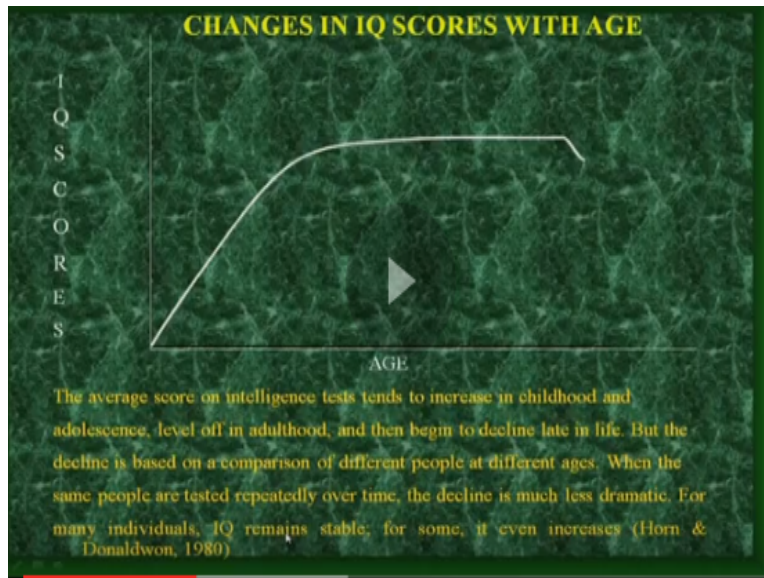
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In other studies in the effect of different environment and moment on IQ it also shows like IQ score compared with the quality of environment then in order to study the influence of environment in more clear way you cannot serve three different child in three different environment.

You will find their IQ score found to be very different so you can easily see here the differences in their IQ scores the type D people they show superior intelligence the type C shows average intelligence. Type B shows resource retarded and type an mentally defective. So this is how it shows people those who are from deprived atmosphere are likely to suffer more of psychological diseases or mentally deficiencies they are liable to suffer.

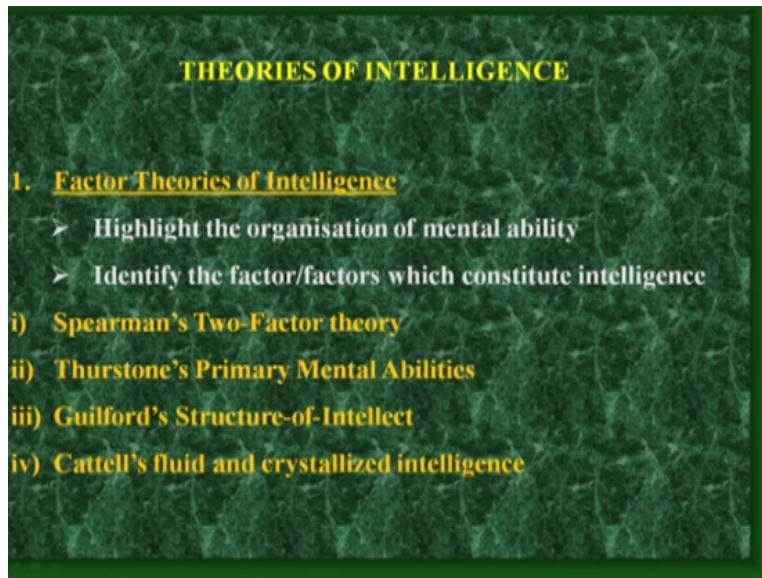
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So coming back to another thing like changes in IQ scores with age this has been also pointed out in many other studies age has also a big difference big influence on the intellectual development of a person starting from a childhood if the study shows that the average scores in intelligence test tends to increase in childhood or adolescence level of in adulthood and then being to decline late in life.

But that is based on the comparison of different people at different ages. When the same people were tested repeatedly over time the decline is much less dramatic. For many individual IQ remains stable for some it even increases this is the study conducted by Horn & Donaldson. Now going into different theories so it is important why because it is very important to know what is the principles behind the intellectual development of a person's.

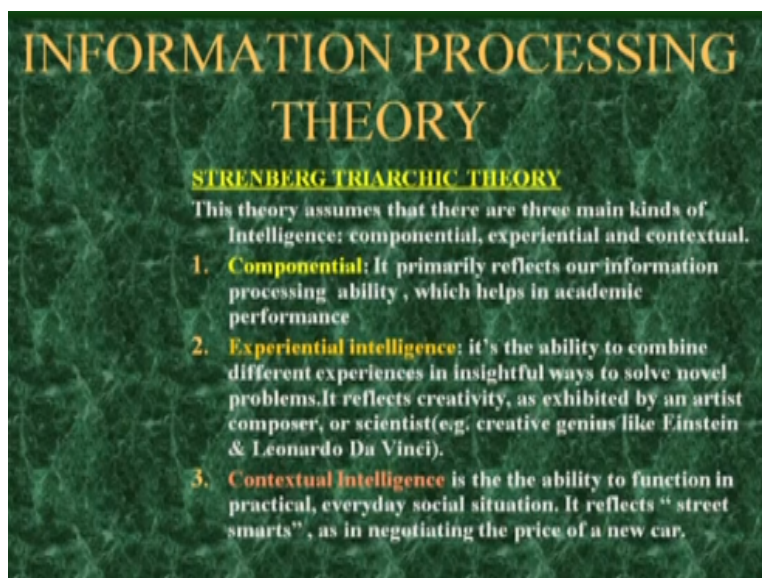
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In a nutshell we describe that the psychometric theories helps us to understand the organ the factors that are responsible for once intellectual domain but is that only we can categorize people based on the different factor or different type of intelligence or that is not enough to talk about human intelligence.

I think that is not enough we must also highlight there are the different processes that are involved in making a person intelligent. So there are some process theories they are equally important that highlight the organizations of mental ability let us have a look at those factors they talk about the processing we call it the process oriented theory .

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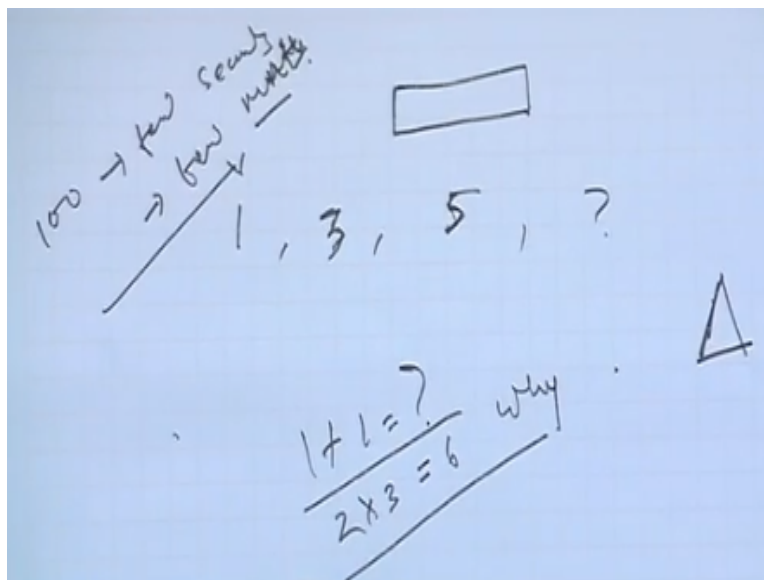


Let begin with the information processing theory what we discussed in our earlier class that Steinberg come up with three important dimension of human intelligence he said that componential.

It is primarily reflects our information processing ability how quickly we process information and recover it from our storage which helps in academic performance but that is not enough there are many abilities we do not learn but we develop through our exposure and experiences what we call is the ability to combine different experiences in insightful ways to solve noble problems.

It reflects creativity it also helps in exhibiting an artistic composers, scientific temperament, scientific skills, which are reflected in terms of creative genius like Einstein, Leonardo Da Vinci etc., We have also seen this kind of abilities being reflected in the acts of artist or painters.

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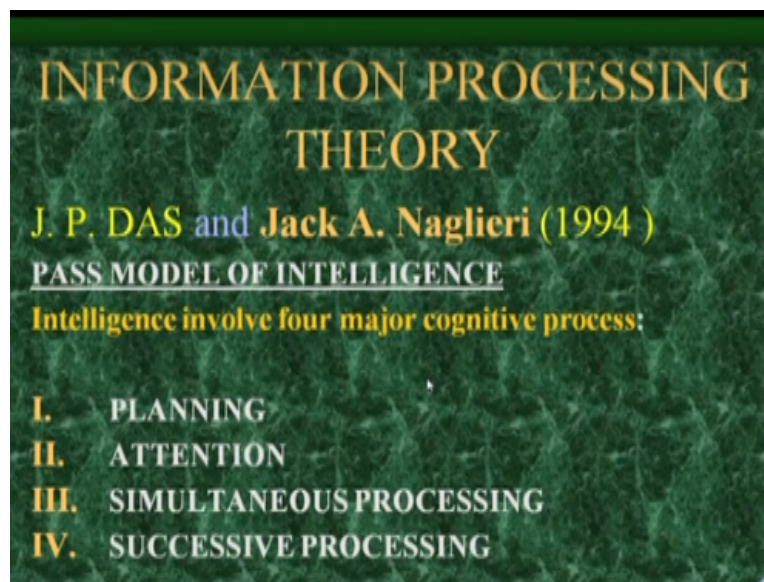


There is one more type of intelligence that was classified or developed by Robert Sternberg in his theory of tier theory of intelligence Robert Sternberg talks about also contextual intelligence it is the ability to function in a practical way everyday situations it reflects the street smart as in negotiating the price of a new car you have never bought any car but you do not have any idea and you still bargain.

When you are buying a house you know them we do not know the exact price of the market but how you go on negotiating and reaching at a better rent these are some of the abilities that people display during their everyday dealings by finding clues from their experience which help them to solve the practical problems say of examples like say for suppose you are walking on the road suddenly you saw a snakes just opposite to you standing in front of you and how do you react to that situations does it require do you have any ability to deal with the snake?

Although we do not have any bookish knowledge say for example we have seen the snakes have been caught by snake caugther or (()) (11:06) etc. Then we try to apply those kinds of skills so that is how their certain abilities we gain through our practical experiences and we reflect in our practical behavior while dealing with practical problems.

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But there is one more important theory that was given by JP Das and Jack A Naglieri two famous Canadian psychologists who were working on neuropsychological model of intelligence they come up with a very important theory what we call pass model of the past theory of intelligence. This past theory emphasizes on planning, attention, simultaneous and successive processing.

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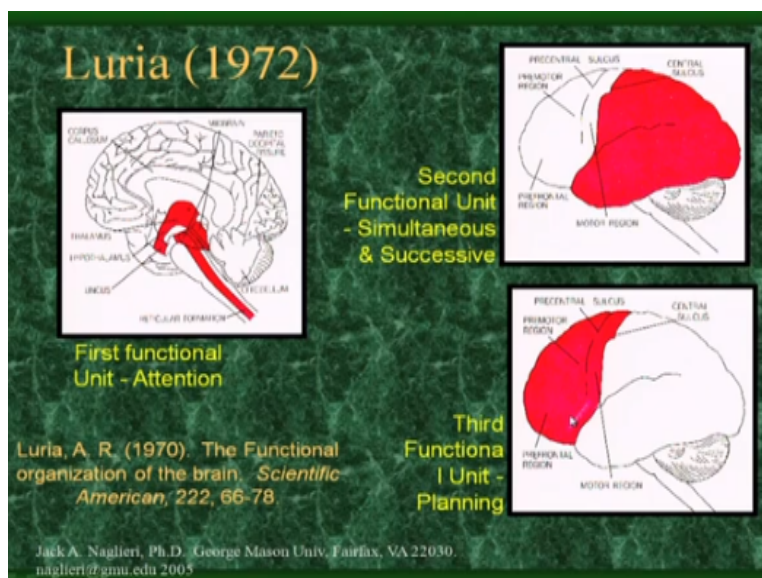
PASS Theory & CAS

- Human cognitive functioning includes:
 - **Planning** - The *how to*, cognitive control, use of processes and knowledge, intentionality (Luria's Third functional unit)
 - **Attention** - focused cognitive activity and resistance to distraction (First unit)
 - **Simultaneous & Successive** - two forms of processing information (Second unit)

What are these theories are what are these theoretical concept and what they highlight so these process are nothing but the human cognitive functional zones such as planning. Planning refers to the how way how we performs from certain cognitive task, cognitive control use of process knowledge intentionality. So these are refers to Luria's another feature psychologist from Russia.

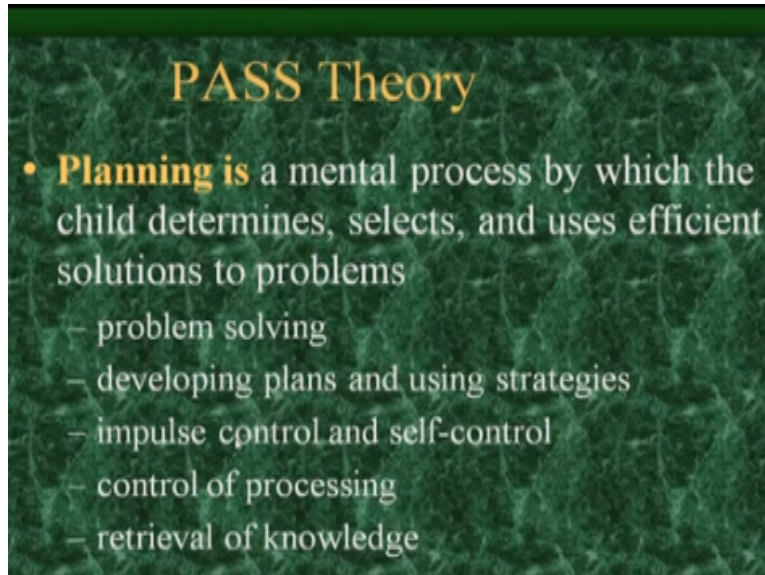
Who identified different functional zones in human brains they are responsible for our cognitive functions or intellectual functions. Attention refers to cognitive activity that is focused and resistance to distraction this refers to Luria's first unity simultaneous and successive is the two form of processing information that refers to the second unit of Luria's.

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The functional organization of the brain this article was published in scientific Americans in nineteen seventies were Luria tried to identify different cognitive functions the how they are related to different areas brain areas. So this is called attention is the first functional zones and this is the second functional zones where the simultaneous and successive processing takes place.

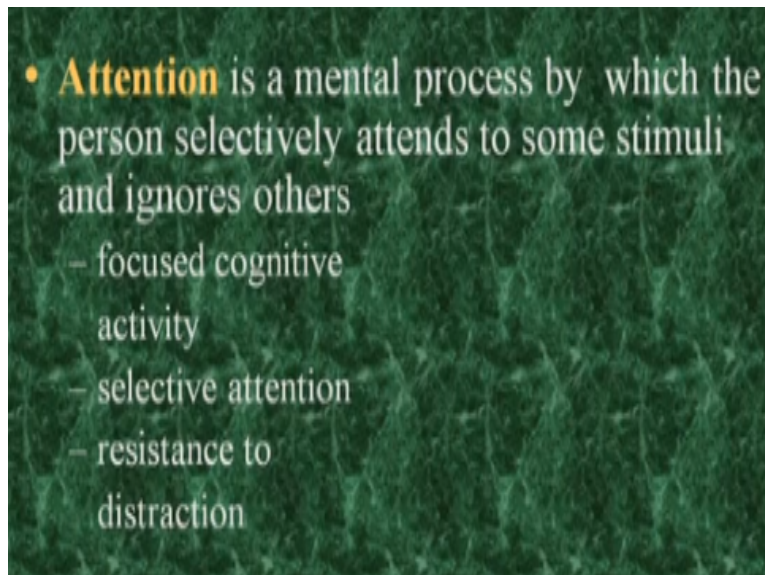
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And this is the third functional unit the responsible of funny mostly this three central areas. The past theory emphasis on the concept of planning which is a mental process that is by which the child determines selects and use efficient solutions to his or her problem say for examples it helps in problem solving developing plans using strategies impulse controls, self-control, control of processing and retrieval of knowledge. So these are some of the benefits that has been outlined by Naglieri who works at a jobs jones mansion university

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He also talks the attention? important it of our mental person



about the benefits of functional zone of Attention is very is important domain mental activity is a process where a selectively attends

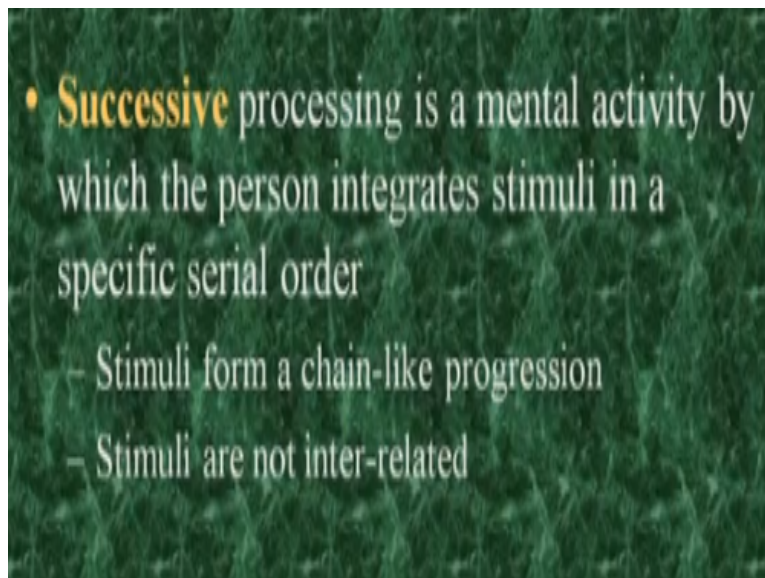
to some stimuli and ignores others. It is also very important in terms of our memory why do we selectively memorize certain actions or objects while we ignore others. So that is why the attention plays a very important role in the process of our concentration, memory, learning etc.

So that is why it is known as focus precognitive activity selective attention resistance to distractions. So that is why more focus has been put on the concept of attention. Simultaneous processing is a mental activity by which the child integrates stimuli into groups. The stimuli as seen in whole each piece much related to each other like when we when we look at a person.

We do not perceive when you ask how is the person we do not just say that yes he is beautiful or he his sorry he his handsome or he is beautiful. We often say he is a nice person when you say when he is nice person it takes all of his abilities into analysis and then we draw conclusions. So this is exactly applies to hmm the learning theory the whole versus part learning theories.

We do not understand people's abilities are intellectual profiles just in terms of one entity or specific abilities. We take all the abilities available with the person then we decide how capable is the person?

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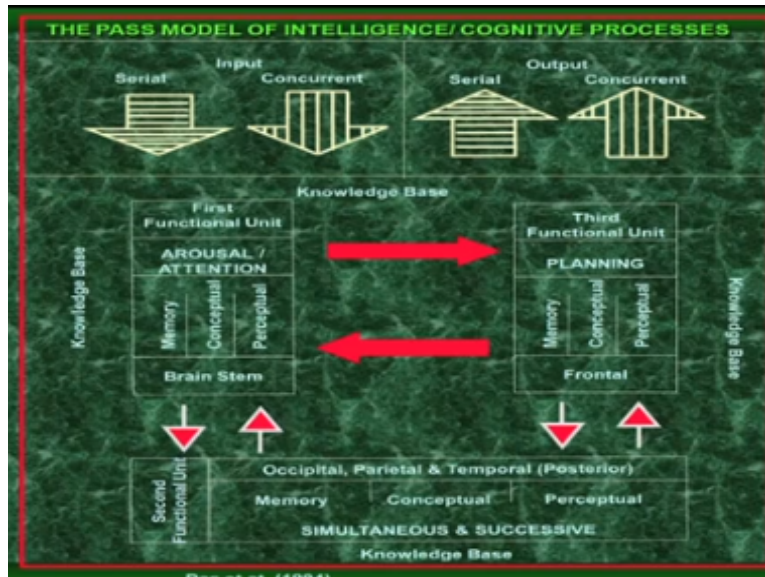


Then successive processing is also equally important because most of learning wrote memories are done on these basis processing it is a mental source activity by which a person integrates

stimuli in a specific serial orders. Many times we want to remember certain things or certain numbers on the basis of serial.

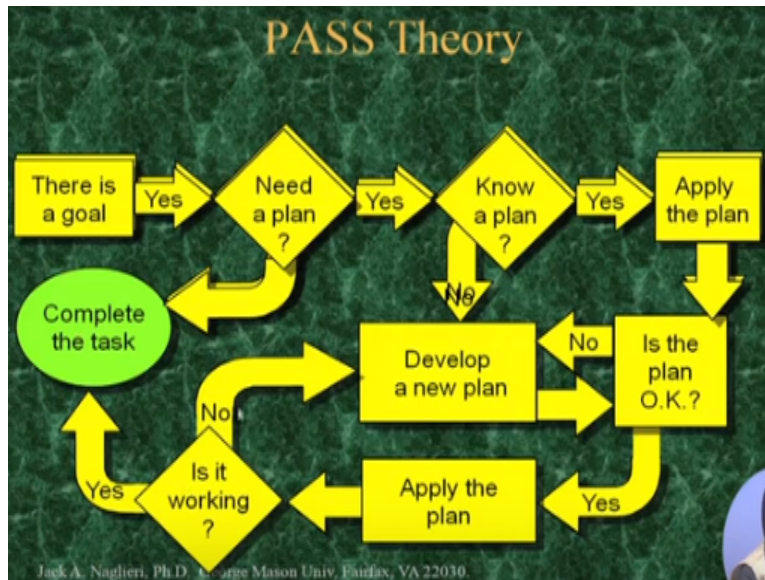
So that is why say for example we can quickly learn, our leaning is faster when it is successive because you can remember numbers faster and better way from increasing order or decreasing order. So why because it facilitates the memory processes the stimuli form a chain like progression you expect that yes two comes two comes after one three becomes after two so there is a natural expectation it is a chain like events stimuli are not inter related but we remember them in an order.

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This shows the whole pass theory of intelligence and these are different zones. This is the first zone the arousal attention and this is the second functional zone simultaneous and successive processing this is the third functional zone what is you call pump planning and all this process they interact with each other's.

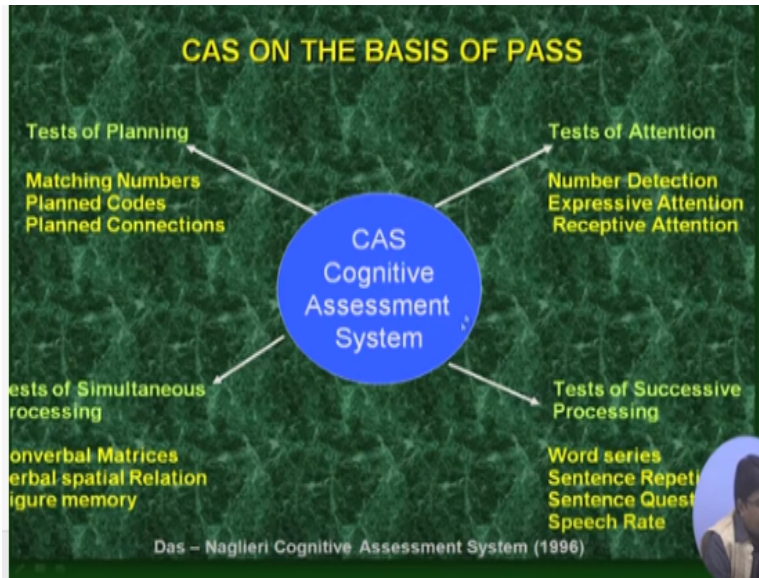
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This process will be more clear if we look at this models. Since here you what happens you are receiving and any information from outside. So suppose if you feel that is a goal yes you perceive there is a goal and for that goal you need a plan. Okay if you need a plan then you complete task then it goes to know the plan.

If yes apply the plan if no then develop then plan and if that if you apply the plan then is that plan ok no then again go back and develop a plan. So this is how the whole the all three functional zones they interact with each other's now if the plan is ok then apply the plan. When you apply the plan is it working yes if it is working then it is complete, if it is not working again you go back and develop a new plan. So this is exactly this is the theory they interact with each other's and final this is the output that comes up in terms of your intellectual activity.

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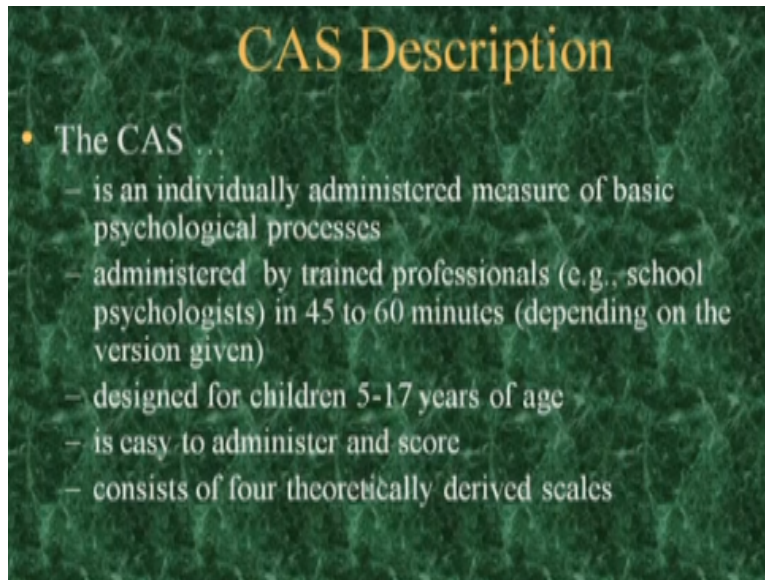
Well this CAS test it is developed based on pass theory this is known as cognitive assessment system developed by DAS and Negileri in nineteen ninety six is now worldwide very popular. It measures for important domains like you just discuss, planning, simultaneous and successive planning function is measured in terms of three important test one is called matching numbers plan codes plan connection.

Okay and the second is attention is the number detections say for example there is a series of number in between one number is missing or in between one number is repeated. When the tester asked how many the number is missing or how many times the number is repeated then there is another test called expressive attention then receptive attention.

Then the simultaneous processed are measured in terms of nonverbal mattresses. So a small portion of the entire matrixes say for example is missing and that missing figure is followed by five six alternatives and the subject is asked to find out the correct (()) (20:29) if that is pasted on the missing figure that will complete the matrix.

So that is how the simultaneous process is a processing abilities measure. Then we have a test of successive processing so this is also measured in terms of odd series, sentence repetition, sentence questions and peace rate.

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This CAS test description in fact is an individually administered measure of basic psychological processes it is administered by trend processionals supply school psychologist even counseling psychologist it takes around forty five to sixty minutes depending upon the person given. It is designed for people or students from fifth to seventeen years of age. It is easy to administrate and score it consists of four theoretically derived scales.

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However this is the whole tool kit of cash the cognitive assessment systems one can think of buying for their personal consumptions or even institutions and departments they can think of buying for the libraries that could be useful for assessing student's intellectual profile.

It will be also help for it is very helpful for counseling centers particularly for assessment of their cognitive abilities of the school going students. Okay the major focus of the information processing was on the different areas that are responsible for what you said processing information's. In information processing theories and there are certain areas which get affected with the increase in age.

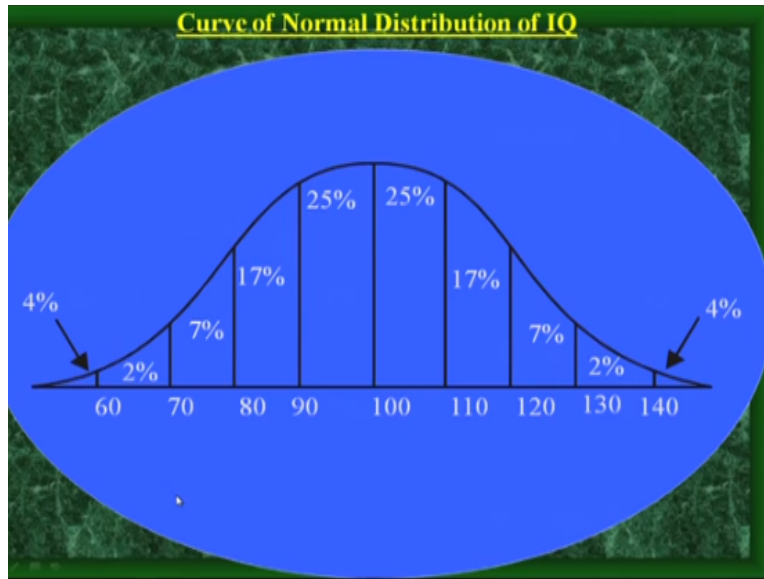
Say for example certain memory earliest findings was that short term only last for fifteen to twenty seconds but although the trend is changing now a days this certain memories are otherwise known as the working memories it is likely to be affected by the information processing ability. If it is not maintained properly it is the ability to hold and organize materials in a short term memory basis.

Processing of seedy also generally showing all the mental processes when we grow on our age human beings usually like it to rule lose the pace of processing information's. Even their reaction ability also goes down the organization of events, objects, sequence of events they also gets effected then conservatism less likely to abandon and old hypothesis in favor of a new one it even often happens with people those who have high level of cognitive rigidity but over a period of time when you are habituated with a particular mode of behavior you do not like to change that.

So that is get affected when you try to come across new findings new events and very often I used to see in terms of doctors you know, in very recently I met a orthopedic specialist when I met an accident and that doctor is known to be very classic doctor you know what is mean by classic doctor who believes in the classical treatment procedures this is know all this do not believe in any unnecessary putting the patients on an economic burden asking him to go for MM , MRI or FMRI or CT scans a simple x-rays enough for my treatments.

But today's modern orthopedicians they say know diagnosis is very much important. So they do not much rely on their experiences they more rely on their recent advances that is where this is going to affect our intellectual domain when we grow on our age.

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Well this is very important to discuss in the framework of intelligence when you talk about the concept of IQ and this is how the IQ has been distributed. If you look at this normal distribution you know measured of the population is concentrated on the middle of the cause. So it itself show that it means that intelligence is normally distributed.

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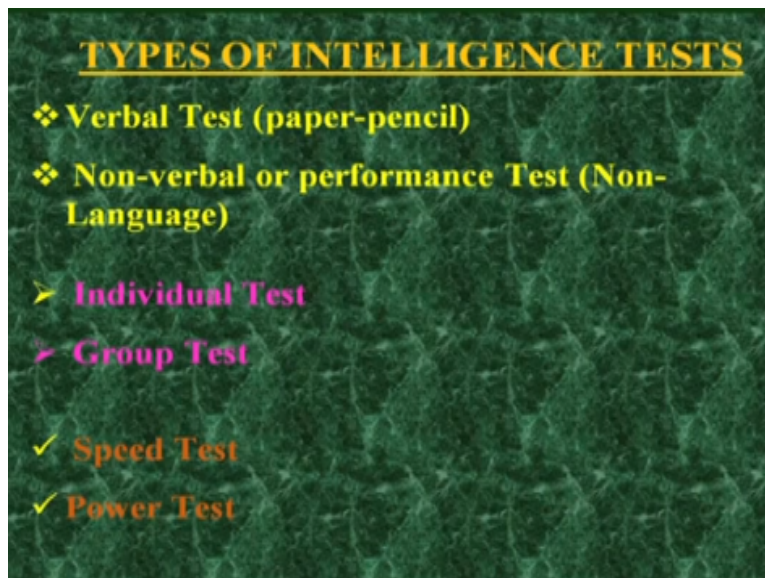
IQ	Verbal Description	% of Adult Population
130 or Above	Very Superior	2.2
120-129	Superior	6.7
110-119	Bright	16.1
90-109	Average	50.0
80-89	Dull Normal	16.1
70-79	Borderline	6.7
Below 70	Mentally Retarded	2.2

Yeah this is what you call a classification of IQ scores and the verbal description of that level our general populations you know you will find people mentally retired people 2.2 percent, the borderline person 6.7, percent dull normal 16.1, average fifty percent zero.

You know bright people will find in the general population around 16.1 percent superior are close to 6.7 percent and very superior what we call exceptionally intelligent or the gifted people are closely around 2.2 populations. So that is why it is quite natural to see varieties of people in our societies. All are not highly intelligent all are not highly dull people, all are not dull people and all are not creative people.

So that is the beauty of distribution of intelligence that gives impression about different abilities that is present within human beings. So I would like to bring some examples how intelligence is what are the different techniques those are used for the evaluation of human intelligence.

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Well basically if you look into the domains of measurement there are varieties of tests available one is called verbal test like paper pencil test questions are prepared and students are asked to answer those questions.

Certain questions are nonverbal in measure like matrices or you can look on look at it in the wooden block test like where you give them some activity mental activity say for examples you give them some wooden blocks and so a designs an you ask them to prepare a particular design by the help of the wooden blocks available that shows how quickly they complete the designs that shows the level of their intellectual abilities ok. We will take a small break then we will come back thank you.