

Emotional Intelligence
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Module No # 1
Lecture No # 2

Introduction to Emotional Intelligence and Related Concepts (Contd.)

Well welcome back to the concept of intelligence as you all know that intelligence has been defined in numerous ways by physiologist. However one of the most widely accepted definition intelligence is given by David Weschler intelligence is talks about intelligence is that it is the aggregate or the global capacity of an individual to act purposefully think rationally and deal effectively with his environment his or her environment.

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INTELLIGENCE

Intelligence is “the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment.”
DAVID WESCHLER, 1975)

Intelligence is “What intelligence test measures”
(E.G. BORING, 1923)

Intelligence is the “Capacity for goal directed and adaptive behaviour; involving the abilities to profit from experience, solve problems, reason and successfully meet challenges and achieve goals.”
(ROBERT STERNBERG & WILLIAM SALTER, 1982)

So why I call this is one of the comprehensive definition because it has a wide range of coverage of human abilities first of all it focuses on it is the aggregate it is the overall capacity of an individual you cannot say that a person is good in computer is likely to be good in humanities not necessarily. So the human ability the whole range of human abilities is very difficult to put them in a single framework so therefore people call it is the aggregate of ones abilities.

Second is to act purposefully it is a kind of ability that has a purpose so that is why psychologist say all behavior are goal oriented. So whatever we do every act has and has a goal has a purpose

right then think rationally intelligence think rationally means what do you mean by rationality? When you call somebody is thinking rationally logically yes when you bring little bit logic to a thought processes to your think processes you call it as a logical thinking.

So why you call it as a logical thinking because, it is systematic because it deals with facts and figures. We can calculate it we can prove it you can disprove it, so any facts and figures based on our arguments is proved to be valid or invalid is called a logical thinking. So that is why we call any systematic thinking any logical thinking is related to intelligence and to deal with his or her environment. So what do you mean by dealing effectively with the environment.

So when you call that your behavior is effective why environment is important for human behavior because human behavior does not exist in isolation. So the context is more important than your content content is invalid is meaningless unless there is a context. So whatever you are saying whatever you are talking whatever you are arguing does it has a context otherwise people say what rubbish are you taking this all are meaningless.

So contextually your thinking should be appropriate. So that is why suppose you are discussing about intelligence you should talk about intelligence do not talk about politics then people will say what nonsense are you talking. So that is why human behavior is interpreted always in the context of any kind of environment any kind of context so that is why this are three important characteristics it is a global capacity it is a purposeful act it is rational and it is effective because it is in the context of particular environment.

But although it is a very comprehensive definition it covers a wide range of human abilities but it is very difficult to design a test that could capture global capacity is such a thing that is endless but can we capture somebody's global capacity in one framework is very difficult. So that is why some people say it is not feasible but although David Weschler has tried to develop an adults intelligence test.

But still the same test is not able to tap the actual global capacities because East is different than west distant prospective of intelligence is different from western prospective. So then people

started believing on the intelligence test or intelligence conceptualization given by E G Boring although it is older than Weschler's. Why people accepted it more because every test as its own limitation. So therefore your intelligence is what your intelligence test measures although it looks very simple but it's with high morals.

Why because you go for any intelligence test that will give you one impression about your intellectual profile. So that means it gives you two things it gives you the current status of your intelligence and on the basis of that you can say yes this person is good in science or good in analytical ability he is going to be better or to explore to excel in this areas so therefore you are talking about two things present as well as future.

So that is why people say intelligence is what intelligence test measures but actual intelligence is much more than this then another physiologist like Robert Sternberg and William salter they define intelligence is the capacity for goal directed and adoptive behavior involving the abilities to profit from experience solve problems reason and successfully meet challenges and achieve goals.

So this is little more complex than the earlier definitions because it covers a wide range of domains such as it is a goal directed it is adaptive anybody who is intelligent can adopt to any situations because you believe that an intelligent person is he or she who adapt ask for the demands of the situation that is why we always believe in the popular phrase that behave like a Roman when you are in Rome. So that exactly fits into the adaptability of persons.

Involving the abilities to profit from experience solve problems simply in simple term you can define intelligence is the ability to solve problems. It is the ability to profit from experience you have lot experience but if you cannot make use of it. Where is the benefit of that? Many people are so rich in their experience but very honest systematic that also make them that foolish although the man is highly experienced but is unable to express them in a systematic manner.

So That's systematic presentation is also is a sign of scientific ability what we call intelligence then reaching out if you are intelligent person you will be reasoned. What is that will be reason

you will be able to distinguish what is right what is wrong you will be able to differentiate what is correct what is incorrect. So That is how we establish a the relationship between weaker people and stronger people and that is where intelligence matters then if you are intelligent you can successful meet the challenges of the environment.

You can survive without food for five days ten days when you intelligent people are determined people. So but if you are not intelligent you do not know you it will be difficult for you to understand the complex situation of the any kind of environment. People say see I am a pure Hindu vegetarian how can I survive in a meat rich country like any western country you say about.

So that is when your thought process are regulated in this direction that is actually a sign of your foolishness. So that means you are finding difficulty to adapt to situations here the food is not important your goal is important you have come here to achievement of certain goals. So your energy should be regulated in those directions.

Intelligent soldier and unintelligent soldier you know during soldiers operation training operational effectiveness you are new soldier has been recruited to a different sectors, during training you will be dropped in middle of jungle you do not know where to go and they ask you ok you have two hours because this jungle is within a radius of five kilometers. So we are giving you two hours to reach our training camp that is all.

So like you will conduct a desert survival exercises you have restricted items for your survivals can you survive or not intelligent peoples survive we very well un intelligent people look for using here and there. So that is the difference between intelligent people and unintelligent people.

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INTELLIGENCE

- It refers to the range of behavior from dull to bright, slow-witted to quick-witted or stupid to clever.
- Highly intelligent presumably makes it easier to use words and numbers correctly, to remember substantial amounts of information and to reason out the solutions to problems of various kinds.
- The meaning of intelligence may vary from culture to culture.

Okay going forward I will examine more of the nature of intelligence that if you look into the nature and development of one's intellectual abilities there are two principle acts well very often we see nature and an archer.

Some people are biologically blessed with certain intelligence now scientists are discovering the intelligence genes identifying so if you are processing certain intelligence you are intelligence genes you are likely to be intelligent just like you know the son of the king will become the king so that is called intelligence by heredity but most of our intelligence is an archer by environment the environment when we say environment your school your home your all educational system training exposure etc.

So it starts with our family so that is why we often call family is the first school of children to build up the intelligence profile highly intelligent presumably makes it easier to use words and numbers correctly so that is also you know in earlier times if you look into the domain of IQ we are going to discuss in details about that initially this test was developed to examine the reasoning ability of student. But can we apply IQ test for a graduate student for a post graduate student then how far you go and mapping their intellectual profile.

We will discuss about that when you talk about the different measurement aspects of intelligence the meaning of intelligence may vary from culture to culture that is what you know the East

differs from the West in the sense that we believe in an integral intelligence but they believe in systematic and cognitive intelligence so therefore the concept of buddhi in Indian settings is much more wider and broader than the concept of intelligence in western setups.

So that is where our culture matters in western setups the reason and logical part has been emphasized on to prove the concept of intelligence whether you are likely to be intelligent person or not but here we go beyond proving something it is realization sometimes if you are intelligent person you will be able to realize the consequence of certain activities.

But in western concepts they only realize after testing the consequence of activities that is the difference between so that is why more of the things in eastern settings remains the perceptual level where most of the things are proved at the action level in western concepts.

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Types of INTELLIGENCE

- COGNITIVE
- SOCIAL
- EMOTIONAL
- PRACTICAL
- ARTIFICIAL

Ok there are N number of type of intelligence or intellectual abilities available we can say but to be very brave I have just noted down here five kinds of intellectual abilities such as cognitive what you say which is heavily based on your logical abilities systematic abilities social abilities the ability to dilute people. How you are dealing with people in social situations?

Many people are very intelligent cognitively technically very sound but if you want them okay can you present your ideas in front of ten people or twenty people they start shaking you cannot

imagine that is why we got they have lot of tremendous stage fears they will say no sir can you ask it somebody somebody else to present my ideas that is where they fail in their social intelligence you have already tested in many high many ITians they are failed to be effective managers.

Why because they are technically very sound but their social emotional intelligence is very low and that need to be not sure. I will show you one video clips maybe today or tomorrow that will signify the importance of emotional intelligence in our educational curriculum. We have training system to analyze somebody intellectual abilities. We impart training to enhance technical skills but there is no such training or educational curriculum till date that will enhance the emotional intelligence of any children.

And that is why for last couple of years lot of discussion is going on emotional intelligence starting from school education to higher education till the work place then we come to the practical intelligence what is that is that something like practical beyond theory does any ability exist this yes this is something that no book is require to get gain this knowledge this is something we gather from our experiences. This is something we not sure through exposure this is something you can exercises out of your experience and intuitions.

Right so that is why the when you talk about emotional intelligence, emotional always attributed to our heart and intelligence is always attributed to our head. So that is why people often say that when we take any kind of decision in our daily life there is a huge conflict between our head and heart. And this head is referred to our hardware and heart is referred to our software. So emotional intelligence is just like that this is a combination of human hardware and software. The hardware cannot work without software and software cannot function without systematic hardware.

We are going to connect this two and see their effectiveness in human life when you discuss about emotional intelligence well before going further let me tell you that is something artificial intelligence this is upon seen in computer science results a preplanned program preprogrammed

software you have developed a software it will only follow certain paths certain procedures to solve a problems but the difference between human minds and computer is that.

There are two processing systems available in human mind or human computer simultaneous and successive but for long time you have been seen computers or less follows successive processing. So because it is systematic what is systematic it is step by step so you cannot have successive person but see but now this scientist are also exploring the possibility of self-simultaneous processing may be very soon they will develop some new software that will solve this problems.

So in a nutshell these are the five aspects of human intelligence but there are many other intelligence like a there are many other specific in mechanical intelligence visual abilities we often say that. Somebody you know recently a movie was valued movie was very much hitting a valued sectors would call Drishyam. So do you know the importance of this concept this is also based on intelligence that these highlights this movie Drishyam where Ajay Devgan plays a very important role leading role.

It highlights the importance of visual memory in human actions and sees how he is changing all these stories all across among all these actor and actresses by giving them press and visual images into their minds. So that their memory remains intact showing them the tickets the other attributes of the sequence of evidence describing them every day. So that means the memory will always remain for us so that whenever require then can recover it very faster but actual such things did not happen but it is happen in such way it was planned.

So that is why we often say the visual memory as more or better remember than audited memories there are many other experiments also available classic experiments have been conducted what you have observe in your eyes will be better remember than what you hear and remember through your ears. Crystallized intelligence and prudent this are two kinds of intelligence given by cattle.

Crystallized intelligence are always in a momentary shapes they keep you moving here and there because the extent to which individual have incorporated the valued knowledge of their culture this is culturally influences that saves our intellectual abilities. So people often say that after certain limits our intelligence does not grow particularly people say that up to nineteen years the cognitive ability reaches at the peak and it remains almost same till forty years then it declines.

But actually all this concepts are related to only cognitive abilities you will be very surprised to know an old person think of about a lawyer he is so informative so logical even true things can be proved as false and false things could be proved as correct. How does it? If follows logical sequences it manipulates information but we often say that no older are less intelligent than younger people.

But why it happens so because there are certain abilities that gets richer and enriched over period of time your logical abilities augmented abilities may go down or reaction time may be very slow when you go for older age but you will be more informative more experienced the experiential knowledge will be higher but the componential knowledge will be lower.

So that is where the crystallized intelligence focuses on the contextual knowledge, a contextual abilities the fluid intelligence is called componential our intelligence consists of what our attention, perception, reaction, memory, learning all these things are involved in our cognitive abilities that is why we all say these are in fluid state and they used to vary and they reach at the peak why because these are fresh are the earlier years of life. You can run faster or you can react faster, you can grab faster, you can memorize faster.

So that is why they are intact but the moment you cross your teenagers our physiological systems get slows particularly after forty years that is why you often starts losing eyesight's after forty you know that is a popular it is it is age of taboo for physical deficiencies. After forty you will start losing your eye sight ear sight why because it is a natural decayed natural it is the stage of natural biological decay. So that is why our perception our sensation everything goes down.

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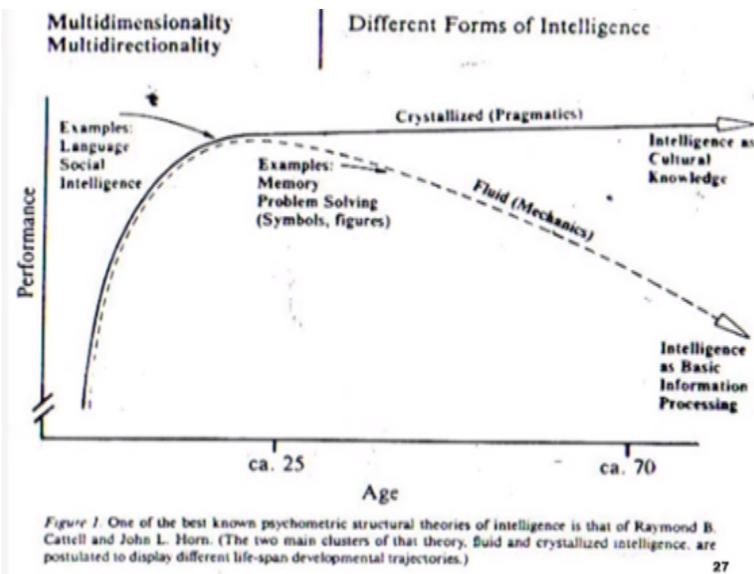
Intelligence and adult development

- The neofunctionalist approach – some intellectual decline may be seen with age but that stability and growth in mental function also can be seen across adulthood
 - Plasticity
 - Multidirectionality
 - Interindividual variability

Intelligence adult development intelligence it has been found that some intellectual decline may be seen with years but that stability and growth in mental functions also can be seen across adulthood particularly for plasticity multi directionality inter individual variability. Let us see what this concept are exactly that plasticity concept is that the range functioning with the individual and the condition under which person's abilities can be modified within a specific assurance.

A person who is more diverse in his approach in his experience in his expose will accommodate more will modify more of his abilities is more open to experiences. So it expands us the range of your abilities multi directionality you will be able to use your available intelligence in multi directions the distinct pattern of change in abilities over the life span with the change pattern being different for the different abilities. So when you gather multi type skills you will be able to solve multi problems so the development and applications of intelligence expansion in multifold.

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So these are some of the studies that shows the developmental decline of human intelligence initially you are high you this is your crystallized intelligence then fluid intelligence gradual goes down because after when you grow older after 40.

If I ask you can you memorize these things you will be no no, I cannot do this but you ask a twelve or fifteen year's old student it will take no time. So that is why our students are very good to do well in exam just before two days because they have got so powerful memory base they can digest you know unlimited information's but the same thing may not happen in the same way for the older person you will think thrice to digest so much information in short span of time.

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INTERINDIVIDUAL VARIABILITY

- Acknowledges that adults differ in the direction of their intellectual development

Another is called as inter individual variability it acknowledges that adults differ in the direction of their intellectual development because of individual difference and because of exposure. You are born and brought up in a different environment she is born and brought up in a so an experience opinions will vary from each other's a person who is brought up in a open ended climate is more likely to be open to experience know he is mentality will be much more wider.

But a person who is brought up in a restricted very closed environment will be very reserved will feel shy will feel hesitant to interact with others. So that is how the interval will take place yes when you talk about the measurement aspect of human intelligence we have seen.

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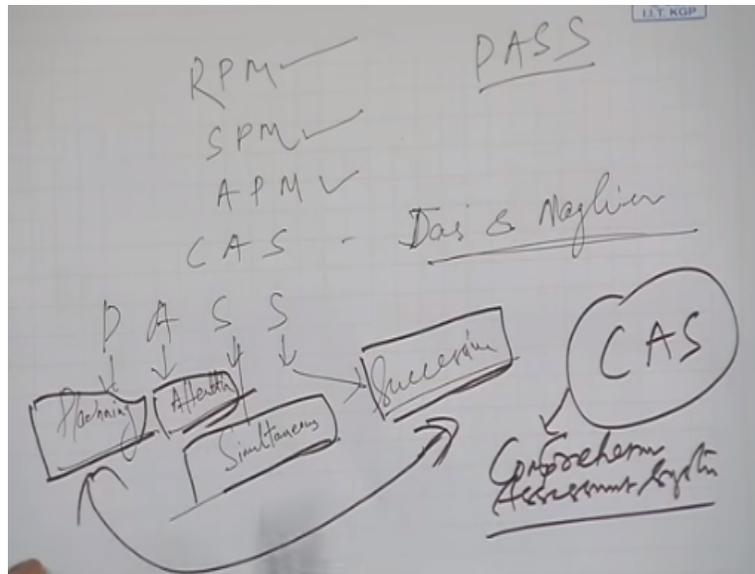
Measurement of adult intelligence

- **The psychometric approach**
 - measuring intelligence as performance on standardized test.
- **Weschler Adult Intelligence Scale (WAIS-R)**
 - **Wechsler, 1958**
 - This test consist of subtests with vocabulary, arithmetic, comprehension & similarities - tapping language & numerical skills
 - The remaining 5 subtests make up a performance scale - picture completion, picture arrangement, block design, object assembly, & digit symbol substitution.

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There are two approaches in physiological measurements ability based approach and characteristic based approach. However characteristic based approach are applicable for personality related measurements but factor ability relates are mostly based on psychometric approaches. We apply psychometric principles to quantify human abilities so some of the psychometric tools are verdict always less adult intelligence test you can also think of about like RPM SPM APM these are developed by these are called [raven's progressive matrices](#).

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RPM SPM standard progressive matrices this is called [Raven's progressive matrices](#) this is called standard progressive matrices that is another called APM [advance progressive matrices](#). So these are age wise restricted test that is applicable across different as limits apart from this there is a test called CAS developed by Das and Naglieri.

JP Das is one of the famous scientist in the field of intelligence has given a theory a pass model of intelligence you know this pass model called this is called planning this is called attention this is called simultaneous this is called successive. So these are the four domains this theory covers and this is based on the cognitive theory and this planning attention simultaneous and successive is our four important domains that covers the gamut of cognitive intelligence and this test is very popular across the world.

And it has been translated in more than ten languages and has been very popular even you can find it in French, Spanish, Japanese, Koreans, Chinese etc. However in India also it is very popular and this is also based on the psychometric principles apart from Robins provision this pass model this test is called CAS.

The CAS is nothing but what we call the comprehensive assessment system that profiles I think more than twenty domains and subdomains of cognitive abilities of a person. Now this apart from this there are many other tools are available that measures adult intelligence tests.

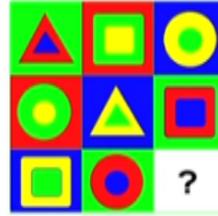
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■ The Intelligence Quotient (IQ) William Stern

- The first intelligence test were constructed solely for children and young adolescence.
- These test computed IQ by multiplying the ratio of mental age to chronological age by 100

$$IQ = MA/CA \times 100$$

- A child's mental age was measured by the number of items passed on the IQ test.



Well the if you look into the historical growth of the measurement of intelligence the first test the that was available in the world is called the IQ test this was into act and developed by the concept has developed by William stern.

But it was applied in school settings and the concept was more popular Alfred minute when he was asked by the French government to look into the intellectual profile of schools going children. Why some children are performing better than others and can we have different curriculums from different students because there are some students are poor some students are good and some students are brighter.

How to characterize students into different categories what should be the basis one best way to categorize students is called to assess the intellectual ability and put them into separate classes. So that is why a formula was developed that is called IQ, IQ called MA by CA, MA is mental age, CA is the chronological age and it is multiplied by hundred just to reduce the decimal points.

So a child's mental is what is measured by the number of items passed on the IQ test. Well there are many theories like content theories are there fractor theories are there process theory and

factor theory basically in factor theory you know we have G factor we have Thurstone seven primary mental abilities. We have Howard Gardner multiple theory of intelligence.

We have structure of intelligence given by Guildford that measures around I think in recently it has gone up to 180 factors right and there are information processing approach like Guildford, Peaget, Steinberg etc. So although there are numerous theories are exist will take of selective very few of them so that we can distinguish how they are different from each other and how they describe human abilities we will take a short break and then we will come back, thank you.