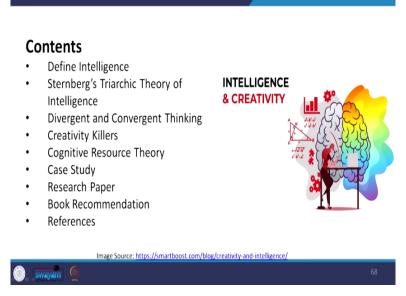
Leadership and Team Effectiveness Prof. Santosh Rangnekar Department of Management Studies Indian Institute of Technology – Roorkee

Lecture – 16 Intelligence and Leadership

So, whenever we are talking about these personality, personality traits in an individual, the, another important question comes in mind is what is about the intelligence and leadership. So, naturally, the personality plays an important role. And, according to the personality and personality traits, the leader can have the effective leadership also. He can create the team also and the team effectiveness also.

Now, here in the intelligence and creativity, whenever we are talking about the individual, first question arises, what is the intelligence? And, when we decide about the intelligence, then this intelligence will be taking care of.

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That is the different theories like this Sternberg's triarchic theory of intelligence, divergent and convergent thinking. So, people, there are so many perceptions are there about this divergent and convergent thinking that who will be the more creative who will be the more successful. Creativity killers are there. Cognitive resource theory and as result the case study research papers and the book recommendation will be there.

So, making this simple complicated is the common place. The, making the complicated simple awesomely simple that is the creativity is there.

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Making the simple complicated is commonplace; making the complicated simple, awesomely simple, that's creativity.

Charles Mingus, jazz bassist and composer



So, therefore, in that case, it becomes a very interesting. It is the whatever you simply complicated is the common place is there. But, they did complicated simple place or that are simply simple making this and that is a creativity. So, whether we are able to make that particular simple that creative place. So, that depends on the creativity of the individual. So, for that creativity, first, we have to understand the intelligence.

So, intelligence is a person's all-around effectiveness in activities directed by the thought intelligently by thought. So, therefore, this is the, whatever the activities are directed by the thought of by the any individual, it is the, and then, what is its effectiveness.

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What is Intelligence?

Intelligence is a person's all around effectiveness in activities directed by
thought. Intelligent leaders:
☐ Are faster learners.
☐ Make better assumptions, deductions, and inferences.
☐ Are better at creating a compelling vision and strategizing to make
their vision a reality.
Can develop better solutions to problems.
☐ Can see more of the primary and secondary implications of their
decisions.
Are quicker on their feet than leaders who are less intelligent.
☐ Intelligence is relatively difficult to change because of heredity but
can be modified with education and experience

So, in intelligent leaders, they are the faster learners are there. We have seen in the personality also. Type A personality, Type B personality, and in Type A personality, they are the solution finder. And, they are the more creative. So, because they are the faster learners are there. And, they make better assumptions. The deductions and the inferences are there. So, what are the assumptions are to be made?

That will be decided by these intelligent people. And, they better in creating a compelling vision and strategizing to make their vision a reality. So, therefore, it is compelling the vision is there. That is how they are able to create that particular vision. They can develop the better solutions to the problems. And therefore, in that case, the creative persons always they are the solution provider, can see more of the primary and secondary implications of their decisions.

And, they are able to visualize. That is why the leaders are very creative because they are able to visualize the implication of their decisions, are quicker on their field than leaders who are less intelligent are there. And, intelligence is relatively difficult to change because of the heredity. But, can be modified with the education and experience is there. So, earlier, it was told it is the IQ cannot be changed.

But, now, the theories have come which talk about that is the, with the education and experience, you can change your intelligence also. Your IQ score also. So, Robert Sternberg in year 1993 in 1977 defined intelligence as the mental abilities necessary for adoption to as well as shaping and selection of any environmental context is there.

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Author Name	Year	Definition
Robert Sternberg	1977	"Defined Intelligence as "the mental abilities necessary for adaptation to, as well as shaping and selection of, any environmental context.
H. Gardner	1993	"An intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings."
F. N. Freeman	2000	"Sensory capacity, capacity for perceptual recognition, quickness, range or flexibility of association, facility and imagination, span of attention, quickness or alertness in response."

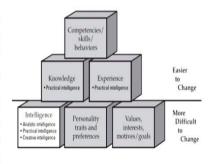
So, this is the individuals mental ability is there. And, we have seen that is that is the environment response to the environment in personality traits. Those who are fast in response to the environment adoptability so that adoption to therefore they will be able to shaping selection of any environmental context is there. And, H. Gardner, in 1993, an intelligence is the ability to solve problems, to create products that are valued within one or more cultural settings are there.

And, F N Freeman, in 2000, sensory capacity, capacity for perceptual recognition, quickness, range or flexibility or association, then the facility and imagination, span of attention, quickness or alertness in response is there. So, when we see the sequence of definitions from 1977 to 2000 and there that know, so, what we have observed is that is a it is a capacity of an individual who is very fast quick in the observations, who is the flexible and who is adoptable. So, and we can see that is the intelligence is not a fixed quantity.

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Intelligence is not a fixed quantity

- Intelligence is relatively difficult to change. Like personality, it is also an unseen quality and can be inferred only by observing behavior.
- Intelligence is not a fixed quantity. Although heredity plays a role, intelligence can be modified through education and experience.





So, is relatively difficult to change. Like personality, it is also an unseen quality and can be inferred only by observing the behavior is there. So, intelligence, personality traits preferences and values then these are the more difficult to change. While the knowledge experience and competencies and skills they are easier to change is there. So, it is not a fixed quantity although heredity plays a role.

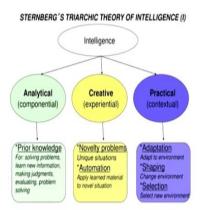
Intelligence can be modified through education and experience is there. So, however, it is the your the basic the personality trait will be in about intelligence. That is a analytic, practical and creative is there. Now, but, whatever the score is there or whatever the level of the intelligence is there that is core or the intelligence of the level of the intelligence that by the practical knowledge.

We provide the particular knowledge and the experience. Then, definitely, in that case, that level of the intelligence of the individual in that that will enhance. So, it is not like this. That is the, if you are having a particular intelligence as a heredity and then it will not be changing. Then, competencies are there. Skill behaviors are there. And, on the basis of the competencies and skills behavior and intelligence that can be changed.

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Sternberg's Triarchic Theory of Intelligence

Sternberg proposed his theory in 1985 as an alternative to the idea of the general intelligence factor. He believes that the ability to function effectively in the real world is an important indicator of intelligence. Sternberg broke his theory down into the following three sub theories.



Source: https://www.quora.com/What-are-the-elements-of-triarchic-theory-of-intelligence

Now, Sternberg's triarchic theory of intelligence is there. That is the analytical creative and practical is there. So, in case of the analytical componential, it is a prior knowledge for solving the problems, learn new information, making judgment, evaluating, problem solving. And therefore, that is the intelligence is required with the analytical skills are there. Creative is required. Novelty problems unique situations and automation is there.

While the practical contextual is there, so, in that case of that, adaptation, shaping and the selection is there. So, here we will find that is the whenever we are talking about the this Sternberg's triarchic theory of intelligence is in 1985 he has proposed this idea. And, he believes that the ability to function effectively in the real world is an important indicator of intelligence.

Sternberg broke his theory down into the following these 3 sub theories are there. And, on basis of that, prior knowledge, novelty problems and adaptation, shaping and selection that is the practical is there. He has proposed this particular theory. So, from here, we can understand that is by making the components of the all these 3, analytical, creative and practical, we will be able to convert our intelligence level to a next level.

That is towards the higher level is there. And, for this purpose, what is required is that is the, we have to outline the various mechanisms that result in the intelligence.

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Componential subtheory:

 The componential theory outlines the various mechanisms that result in intelligence. According to Sternberg, this subtheory is comprised of three

kinds of mental processes or components:

Metacomponents enable us to monitor, control, and evaluate our mental

processing, so that we can make decisions, solve problems, and create

plans.

Performance components are what enable us to take action on the plans

and decisions arrived at by the metacomponents.

Knowledge-acquisition components enable us to learn new information

that will help us carry out our plans.

According to Sternberg, this sub theory is comprised of 3 kinds of mental processes or

components are there. First is the metacomponents, so, Sternberg has further studied on these

particular parameters. And then, he has found that is the, there are the mental processes are

based on the 3 types of these components. First component is the metacomponent.

Metacomponents enable us to monitor control and evaluate our mental processing so that we

can make decisions, solve problems, and the create plans are there.

So, therefore, in that case, the metacomponent is for the control and evaluate, monitor,

control and evaluate. Performance component to take action on the plans and decisions

arrived at by the metacomponents is there. So, whatever the metacomponent has evaluated

our mental processing on the basis of that mental processing that the plans and decisions are

arrived at by the metacomponents.

It is a performance component is there because we are working on that. And then, that is why

it is a performance is there. Knowledge acquisition component enable us to learn new

information that will help us to carry out our plans are there. So, therefore, in

metacomponents, normally, what we are doing? We are making the evaluations. And then,

evaluations on the basis of the performance and performance on the basis of the knowledge

creation.

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Contextual subtheory

- The contextual subtheory says that intelligence is intertwined with the individual's environment. This subtheory is comprised of three kinds of components:
- ADAPTATION Occurs when one makes a change within oneself in order to better adjust to one's surroundings.
- SHAPING Occurring when one's changes their environment to better suit one's needs.
- SELECTION Replace the previous, unsatisfying undertaken when a completely new alternate environment is found to meet individual's goals.

The contextual sub theory says that intelligence is intertwined with the individual's environment. So far, what we have discussed in the last 3 to 3 sessions. So, that is the in the personality interaction with the environment. Environment means that situation or culture, surrounding cultures, surrounding these, the practices which you are observing, situation, then how you are able to react to that.

This theory is comprised of 3 kinds of the components. That is adaptation, shaping and selection is there. In the case of the adaptation, when one makes a change within oneself in order to better adjust to one surrounding is there. So, therefore, when he wants to make the ones surrounding, then accordingly it will be the adaptation will be there. And, the shaping is when once changes their environment to better suit one's needs is there.

And therefore, what happens that whatever environment is there you are shape you are adjusting with that environment and that is called the shaping is there. Selection is unsatisfying undertaken when a completely new alternate environment is found to meet individuals goals are there. So, therefore, in that case, you are selecting the, this suitable environment that suitable culture is there.

That the, further, the exponential sub theory has talked about there is a continuum of experience from novel to automation. So, whatever there is a new thing is there to convert it into the automation that intelligence can be applied. It is at the extremes of this continuum that intelligence is the best demonstrated. So, how it is to be done? Novel to automation has been done at the novel end of this spectrum.

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Experiential subtheory:

The experiential subtheory proposes that there is a continuum of

experience from **novel to automation** to which intelligence can be applied. It's at the extremes of this continuum that intelligence is best

demonstrated.

At the novel end of the spectrum, an individual is confronted with an

unfamiliar task or situation and must come up with a way to deal with

At the automation end of the spectrum, one has become familiar

with a given task or situation and can now handle it with minimal

thought.

And, individuals confronted with an unfamiliar task or situation and must come up with a

way to deal with it. So, experience with the experience what happens that is the, sometimes

yes it is the just whatever the environment you come across you are able to adjust.

Sometimes, you have when you come across the unfamiliar task, then you have to deal with

it. At the automation end of the spectrum, one has become familiar with a given task or

situation and can now handle it with the minimal thought.

So, therefore, in the beginning, that is novel to automation is that is in the beginning it was

totally new that new environment was given. And, the person, what he does. He is with that

unfamiliar task or situation. He interacts and deal with it. And, when he deals with it, he

becomes familiar. That is whenever this type of situation occurs, then I have to take this type

of decisions or I have to take this type of the steps.

When you are taking those type of the steps or the decisions, then definitely in that case you

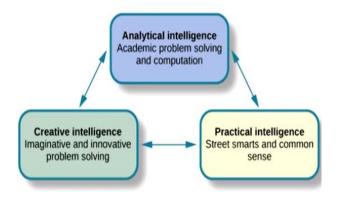
are able to make you on towards your automation. The kinds of intelligence are the analytical

intelligence, creative intelligence and practical intelligence is there.

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Kinds of Intelligence

Each subtheory reflects a particular kind of intelligence or ability:



Source:-https://courses.lumenlearning.com/suny-fmcc-intropsych/chapter/what-are-intelligence-and-creativity/

So, each sub theory reflects a particular kind of intelligence or ability is there. Academic problem solving and computation; creative intelligence, imaginative and innovative problem solving; and, the practical intelligence is about the street smarts and the common sense is there. So, therefore, in that case, whenever we are talking about the, which intelligence will work? So, all type of the intelligence are required at the workplace.

You should be the good analytical also. You should be the creative also. And, you should be street smart also. So, there, then again, it, we have to consider here the personality. And, according to the personality, you can decide about that is how you are matching and what type of the intelligence would you like to use. For example, if there is a data and information then you will naturally you will like to create that analytical intelligence will be more useful will be there.

But, if you are coming across a situation which you have never dealt with and that problem has to be solved. So, that is a creative intelligence will be used. And, whenever it is the just you have to negotiate, talk and you find out that is why, exactly, what is the reason. And then, on basis of that you can go for the common sense also. So, it will be depending upon the individual. That is either he can use all the 3 intelligence at the workplace.

Or, he can use the intelligence be one by one. The practical intelligence Sternberg called one's ability to successfully interact with the everyday world practical intelligence.

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Kinds of Intelligence

- Practical intelligence: Sternberg called one's ability to successfully interact with the everyday world practical intelligence. Practical intelligence is related to the contextual subtheory. Practically intelligent people are especially adept at behaving in successful ways in their external environment.
- Creative intelligence: The experiential subtheory is related to creative intelligence, which is one's ability to use existing knowledge to create new ways to handle new problems or cope in new situations.
- Analytical intelligence: The componential subtheory is related to analytical intelligence, which is essentially academic intelligence.
 Analytical intelligence is used to solve problems and is the kind of intelligence that is measured by a standard IQ test

And, practical intelligence is related to the contextual sub theory. Practically, intelligent people are especially adapt at behaving in successful ways in their external environment. So, creative intelligence experiential sub theory is related to the creative intelligence which is one's ability to use existing knowledge to create new ways to handle new problems or cope in the new situation is there.

So, therefore, in that case, this creative intelligence is which is based on the experiential theory which is creating the more towards the use of the existing knowledge whatever the knowledge person is having but with the help of that knowledge. Now, here I would also like to mention. That is a knowledge level, knowledge km1 km2 km3 km4 km5. So, you are increasing that knowledge in management level.

So, when you are increasing the knowledge management level, you are identifying the new ways to handle the new problems. Analytical intelligence is the componential sub theories related to the analytical intelligence which is essentially academic intelligence. And therefore, in their case, like, we see in the PhDs and the research programs. That is the students are taught. That is how to make the analysis.

And, that is increasing the academic intelligence. So, analytical intelligence is used to solve problems and is the kind of intelligence that is measured by a standard IQ test is there. On the basis of this standard IQ test and we have seen that is this analytical intelligence based on the standard IQ test which we can enhance with the our knowledge and experience.

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Implications of the Triarchic Theory of Intelligence

· Leadership effectiveness or emergence is positively correlated with

analytic intelligence.

Sometimes, personality is much more predictive of leadership

emergence and effectiveness than analytic intelligence.

Leader's primary role is to build an environment where others can be

creative.

The Triarchic theory of intelligence focuses on what a leader does

when solving complex mental problems.

Emphasizes how 3 types of abilities work together to create intelligent

behavior.

So, the implication of the triarchic theory of intelligence is leadership effectiveness or

emergence is positively correlated with the analytic intelligence is there. And therefore, if

you are having the high analytical intelligence, high will be the leadership effectiveness. That

is the result. Because it is positively related with the analytic intelligence is there. So,

therefore, what is required? We have to increase the analytic intelligence.

When we are increasing the analytic intelligence, our leadership effectiveness will also

increase. Sometimes, personality is much more predictive of leadership emergence and

effectiveness then analytic intelligence is there. So, therefore, in that case, it is not there just

because of that whatever the is there this analytic intelligence is there. But it is much more

that is the leadership effectiveness which is making the, you more successful.

Leaders primary role is to build an environment where others can be creative. The triarchic

theory of intelligence focuses on what a leader does when solving complex mental problems.

Emphasizes how 3 types of abilities work together to create intelligent behavior. And

therefore, what is important is this. That is this all 3 triarchic intelligence of the triarchic

theory that has to be emerged as a positively and emergence, a positively for the effective

leadership is there.

Now, in that case, when you are having that effective leadership then you end up using the

intelligence.

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Divergent Thinking

- Divergent thinking is defined as producing
 a diverse assortment of appropriate Using Your Imagination
 responses to an open-ended question or
 task in which the product is not
 completely determined by the (More Creative)
 information.
- So, divergent thinking concentrates on generating a large number of alternative responses including original, unexpected, or unusual ideas. Thus, divergent thinking is associated with creativity.

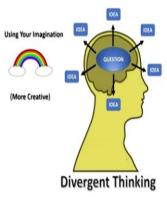


Image Source: https://thinkwellcenter.edublogs.org/files/2019/08/Divergent-Thinking-Person-1024x615.jpg

Then, definitely, you, it is your thought process. In the thought process, the most important point is the divergent thinking. And, the divergent thinking is defined as the producing a diverse assortment of the appropriate responses to an open ended question or task in which the product is not completely determined by the information. So, there, here, it is not that is the, already you are knowing the answer.

And therefore, in that case, what is required is that is the open ended questions or task is important. And, it is not completely just by the information you will be able to solve the problem. So, using your imagination is becoming more and more creative. So, divergent thinking concentrates on generating a large number of alternative responses including the original, unexpected or unusual ideas are there.

Thus, divergent thinking is associated with the creativity is there. Now, here, in this diagram also, you can see that whatever the situation is there like a question. Question is been given situation is there. Now, there are the, how many ideas do you generate? You generate 1 2 3 4 5 6 or so many. And, who will be able to generate the maximum ideas? So, it is expected those who are having the knowledge and those who are having the experience and those who are having the competency.

So, they will be able to create. That is the more ideas. So, as next to the divergent thinking is the convergent thinking.

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Convergent Thinking

- Convergent thinking involves finding only the single correct answer, conventional to a well-defined problem. Many facts or ideas are examined while convergent thinking for their logical validity or in which a set of rules is followed.
- Convergent thinking focuses on reaching a problem solution through the recognition and expression of preestablished criteria.
 Standard intelligence tests are similarly believed to measure convergent thinking.

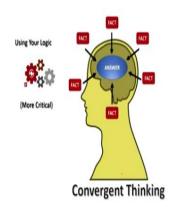


Image Source: https://thinkwellcenter.edublogs.org/files/2019/08/Convergent-Thinking-Person-1024x615.jpg

Convergent thinking involves finding only the single correct answer. So, therefore, it is conventional to a well-defined problem. Many facts or ideas are examined while convergent thinking for their logical validity or in which a set of rules is followed. And here, it is the facts. Facts will be considered and the convergent thinking will be there. And here, in the convergent thinking, so many facts are there. So, you, what you are doing?

You are using more critical or you are using more logic. Well, in the case of divergent thinking, you were using more innovative ideas and more innovations are there. So, here in the convergent thinking that was in divergent thinking more ideas were created. In the convergent thinking, more facts are concerned. And therefore, you are using the logic here, reaching a problem solution through the recognition and expression of the pre-established criteria.

And, the standard intelligence tests are similarly believed to measure the convergent thinking are there. And here, we always, it has been found that is at the workplace you may require sometimes to have the divergent thinking or the convergent thinking is there. But, standard intelligence is to be developed. As an standard intelligent test are similarly believed to measure the convergent thinking is there.

And therefore, in that case, as a, as per the environment, you have to decide about, what are the divergent thinking or convergent thinking? What will work?

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Creativity Killers

The following is a list of things leaders can do if they wish to stifle the creativity of their followers.

- Take away all discretion and autonomy: People like to have some sense of control over their work. Micromanaging staff will help to either create yeasayers or cause people to mentally disengage from work.
- Create fragmented work schedules: Repeated interruptions or scheduling "novel solution generation time" in 15-minute increments around other meetings will disrupt people's ability to be innovative.
- Provide insufficient resources: People need proper data, equipment, and money to be creative. Cut these off, and watch creativity go down the tubes.

The creativity killers, the following is a list of things leaders can do if they wish to stifle the creativity of their followers. Take away all discretion and autonomy. So, that will create that will kill the creativity of your followers. So, please never do that. But, if you want to do the to kill the creativity, do this. That is the people like to have some sense of control over their work naturally.

What happens know when you are at the workplace, you develop an autonomy. You develop an ownership. So, micromanaging staff will help to either create the yea-sayers or cause people to mentally disengage from the work. So, so therefore, in that case, it is the, that if you do not want to be them creative take away their discretion and autonomy. Create fragmented work schedules.

So, repeated interruptions or scheduling. So, novel solution generation time in 15 minutes increments around other meetings we will disrupt people's ability to be innovative is there. So, you will not allow for even for them think the continuously for the 15 minutes on 1 issue. Provide insufficient resources. And then, whatever the man, machine, material, money, method, minute is the required, then do not provide them the sufficient resources.

And, they cut these off and watch creativity go down the tubes is there. And therefore, in that case, now, what is the warning is? Do not be creative killer. If you want to be really a leader, then give them the discretion and autonomy, give them the, a proper work schedule. And then, accordingly, you will find that is the, they will be able to perform. Focus on short term goals.

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Creativity Killers (Cont.)

Focus on short-term goals: People can be creative and funny if given

enough time, but focusing on only short-term outcomes will dampen

creativity.

Create tight timelines and rigid processes: The tighter the deadlines and

less flexible the processes, the more chance that innovation will be reduced.

Discourage collaboration and coordination: The best ideas often come

from teams having members with different work experiences and functional

backgrounds. By discouraging cross-functional collaboration, leaders can

help guarantee that team members will offer up only tried-and-true

solutions to problems.

These also creativity killer, people can be creative and funny if given enough time. But,

focusing on only short term outcomes will dampen creativity is there. So, therefore, if you are

allowing them to create the short term goals only, then definitely their creativity is going to

be killed. Then, they create the tight timeline and the rigid processes. So, therefore, you are

not given them the enough time. There is no flexible time.

So, the tighter the deadlines and the less flexible the processes the more chance that

innovation will be reduced. And therefore, in that case, you will find that is the, whatever,

whenever we are talking about this the development of the ideas innovative ideas, then

definitely what is required is that is the you have to create them the, these the solutions to the

give them the time so that they can think of.

Now, discourage collaboration and coordination, the best ideas often come from teams

having members with different work experiences and functional backgrounds. By

discouraging cross-functional collaboration, leaders can help guarantee that team members

will offer up only tried and true solutions to problems is there. So, therefore, in that case, you,

what you are doing.

That is you are not, you are discouraging the collaboration and coordination. And, as you are

discouraging the collaboration and coordination, the team effectiveness will be decreasing.

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Improving Organizational Creativity

- · Leaders should be mindful that:
 - Various sort of incentives or rewards can have various effects on creativity.
 - Synthetic abilities can be hindered if ideas will be evaluated.
 - In order to develop new products and services, the level of turnover should be low, and goals should be clear.
 - Leaders need to provide enough room for creativity to flourish, but enough direction for effort to be focused as well.
 - Creeping elegance which refers to the tendency of a design project or product cycle to accumulate more and more features or details, rather than to be completed and released at a more basic level. Also fails to meet customer needs. It should be avoided.

So, improving the organizational creativity, the, how we can increase the organizational creativity. So, various sort of incentives or rewards can have various effects on the creativity. And, the synthetic abilities can be hindered if ideas will be evaluated. So, here, these the what sort of the rewards which we are looking for then that will give about that the incentives and rewards are more you are encouragingly encouraging them.

That is then definitely at workplace they will try to solve the more problems and be more creative. Synthetic abilities can be hindered if ideas will be evaluated. So, therefore, in that case, if it is always better that is the, we have to encourage the synthetic abilities. And, we should not evaluate their ideas. Then, what to do? Develop the new products and services. The level of turnover should be low. And, goals should be clear very clear.

And then, our organizational creativity will increase employees turnover should be low. Now, leaders need to provide enough room for creativity to flourish but enough direction for effort to be focused as well. Now, you see it is the balance is required. So, on one side, that is you have to give them the enough room for the creativity. And, on other side, that is you have to give the proper directions.

Creeping elegance is refers to the tendency of a design project or product cycle to accumulate more and more features or details are there. So, here, it is a more basic level, fails to meet the customer needs. It should be avoided. So, therefore, in that case, it becomes important. That is the, we are encouraging for the more organizational creativity. This cognitive resource

theory that is talks about the intelligence and stress is reinvention of the Fiedler contingency theory. And, concepts was given by the Fred Fiedler and the Joe Garcia in 1987.

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Cognitive Resources Theory: Intelligence and Stress

- The Cognitive resource theory is a reinvention of Fiedler contingency theory and concept was given by Fred Fiedler and Joe Garcia in 1987.
- Cognitive Resources Theory is a conceptual scheme for explaining how leader behavior changes under stress levels to impact group performance.
- This theory relates to a leader's intelligence and experience with his/her reaction to stressful situations. Like in a more stressful situation one can react without thinking logically. It clears how a leader's intelligence and experience influence the way he/she may react to stress.
- Cognitive Resource Theory consists of several key concepts; i.e. intelligence, stress, experience, and task-knowledge.

We have talked about the Fiedler's theory. We have talked about the leader member relationship task and the positioning power. This theory is further extended one. So, cognitive resources theory is a conceptual scheme for explaining how leader behavior changes under stress level to impact the group performance is there. So, here, that whenever we are talking about the leader behavior change, naturally in the given stress level.

That is the, it is having the group perform impact on the group performance. So, this theory relates to the leader's intelligence and experience with his or her reaction to the stressful situation. So, leader in a given situation, that is how he will be behaving and then, so, that is this theory will be helping him to handle this stressful situation without thinking logically. It clears how a leaders intelligence and experience influences the way may react to stress.

So, cognitive resource theory consists of several key concepts, intelligence, stress, experience and the task knowledge is there. And, when we are considering this all these factors and especially in the given stress then we are giving him more time because normally what happens in a given time in the stress the leader is very spontaneous. And then, he is not having the enough time to use his intelligence. So, theory is based on the following assumptions.

The success of a leader depends on certain factors unlike intelligence, experience and other cognitive means.

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Cognitive Resources Theory: Intelligence and Stress

Theory is based on the following assumptions:

 The success of a leader depends on certain factors like Intelligence, experience, and other cognitive means.

Leadership success is not based on cognitive capabilities only.

Stress affects decision-making ability.

Theory predictions include:

· Greater experience but lower intelligence may account for higher-

performing groups in high stress conditions.

High levels of experience may account for usage of old solutions when

creative solutions are more apt.

Leadership success is not based on cognitive capabilities only. And, the stress affects the decision making ability is there. So, therefore, these are the assumptions are made. And, if this is the assumption because the not all leaders may be the all leaders may not having the stress. But, yes, some of them may be having these stress and they respond to the stress. They are so fast.

So, that as a result of which they are not using the proper approach. The theory predictions include the greater experience but lower intelligence may account for the higher performing groups in higher stress conditions are there. High level of experience may account for usage of the old solutions when creative solutions are more apt. So, therefore, in that case, this is very interesting point and I am sure very relevant for the practical field also.

It is high level of experience may account for usage of the old solutions. So, therefore, in that case, always, whenever we say I am used to do this. This is an example. So, then, it is the, that is account for usage of the old solutions. When creative solutions are more apt is there. And therefore, in that case, the people they will go for there the old solutions. Cognitive research theory talks about predict whether a certain type of person will be able to lead in a stressful situation or not.

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Characteristics of Cognitive Resources Theory

- The theory helps predict whether a certain type of person will be able to lead in a stressful situation.
- The theory helps the placement of persons in leadership positions by suggesting that people be tested for intelligence and the ability to manage stress in addition to assessing leadership qualities.
- It differentiates the abilities of a skilled labour from an experienced labour and indicates how they are useful.
- The Cognitive Resource Theory helps in understanding the role of intellectual abilities and organizational performances in solving tasks.

A wonderful contribution that is the, if the stress level is there and then in a given stress how the person will behave. And, the theory helps the placement of persons in leadership positions by suggesting that people be tested for intelligence and the ability to manage stress in addition to assessing leadership qualities are there. So, whenever we are talking about the assessment of the leadership qualities then definitely we will be having the positions and the ability to manage.

Then, here, these particular types of the theories they are practically helping the person. That is the, in a given situation, what how he can use his, the potential. Now, if it differentiates the abilities of a skilled labor from an experienced labor and indicates how they are useful. And, one side that is the old knowledge is there. Other side, there is no experience but the solution providers are there.

So, cognitive resource theory helps in understanding the role of intellectual abilities and organizational performance in solving task is there. So, whatever the role of the intellectual abilities, are there, then they will be able to command and the organizational performance are there. So, there, where high opportunities more opportunities are there to use the intellectual abilities.

However, in a current situation, when there is a high level of the stress it will may be very difficult to get the time to solve this particular intelligent problem and to use the intelligence. So, limitations of this cognitive resource theory is that does not talk about those leaders who have both a good IQ and a good work experience also.

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Intelligence and Stress: Cognitive Resources Theory

Limitations of CRT:

 Cognitive resource theory does not talk about those leaders who have both, a good IQ and a good work experience.

 Intelligence is not defined. There are many types and degrees of intelligence and the Cognitive Resource Theory doesn't account

for them.

Leadership implications of CRT:

The best leaders are often smart and experienced.

 Leaders may be unaware of the degree to which they are causing stress in their followers.

The level of stress inherent in the position needs to be

understood before selection of leaders.

Because they are talking about that is a, in a given stress, when there will be the high stress

the old solutions will be applicable because of the experience. But, there that is required. That

is how we can you make the use of the IQ in a, for the, with the work with the high level of

the work experience also. Intelligence is not defined. There are many types and degrees of the

intelligence and the cognitive resource theory does not account for them.

And therefore, here, that what exactly the intelligence means that authors have not described.

Leadership implication of CRT, the cognitive resource theory is the best leaders are often

smart and experienced. Leaders may be unaware of the degree to which they are causing the

stress in their followers. The level of stress inherent in the position need to be understood

before selection of the leaders, are there.

So, definitely, this theory will help us in a different ways. On the one side, it will be helping

us to make the aware about to sensitize. That is that we should know the stress level of the

followers. And, on the other side, it also help us to understand. That is the, how our old

experience that we can use for solving the problem. For the past 100 plus years, the western

hemisphere, this is the case study.

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Case Study: Innovation in emerging economy

- For the past 100-plus years the Western Hemisphere has been the center
 of innovation and creativity. Many of the modern conveniences to which
 we have become accustomed were invented in the United States or
 Europe. But will the West remain the center of innovation?
- This is an important question: studies show that future job and economic growth will come from information-or knowledge-based work rather than manufacturing-based work. North America may lead the world in research spending, but globalization and information technology are helping other parts of the world to catch up.
- The emerging economies of Brazil, Russia, India, and China (BRIC) are graduating millions of scientists and engineers each year, and their economies are becoming robust enough to generate strong domestic bases for new products.

Innovation in the emerging economy is there. That is the, whenever we are talking about these Brazil, Russia, India and China, then scientists and engineers each year.

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Case Study (Cont.)

 Clever ideas can be found anywhere, and technology is helping to make these ideas into products. The expanding middle class of the BRIC countries is giving more people the income needed to purchase new products. With the number of scientists and engineers graduating from the BRIC countries and their rapidly expanding economies, it may only be a matter of time before the West is no longer the center of innovation.

Questions

- Does analytical and creative intelligence of individual play dominant role in make of center of innovation?
- What do you think are the implications of these trends for leaders in the West or the BRIC countries?

Then, how, there, these ideas can be generated and the technology can be help to make these ideas into the products are there. So, this is about the BRICs. The expanding middle class of the BRIC countries is giving more people the income needed to purchase new products. So, with the number of scientists and engineers graduating from the BRIC countries and their rapidly expanding economies, it may only be a matter of time before the west is no longer the center of innovation.

Does analytical and creative intelligence of individual play dominant role in the make of the centre of innovation? What do you think are the implications of these trends for the leaders in

the west or the BRIC countries are there. So, therefore, whether the, this stress management will be helpful or then it will be done.

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Research Paper

Intelligence and Leadership:

A Quantitative Review and Test of Theoretical Propositions

Journal of Applied Psychology 2004, Vol. 89, No. 3, 542-552

Timothy A. Judge University of Florida Amy E. Colbert University of Iowa

Copyright 2004 by the American Psychological Association 0021-9010/04/\$12.00 DOI: 10.1037/0021-9010.89.3.542

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Purpose

The purpose of this study was to provide a quantitative review of the
intelligence-leadership literature that (a) distinguishes between different
measures of leadership outcomes, including perceptual measures of leader
emergence and effectiveness and objective measures of leadership
effectiveness; (b) distinguishes perceptual from paper-and-pencil measures of
intelligence; and (c) tests propositions from two relevant leadership theories:
implicit leadership theory and cognitive resource theory.

These are the research papers which you can refer for the further studies.

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Design and Methodology

 Meta-analysis was used to aggregate results from studies examining the relationship between intelligence and leadership. One hundred fifty-one independent samples in 96 sources met the criteria for inclusion in the metaanalysis.

Findings

 Intelligence correlated equally well with objective and perceptual measures of leadership. Additionally, the leader's stress level and the leader's directiveness moderated the intelligence—leadership relationship. Overall, results suggest that the relationship between intelligence and leadership is considerably lower than previously thought. The results also provide meta-analytic support for both implicit leadership theory and cognitive resource theory.

Implications

- Authors found that several traits had stronger correlations with leadership than
 intelligence and that, overall, the Big Five had a multiple correlation of .48 with
 leadership. It is true that these validities are higher than those for cognitive
 ability, suggesting that selecting leaders on the basis of personality appears to
 be relatively more important. However, though the overall relationship between
 intelligence and leadership may be modest, in selecting individuals, even
 moderate validities can have substantial practical implications.
- Moreover, on the basis of cognitive resource theory, it is more important to select or place intelligent individuals in leadership positions when the stress level is low, and the leader has the ability to be directive. In such cases, the validity of intelligence may be substantial.

And, their findings that will be useful and these the paper which has been given it is based on the CRT of the CRT theory. And, the research on CRT, that is the cognitive resource theory that helps to develop the intelligence.

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BOOK RECOMMENDATION

Intelligent Leadership: What You Need to Know to Unlock Your Full Potential

Publisher: Amacom; edition (16 May 2018)

Authors: John Mattone Language: ENGLISH Paperback: 256 Pages ISBN: 0814439373

ISBN-13: 978-0814439371

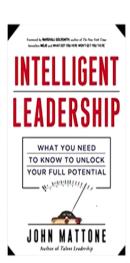


Image Source: https://images-na.ssl-images-amazon.com/images/I/516mJO8GcGL. SX331 BO1,204,203,200 .jpg

These are the books which I suggest you can refer more and that is intelligent leadership what you need to know.

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BOOK RECOMMENDATION

Leadership coach and author John Mattone has years of experience working with high-achieving professionals facing the enormous challenges that come with achieving and sustaining breakthrough operating results as a leader in today's business environment. Mattone recognizes the immense need for a roadmap to developing and mastering the executive maturity necessary for today's leaders. Intelligent Leadership helps readers calibrate their abilities so they can simultaneously focus on their strengths and--equally important--address their weaknesses. The goal is to improve key tactical competencies (such as critical and strategic thinking, decision-making, talent and team leadership, and communication) and integrate them with often ignored or under-utilized inner traits like values, character, and beliefs in order to achieve their leadership potential.

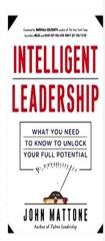


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Unlock your full potential. That is a book recommendations.

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- https://www.slideshare.net/AkonnorOwusuLarbi/cognitive-resource-theory-ppt

And, these are the references for the detailed studies which you can refer for the further enhancing your knowledge. So, this is all about the intelligence and the leadership which we can develop at the workplace, thank you.