## Psychology of Personality and Individual Differences: Theory and Applications Professor Dilwar Hussain

## Department of Humanities and Social Sciences Indian Institute of Technology, Guwahati Week 4

Lecture 9: The five-factor model and beyond

I welcome you all to lecture number 9 of this course. So, this is module 4, which is about trait perspectives in personality psychology, and this is the third lecture of this module and, overall, the ninth lecture. So, today's lecture will deal with the theory of the five-factor model, or what people also call the Big Five personality trait theory, and a few other theories that go beyond that. So, a few more concepts are associated with the Big Five Factor Model. But they are used a little bit beyond the five-factor model.

So, before we talk about today's lecture, let me give you a brief recap of the last lecture, which is lecture number 8. In lecture number 8, we talked about two specific theories in trait psychology or trait personality theory. One is Raymond Cattell's theory of personality, which talks about 16 source traits, which can be used, or dimensions which can be used to discuss or categorize human beings on those 16 traits. So, according to Cattell, the 16 source traits are good enough to describe all kinds of human variations, all kinds of traits that are possible within human beings.

On the other hand, the Eysenck theory talks about only three factors. He said we do not need to go beyond these three traits. And he called them the three super factors where each of these factors had many sub-dimensions. However, according to Eysenck's theory, these three super factors are good enough to describe human differences in terms of traits and so on. Both theories had their advantages and limitations, which we have discussed, but Eysenck's theory was largely based on explaining the biological origin of traits, including even cattle theory, which was also discussed. Many of these traits, according to Eysenck, actually originate or have a biological basis. So, the biological aspects of these traits were given a lot of importance, and compared to the environment, biology plays a more important role in determining these traits within human beings. So, these are some of the things that we discussed in the last lecture.

In today's lecture, we will be talking about the five-factor model. There is another model related to the five-factor model called the HEXACO model, and at the end, we will be talking about the dark triad of personality. So, let us start today's lecture. So, this five-factor

model or Big Five personality trait model is also called the Big Five trait model or the five-factor model. This is one of the most celebrated trait theories, at least in today's literature, in terms of evidence and utility. This Big Five factor theory is one of the most used theories and one of the most evidence-based theories, with a lot of research evidence supporting the Big Five factor model. We can say this is a model that is most accepted based on the evidence we have received in contemporary psychology. So, this theory was proposed, and most of the research in this direction was done by these two people: Robert McCrae and Paul Costa. So, their photographs are here.

So, these two people have done most of the research in terms of finding the empirical evidence for this five-factor model. Other people also contributed to that, and we will be looking at the historical aspects of it also. So, this five-factor model talks about how human dimensions or personality traits could be described using only five traits. The same thing in Cattell's theory talks about 16 traits, and Eysenck's theory talks about three traits. This theory says five factors or five traits are most suitable in terms of personality, including all the individual differences and all the human traits. So, let us see what this theory talks about. Now, Cattell and Eysenck used the factor analytical method to derive the personality traits, resulting in different numbers of traits. In the case of Cattell, it was 16 source traits. In the case of Eysenck, it is three main dimensions.

Some recent personality researchers have expressed dissatisfaction with both theories, suggesting that Eysenck's had too few dimensions and Cattell's had too many factors. So, both theories are limited according to the evidence that we have received in recent years; Eysenck's theory has very few dimensions, only three dimensions, which is not able to capture all the nuances and all the possible traits that human beings have. On the other hand, Cattell's 16 traits seem to be too many factors and create a lot of ambiguities and so on. So, psychologists increasingly agree, and most recent researchers agree, that five traits or five super traits may be the most important or most suitable structure of personality, which is not too little and not too many. And research also shows five factors are good enough to describe all the human variations in personality traits. So, Robert McCrae and Paul Costa, working at the Gerontology Research Center of the National Institute of Health in Baltimore, Maryland. They initiated an extensive research program in the 1980s in the direction of finding out the optimum number of traits to describe human personality. Their work eventually led to the five-factor model, which is also known as the Big Five personality traits. So, both mean the same thing; stating those basic five traits that are used to describe human personality traits. Over 25 years and hundreds of studies later, after a lot of evidence and a lot of research in the field of traits, McCrae described the five-factor model marking it as the turning point in the history of personality psychology. Because this is one theory that received a lot of attention and a lot of research evidence. Consequently, this seems to explain human personality traits in a very robust way.

So, these five factors are: neuroticism, extroversion, openness, agreeableness, and conscientiousness. In short, this is also called the OCEAN model: O-C-E-A-N. O is for openness. C is for conscientiousness. E is for extroversion. A is for agreeableness. N is for neuroticism. So, the acronym for these five factors IS: OCEAN, which uses the initials of these five factors. So, each of these factors represents a continuum along which individuals can be placed. So, all these factors are important in describing human personality. So, all human beings will have some scores in each of these five dimensions. Some may score high in some of these dimensions, and some may score low. So, there is a continuum of scores possible in each of these states. Now, how did researchers reach these Big Five Factor model, and What was the kind of historical research behind it?

So, I will just give you a brief idea of the important events or research findings that led to the discovery of the Big Five Factor. Psychologists have been working on these personality traits for over 70 years. Trait research has a long history. One of the first researchers in this field of traits is Gordon Allport. We have discussed his theory also. So, Allport and his colleague Odbert, as we have already discussed, used the English dictionary lexical approach, where they found almost 18,000 words for describing human personality from this dictionary. Reducing all the synonyms, they came to 4,500 words that describe human personality.

So, this list of words has been used by many other researchers later to refine those number of traits and come to a lesser number of traits. Because 4,500 traits are too many, and it will not make any sense to describe human beings using so many traits. Then it is like, you know, everybody has a new name for traits and so on. So, a good theory should be more parsimonious in the sense that a few concepts should describe a lot of things; only then does it have the characteristics of a good theory. So, in that context, you know, the researchers tried to refine this list more and more, and finally, we came to the five-factor model.

So, Raymond Cattell, for example, Cattell also used these 4,500 traits, which were discovered by Allport and his colleagues. He selected 36 out of this trait list and added 10 more from his own ideas and literature review, and finally, he came to 16 source traits. So,

the idea is that this list of 4,500 was used by other researchers like Cattell. He used 36 traits out of these 4,500. He selected these because he found other words are not that important other traits are not that important, and he finally, using factor analysis, came to the 16 source traits. Donald Fiske also chose 22 traits from Cattell's list. Cattell selected 36 traits from the 4500 list of Allport. Donald Fiske chose 22 from those 36 selected by Cattell, and after doing further analysis, he found five factors through self-rating and rating by peers and psychologists, which is one of the first emergences of the five-factor model.

David Fiske, after he analyzed these 22 traits using ratings by peers and psychologists, almost found five traits. Names were different at that time. Later, other studies like Tupes and Christal in 1961, also using the data from eight different samples, including graduate students and Air Force personnel, identified the same basic five factors. So other researchers before McCrae and Costa also came to this five-factor model using other data sets and so on.

McCrae and Costa, in 1976, initially actually identified three factors through factor analysis of different data sets. These three factors were initially called by different names, where one factor was called anxiety adjustment, which was termed neuroticism later, and introversion-extroversion, so extroversion was used, and also they used openness to experiences. So initially, after factor analysis, they came to these three important factors, and they said that most of the evidence was in the direction of using these three factors as a description for human personality traits. They developed a questionnaire called the NEO-PI inventory to measure these three traits. NEO-PI means NEO is an acronym for these three traits: N for neuroticism, E for extroversion, and O for openness. So, this was initially devised to measure these three traits only. Now, encouraged by the robustness of many other lexical findings from the words used in different languages, they finally expanded these three factors into five factors. So, they added two more factors based on the evidence in favor of these traits. So, they used factors of agreeableness and conscientiousness later along with these three factors which ultimately became the five-factor model, which is also called the Big Five personality trait model. So today, this five-factor model, which includes neuroticism, extroversion, openness, agreeableness, and conscientiousness, is assessed using the revised model. So, the NEO Personality Inventory was revised later to include these two additional traits that they later added.

Then, the questionnaire became known as the NEO-PI-R, so it was revised. So, now, this scale uses all five factors. So, these Big Five traits have been consistently found in various studies using different traits and diverse samples. So, there is very strong research evidence

in favor of these five traits. That is the main advantage of this particular theory. If you look at other theories, there are some advantages, and then there are certain issues associated with other theories. But the research evidence, especially in the contemporary research evidence, if you look at the five traits or Big Five trait theory, seems to have a lot of evidence in terms of research from diverse samples and data sets. So, according to this NEO-PI-R revised questionnaire, each of the five factors is made of six subscales called factors or facets or sub-traits or sub-facets which kind of constitute this trait. So, these are more like super factors in the terminology of Eysenck, and then each factor had many sub-factors. So, let us see what these five factors are in more detail. These factors are very important in contemporary personality psychology and are considered to be one of the most accepted personality theories in terms of trait theory.

So, the first one is neuroticism. According to McCray and Costa, this trait or super-trait has six more sub-facets or facets to it. The first one is anxiety. So, the people who score high on neuroticism will have these facets and therefore will score more on this. So anxiety, anger, hostility, depression. When we are talking about depression here, it is more like a symptom of depression, not necessarily a clinical disorder or something like that. Self-consciousness will be very high for people with high neuroticism, they will be too conscious of themselves. Impulsiveness, sometimes when people become emotionally unstable, the more they are emotionally unstable, the more likely they are to be impulsive also. So, impulsiveness is also found to be an associated characteristic of neuroticism. But vulnerability to stress is also very important. So, they are more prone to experience stress.

So, these are six facets of neuroticism. So, people high in neuroticism exhibit poor coping skills in stressful situations. They are not good at dealing with the stresses of life. They also show poorer health because these are all connected to coping. So, if you are not able to cope with the stresses of life, you are more likely to experience poorer health, both mental and physical, because it is connected to how you deal with stress. And a higher likelihood of experiencing burnout and job changes. So, you are more likely to get burned out from whatever pressures come from life as well as from job situations. People high in neuroticism are also prone to negative emotions such as fear, sadness, embarrassment, anger, guilt, and disgust. In contrast, emotionally stable individuals demonstrate greater commitment to work, higher satisfaction with their relationships, and so on. People with low neuroticism seem to have more positive qualities in terms of adjustment to life and so on. The next one is extroversion. The second trait in the five-factor model. This extroversion has six further sub-facets or characteristics. People with high extroversion are

the kind who show qualities such as warmth, which means they are more likely to meet people and are more comfortable in group situations and so on. Assertiveness and activity levels are high, and excitement seeking is also high. They are also more likely to experience positive emotions like happiness, joy, and so on. Now, extroversion involves energetically seeking out and interacting with others. So, there is more of an outgoing nature with people who are higher on the traits of extroversion. They are more outgoing, more energetic, and more likely to have a gregarious nature. Connecting with people, meeting people, and so on. A key indicator of extroversion is agreement with items like, 'I am a cheerful, highly spirited person.' So, it is one of the aspects of the central aspect of extroversion: being a cheerful, high-spirited person. An energetic, optimistic, cheerful person is not necessarily low in anxiety. So, someone who scores high in extroversion does not mean they are low in anxiety. Because anxiety is a completely different facet, extroversion is a different facet. They are not necessarily mutually exclusive categories, and so on. So, an energetic, optimistic, and cheerful person, which is associated with extroversion, is not necessarily low in anxiety or depression, which are related to neuroticism. So, research shows that neuroticism is different from extroversion.

So extroverts are more likely to hold leadership positions because of their characteristic traits, have many friends and sexual partners, and be selected as jury candidates. Whereas introverts tend to have poorer relationships with parents and peers. It is because of their characteristic traits that they will have different outcomes in life situations. So introverts, because of their characteristics, will kind of attract different kinds of life situations more favorably as compared to others.

The next comes openness. The third trait, openness, has facets like Fantasy, which means they are more like people who are open to experience. They imagine things more in terms of fantasizing and other things. They are also more interested in the aesthetic aspects of life. Feelings and emotional aspects could also be very dominant, not in terms of neuroticism, but in general, connecting emotionally to things, actions, ideas, values, and so on. So, these are some of the broad aspects that define the trait of openness. So, we will just kind of break down some of these ideas a little bit more. So, a person high in openness, according to McCrae, in his own words, is Interested in experience for its own sake. So, they are more interested in newer experiences, eager for variety, and tolerant of uncertainty. So, they are also tolerant of uncertainties in life. So they get into more new domains of life. This is what they prefer: to get more new experiences in life. Leading to a richer, more complex, and less conventional life. So, their life is a little bit unconventional in the sense

that they seek out more new things in life in terms of experience. So that makes their life less conventional and richer in terms of experiences. By contrast, the closed person, who is the opposite of an open person, is seen as being impoverished in fantasy, and insensitive to art and beauty. So, people who are open to new experiences are more sensitive to art and beauty in terms of connecting with the concept of art and beauty, restricted in affect, means emotions, behaviorally rigid, bored by ideas, and ideologically dogmatic. They are more rigid in terms of thought processes and their emotions as compared to people high in openness, they are more open to new things, they are less rigid, more flexible, and they lead less conventional lives, and so on. So openness is about inquiring intellect. So intellect is there all the time, inquiring, you know, then trying to find, you know, ask questions about why this is happening. So, that sense of inquiring intellect is something that makes them more open to new experiences. So openness includes facets like fantasies about imagination, aesthetics about artistic interests, and feelings about emotionality, actions are about adventurousness, ideas are related to intellect, and values are about psychological liberalism, meaning more diverse aspects within their experience of life.

People high in openness are imaginative and creative, while those low in openness are more conventional, practical, and down to earth. So, this is what we have already discussed. Openness refers to an appreciation for intellectual pursuits such as ideas, thoughts, fantasies, art, and beauty. So, more of appreciating these new aspects of life. And it is distinct from intelligence. So, it is not necessarily true that if you are high in openness, you are also high in intelligence. So, intelligence is a different aspect. Not necessarily if you are high in intelligence, you will also be high in openness.

So. Openness is more about the appreciation for intellectual pursuits. So, you appreciate, that you like these intellectual pursuits, ideas, thoughts, and fantasies, which may not automatically lead to higher intelligence or not necessarily. Now, individuals can score high in openness without having high IQs. Not necessarily, you will have to have a high IQ score to have high openness. This can happen, but it is not necessary. So, that is the difference between the concept of intelligence and openness. High openness is also associated with higher educational attainment, success in creative jobs, and creative, distinctive work and home environments. So, certain life outcomes seem to be more favorable for people with high openness.

A key indicator of openness is experiencing chills and goosebumps in response to an aesthetic experience. So, these people kind of connect with aesthetics and beauty and those kinds of artistic things. They are more interested, and that gives them more intrinsic

motivation to perceive that. Artistic interest with openness is different from artistic ability. So, they are not necessarily genius in terms of artistic ability. So, ability comes with inborn quality. Somebody may be very good at painting and so on. So that's ability. But artistic interest is about how, with what motivation and interest, you pursue something. That is associated with openness to experiences.

So, not necessarily people who are open to new experiences will automatically have high artistic ability. So, artistic ability is different from artistic interest. Artistic interest is associated with openness, not ability directly. So, artistic ability is not a personality trait as such. So, it involves openness to ideas and new things rather than people. Also, it is different from extroversion. So, people who are open to ideas and new things are not necessarily open to other people in terms of relationships and so on. And this relationship part is associated with extroversion. But openness may not be very open to other people as such, but they are more open to ideas and things and so on.

So, extroverted people are not necessarily also high in openness. So, they are conceptually different terms. So that is why they are considered different traits. People high in openness enjoy new experiences, but not necessarily dangerous or thrilling ones. So, some people who are very impulsive and risk-taking, who engage in dangerous activities or thrilling games, and people with openness to experience do not necessarily do those things. So, there is an inherent psychological benefit to being high or low in openness or extroversion, the value of creativity and conventionalism depends on the context of the individual, and both depend on the situation. So if somebody is high on openness or low on openness or high on extroversion, low on extroversion, these all have their advantages and disadvantages depending on the life situation and context, somebody will get more benefit.

In other contexts, some other types of people will have benefits. So, it is not like one particular trait is good for everything. So, it depends on the context. In some contexts, some people will be more suitable in terms of adjusting to that. In other contexts, there will be some other traits that will be more suitable, and so on. So these are all different characteristics of people. Not necessarily better than the other. It's not judging in those dimensions. But because of certain characteristics, they will be attracted to those life situations and that will have certain advantages or disadvantages.

The next one is agreeableness, the fourth one. So, agreeableness again has facets, which include trusting others, straightforwardness, altruism which also means helping, compliance, people are more likely to hear what other people say, they accept what others

request, and so on. Modesty, tender-mindedness. So these are the characteristics or subfacets of the trait of agreeableness. So let us see a little bit more about this trait. So, agreeableness refers to the quality of interpersonal relationships. So, this particular trait is more evident in the context of relationships where you are relating with other people or a group of people, including how much a person feels and gets along with others. So, one of the characteristics, that is typical or central to agreeableness, is how you feel and get along with others. The more you can get along with other people, the more able you are to adjust to group situations involving other people, and the more agreeable you are. So, agreeableness is mostly associated with the relationship context.

So, it can be seen as a prosocial or communal orientation. So, this orientation is mostly associated with other people, where you also like to help other people and so on. So, a helpful nature is also associated with it. Which contrasts with antagonism or competitiveness. People with high agreeableness are less competitive, less antagonistic, and so on. People low in agreeableness may exhibit hostility, self-centeredness, spitefulness, indifference, and jealousy toward other people. So, people who are low on these traits show a lot of this selfish kind of behavior. They may exhibit hostility, they are very self-centered and will be very indifferent to other people's requests, and so on. They may also express jealousy and so on.

So generally, individuals high in agreeableness exhibit better performance in work groups as compared to those low in agreeableness. So, because of the quality of Getting along with other people well in group situations or with other people, they are more likely to perform better in situations where there is teamwork and group dynamics and so on. People with high agreeableness.

People low in agreeableness are often at risk of cardiovascular disease, juvenile delinquency, and interpersonal problems. People who are low in agreeableness, because they do not get along well with others, will have a lot of conflicts and relationship issues, which may also lead to many other stressful situations in life, which may result in negative impacts on health, including physical health like cardiovascular diseases and so on. However, Costa and McCrae observed that readiness to fight can be advantageous in life, and good science requires skepticism, and critical thinking is often associated with individuals low in agreeableness. So it is not that people who are low in agreeableness are bad in every sense, because sometimes people should have certain qualities of low agreeableness in many situations in life. Like, you need to fight back when it is required. So, people low in agreeableness are good at that. Sometimes you need to be skeptical.

Sometimes you need to think critically, not just accept whatever others say. So, in that sense, certain aspects of low agreeableness could also be good in certain situations. So, it is not all good and bad situations. So, none of these traits are all good or all bad. These are all contextually relevant depending on the situation.

The last one is conscientiousness as a trait. Its sub-facets are competence, orderliness in life, dutifulness which is being very organized, achievement striving, always trying to achieve things, self-discipline, deliberation, and so on. So, this is a trait that is associated with a more organized life and so on. It is about having more achievement orientation, being more disciplined, and leading an organized, orderly life. The more of these traits you have, the more conscientious you are. The fewer of these traits you have, the less conscientious you are. So, this conscientiousness refers to an individual's level of organization in life. How organized you are. It encompasses both physical organization, such as the organization of one's office, and mental organization, such as planning ahead and setting goals to be achieved. So, this organization is reflected both in the physical world and in the mental world of these people. They are physically very organized; for example, their room will be neat and clean, their office will be tidy, and so on. Mentally, they will also be very organized; they will plan everything properly before doing something. So that can be reflected in both aspects.

It also involves how individuals regulate their impulses, including thinking before acting, delaying gratification, and adhering to norms and rules. So, very conscientious people will show regulated behavior. So, they will show very regulated behavior in terms of not being impulsive and doing everything without thinking. They will think properly before doing something, and they will also show something called delayed gratification.

Delaying gratification means there are two options where one option provides immediate gratification or benefit. But if you delay a little bit, then in the long term, if you delay some of the pleasures of life, you are going to get something better. These people are good at it. Immediate pleasures and such things, they will hold back and think about the long-term benefits. And do what is necessary. So, that is the idea of delayed gratification. And adhering to norms and rules, they are very disciplined in that. So, people high in conscientiousness have these qualities. Individuals high in conscientiousness are perceived by their peers and even spouses as well-organized, neat, thorough, and diligent. Even when researchers ask about people around them, they also perceive them as very neat, thorough, and diligent individuals.

They also tend to achieve higher grade point averages and demonstrate better job performance and so on. Because of their discipline, focus, and organization, they are more likely to get certain benefits in their life in terms of performance and so on. People low in conscientiousness will also have some problems associated with that. They are more likely to engage in, let's say, smoking, alcohol, or drug abuse. Generally, people low in self-conscientiousness are more likely that doesn't mean automatically they will. It will increase their vulnerability. They will also show symptoms of attention deficit disorder, maintain poor dietary habits, less exercise, and so on. So basically, their life will be less organized. Which will be reflected in all these things. They will have less discipline and so on. So these are all symptoms associated with all these things kind of. So they are kind of a manifestation of that quality.

Individuals high in conscientiousness are more inclined to adhere to doctors' orders compared to those low in conscientiousness. They tend to live longer. Because of the orderly nature, more adherence to a healthy lifestyle, and doctor's orders. So, some research shows they are more likely to live longer compared to people low in conscientiousness. Obviously, death has many other factors involved. This could be one of the factors. However, it is important not to become complacent if you score high in conscientiousness. Again, every trait has its own advantages and disadvantages. Too high a level of conscientiousness may also sometimes lead to irritating habits such as fastidiousness, compulsive neatness, workaholic behavior, and so on. Some people, if they become too high on this, their behavior may sometimes become highly irritating, you know. Everything too organized, too neat, and too much of a workaholic nature can sometimes also be a problem in terms of other aspects of life.

So, some thoughts on the Big Five Factor Model. Recent research has increasingly focused on the Big Five personality traits, and a lot of evidence shows this is one of the best theories in terms of explaining human traits. These five factors are good enough to describe human personality compared to other theories that we have discussed. One reason is that factor analysis of personality tests often reveals groupings that align with the Big Five. Most theories now show that the Five Factor Trait Theory is supported by most of the data or evidence aligning with the Five Factor Model. The list of basic traits such as Cattell's 16 traits and other trait theories can be subsumed under the Five Factor Model. So, let us say cattle have 16 factors; all the 16 factors could be subsumed under those 5 factors only. We do not need 16 factors, as 5 factors can explain all the 16 factors. So, a lot of other theories of trade or trade factor models could be explained using 5 factors. So, we do not need other

factors—too many factors or too few factors. Subsequently, the big five are seen as integrating other systems or theories rather than opposing them. So, it is not like this theory is opposing other trait theories. It kind of subsumes other trade theories and can explain the factors that are there in the other trait theories as well. So, in that sense, it has better explanatory power.

Now, let us look a little bit at some other models that are associated with the Big Five model, but they looked at it in a few other ways. One is the hexagonal model, which is based on the five-factor model only, but they added one more factor to kind of make this theory a six-factor.

So, they call it the hexagonal model. This HEXACO model was proposed by Ashton and Lee in 2005, as an alternative to the big five-factor taxonomy. So, it is a proposal they gave to kind of explain or provide an alternative model to the five-factor model. So, basically, they have all the five factors of the five-factor model. They added one more factor to that theory, which is honesty and humility. If you see all the other factors, these are all factors of the 5-factor model only. So, they added one more and called it the 6-factor model or HEXACO model. Let us see if is there any evidence of that or not. This is a proposition that they gave, and let us see the 5-factor model is well established, but let us see whether this theory has such evidence or not. Now, five of these factors are similar to those in the five-factor model, only they added honesty and humility as additional trait.

This new factor, which emerged from cross-cultural and linguistic research according to them, can be understood as a measure of genuineness or trustworthiness. So, they say it additionally measures genuineness or trustworthiness as a trait. According to them, this is not reflected in the five traits. So, this should additionally be added. So, this humility and honesty trait includes things like sincerity, fairness, greed avoidance, and modesty, in contrast with arrogance and egotism. So, the people with Honesty-humility traits will show these traits of sincerity, fairness, greed avoidance, modesty, and so on. And people low in this will show arrogance, egotism, and so on. Although honesty-humility may appear similar to agreeableness, according to them. But if you see the five-factor model, the agreeableness trait also has similar characteristics already. So, is there any need for adding this, or can agreeableness include those traits and descriptions? According to them, honesty and humility may appear similar to agreeableness, but the key difference lies in its focus on not exploiting others, especially the disadvantaged, while agreeableness involves altruism and helping others even at personal cost. So, they say this may be a kind of subtle difference in why we need another trait. So, they said the difference lies in the focus on not

exploiting others. Especially the disadvantaged. So, agreeableness involves helping others, an altruistic nature, and getting along well in group situations. Even at personal cost, people high in agreeableness tend to show those kinds of traits. However according to honesty and humility, that exploiting aspect or personal exploitation aspect is not there. So, that is their argument.

However, researchers and many other people in the field of personality were not very convinced with this explanation. So, this HEXACO model has faced many other criticisms. McCray and Costa, who proposed the five-factor model, said honesty and humility are merely a variation of agreeableness. It is an expression of agreeableness itself. So, there is nothing new added to it. So, we don't need an additional factor to it. Because agreeableness can explain these aspects. Focusing on its introverted aspect. It is more like the introverted aspect of agreeableness. So some aspects of it.

While traditional facets of agreeableness, such as trust, straightforwardness, altruism, cooperation, modesty, and sympathy, reflect more of an extroverted aspect of social interaction. People who are agreeable and introverted, which may not be directly reflected in their outside behavior, are honest and humble and they will show this honesty and humility aspect. People high in agreeableness will also show high honesty and humility aspect, and in terms of expression, whatever is shown, characteristics like trust, straightforwardness, and altruism, all these things will be expressed by people in the outside world and so on. So according to them, there is no value addition actually in this theory. So adding one more trait doesn't add anything because this is already explained by agreeableness. So why is there a need to add one more? So, the explanation given by the HEXACO model is not convincing to a lot of research. Therefore, this theory did not become a very popular theory simply because many researchers think that agreeableness is an aspect or expression of agreeableness itself, the additional factor. So, they contended that the six-factor model is redundant; it is not useful. It does not offer any improvement over the five-factor model; it does not add any more explanation to it. So that is why it is not that popular a model, but this is also discussed in the literature.

The last concept that we will be discussing is the dark triad of personality. So that means some people, some researchers also looked at negative personality dimensions. Some dimensions have negative behavioral connotations. So, a triad means there are three such personality factors or traits. So, the dark triad of personality, Paulhus, and Williams from the University of British Columbia, Vancouver, Canada, introduced this three-factor approach to understanding the darker side of personality. Some people show very dark

negative characteristics, and when you only look at those characteristics, there are three types of such traits.

So, this includes one is a narcissistic trait or narcissism. One is called Machiavellianism, and another is called Psychopathy. So, let us see what these three factors are. So, narcissism as a trait is characterized by extreme selfishness. An inflated sense of one's abilities and talents and a constant need for admiration and attention. People with narcissistic traits are extremely selfish; they only think about themselves and not about others. So, they will only do things that will advantage themselves, even to the extent of exploiting others. They have an inflated sense of ability and talent. Whatever talents and abilities they have, they inflate them more. And they think they are much better than what they are. And they want to be the center of attention all the time. The need for admiration and attention is very high and therefore these are called narcissistic individuals. So, it's more like people are very selfcentered kinds of individuals. So, this is one group of people, which has a negative connotation in terms of their behavior because such tendencies will create a lot of problems in their life and so on. The second one is Machiavellianism as a personality trait, which includes the need to manipulate others, marked by cunning deceit, and unscrupulous behavior. The Machiavellianism trait is not exactly like narcissistic people, but they are more towards manipulating other people. More like cunning people, deceitful people. They can have unscrupulous kind of behavior. They are more of a manipulative nature kind of individual. They have tendencies to manipulate people, you know. They may not show all the other traits of narcissistic people, but they are very manipulative individuals. So those are called Machiavellianism traits. Some people are high on this trait, and this will have its problems. So these are darker because this kind of problem is negative behavior shown by this kind of people. The last one is psychopathy. Which involves being callous, insensitive, egocentric, antisocial, and often taking advantage of others using great charm and sometimes violence. So, if you remember Eysenck's three-factor theory that we discussed, one of the factors was psychoticism, which is loosely related to psychopathy. That was one of the criticisms of Eysenck's theory that he was including a trait in the normal population as a theory. But which is more suitable for certain negative behaviors and more disordered behaviors. So that was one of the main problems of this trait, and no other trait directly talked about psychoticism. Because this particular theory is about negative traits only. So, it is more suitable in this context.

So psychopathic people are more of an antisocial nature. So, their behavior will harm other people a lot. They may show great charm and sometimes even violence in terms of their

day-to-day behavior they are very insensitive, and there is no empathy. They don't see life from the perspective of other people. They only do whatever they think is right. So, there may be some commonalities among these traits, but in their own characteristics, they are very unique in terms of focusing on certain aspects. Narcissism will be more of selfishness and an inflated ego, always the center of attention. People with Machiavellian characteristics are more of a manipulative nature, and may not always focus on admiration and other things, but manipulation is the central focus here. Psychopathy is more of an antisocial characteristic and, behavior that harms other people. So, these are three traits of dark behavior shown by certain personality characteristics. And psychopathy and other things are also prevalent in people who score high on this. They come under personality disorders and so on.

Studies have shown that individuals who score high on the traits of narcissism, Machiavellianism, and psychopathy engage in more antisocial activities and derive greater satisfaction from others' misfortune. A common aspect, a theme. In all three, these are some of the common characteristics associated with all three traits: they are likely to engage in antisocial activities and derive greater satisfaction from others' misfortune. So, they kind of enjoy others' misfortune and the problems or putting other people in problematic situations; probably they enjoy it, or they don't care about it. These individuals also tend to engage in strong acts of self-promotion and are often called duplicitous and aggressive. Self-promotion is another characteristic most of the show. Further, the verbal content of their Facebook updates, which are typically emotionally cold, aggressive, and highly selfpromoting, is a valid predictor of the level of psychopathy and narcissism. So, a lot of these characteristics in people with high levels of these traits can be very evident in their online behavior, in terms of their posts on Facebook and so on, which could be easily detected in some of these posts. From that content, you know, their behavior or traits could be predicted also. Additionally, those who score high in Machiavellianism and psychopathy tend to score low in the Big Five factors of conscientiousness, agreeableness, and openness.

So, most of these people, especially those with Machiavellianism and Psychopathy, score very low on factors of conscientiousness, agreeableness, and openness. These three are very important and have many positive life outcomes. They score low on this. In addition, individuals high in these dark traits exhibit several other characteristics. They typically display little empathy or consideration for others. A high level of aggression, a vengeful and unforgiving attitude, and a low score on emotional stability. So, these are also some of the characteristics they found. Now, this emotional stability may also differ among these

three traits. People with psychopathy, you know, maybe emotionally very stable sometimes, which may not be true for narcissistic people.

A lot of people who engage in antisocial behavior and so on, like antisocial personality, may be emotionally very stable. They will not show any sense of stress or anxiety in their behavior, but they can be very poisonous and negative in terms of behavior. Moreover, the dark triad is associated with engaging in short-term exploitative behavior and sexual relationships. Psychopathy, in particular, is linked to a high sex drive strong sexual and masochistic behaviors and fantasies, and so on. Some of these people who are high on psychopathy may have very exploitative sexual behaviors and engage in various kinds of antisocial behavior.

Individuals scoring high in psychopathy and narcissism often participate in numerous short-term sexual relationships with no intention of commitment and so on. Because they are not concerned with the welfare of other people, they are more concerned with their gratification. So these are also some of the characteristics that research shows are associated with these people.

So let us just summarize the trait perspective because this is the last lecture on trait theories. So if you see all the trait theories, there are different trait theories, and they try to define traits in their ways. Mostly in terms of a certain number of traits. If you see the evidence and other things in contemporary personality theories, the Big Five trait theory seems to emerge as the most empirically supported trait theory and the most acceptable and evidence-based theory in contemporary personality trait theories. Because a lot of other theories can be subsumed under this five-factor trait model or trait theory. The theories and supporting research suggest that genetic components or inheritance could account for about 50% of personality traits.

Most of these traits that we discussed, the five-factor traits and other traits, research shows they have a very strong genetic component. At least 50-60% of some of these traits can be explained using genetic inheritance. So, there is a very strong component of genetic contribution. Having said that, It is not 100%. So, the environment can also play some role in it. But genetics also plays a very strong role and is the more dominant factor in determining these traits in behavior. So, the evidence is particularly strong for factors like extroversion and neuroticism. The genetic contributions are very strong, with very strong determination evident in the research, and almost all other traits also show around 50%. So, a significant biological component is present in most of the traits or theories. Despite

this minor influence of the shared family environment in many cases, it is premature to discount family and other environmental factors. So, we cannot say that the family environment or overall environment does not play any role. Genetics may play a very predominant role, but the environment can also shape one's traits in very significant ways. So, overall, we can say that personality traits are shaped by both genetic makeup and life experiences, as well as environmental factors. That is the ongoing challenge for psychologists: to determine to what extent our genetics contribute and to what extent the environment plays a role. It is not so easy. Some of the research that we have already discussed shows to what extent genetics contributes. And none of this research says that 100% is contributed by genes and so on. For some traits, it is very strong maybe 60-70% is determined by genes. But still, there is room for environmental research contribution to shaping those traits, in other words, we can say genetics may play a contributing role in terms of expression; they may give certain tendencies within those human beings, and the environment can shape bring out those tendencies or suppress those tendencies depending on the environment. So, if you have certain traits for extroversion, genetics may give you those tendencies of extroversion, but it is the environment that can further bring it out or may also suppress it. So, in that sense, interaction with the environment is very important.

So, these are some of the things about trait theories, and we have discussed some of the major trait theories. We discussed the most important theory and the most successful in terms of explaining traits: the Big Five Factor Model and the different evidence associated with it. So, with this, I stop here. In the next module, we will be talking about psychoanalysis. Thank you.