

Psychology of Personality and Individual Differences: Theory and Applications

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Week 10

Lecture 23: Personality development 2: Attachment and personality development

I welcome you all to Module 10 of this course, and today is the last lecture of this module. This is the third lecture of this module, and overall, this is lecture number 23. Today we will be talking about the second part of personality development. In the first part, we talked about Erikson's stages of development, and in the second part—i.e., today's lecture—we will be talking about the concept of attachment and how it is connected to personality development. So, before we talk about today's lecture, let me give you a brief recap of the last lecture.

In the last lecture, we discussed in detail how Erikson, who was a Neo-Freudian, talked about the different stages of personality development that occur from birth to old age. He talked about eight stages of development, and we discussed the details of these stages. According to him, there are eight life crises we face at each stage, and based on whether we successfully resolve them, our personality is shaped accordingly. So, that was the basic concept of Erikson's stages of development, which we discussed in the last lecture. Today, we will be talking about the concept of attachment and how it plays a role in personality development. We will discuss the concept of the attachment behavioral system, the different phases of separation, and individual differences in attachment patterns. We will also talk about Mary Ainsworth's Strange Situation study, how she categorized different attachment styles, and how childhood attachment influences personality development later in life. Additionally, we will explore whether attachment styles developed in childhood are fixed or can be changed later. So, these are some of the topics we will cover in today's lecture, so, let us begin.

The concept of attachment theory was primarily developed by two people: John Bowlby and Mary Ainsworth. They conducted most of the initial research and developed the foundational concepts of attachment theory, and we will discuss their findings. When we talk about attachment, addressing the questions like, what is attachment? what is the definition of attachment? Talking about attachment, we will discuss close emotional bonds,

which are more like the emotional connection that we have with another person, typically, which is called an attachment.

So close emotional ties that we feel for special people in our lives, i.e., we feel a certain attachment with different people. These emotional ties are basically called attachment. Now attachment to the primary caregiver develops over the first 18 months of the child. When a mother gives birth to a child, the child interacts with the mother, and slowly the child develops attachment with the mother or whoever is giving care to the child. As a result, this whole attachment story goes on to the later stages of life. Next, we will be talking about different attachment styles as now we are just giving a brief introduction. Individuals who are securely attached, and who are comfortably healthy or attached to the caregiver enjoy being with their attachment figures.

As a result, if one is securely attached, they enjoy being with their attachment figures derive pleasure from their interactions, and feel comforted by the presence of their attachment figure, especially during times of stress and uncertainty. So, with whoever we form this attachment—basically, if that attachment is secure (we'll be talking about that in detail a little bit later)—but 'secure' means it's more like a healthy way where we are attached to the person. Then, the presence of that person is very comforting to us, especially during times of distress and uncertainty.

The theory of attachment was developed by John Bowlby, who was a British psychoanalyst. He is the main founder of this theory, though later many other people also contributed about whom we will be discussing. Bowlby aimed at understanding the intense distress experienced by infants separated from their parents. He observed that children, especially in the infant stage, experience a lot of distress when they are separated from their caregivers, like their mother or father—more specifically, the mother in most cases. He observed that such infants would engage in behaviors like crying, clinging, and frantically searching to prevent separation and re-establish proximity to their parents. So, the child has a natural intuitive nature of seeking connection with the caregiver or, in this case, mostly the parents. As a result, when they are separated, they start crying, clinging, or searching for their primary caregivers. This is a very general phenomenon that we see among all infants. Basically, Bowlby, based on this observation, proposed this whole attachment theory. Now, many contemporary psychoanalytical writers at this time view this behavior of children falls under immature defense mechanisms to repress emotional pain. That was one of the explanations given by psychoanalysts or people in the psychoanalytical tradition—that it is more like an immature defense mechanism. The child

is trying to defend himself because of the emotional pain they experience from the separation of their parents. However, Bowlby noted that this is not only the case with human beings. Such behaviors are prevalent across many mammalian species. Similar behaviors can also be observed even among many animals and mammals. It is not just a defense mechanism because animals do not generally engage in defense mechanisms and other things.

It that means there is some deeper reasoning that has to be explained, and he proposed that this could be because of some evolutionary reasons that this is seen across infants of humans and animals. He postulated that these behaviors might serve an evolutionary function, helping to ensure the survival and well-being of the young by maintaining closeness to their caregivers. One of the explanations that we can give for attachment behavior—is based on an evolutionary explanation because such attachment behavior promotes survival. Because if they are connected to or attached to their primary caregivers, their likelihood of survival is much higher, as they are the caregivers. So, such behaviors are prevalent not only among human beings but also among the infants of animals. There is an evolutionary function and mechanism behind it, and therefore it is not just a psychological mechanism. In that context, Bowlby used the concept of the attachment behavioral system that we all have.

From the ethological theory, John Bowlby postulated that attachment behaviors such as crying and searching were adaptive responses to separation from a primary attachment figure. So, this is a natural and adaptive response because it is required for their survival from the evolutionary perspective. Someone who provides support, protection, and care will naturally seek protection, nearness, or closeness to the primary caregiver. Human infants, like other mammalian infants, cannot feed or protect themselves and are thus dependent on the caregiver. Since an infant is helpless, they cannot protect themselves, as a result, the support of the caregiver is very important for humans and all other mammalian species. Bowlby argued that over evolutionary history, infants who maintained proximity to an attachment figure through these behaviors were more likely to survive until reproductive age. So, their survival rate would increase if they maintained the connection and attachment with the caregiver. He proposed that the attachment behavioral system, which means, it's a motivational system designed by natural selection, regulates proximity to an attachment figure. When we talk about this attachment behavioral system, it's a system that exists in all humans and other mammalian species, additionally, it's a motivational system. It automatically motivates individuals or infants through evolutionary

forces guided by natural selection which propels or motivates them to seek closeness to the attachment figure. That is called the attachment behavioral system because of which a child wants to protect themselves or ensure their survival and they are motivated to seek proximity to the primary caregiver. So, that is called the attachment behavioral system.

This behavioral system attachment behavioral system is very important in attachment theory as it links to ethological models of human development and the modern theories of emotion regulation and personality. This is a form of a link or explanatory link that connects both ethological theories and modern emotion regulation theories. According to Bowlby, the attachment system essentially asks, if the attachment figure nearby is accessible and attentive. So, this whole attachment behavioral system is only concerned with the fact whether your attachment figure is near, visible, attentive to you or not. If the child perceives the answer as yes, they feel loved, secure, and confident and are likely to explore their environment, play with others, and be sociable. When they feel their protection system is in place, protective figures or whoever is the primary caregiver is around them or protecting them or they feel a sense of secure connection with them, then they will feel a sense of love, security, confidence and they will explore actively the environment, play with others, socialize with others and so on.

However, if the child or the infant feels that there is no such attachment figure nearby, the child experiences anxiety and exhibits attachment behaviors ranging from visual searching to active following and vocal signaling. They will feel insecure and they will start searching for them. This is typically guided by this attachment behavioral system that is typically an evolutionary system. These behaviors continue until the child reestablishes. If the child sees there is no protective figure or primary caregiver around them, they will actively seek and try to reestablish the connection with them by seeking and finding until the child re-establishes a desirable level of proximity to the attachment figure or wears down in the context of prolonged separation or loss. In case they are not able to find a caregiver, then they will wear themselves down and exhaust themselves and then they will feel despair. In such cases, Bowlby believed that young children may experience profound despair and depression if they don't find their protection figures for a long time. So, that's a typical behavior that is common among all children. This is the figurative way of showing the function of this attachment behavioral system, where the question is, whether the caregiver is near, attentive, and responsive. The attachment behavioral system is guided by this question, where if the attachment figure is nearby visible, they feel secure, love confidence, and will be playful, less inhibiting, smiling sociable. On the other hand, if they find they

find that the answer is no, they will experience separation distress, anxiety, and so on. Additionally, attachment behaviors are activated to some degree ranging from simple visual monitoring to intense protest, clinging, and searching. As a result, they will search and ask questions if the caregiver is nearby till they find their nearness, and then the same cycle can continue. If the answer is yes, they will go there & if no, they will come again and they will again seek. As a result, this whole cycle will go on and on. This is one of the typical behaviors that we see among infants or children.

Bowlby also described different phases of separation especially in the context of children, in cases when they experience separation from the primary caregiver what kind of behavioral symptoms do they experience in the different phases? Bowlby describes several phases of children who go through the response of separation from the primary caregiver like parents, or any other primary caregiver. So, the phases reflect the emotional and behavioral reactions of children during the separations. What kind of emotional reaction do they experience during each of these phases, and how it can influence their future attachment style later?

So, the first phase of separation, when they experience separation, is called protest. This is the initial reaction to separation when the child first experiences that the primary caregiver is not nearby, is when where the phase of protest comes into the picture. The children become agitated, cry, scream, and show signs of distress. Here, typically, the child actively seeks to re-establish contact with the caregiver, demonstrating clinging and refusal to be comforted by others. This phase can last from a few hours to several days, depending on the situation of the child. Initially, the child goes into the mode of protest, where they try their best to re-establish the connection, called the protest stage.

The second stage is despair. If the separation continues, the child's initial protest turns into despair. Let us say they are not able to reestablish the connection with the primary caregiver, they will enter the next stage, called despair. They will feel highly sad and despairing because they will get exhausted from protesting. The child's behavior appears withdrawn, quiet, and less active, and there may be signs of sadness, hopelessness, and decreased interest in the environment. So, those could be some of the possible signs. The duration can persist for an extended period if the separation is prolonged or a new attachment system is not formed. So, if they are not able to find that primary caregiver, it can continue until then or until they find a new caregiver or attachment figure so that despair can continue.

The third stage is called detachment. Here, following prolonged separation after the despair stage, they may enter the detachment phase. When this continues the child starts to emotionally detach from the caregiver because they are hopeless and they are not able to reestablish, as a result, the phase of detachment comes. The child becomes more interested in the surroundings and might engage with other people or toys. However, this engagement lacks the emotional depth of the previous attachment, so they will slowly disengage or detach from the primary caregiver because they cannot reestablish the connection. They will slowly divert their attention to other things, but that emotional depth may be lacking in the new cases of whatever activities they are doing. This phase reflects a coping mechanism where the child protects themselves from further emotional pain by becoming emotionally distant. It is more like a protective mechanism that comes into the picture because they cannot remain in intense emotional states for a long time as it is very exhausting. So slowly there is an inherent mechanism where they start detaching themselves. But, again that sense of hopelessness and sadness may remain for some time.

The last one is permanent withdrawal. The last stage is where in cases of extreme prolonged separation some children may enter into phases of permanent withdrawal. Here the child shows a chronic lack of interest in forming new attachments or engaging with others. Emotional numbness and social withdrawal can become entrenched behavior, therefore they completely lose interest in all activities, and will completely withdraw. That is one of the possibilities. This phase can have long-lasting effects on the child's ability to form secure attachments in the future, potentially leading to attachment disorders. So, if a child enters into such kind of phase, it can influence his or her life in the later stages, like in adulthood or adolescence. But throughout their remaining life, they may have issues in forming connections or bonding with other people because of the problem of attachment figures in childhood. So, it can continue in the later stage also, and may lead to many disorders related to attachment figures and so on. This phase has highlighted the profound impact that early separations and disruptions in attachment relationships can have on a child's emotional and social development. So, the initial attachment stage—what kind of attachment the child has with the primary caregiver—can play a very important role in forming the foundation of how people relate to others in the later stages of their lives.

Now, these attachment patterns can have individual differences where not everybody behaves similarly. There are some general patterns, but there can be individual differences in the patterns of attachment among children and among human beings. Although Bowlby believed the basic dynamics, as described earlier, of attachment are experienced by almost

everybody in a similar fashion, it is a normative thing. He also acknowledged that individual differences exist in how children appraise the accessibility of their attachment figures and regulate attachment behaviors in response to threats. So, there can be some individual differences within those attachment styles and how they relate to attachment figures.

In the context of individual differences, Mary Ainsworth—a main researcher who was a colleague of Bowlby—systematically studied these individual differences and articulated a formal understanding through research. What kind of differences in attachment styles that children or human beings have? So, because we all don't experience similar attachment styles, people can differ in their attachment styles. Mary Ainsworth conducted very significant research in this direction. In her research in the 1970s, psychologist Mary Ainsworth expanded on Bowlby's work by finding out individual differences in attachment styles. Her groundbreaking Strange Situation study revealed the profound effects of attachment on behavior. She conducted an experiment named the Strange Situation experiment or study which is a well-known study where she investigated how different children react to separation from their caregivers, and from that, she developed individual differences in terms of attachment styles. Mary Ainsworth, in the Strange Situation study, for her students, developed this experiment as a laboratory paradigm to study infant-parent attachment systems. In this study, researchers observed children between the ages of 12 and 18 months as they responded to a situation where they were briefly left alone, and then reunited with their mothers. They were systematically separated and then reunited. Children from 12 to 18 months of age were brought into the laboratory or whatever the experimental setup was. The children were separated from their mother for a brief period and then reunited. She was observing the reaction pattern when they got separated from their mothers. So, that was a very simple study, and she observed all the individual differences. Based on the results she found that there are different patterns of attachment shown by these infants. A particular category of infants was considered to be securely attached. She found about 60% of the infants in the study. They showed or displayed something called secure attachment. This is one style: secure attachment means the infant uses the mother as a secure base for exploration and seeks contact after separation. These children become upset when the parent leaves the room but actively seek the parent and are easily comforted upon return. There is a safe and secure attachment with the mother. When the mother left them, they actively sought and tried to reunite with her, and when the mother came, they were very comfortable and comforted by her presence. She therefore termed it as a secure attachment pattern. So, you feel discomfort when the caregiver is

away and feel very comfortable and loved when the primary caregiver returns. This is more of a normative behavior that most children generally experience.

Bowlby talked about this as a normative behavior where children feel secure and confident in the caregiver's responses and availability. Children will feel secure and confident when the caregiver is present after the separation. This is more of a normative behavior. About 60% of the infants showed this pattern of attachment and about 20% of the infants in that study showed another style of attachment which is called an anxious resistant attachment. Here Infants are unable to use the mother as a secure base and may show anger and resistance upon the reunion. So, here their base or the connection with the mother is not that secure, because in the case of security, when they were reunited, they were very comfortable, happy, and so on. In this case, when they were reunited, they were showing a lot of anger and resistance when they reunited with the mother. So, their behavior was a little different from the other group of kids or infants. Ainsworth called them showing an anxious resistant attachment style as they were showing anger and resistance upon the reunion. These children were initially anxious and ill at ease and became extremely distressed upon separation. When reunited, they have difficulty being soothed and often show conflicting behaviors, wanting comfort but also appearing to punish the parents for leaving. So, there was a lot of resistance and anger, which was not present with the secure attachment styles. This attachment style indicates ambivalence and a lack of trust in the caregivers' availability and responsibility. They did not feel the sense of comfort that was shown by the secure attachment. So, this is another style shown by some infants, called the anxious-resistant attachment style. She found around another 20 percent—of infants showing another style called avoidant attachment. This basically means that the infants fail to use the mother as a secure base for exploration, like the earlier one, and avoid the mother upon reunion or approach her only indirectly. When they reunited after the separations, these children were not exactly avoiding the mother or relating to her indirectly or approaching her only indirectly. So, it was a kind of avoidant attachment style. Children do not appear too distressed by the separation and actively avoid seeking contact with the parents upon reunion. They are not very happy, nor are they very distressed when separated, and when reunited, they are not very secure or happy with the reunion, while sometimes focusing on play objects instead, and therefore, a little bit of avoidance behavior was there.

This pattern suggests a kind of disconnection or emotional distancing between the caregiver and the infant possibly due to some lack of responsive or sensitive caregiving,

some kind of possibility is there. Some children showed this avoidant attachment style—about 20%. These are the three categories she found from that study. One was secure attachment, which was the largest number of infants, the second was anxious-resistant, and the third one was avoidant attachment. Later, other researchers like Main and Solomon in 1986 found a fourth possible style. In their later research, they found disorganized insecure attachment. In this case, the children with disorganized insecure attachment display behaviors that are contradictory or lack a particular pattern. For example, they may approach the caregiver but then suddenly freeze, exhibit a dazed expression, or engage in repetitive behaviors. They were showing some kind of disorganization and there is no fixed pattern. If you see all the other styles, they had a fixed pattern: one was securely happy when reunited, another was angry, and another group was avoiding. So, there was a kind of consistent pattern there, but in this case, there were some children who showed a very disorganized kind of pattern while displaying confusing, contradictory behavior. There is a lack of pattern. Sometimes they approach with happiness, and then suddenly they freeze and exhibit a sad expression. Some kind of disorganized, insecure, inconsistent patterns were observed and there is a lack of strategy in this particular case. So, unlike securely, anxiously, and avoidant attachment children, which Ainsworth found, those with disorganized attachment do not have a consistent strategy for dealing with separation or seeking comfort. Their behavior appears disoriented and erratic. So, this is also another possibility that was later found.

Ainsworth's work was very significant for certain reasons because she empirically demonstrated how attachment behavior manifests in both safe and frightening contexts. What kind of possibilities does an infant show, which can also continue later? She created the first empirical taxonomy of infant attachment patterns. She identified three, and later another one was found which were secure, anxious-resistant, and anxious-avoidant. She showed that these attachment patterns correlated with parent-infant interactions, with secure children having responsive parents and insecure children often having insensitive or inconsistent caregivers. Subsequent research has further supported the link between early parenting sensitivity and attachment security. So, what kind of parenting, and what kind of behavior of the parent can influence those attachment figures in early childhood?

Now, these attachment styles are also very strongly connected to emotion regulation. So, Bowlby and Ainsworth's study basically shows that attachment styles can be viewed as a continuum of emotion regulation. If you see all these four attachment styles that we discussed, which were found in the Ainsworth study, actually differ in terms of emotion

regulation. In the case of anxious-avoidant, this is where children avoided the mother when they reunited and are characterized by overly organized strategies to confront and minimize emotions, representing one end of the continuum. So, at one end, this category of children who are showing an anxious-avoidant style where emotion regulation, was very minimal in this case with very minimal emotional expression. Anxious resistance is associated with relatively uncontrolled and poorly managed effects, which is the other extreme, where a lot of emotions, anger, and so on are shown—the other extreme.

Anxious resistance was one extreme, with a lot of emotional content. Avoidant was another extreme, with very little emotional expression. Secure falls in the middle, reflecting a balanced approach to emotion regulation. So, a balanced, necessary amount of emotional aspect was there in the secure attachment style. The other two were two extremes. In the case of the fourth one, which was later discovered by another researcher, is a disorganized style. It involves a range of behaviors with unpredictable emotional reactions. This can include impulsiveness, aggression, withdrawal, and difficulty experiencing emotions. So, this case of disorganized attachment style involves very unpredictable emotional reactions. It does not fall into any of these categories.

This includes impulsiveness, aggression, withdrawal, and difficulty expressing emotions. So, a lot of emotional confusion and no fixed pattern is observed here. Moving ahead, stating about what are the causes behind these attachment patterns? So obviously, one of the main reasons why a child develops a certain kind of attachment style is their experiences with the caregiver—what are the experiences with the parents or whoever is taking care of the child? The early experiences with the caregivers are crucial in developing attachment. The way an infant expresses the need for proximity to caregivers depends on the past caregiver responses. How the caregiver responds to their needs—responding to their emotional needs and so on, accordingly, they develop a certain style. 32:57

The key factors predicting attachment security include caregiver sensitivity and responsiveness. So, these two things are very important. One is how sensitive the caregiver is, and how responsive they are, both of which are connected. If somebody is sensitive, they will also be responsive. How immediately they respond to the need and how sensitive they are determine a lot of these attachment differences in infants. In the case of anxious-resistant caregivers, some of the research—mostly in the Western context—shows that caregivers were found to be unreliably responsive. This means they are not always responsive; sometimes they are very responsive, and sometimes they are not responding at all. This kind of unreliable responsiveness was shown for many children who developed

an anxious-resistant style, with poor timing in response to distress and frequent interruptions during play. These were some of the early findings. In the case of anxious-avoidant children, the caregivers were generally unresponsive and often rejected proximity-seeking behaviors. So, they are not very responsive to the needs of the child. A lot of the time, neglect could be present as a result of proximity-seeking behaviors, which are often rejected. Cold parenting and similar behaviors are likely reasons for developing an anxious-avoidant style.

In the case of a disorganized style, caregivers often experience psychiatric distress or unresolved personal issues, appearing frightened and fearful to their infants. So, in this case, a probability of a lot of parents or caregivers going through emotional problems, including psychiatric distress and personal issues may appear frightening and fearful in front of the infants. This style can be linked to high-risk environments such as abuse or poverty and so on. So, many children who grow up in high poverty or abusive environments may develop this disorganized kind of attachment style due to the environmental situations and the behavior of the caregiver. So, this attachment classification tends to remain stable over time if environmental conditions are consistent.

So, if the family environment remains the same, the attachment style also tends to remain the same. Early caregiver interactions form a prototype for future relationships, making these early experiences particularly significant. This can influence your future patterns of relating with other people because it can form an initial foundation. Whatever experiences we have during childhood can have a long-lasting effect because, at that time, a child is not able to filter out, what happens; they absorb it, and it goes very deep into their mind. So, whatever styles or relationship patterns they develop during childhood can continue into adulthood because that impact is very deep. Attachment theory also extends beyond childhood, influencing our adult relationships, particularly intimate romantic relationships and so on.

The kind of relationships we form in adulthood, including romantic ones, could all be influenced by the attachment styles we develop during childhood. In this particular lecture, I will not be able to discuss in detail specific relationships like romantic ones and so on. However, there is a lot of research that shows how attachment during childhood could transfer into romantic relationships. Research also indicates that our attachment styles as adults can be directly linked to attachment patterns formed in childhood and the quality of care we receive from our primary caregivers. So, the thing is, a lot of research shows that it can have a long-lasting impact. Based on the question of how can attachment during

childhood impacts later development, both psychoanalytical theories and ethologists believe that the feelings of warmth, trust, and security that infants gain from secure attachment set the stage for healthy psychological development later on. Whenever a child has a secure attachment style, if it develops during childhood, it generally continues into adulthood as a result they will have a secure relationship, healthy relationship, or development later in their life.

Consequently, insecure attachment may predict less-than-optimal developmental outcomes in the future. On the other hand, if they have an insecure attachment like other attachment styles that we discussed, could lead to certain problematic aspects in the development of the child in later stages. Although the existing data focus mainly on infants' attachment to their mothers, secure primary attachments are linked to favorable developmental outcomes. Most of the research shows, about mothers, but other figures could also come into the picture.

The children showed secure attachment during their initial infant stage, like 12 to 18 months, it was found that they have better problem-solving skills at age 2. Even though it exists in childhood, it shows how the initial attachment style predicts certain behaviors a few years later, and therefore better problem-solving at age 2. They engage in more complex and creative symbolic play, display more positive and fewer negative emotions, and are more attractive playmates for toddlers. In contrast, infants with disorganized, disoriented attachments are at risk of becoming hostile and aggressive preschool and grade-school children who are likely to be rejected by their peers.

These are some of the very early findings that showed that the initial 12-to-infant-stage attachment style could predict some of the behavior later at age 2 and beyond. Long-term studies of attachment also reveal some of the important aspects of how it can impact later development. In early childhood, for example, Waters and colleagues in 1979 found that securely attached children at 15 months became social leaders by the age of three and a half. Here, leaders mean in the context of children's behavior when they play as a team. They initiated play, were sensitive to others, popular, curious, self-directed, and eager to learn, therefore few years later, it also has a certain impact on their behavior, especially if they had a secure attachment style in the initial 15 months. Insecurely attached children were more socially and emotionally withdrawn, hesitant to engage in play, less curious, and less forceful in pursuing goals. So, almost similar, and consistent findings were reported by these studies also. Some of the follow-up studies during later childhood and adolescence i.e., at the ages of 11, 12, 15, and 16 years showed how the initial attachment

style in the infant stage impacted their behavior. Even during adolescence, at 11 to 12 years, or 15 to 16 years of age, securely attached children displayed better social skills and were more likely to have close friends. On the other hand, insecurely attached children were more likely to have, conflicted emotional dialogues with their parents, be less enthusiastic about challenges, less prepared for the transition to college. They also had poorer peer relationships, few close friends, and more deviant behaviors, some also showed some pathological symptoms. This study also shows that even during adolescence a lot of these patterns actually continue. Based on this, understanding the reason behind this and why some kind of attachment style that is developed during the infant stage could forecast some of these later developmental outcomes was explained when John Bowlby used the concept of attachment as a working model for oneself and others. How a child forms attachments with others, is based on how they develop a mental model about themselves and others which remains and guides their behavior later on.

Bowlby proposed that the stability and enduring effects of early attachment classifications can be explained by the development of internal working models. These cognitive representations of oneself and others formed through interaction with the primary caregiver are used to interpret events and expectations from other human relationships. So, they formed a model, working model, or cognitive model which has information about how you view yourself, and how you view others. You develop a certain model or thought process that is called the internal working model and this model seems to remain and continues in adulthood which guides your behavior. How you think of yourself and how you think about others, particularly close people, is the stage at which the model is developed during early childhood. So, if you have a positive working model, which forms in the secure attachment style, sensitive and responsive caregiving leads children to develop a positive working model of others, believing that people are dependable. Additionally, if caregivers respond quickly and appropriately, children form a positive working model of self, concluding they are lovable. To answer how they were reciprocated for their behavior during childhood, they develop a working model and gain certain ideas about themselves, like whether they are lovable or whether they are accepted or rejected individuals, and how others should be trusted or dependent. All these things develop from those working models. This working model can guide your behavior later also.

On the other hand, if you develop a negative working model based on your interaction with the caregiver, especially if the caregiver is insensitive, neglectful, or abusive, caregiving results in a negative working model of others leading to insecurity and mistrust. If

caregivers ignore or misinterpret signals, children develop a negative working model of self. They feel they are unworthy; they have low self-esteem and they feel that they are not accepted but rather hated by people. These internal working models influence the quality of a child's primary attachment and shape their expectations for future relations. This whole mental model continues there, and this will be reflected in their adult behaviors or during the adolescence phase. So that is the model of how we form this model, and the diagram is just a reflection of it.

We have ideas about ourselves, the self, and about others. As you can see, this side is about others, and this side is about the self, based on these, you have different attachment styles. If you have a positive self-image and also a positive image of others, then this basically happens when there is a secure attachment style. So, in the case of a secure attachment style, you have a positive self-image as well as positive views about others because you formed a very secure relationship with caregivers. So that is basically an outcome that leads to secure attachment or that is an outcome of a secure attachment style. When you have a negative view of yourself and a positive view of others, these are the possibilities that can lead to something called preoccupied or resistant primary attachment. This whole resistance style could develop and one of the possibilities is that the child has a negative view about the self but has positive views about others, so that's called resistant primary attachment. On the other hand, when one has a negative view of others but a positive view of oneself, then an avoidant attachment style could be the result of that, or this could be the result of an avoidant attachment style. The last one is when you have both negative views about yourself and negative views about others. In terms of your working model, or mental model, then it leads to a disorganized attachment style. So, this is the most negative form of attachment style. So, these are the four possibilities based on how you view yourself and others. These four possible combinations lead to four types of attachment styles that we already discussed. These are products of these four attachment styles. this talks about the different working models or mental models that people develop out of these attachment styles.

Belsky and colleagues in 1996 were among the first researchers who showed that children with secure and insecure attachments have different working models. However, Belsky and colleagues discovered that when you have secure and insecure attachments or different attachments, these people have different working models. They empirically proved that they have different internal working models of self and others. So basically, what the researchers did was to show three-year-olds a series of puppet shows dramatizing positive

events, such as getting a birthday present, and negative ones, such as spilling juice. So, there were many children in the experiment, and basically, they were shown a puppet show, and in that show, there were many positive things and many negative things. Positive things, like getting birthday presents and so on. They also observed negative things, like somebody spilling juice and then certain behaviors. They showed different kinds of dramatizations of positive and negative behaviors in that puppet show. They expected children who had been securely attached as infants to expect positive experiences in life and to attend to them and remember them especially well. So, they hypothesized that if a child is securely attached, then they are more likely to remember positive things from that puppet show for these three-year-old children, because their expectation or internal working model is positive, they are more likely to remember and focus more on positive things in that show. They expected children with histories of insecure attachment to expect and recall more negative events.

On the other hand, they hypothesized that children with insecure attachment would be more likely to remember negative things from that puppet show because their mind is kind of tuned toward that. The securely and insecurely attached children in the study—that both groups, securely and insecurely attached children in the study, did not differ in their attention to positive or negative. Based on what content they attended, there was no difference. But securely attached children excelled at remembering positive events, whereas insecurely attached children excelled at remembering negative events.

So, they found there was a difference in terms of what they remembered from that show. Based on the hypothesis, they found that securely attached children actually remembered more of the positive events from the show, and insecurely attached children remembered more of the negative events from the show. This was true even when the group differences in temperament were controlled. So, children were more or less similar in temperament. So, temperamental differences were controlled. It was not because of temperamental differences as they were trying to see whether attachment style has an impact on that. They found there is a possibility of difference in the internal working model of these two groups of children. So, this was the graphical result, where, if you see, for secure attachment style children for positive they remembered more than negative they remembered less. For the insecure attachment style, the children remembered negative events more in terms of how many events they remembered and so on. There was a memory score was there where they gave certain scores in terms of how many items they remembered.

Now, the next question is, whatever childhood experiences or attachment with the primary caregiver we have, is like a destiny that we cannot change or there is a possibility of change? So let us address this question at the end. Although for these early working models, research shows that they can have a long-lasting impact and can impact adult behavior also. It also influences the attachment styles where the secure attachment style has an advantage. The future is not necessarily bleak for infants with insecure attachment. For whatever has happened as an attachment style in the children it is not impossible to change.

The secure attachment style has an advantage, but that doesn't mean children with insecure attachment cannot change their destiny or their behavioral patterns later on, and so there is nothing fixed like that. A secure relationship with another person, such as a father, grandparents, or daycare provider, can help mitigate the negative effects of insecure attachment with the mother. So, let's say a child has an insecure attachment to their mother. If they have a secure attachment with some other figures, parallelly, like with a father or with grandparents, or let's say they go to a daycare provider, then a lot of this negative impact can be minimized, because even though they are not getting secure attachment from one figure, they are getting secure attachment from another figure. So, a lot of this negative impact could be mitigated.

Additionally, if an initially insensitive mother becomes more sensitive and responsive over time, her child is less likely to experience the behavioral problems and shortcomings typically associated with insecure attachment. So, if the behavior of the parents or caregiver changes with the passage of time, then slowly, the child also develops different working models within themselves and they start changing their perspective. So, it can change if the behavior of the caregiver also changes.

Secure attachment can become insecure in cases like some children have a very secure attachment, but it may become insecure later if something significant changes in their life due to, for example, a lot of stress. For example, a mother returning to work, having another baby that requires undue attention, or experiencing marital problems, depression, illness, or financial difficulties. If there is a significant, stressful event they encounter from the parent or the family environment, the child who initially had a very secure attachment may slowly, because of environmental influences, develop an insecure attachment as a result of a significant stressful event in the family.

For example, the mother is no longer available because she goes to work or witnesses and experiences the marital problems of the parents. All these stressful events can harm their

working model and their perspective of thinking. Bowlby used the term 'working models' to highlight a child's cognitive representation of themselves and others and how their relationship dynamics can change based on later experiences with caregivers, friends, romantic partners, and spouses. Therefore, this working model is not like a fixed line, things can change later on based on certain experiences, but those experiences have to be very significant. In summary, while secure attachment histories do not guarantee positive adjustment later in life if something negative happens later on, the secure attachment may not continue if there is a very strong negative event later in their life. Insecure early attachment does not necessarily predict poor outcomes if something positive also happens later in life. However, secure early attachment remains significant as it serves as an important source of emotional strength, helping children and adolescents cope better with stress and adversity, even though it does not provide a guarantee. So, even though it doesn't provide a guarantee of what will happen in their next life if you have a secure attachment established in the initial period of your life, this will give a strong foundation and help provide emotional strength to deal with problems stress and adversities of life later on. As a result, it will provide you with a good foundation, even though it is not a guarantee that it will continue as many other things can happen in life, but it will give you a stronger foundation to face later problems in life.

Stating some of the limitations of this theory. Since no theory is perfect. Stating about this theory, some researcher says that too much emphasis is only given to the parental relationship. Primarily they focused on the caregivers, more specifically parents and more specifically mothers. Some researchers argue that an individual's personality is not just a product of parents' relationships with the parents, and many other factors like genetics and other significant events of life or other people in life can also play very important roles. Parents and mothers play very important roles but there may be many other things that they have not focused on here since no theory can focus on everything their focus was only on attachment styles. So, there is another limitation that some people say is about the focus on stressful situations only. The model is based on children's reactions to brief stressful situations, such as separation from their parents, and does not account for interactions in non-stressful contexts. Many other experiences in non-stressful contexts can also shape their personality, which was not considered here. Another limitation is that the early model did not consider that children might form different attachments with various people. The attachment with the mother may not reflect the attachment formed with others. As a result, there can be many other attachment figures in the lives of children, or as they grow, all of

which could influence their personality, but they do not focus much on attachments with other figures.

The original model also assumed the mother as the primary attachment figure overlooking other individuals, such as fathers, stepfathers, siblings, grandparents, and other relatives, who might also play the role of children's primary attachment figure. Since naturally, the mother is the most important figure in the infant's life, the focus was given to the mother's relationship on the basis of most of the experiments that were done. Children can also have attachments with primary caregivers or other attachment figures and many other figures, like fathers, stepfathers, grandfathers, and so on. All of which were not included.

So, these are some of the limitations or, you can say, criticisms of this theory. Since no theory is perfect, and one theory cannot account for everything as a result of which this theory reflects and gives many ideas or insights about the attachments we form, particularly in the initial phases of our lives which can play a very important role in shaping who we are, what kind of person we become, and how we relate to other individuals. So, it can influence our personality very strongly. Therefore, this is the major contribution of this theory. With this, I will stop here, and we will start a new module in the next lecture. Thank you.