

Psychology of Emotion: Theory and Applications
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Lecture 1: Emotions: Concepts and Categories

I welcome you all to the first lecture of a course titled "Psychology of Emotion: Theory and Applications." So, as you know, this is a course associated with the discipline of psychology, and more specifically, we will be discussing the concept of emotion. The diverse aspects of emotion we will be discussing include theoretical aspects and specific applications. So, before I delve into what this course is all about, I will provide a brief background on the discipline of psychology. This is because there may be many students taking this course who are not from a psychology background.

So, it is important to provide some background so that individuals who come to this course, particularly those who are not from the discipline of psychology, have some understanding of what this discipline is all about. Therefore, I will briefly define what psychology entails. One of the basic definitions of psychology is that it is a scientific study of behavior and mental processes. If we examine this definition, there are a few key terms that we need to understand: science or scientific study, behavior, and mental processes. These three terms are essential to grasp the essence of this discipline. Firstly, psychology is considered a science or involves scientific study. What exactly does this mean? This is crucial to understand.

So, any discipline can be considered a science or scientific study provided it adheres to the scientific method. The method or methodology used by a discipline determines whether it qualifies as a science. Science encompasses not only pure sciences such as physics, chemistry, or biology but also social sciences. Therefore, psychology is considered a science or scientific study.

What does "science" or "scientific study" mean, essentially? It means the utilization of the scientific method. Now, in the scientific method, certain hallmarks or characteristics must be present for it to be deemed scientific. On this slide, you can observe some of the characteristics of the scientific method. When we assert that a particular discipline is a science or when we refer to employing scientific study, the implication is that this discipline or specific study/experiment adheres to or possesses these characteristics or hallmarks. One of the elements of the scientific method is the utilization of systematic observation or empiricism.

Systematic observation is one of the fundamental characteristics of science. This means that science relies on systematic observation as a key aspect of its methodology. What does this mean? Science investigates only those phenomena that are observable or detectable using our sensory organs. Science does not concern itself with anything beyond what can be detected. We can detect phenomena through our sensory organs such as hearing, seeing, touching, tasting, and smelling.

The scientific method not only utilizes observation but also emphasizes systematic observation. This distinction is crucial. Systematic observation involves observing phenomena in a structured and organized manner. There is a notable difference between systematic observation and random observation. Random observation involves haphazardly observing phenomena without a structured approach. Conclusions drawn from random observations can be erroneous or full of errors.

Why, for example, consider human behavior. Let's say you visit a shop and encounter a salesman for the first time, and this salesman behaves very strangely or rudely towards you. Immediately, you might be inclined to conclude that the salesman is inherently rude. However, upon careful consideration, you realize that this is just one instance of the person's behavior. It's a random observation—you happen to meet them for the first time and witness one instance of their behavior. It's possible that the person is behaving rudely due to external factors, such as a personal conflict or a recent quarrel. Exactly. It's possible that the person is in a disturbed state, which is influencing their behavior at that moment. Perhaps, most of the time, this person is calm and well-behaved. Making a conclusion based on just one observation is not advisable because it may lead to an inaccurate judgment. Science emphasizes the need for systematic observation, which involves collecting data from multiple instances, different time points, and various circumstances. By gathering data systematically, scientists can make more confident conclusions about the likelihood of certain phenomena occurring or about the behavior of individuals.

Absolutely, systematic observation is indeed crucial in the scientific method. Drawing conclusions based on only a few instances of observation or random observations can lead to erroneous interpretations, as these occurrences may simply be chance events rather than representative of the underlying phenomena. Systematic observation, also known as empiricism or empirical study, involves the systematic collection of data, enabling researchers to make conclusions based on a comprehensive set of observations.

Furthermore, another essential characteristic of scientific study is objectivity. Objectivity is a crucial aspect of science because it ensures that biases, whether subjective or individual, do not influence the interpretation or collection of data. When biases are present, there is a risk of manipulating data to fit preconceived notions or desired outcomes, resulting in biased data that may not reflect the true reality of the phenomenon being studied. Objectivity requires setting aside personal biases, thoughts, and feelings, and observing the phenomenon as it is, without any interference. The data collected and reported must reflect this impartial observation. In contrast, subjectivity involves reporting data based on personal thoughts, feelings, or biases, without considering the objective reality of the phenomenon.

So, subjectivity changes from time to time and place to place, whereas objectivity is more factual. Science employs objectivity as one of its methodological characteristics. Another crucial characteristic of science is replicability or verifiability, which is also of great importance.

In the scientific community, and in various disciplines, researchers publish their experimental studies and findings in journals. These publications serve the purpose of verification and replication. The objective is to enable others to replicate the same experiments or provide comments on their validity. If you conduct an experiment using a certain methodology and obtain a result, but no one else can replicate the same result using the same methodology, then there is cause for skepticism. You may have found something that others cannot find.

So, if others cannot replicate your findings, it indicates a problem with your research. Replicability and verifiability are crucial aspects. When something is verified and replicated repeatedly, confidence in its validity increases. This confidence stems from the fact that multiple researchers have observed similar phenomena, not just one individual. This process of verification and replication is known as replicability or verifiability.

These characteristics are among the primary attributes of the scientific method. While there are numerous other characteristics, these are some of the most significant. To classify a discipline as scientific, it must adhere to these characteristics. When we refer to psychology as a science or scientific study, we mean that psychology endeavors to uphold these parameters in its research.

So, that is one aspect of scientific study. Now, in psychology, science focuses on behaviors. Behaviors refer to observable actions that can be measured. For example, when I walk, you can observe the movement of my body, and when I speak, you can record what is being said.

All such actions are considered behaviors because they can be observed, recorded, and measured. Psychology examines both behavior and mental processes. Mental processes encompass a wide range of activities of the mind. These activities collectively constitute mental processes. They include various functions such as perception, thinking, memory, and imagination, among others. The mind engages in these diverse activities, all of which are studied using the scientific method in psychology. So, psychologists aim to quantify mental processes using specific methodological approaches. However, delving into the intricacies of these methods is beyond the scope of this course. Psychology, fundamentally, is the scientific study of human behavior and mental processes. The goal is to comprehensively comprehend what constitutes scientific study, behavior, and mental processes. Psychology seeks to gain a holistic understanding of the diverse aspects of human behavior, acknowledging the inherent complexity of understanding human behavior.

Psychology encompasses numerous sub-disciplines, each dedicated to addressing various aspects of human behavior. Given the vastness of the field, it's impractical for every researcher to cover every facet comprehensively. Hence, sub-disciplines emerge within psychology, with individuals specializing in specific areas. For instance, social psychology examines social behavior, clinical psychology focuses on mental disorders, including diagnosis and treatment. Additionally, health psychology explores how mental factors affect physical health. Organizational behavior delves into understanding human behavior within organizational settings. These diverse sub-disciplines offer multiple perspectives on human behavior, contributing to a holistic understanding of psychology.

Now, let's shift our focus to this specific course. It's evident that this course is affiliated with the field of psychology. The central theme of this course revolves around the concept of emotion. Therefore, our primary objective is to grasp the intricacies of emotion. Emotion stands as a cornerstone concept within psychology. Across various sub-disciplines of psychology, emotion consistently emerges as a critical aspect. This underscores the indispensable role of emotions in comprehending human behavior and psychology as a whole. Emotion is a fundamental aspect that distinguishes human life, enriching experiences in profound ways. It sets humans apart from machines; while machines can perform various activities, they lack the capacity for emotion. Emotion, therefore, holds a central position in human behavior. In fields such as social psychology, understanding emotions and their role in relationships is pivotal to

comprehending social behavior. Similarly, in clinical psychology, emotions are integral to understanding psychological disorders. Consequently, emotions emerge as a crucial concept across various psychological domains.

This significance underscores the importance of exploring the concept of emotion within the realm of psychology. In this course, our aim is to delve into this concept through the lens of psychology and related disciplines. We will explore theories and applications surrounding emotions, seeking a comprehensive understanding of this multifaceted phenomenon. By examining what psychology and associated disciplines have uncovered about emotions, we aim to gain insights into their complexities and implications in human behavior and psychology.

This course aims to provide a comprehensive understanding of the psychology of emotions, including their theoretical foundations and practical applications, such as emotional intelligence. Broadly, the course content can be divided into two main parts:

The first part focuses primarily on theoretical aspects of emotions. It delves into various theoretical frameworks and concepts surrounding emotions, aiming to provide students with a solid understanding of the diverse aspects of emotions and their significance.

In the latter part of the course, we will explore the practical applications of emotions, with a particular emphasis on emotional intelligence. Here, we will examine how the concept of emotional intelligence can be applied in real-world contexts to enhance personal and professional effectiveness.

Throughout the course, we will address some of the major questions associated with the scientific study of emotions, offering students a comprehensive overview of this fascinating and important field within psychology.

Indeed, these questions are pivotal not only for understanding our own lives but also for comprehending the discipline of psychology and human behavior as a whole. Throughout the course, we will delve into key inquiries such as:

1. What are emotions? We will explore the nature and definition of emotions, seeking to understand their essence and components.

2. Are emotions universal, or are there culture-specific variations? We will examine whether emotions are experienced similarly across different cultures or if cultural factors influence emotional experiences.

3. How do emotions influence our brain and body? We will investigate the physiological aspects of emotions, exploring how emotional experiences affect our neurological and physiological functioning.

4. What happens when we struggle to manage emotions? We will discuss the consequences of emotional dysregulation, exploring the impact of difficulties in managing emotions on psychological well-being and overall functioning.

By addressing these questions, we aim to deepen our understanding of emotions and their role in shaping human experiences, behavior, and psychological processes. The management of emotions is indeed crucial, as difficulties in regulating emotions can lead to various disorders and challenges in life. Throughout the course, we will explore the implications of ineffective emotion management and its potential impact on psychological well-being. We will also examine whether there are specific psychological disorders that are primarily centered around emotions or the inability to manage them effectively. Moreover, we will address the question of whether it is possible to learn to regulate destructive emotions. Certain emotions can be harmful if left unchecked, so understanding strategies for regulating them is essential for mental health and well-being. In addition to exploring negative emotions and their management, we will also delve into the realm of positive emotions and happiness. Understanding positive emotions is equally important, as they play a vital role in enhancing the quality of life. We will explore the concept of happiness and positive emotions, seeking ways to cultivate and enhance them in our lives.

Furthermore, we will examine the concept of emotional intelligence and its significance for success and satisfaction in both personal and professional domains. Emotional intelligence has gained prominence in research due to its profound impact on happiness, satisfaction, and overall success in life. Therefore, understanding and developing emotional intelligence skills can be instrumental in fostering personal and professional growth and fulfillment.

Throughout this course, we will delve into various aspects of emotional intelligence and explore ways to acquire and apply these skills to enhance our quality of life. Our aim is to provide a comprehensive and insightful understanding of emotions by examining both theoretical frameworks and empirical literature on the subject. The course content will be

rooted in research-based theories and data, ensuring a scholarly approach to the exploration of emotions.

Spanning 12 weeks, the course will comprise 12 modules, with one module covered each week. Within each module, students can expect to engage with 2 to 3 lectures, resulting in a total of approximately 30 to 31 lectures throughout the duration of the course.

For this first lecture, titled "Emotion Concepts and Categories," we will focus on key concepts related to emotions and their categorization. These concepts will serve as the foundation for our exploration in today's session.

In today's lecture, we will delve into the core concepts of emotions, beginning with a discussion on how emotions are defined and their components. We will then explore the distinctions between emotions, affects, and moods, as these terms are often used interchangeably but carry specific technical differences.

Furthermore, we will examine how emotions can be understood and classified using two main categories of theories: the basic emotions model and the dimensional model of emotions. These theoretical frameworks offer different perspectives on the nature and organization of emotions, providing valuable insights into their complexity.

From both a scientific and layman's standpoint, emotions hold a central position within the field of psychology and in the lives of individuals. Emotions shape our daily experiences, enriching our lives with a range of feelings, from joy and excitement to sadness and fear. Indeed, it is emotions that give depth and richness to our existence, defining our interactions and responses to the world around us.

In psychology, emotions are at the forefront of nearly every sub-discipline. For instance, clinical psychologists often assist individuals in managing harmful or dysfunctional emotions, highlighting the pivotal role emotions play in mental health and well-being. Throughout this lecture, we will explore these fundamental aspects of emotions, laying the groundwork for a deeper understanding of this complex phenomenon. Clinical psychologists primarily focus on understanding and addressing emotional disturbances, as these disturbances often underlie many psychological issues. Their emphasis lies in comprehending emotions and providing treatment for individuals experiencing emotional difficulties. In contrast, cognitive psychologists explore how emotions influence people's cognitive processes and decision-

making abilities. Emotions are not experienced in isolation; they significantly impact our thoughts and behaviors, shaping our perceptions and responses to various situations.

Similarly, social psychologists and personality theorists investigate how emotions affect our relationships with others. Emotions play a crucial role in interpersonal dynamics, influencing communication patterns, social interactions, and the formation of bonds.

The importance of emotions in psychology is evident in how they permeate various subfields and aspects of human experience. Whether considering clinical, cognitive, social, or personality psychology, emotions are integral to understanding human behavior and psychological functioning.

To embark on a comprehensive exploration of emotions, we must first define what emotions are and understand their fundamental nature. Only then can we delve into further discussions about their components, influences, and implications in various aspects of human life and psychology.

Indeed, emotions are an integral part of our daily lives, encompassing a wide range of experiences from happiness and excitement to anger and sadness. Despite our familiarity with experiencing emotions, defining them can be a challenging task. While we may recognize and label emotions as we experience them, providing a comprehensive definition proves to be more complex.

Research in this area reflects the difficulty in defining emotions, with one review identifying a staggering 92 separate definitions. This diversity in definitions highlights the varied perspectives and interpretations individuals have regarding the concept of emotions. Some researchers even humorously remark that everyone knows what an emotion is until they are asked to define it.

This complexity underscores the challenges inherent in defining a multifaceted concept like emotion. While we may intuitively understand and experience emotions in our daily lives, articulating a precise definition that captures the intricacies of emotional experiences remains elusive. As we delve deeper into the exploration of emotions, we must grapple with this complexity and appreciate the nuances inherent in understanding this fundamental aspect of human psychology.

Language possesses a remarkable quality in its capacity to refer to concepts even when our understanding may be imprecise. Despite this ambiguity, humans possess the ability to

articulate definitions, albeit imperfectly, through language. As such, individuals often endeavor to define concepts such as emotion in their own terms, drawing upon personal experiences and cultural influences.

In our exploration of emotion, we will consider several key definitions that offer a more comprehensive understanding of this complex phenomenon. Through this examination, we aim to shed light on the multifaceted nature of emotions and explore the diverse perspectives that contribute to our understanding of this fundamental aspect of human experience.

The term "emotion" finds its roots in the Latin word "emotio," derived from the verb "emoveri," which means "to move" or "to stir up." Thus, at its core, emotion signifies anything that stirs or moves an individual. When we experience emotions, there is a palpable sense of movement or stirring within us, propelling us from a state of rest to one of activation or response.

Aristotle also recognized the significance of emotions, describing them as a principle of movement in human experience. Emotions play a pivotal role in our lives, driving us forward and shaping our actions and decisions.

Despite the challenges in providing a precise definition of emotion, most psychologists agree on certain fundamental aspects of this phenomenon. Drawing upon these shared understandings, one comprehensive definition encapsulates the key parameters commonly acknowledged across various definitions.

One potential definition of emotion describes it as a motivated state, wherein individuals are propelled to action. This state is characterized by three main components: physiological arousal, expressive behavior, and mental experiences. These components can vary in intensity and may be experienced with varying levels of pleasantness or unpleasantness. For instance, when experiencing anger, physiological responses such as an increased heart rate may occur. So, when experiencing anger, physiological arousal manifests as an increased heart rate. This physiological response indicates the arousal present during the emotional state. Additionally, individuals may exhibit specific facial expressions, such as gritting their teeth, which serve as expressive behaviors signaling their anger. These outward expressions provide observable cues indicating the individual's emotional state. Furthermore, the mental experience of anger is characterized by a sense of being enraged, often described as a hot state, accompanied by a feeling of readiness to act aggressively or destructively. This mental aspect of emotion contributes to the overall experience of anger, demonstrating the multidimensional nature of emotions as encompassing physiological, behavioral, and subjective components.

So, psychologists delve into the various facets of emotion, including physiological arousal, expressive behavior, and mental experiences. To provide a clearer understanding, let's break down these components. Firstly, we have the physiological component, which encompasses bodily responses such as changes in heartbeat, breathing patterns, and perspiration levels. When experiencing emotions, individuals may undergo physiological arousal, indicated by heightened heart rate, accelerated breathing, and sometimes, increased sweating.

So, this is one component of emotion. Another component is behavior, which encompasses various bodily movements and facial expressions that occur when experiencing emotions. Additionally, there is the aspect of sensation or experience, which involves how emotions are felt in the body and mind, influencing sensations, perceptions, thoughts, memories, and more.

Now, let's explore the next concept, which is crucial for laying the foundation before delving into theoretical aspects. In psychology, three terms are commonly used: affect, emotions, and moods. While people often use these terms interchangeably, they have distinct meanings in the field. "Affect" is a broad term that encompasses a wide range of emotions experienced. It serves as the broadest term used to denote emotions.

So, "affect" serves as an umbrella term encompassing emotions, moods, and other related states, making it the broadest term. Emotions, on the other hand, are intense feelings directed at a specific person or object, often arising from particular situations or stimuli. For instance, if someone insults you and you respond with anger directed towards them, this response is considered an emotion. Emotions are typically focused and specific, occurring within the context of a particular event or interaction.

Moods, however, are also feelings but are more generalized and lack a specific contextual stimulus. Unlike emotions, moods may arise without a clear reason or trigger. For example, you might experience a bad mood throughout the day without any specific event causing it. Moods tend to be less intense than emotions and can persist over a more extended period, influencing one's overall disposition or outlook.

So, the intensity of emotions differs significantly from moods, with emotions being much more intense. Most experts believe that emotions are transient in nature, meaning they come and go relatively quickly. For example, an emotion stimulated by a particular situation tends to dissipate once the situation changes or resolves. Emotions are typically short-lived and not prolonged.

On the other hand, moods can be much more enduring, lasting for extended periods. You might find yourself in a bad mood for an entire day, whereas intense feelings of anger, for instance, may subside within minutes or even seconds. The duration of moods can extend for hours or even days, indicating their long-term nature compared to emotions.

Moreover, emotions are often responses to specific persons or events within a particular context. In contrast, moods are not necessarily tied to specific individuals or situations. They can arise without a clear external trigger or context, persisting regardless of any particular circumstances. Whether experiencing a prolonged good or bad mood, the original context may become less relevant over time.

Emotions are typically more action-oriented, leading to immediate behaviors or reactions. For example, when feeling angry, one might engage in confrontations or even physical altercations. The intensity of emotions often drives these immediate actions. On the other hand, moods tend to be more cognitive in nature. When experiencing a mood, individuals may engage in prolonged thinking or brooding, with less emphasis on immediate actions.

Here's a tabular representation summarizing the differences between emotions and moods. Emotions are often short-lived, lasting for seconds or minutes, while moods can persist for hours or even days. Additionally, moods may arise without a clear or specific trigger, contributing to their longer duration and less immediate action-oriented nature. Emotions encompass a wide range of specific and numerous feelings, such as fear, anger, sadness, happiness, and disgust. Individuals can experience multiple emotions simultaneously or in quick succession. On the other hand, moods are generally more limited in variety. They often fall into broad categories, such as good mood or bad mood, and are primarily characterized along one or two dimensions.

In terms of valence, moods are typically categorized as positive or negative, representing the overall emotional tone. Emotions, on the other hand, are often accompanied by distinct facial expressions that correspond to the specific emotion being experienced. For instance, when someone feels angry, they may display facial expressions indicative of anger, whereas expressions associated with moods may not be as clearly defined or consistent.

Emotions are typically action-oriented, prompting immediate responses or behaviors, while moods tend to be more cognitive in nature, influencing thoughts and perceptions. However, emotions and moods are often interconnected and can influence each other. For instance, an intense emotion like joy from achieving a dream job can transition into a positive mood that

lasts for several days. Similarly, emotions can evolve into moods when the focus shifts away from the triggering event or context. For example, if anger is not directly addressed or resolved, it may develop into a lingering bad mood. In real-life experiences, distinguishing between emotions and moods may not always be straightforward, as they can overlap and mutually influence each other. In real-life scenarios, the distinction between emotions and moods may be less clear and more ambiguous. Broadly speaking, the term "affect" encompasses both emotions and moods, with emotions being more specific and moods being broader and less context-dependent.

Now, let's delve into the classification of emotions. Various theoretical perspectives exist for understanding emotions, one of which is the basic emotional model. This model aims to classify emotions into fundamental categories, with some considered more basic and universal than others. Emotions such as anger, fear, enthusiasm, and disappointment are experienced by individuals across different cultures, suggesting their fundamental nature. Researchers in the field of emotions seek to identify these basic emotions that are universally recognized and experienced.

The basic emotional model, advocated by prominent psychologists such as Paul Ekman, Sylvan Tompkins, and Carol Izard, suggests that certain emotions are fundamental and universally recognized. While these psychologists may differ in their identification of basic emotions, they all propose theories centered around this concept. According to this perspective, basic emotions have biological underpinnings and evolved as part of human evolution. Criteria used to classify emotions as basic include universal expressions across cultures, distinct physiological markers, and presence in other primates, indicating evolutionary continuity. Additionally, basic emotions are characterized by an automatic appraisal or evaluation of the environment.

These basic emotions are connected to specific evaluations of the environment. For instance, the feeling of fear arises from perceiving danger in the environment. Therefore, the appraisal or evaluation of the environment is a crucial aspect of basic emotions. However, there is still no consensus on which emotions should be considered basic, and different theories propose varying numbers of basic emotions. One of the most well-known theories is proposed by Paul Ekman, who initially identified six basic emotions: fear, disgust, anger, surprise, joy, and sadness. Later, he included contempt as another basic emotion, bringing the total to seven according to Ekman's theory.

So, all these emotions have distinct facial expressions, which are part of the criteria for being considered basic emotions. These expressions are universal across cultures. Additionally, they each exhibit a distinctly patterned physiological response or autonomic nervous system response. Apart from Paul Ekman, other researchers have proposed different numbers of basic emotions. For instance, Tomkins proposed nine basic emotions, including some newer ones not present in Ekman's theory, such as interest, shame, dis-melt, and distress, while excluding contempt and sadness. Carol Izzard identified ten basic emotions, adding interest, shame, and guilt to Ekman's list of seven. Similarly, Robert Plutchik proposed eight basic emotions, contributing to the variations in theories regarding which emotions should be considered basic.

So, in the theory, some of these numbers keep changing. The list of basic emotions is evolving, and more may be added as the research progresses. So, there is still no consensus on what basic emotions should be included. These are some, because Paul Ekman's theory has been well researched.

So, we will be discussing his 7 basic emotions. These photographs are taken from Paul Ekman's website. These serve as research stimuli. Anger, as seen here, is generally experienced when we are blocked from pursuing a goal. Whenever we aim to reach a destination and encounter an obstacle, anger is often the result.

Now, it has a very specific facial expression, as you can observe here. Certain features, such as eyebrows being pulled down together and eyes becoming wide, signify anger. Lips are typically pressed together. This is how specific characteristics of anger are expressed, indicating frustration when goals are impeded or when we perceive unfair treatment.

Next is contempt. Again, it is a feeling of dislike or superiority, usually moral superiority, over another person or group of people. So, when you look down at someone, that conveys a sense of contempt or dislike. Here, you can observe a typical facial expression as described by Paul Ekman. One corner of the mouth is raised and tightened, creating a raised lip corner on one side of the face, particularly on one side of the lips.

Disgust is an emotion that arises as a feeling of aversion towards something offensive. When you encounter something offensive or unpleasant, a sense of disgust or aversion arises. In terms of facial expressions, typical indicators include lowered eyebrows, wrinkles on the bridge of the nose, a raised upper lip, and a protruded lower lip. These are characteristic facial expressions of disgust.

Next is joy or enjoyment, which typically arises from connection or sensory pleasure. When we experience pleasure in our lives, we feel joy or enjoyment. Similar to other emotions, joy has typical facial expressions. The eyes are often narrowed, with wrinkles around them. The cheeks are raised, and the lips are pulled back, often revealing the teeth in a smile.

Fear, as an emotion, arises when we experience threat or harm, whether physical, emotional, or psychological. This threat could be real or imagined. Facial expressions of fear include raised eyebrows, a slightly raised upper lip, tense lower eyelids, a dropped-open jaw, and horizontally stressed lips.

Lastly, sadness results from the loss of someone or something important. When we experience the loss of something or someone significant, we feel sadness. In sadness, the facial expression typically involves slightly dropped upper eyelids, often looking downward. The corners of the lips are pulled down, and the inner corners of the eyebrows are slightly pulled up together.

Surprise arises when we encounter sudden and unexpected events, sounds, or movements. The facial expression of surprise includes raised eyebrows that are pulled apart, raised upper eyelids, and a dropped jaw.

Another theory of basic emotions is given by Robert Plutchik's "wheel of emotion." In the 1980s, Plutchik created a wheel of emotions consisting of eight basic emotions and eight advanced emotions, with each advanced emotion composed of two basic emotions. So, according to Plutchik's theory, there are eight basic emotions, and when two basic emotions are combined, they create what is known as an advanced emotion. Each primary emotion has a polar opposite. The eight basic emotions are joy, trust, fear, surprise, sadness, disgust, anger, and anticipation. Each of these emotions has a polar opposite: joy is opposite to sadness, anger is opposite to fear, trust is opposite to disgust, and surprise is opposite to anticipation.

Plutchik suggested that half of these primary emotions are positive, while the other half are negative. He proposed that two basic emotions can be combined to form an advanced emotion. For example, optimism is considered an advanced emotion formed by combining anticipation and joy. Additionally, each advanced emotion also has its opposite; for instance, disappointment is the opposite of optimism. So, he has a list of advanced emotions as well, each of which is created by the combination of two basic emotions. These advanced emotions include optimism, love, submission, awe, disappointment, remorse, contempt, aggressiveness,

and more. Plutchik's diagram illustrates the complexity of emotions. In the diagram, the eight basic emotions—joy, trust, fear, surprise, sadness, disgust, etc.—are depicted. Moving from the outside to the inside, the intensity of each emotion increases. For example, ecstasy represents a more intense form of joy, while serenity represents a less intense form. As we move inward, the shades of color become darker, indicating greater intensity.

Optimism, an advanced emotion, is formed by the combination of anticipation and joy. Similarly, love is composed of joy plus trust, and so on. This diagram helps visualize how combinations of basic emotions lead to the emergence of more complex emotional states.

So, these advanced emotions are combinations of two basic emotions, while the basic emotions themselves are represented on the diagram from the outside to the inside, with intensity increasing towards the center. Emotions without color represent combinations of two primary emotions. For instance, love is a combination of joy and trust. The spatial displacement of emotions on the diagram indicates their relationships to each other, with opposite emotions positioned on opposite petals. For example, the opposite petal of joy is sadness.

When two emotions combine, they create a dyad, a complex emotion. Dyads can be primary when two adjacent emotions combine, secondary when formed by emotions that are two petals away, or tertiary when three petals away. This model allows for the formation of up to 28 complex human emotions through various combinations.

So, this model by Perrott classifies emotions into primary, secondary, and tertiary categories. Unlike previous theories where advanced emotions are formed through combinations, Perrott's approach states that secondary emotions stem directly from primary emotions, and tertiary emotions arise from secondary emotions. This distinction highlights that secondary and tertiary emotions are derived from primary emotions rather than being formed through combinations, as seen in other theories like Plutchik's model.

Perrott presented this classification using a tree-like structure, depicting the hierarchical relationship between primary, secondary, and tertiary emotions. So, in this model, primary emotions such as love, joy, surprise, anger, sadness, and fear serve as the foundation. Secondary emotions emerge from these primary emotions; for example, love may give rise to emotions like affection, lust, and longing. Tertiary emotions, in turn, stem from secondary emotions. For instance, affection may lead to further emotions, as can lust and longing. Each primary emotion can spawn various secondary emotions. For example, joy can result in a range of emotions, while surprise may not lead to further derived emotions. Anger can give rise to

irritability, rage, disgust, envy, and torment, while sadness may lead to suffering, disappointment, shame, neglect, and sympathy. Fear, similarly, may evoke horror and nervousness. These secondary emotions illustrate the hierarchical relationship between primary, secondary, and tertiary emotions in Parrott's classification. In this model, fear, considered a primary emotion, can give rise to secondary emotions like horror and nervousness. Horror, in turn, may lead to additional emotions such as alarm, shock, and panic. Similarly, sadness as a primary emotion can lead to secondary emotions like suspense, uneasiness, worry, and distress, the latter being an example of a tertiary emotion. This hierarchical structure illustrates how each level of emotion is derived from the preceding level.

The comprehensive list of primary, secondary, and tertiary emotions is provided in the table. It's available for reference, and I'll include it in the handouts for your convenience.

We've explored some of the key theories regarding basic emotions, which highlight certain universal emotional experiences shared by humans. However, these theories have their limitations, leading to the development of other theories in the field.

Most psychologists subscribe to the theory of basic emotions, considering them universal, innate, and hardwired in human psychology. The idea is that these basic emotions are experienced universally by all individuals and are ingrained in our evolutionary biology.

However, despite the significant advancements made in our understanding of emotions through the theory of basic emotions, there are several limitations and challenges associated with it. One major limitation is the lack of consensus among theorists regarding which emotions should be included as basic emotions. Different theories propose different sets of basic emotions, although some overlap exists among them.

Additionally, the list of basic emotions tends to change over time as new research emerges, leading to inconsistency and uncertainty in the field. Furthermore, research indicates that individuals do not always perceive or identify emotions as distinct standalone entities. Instead, emotions often manifest as ambiguous and overlapping experiences in various contexts, complicating the categorization and understanding of emotions. Certainly, emotions often exhibit overlapping characteristics in our experiences. For example, anger may escalate into rage or aggression, blurring the boundaries between these emotions. Many researchers argue that emotions lack clear-cut distinctions and often blend into one another without specific boundaries, much like the various shades within a color spectrum. Just as it can be challenging

to distinguish between different shades of color, identifying distinct emotions can also be difficult due to their nuanced and overlapping nature.

To address these limitations, alternative theories have been proposed. One such theory takes a different approach to understanding emotions and aims to provide a more nuanced framework for categorizing and comprehending them.

Certainly, these models are referred to as dimensional models of emotions. Unlike theories that focus on identifying specific basic emotions, dimensional models emphasize the characterization of emotions based on two or three dimensions. Typically, these models focus on two dimensions: valence and intensity.

Valence refers to the balance between pleasantness and unpleasantness. Emotions with a positive valence are considered pleasant, while those with a negative valence are deemed unpleasant. Intensity, on the other hand, refers to the degree of emotional arousal, ranging from low to high. These dimensions are used to classify and understand emotions within this framework.

The circumplex model of emotion, developed by James Russell in 1980, is one of the prominent dimensional views of emotions. It proposes two primary dimensions for classifying emotions: valence (pleasure and displeasure, or positive and negative balance) and arousal (intensity or alertness, ranging from high to low). These dimensions are conceptualized as being bipolar and orthogonal to each other.

In this model, arousal is depicted along the vertical axis, with high arousal at the top and low arousal at the bottom. The horizontal axis represents valence, with pleasant emotions on one side and unpleasant emotions on the other. Within this circular framework, various emotions can be positioned based on their levels of arousal and valence. Here, you can observe a quadrant where emotions characterized by high activation and unpleasantness are positioned. In this space, emotions with both high intensity and unpleasant nature are located. Examples of such emotions include feelings of tension, nervousness, stress, being upset, experiencing fear, anger, and disgust. These emotions are characterized by high levels of arousal and intensity.

Conversely, in the quadrant where activation is low but unpleasantness remains, emotions with low activation or deactivation are situated. In this category, individuals may feel lethargic, sad, depressed, fatigued, and generally calm despite the unpleasantness of their emotions. In this model, emotions are classified based on two independent and bipolar dimensions: balance and

activation. These dimensions are considered unrelated to each other, hence they are independent. "Bipolar" means that opposite emotional terms reflect each other on the balance and activation poles.

The model delineates four possibilities:

1. Emotions that are unpleasant and low in activation.
2. Emotions that are pleasant and highly activated, such as feeling alert, excited, or elated.
3. Emotions that are pleasant but deactivated, leading to feelings of calmness, relaxation, serenity, and contentment.
4. Emotions that are both unpleasant and highly activated, including feelings of tension, nervousness, stress, upset, fear, anger, and disgust.

In this diagram, "opposite" refers to the dimensions of balance and activation being at opposite ends of the spectrum. For instance, unpleasant emotions are on one end of the balance dimension, while pleasant emotions are on the opposite end. Similarly, high activation emotions are on one end of the activation dimension, while low activation emotions are on the opposite end.

The four quadrants represent different combinations of balance and activation: high activation pleasant effect, high activation unpleasant effect, low activation unpleasant effect, and low activation pleasant effect.

The model suggests that a linear combination of these two dimensions, or varying levels of both balance and arousal, can be used to conceptualize each emotion. Thus, every emotion we experience can be placed somewhere within this diagram, depending on its balance and arousal levels.

For example, joy can be conceptualized as a result of strong activation and positive balance, which places it in the quadrant of high activation pleasant effect.

The cognitive interpretation of the neurophysiological experience of arousal and balance within the situational context is a contributing factor to the categorization of emotions. Emotions are categorized based on how the mind interprets physiological arousal and whether it perceives the experience as pleasant or unpleasant. This cognitive interpretation labels the emotion accordingly.

Similarly, the distance between any two affective states is assumed to depend on how far apart their circles are. As they differ more in the circle, they move away from each other, indicating that they are much more different from each other. Effective states should exhibit increasing negative association with one another as they become 180 degrees opposite. Generally, they will be completely opposite emotions, negatively related.

However, this model also has some limitations. The two-dimensional representation frequently does not convey the significant distinction among various emotions. Therefore, it is unable to fully capture all emotional experiences. For instance, although being positioned in the same area of the circle, similar negative high arousal emotions, such as fear and anger, are placed almost in the same position in the circle because both are high arousal unpleasant emotions. However, differentiating them becomes challenging as they are almost placed in the same position. This poses a problem because these emotions are distinct despite their similar placement in the model.

Additionally, the model was developed based on a selection of emotions that were not supported by systematic sampling or explicit theoretical principles. This lack of systematic research-based selection was another limitation.

Nevertheless, this model gained widespread acceptance as a meaningful depiction of affect despite these drawbacks. It has played a significant role in enhancing our understanding of emotions by providing an alternative perspective to basic emotional theories.

Thank you, and with this, I conclude this lecture. Throughout this lecture, we have explored basic concepts, definitions, and some fundamental theories that help us understand the classification of emotions. Thank you.