

CONSCIOUSNESS AND PERCEPTION

Aim

Explain the differences between consciousness and perception.

WHAT IS CONSCIOUSNESS?

Consciousness is the awareness of oneself in every aspect of one's being. There is some debate in psychology regarding consciousness.

Some argue that our consciousness is inaccessible to scientific study and just an effect of the brain, so does not require further study.

Others argue that even though we can't study it scientifically, it still exists. The latter group would resort to analogy to describe consciousness, perhaps likening it to a computer.

It can be argued that psychology lacks a useful theory about the relationship between consciousness and human behaviour.

The Status of Consciousness in Psychology

Can consciousness form part of the subject matter of psychology? Does its private nature not provide problems in this respect? When the discipline of psychology was born, its central aim was to be the analysis of mental processes (which are a key part of consciousness); yet for practical and theoretical reasons, this approach fell into disuse.

One reason is that a large part of the process underlying behaviour is inaccessible to consciousness (i.e. We are not always conscious about what we do).

Another reason is that we cannot directly observe consciousness.

Since the 1960s though there has been a resurgence of interest in consciousness.

The Nature of Consciousness

What does consciousness consist of? Psychologists have tried to discern whether consciousness represents a fixed portion of the human psyche, or whether it represents a continuum in which there are degrees of consciousness. William James regarded consciousness as a continuous changing sequence, subject to a process of selection (focussing) and holism (integrating) -that is, he called it a **stream of consciousness** which we direct through choosing what to perceive, and defining relationships between various things which we perceive.

Consciousness has the particular quality of being intuitively obvious -we all have immediate knowledge of it - yet it is extremely difficult to define or describe. The word consciousness is often used as a collective term for a variety of mental and emotional processes. Some theorists describe consciousness in terms of *sensory awareness*. Others describe it in terms of an *information processing system*. In short, when we ask questions about perception, awareness, learning and memory; about interpreting the environment; or about problem solving or value systems, we are asking questions about consciousness.

THE RELATIONSHIP BETWEEN CONSCIOUSNESS AND BEHAVIOUR

There has been much debate as to whether consciousness causes behaviour; or whether behaviour causes consciousness. Mentalists and phenomenologists claim that consciousness causes behaviour (ie. We do what we think or feel we should do). There isn't always a consistency though between our conscious experience and our behaviour. Often we do things which we didn't mean to do. Indeed, sometimes our behaviour determines our conscious experience (ie. We are sad because we cry, or we are afraid because we tremble). We can safely say nevertheless, that the relationship between consciousness and behaviour is one of mutual influence or mutual interaction.

UNCONSCIOUS AND SUBCONSCIOUS

It is clear from the discussion so far that there are variants or degrees of consciousness that we experience throughout the day. Yet we are not fully conscious of much of our behaviour. Remember the last time someone asked "What are you thinking?" and you replied "Nothing", yet knew that some level of activity was happening in your brain. You were simply unable to retrieve it from memory because it seemed far away. This common experience of not knowing what we are thinking or of not being fully conscious contradicts the rationalist attitude expounded by the philosopher Descartes. Rationalism was a school of thought that regarded conscious thought and will as the primary stuff of our being, and was expressed in Descartes' dictum, "I think, therefore I am". Yet experience tells us that when we are not actively thinking, we still exist and we still sense ourselves as conscious beings.

Sigmund Freud distinguished between conscious, pre-conscious and unconscious.

- **Pre-conscious** material is that which is not presently conscious but which can be retrieved through memory and focussing.
- We also have a **subconscious** level of awareness, a level at which information is stored and from where it can be retrieved when needed. The subconscious is a level below our consciousness, and can influence our behaviour without our being aware of it. For instance, we might tap our pencil on our desk during a tense moment without realising that we are doing it, but as soon as we notice, we can quickly understand that the action was an expression of anxiety. Many believe that the subconscious can be made to purposely store information such as subliminal messages that will affect our behaviour. This has not yet been proven.

What does appear to be the case is that the subconscious stores our memories and experiences for access when we want or need them, and that these memories and experiences can affect our decisions and behaviour without our realising, though when we question our actions, we can usually find the reasons by digging just a little deeper. The subconscious also allows us to perform routine actions "without thinking".

- A deeper level of consciousness is the **unconscious**, postulated by Freud. This holds all of our repressed and denied feelings, emotions and motives, which have been hidden away, even from ourselves, because we learnt that they brought us shame, guilt, or the disapproval of others. Because the unconscious holds what we really think, feel and desire, Freud proposed that the "the unconscious must be assumed to be the basis of all physical life"; the unconscious, rather than the conscious, is the true psychological reality. But since it is also the place of our greatest fears, it is not readily accessible. Instead, we gain insights into what is contained there (into what fears and desires we hid there as children) through our dreams, behaviours and slips of the tongue. Access to unconscious material requires the use of special techniques such as dream analysis or hypnosis.

Freud's theory of the unconscious gave us a way to describe levels of psychological activity which are not fully conscious.

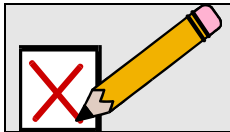
Freud questioned the long-held assumption that consciousness is the nucleus of the personality and in his theory of the unconscious, consciousness becomes radically de-centred if not completely re-defined. The pre-Freudian assumption that the individual is centred in consciousness no longer holds, and the notion that our *psyche* is our consciousness is abandoned.

At one stage, though, Freud stated that it was misleading to regard the unconscious and consciousness as two separate structures in the mind, for this created artificial barriers between two psychological processes which are in constant, dynamic interplay.

The continuum approach seems most appropriate if we consider how frequently we experience an altered state of consciousness. Freud's student, Jung, postulated that the levels of consciousness are arbitrary and fluid, and that anything in the unconscious can be intentionally made conscious (though sometimes requiring the help of psychoanalysis). Jung also postulated another level of consciousness – the **Collective Unconscious** - which is shared by all human beings and from which arise the constant and abiding ideas and themes of cultural myths, individual dreams and human experience. Jung believed that consciousness had an even deeper level that also interacted with all other levels of consciousness: the collective unconscious, which is a universal consciousness rather than the individual consciousness Freud spoke of. This collective unconscious is expressed in our dreams, art, stories, myths, fears, psychological disorders and indeed, in all human symbolic acts, for it is the shared human consciousness in which the memories and experiences of humans are stored. Unlike Freud, however, Jung did not believe that the individual was centred in the unconscious, but was urged forward by the ego towards self-actualisation in the world. His main interest in the unconscious was to help others bring it into conscious awareness so that they were no longer shackled to the past, but could move forward to personal growth.

In modern times a group of French theorists guided by the work of Jacques Lacan made it their central concern to explore the radical (and vastly overlooked) implications of Freud's work, and we can expect that it will continue to enrich our understanding of consciousness as we gain new insights. Another recent development which affects theories of consciousness is that of *computer simulation*, formulated by Herbert Simon in the 1950's. According to Simon, psychological phenomena could be simulated by using a computer. Certain aspects of human consciousness could thus be described in terms of information processing systems. The five senses provide an input channel for information; mental operations are applied to the information, and the resultant structure is stored in memory.

Definition
Phenomenon (Phenomena) –
Segment(s) of events or
behaviour.



SELF ASSESSMENT

Perform the self assessment test titled 'test 4.1'.
If you answer incorrectly, review the notes and try the test again.

ALTERED STATES OF CONSCIOUSNESS

What is an altered state of consciousness? Most would cite an extreme example such as the hallucinatory state that certain drugs induce. Yet in normal everyday life, we do not experience consciousness in the same way, but experience different states of consciousness. We sleep, we meditate, we enter in deep concentration, and we daydream, each activity being quite different in nature to the other.

Therefore, we can say that an altered state refers to a clear change in the normal, waking level of awareness, such as when we drift into a daydream, doze off, sleep or dream, or focus intently on an activity.

Daydreams

When we daydream, our awareness of our immediate physical surroundings decreases and is replaced by a heightened awareness of our thoughts, feelings and mental images. We allow our focus to drift from one thought to another, without defining logical connections. Some people are capable of daydreaming for sustained periods of time, creating entire, imaginary stories. Daydreaming is a perfectly common and healthy activity. There are cases, however, where excessive daydreaming is regarded as a sign of psychological instability (e.g. if an individual ceases to be able to distinguish between daydreaming and reality).

Sleeping and Dreaming

While the nature of sleeping can best be left to physiologists, psychologists are concerned about the altered state of consciousness while dreaming occurs. A lot of research has been conducted to measure the depth of sleep, and noting the periods in which dreams occur. During such research a device is employed to measure electrical changes in the brains activity, and another device measures eye movements (which tend to occur when dreaming).

There are five stages of sleep. Four stages involve deep sleep. The fifth stage involves rapid eye movement, thus it is called "REM sleep". When aroused from REM sleep, subjects usually report a dream. Dreams also occur during NREM (Non REM), however these dreams are not recalled as easily. Although many people claim that they do not dream much, research into REM sleep supports conclusions that we all dream, and do so approximately five times a night. Some find it more difficult to remember their dreams than others. Time of waking also affects dream recall. Those that wake easily during REM will tend to have greater dream recall. As far as the length of dreams is concerned, research suggests that incidents in dreams last about as long as they would in real life. Experimental subjects have had the duration of the REM measured. When awoken, they were asked to mime the incidents in their dreams. The pantomime lasted for approximately the same amount of time as the duration of the REM sleep.

The Origin of Dreams

The greatest pioneer in the study of the psychological origin of dreams was Sigmund Freud. Freud stated that, despite their strangeness, dreams are meaningful, giving expression to the person's wishes and impulses that have been repressed and cannot find other expression because of guilt or social inhibitions. These hidden wishes and desires constitute the content of dreams, and are expressed through the images and experiences of our dreams.

Freud evokes the image of a "censor" at the threshold between our consciousness and our unconscious. This "censor" converts the latent content into the dream work, transforming some of the impulse-expressions that might be too disturbing into symbols that seem harmless and meaningless. In effect, the mechanism protects our sleep from too much psychological disturbance. Much of psychoanalysis is involved with trying to decipher the symbols of our dreams, and symbolic behaviours with which we disguise our true feelings when awake.

The **activation-synthesis theory** of dreaming formulated by Hobson and McCarley (1977) asserts that dreams have no inherent meaning, but that the mind tries to make meaning out of them by synthesising them into meaningful events. According to this theory, dreams are no more than the result of random firings of neurons in the brain. Dream images are triggered by the firing in different areas of the brain, so that firing in the part of the brain that controls balance will trigger sensations and images of falling.

Another theory of dreaming is the computer theory, which proposes that the brain is like a computer whose programs are adjusted and tested when the computer is offline (or the brain asleep).

The images and sensations of our dreams are not new creations, but data being sifted and sorted: the day's experiences, impressions, worries, ideas being organised.

Yet another theory is that we dream to allow the brain to get rid of unwanted data, and the random firing of neurons that triggers images and sensations is the brain's way of defusing unwanted neural connections.

Meditation

Meditation is another activity which involves an altering of one's state of consciousness. Some forms of meditation involve "opening up" or "emptying" of the mind, letting feelings, thoughts and images drift away, without focussing on anything. Other forms of meditation involve concentrating on a particular object or image, not analysing it, but rather letting it fill your consciousness. Either way, meditation seeks to minimise sensual perception – stimuli received through the senses – to find the still mind within. Meditation is said to be a very effective form of relaxation and stress release, and is often seen as a passive activity. Meditation can promote significant health benefits as some studies have found. Research suggests also, that the mind of the person meditating is very active and alert, and significant changes have been observed in brain and nervous system function.

CHEMICALLY ALTERED CONSCIOUSNESS

Psychoactive drugs will cause changes to consciousness by changing the biochemistry of the body. Though psychoactive drugs are considered a problem in many societies, they are used in almost every society, though not necessarily in a way that causes harm or distress. Many societies intentionally use drugs in rituals or for recreation, yet drugs are so much a part of our lives that many of us use them without realising that we are altering our biochemistry and affecting our consciousness. Tobacco and caffeine are stimulants that heighten out alertness, energy and mood. Tobacco is also a major cause of death, and caffeine increases can lead to anxiety, panic attacks, and high blood pressure. Alcohol and many widely prescribed tranquillisers are depressants, reducing our anxiety but also slowing our reactions and leading to possible psychological problems, as well as some potentially fatal physical reactions.

PERCEPTION

During every waking moment, we receive millions of stimuli, bits of information from the world around us and the world within that the brain processes to make meaning. Perception is the process of organising selected information into meaningful patterns.

Because it is impossible to observe, many theorists define consciousness in terms of what it does. It is thus necessary to explore the status of **awareness** and **perception**. In this discussion of perception, we will not focus on the biological mechanism of the visual or auditory senses, although some psychologists rightfully concern themselves with this area. We are concerned here with how perception and awareness are involved in the activity of consciousness -an individual's way of viewing the world. Our view of perception is not a static view for it concerns the more complicated activity of our consciousness, which involves a great deal of hypothesis-testing. The meaning of a stimulus is not in the stimulus itself, but resides in the relevance which it is given by the receiver of the stimulus. For instance, if someone brought us food to encourage us to study harder, the food might not be a positive reinforcement if we dislike the food, or we could see the food as a distraction.

Definition

Perception – The process by which the brain receives information about the world through the sense organs. This information is used to help the organism make sense of their environment.

Consider our bodies moving about in our environment. We are constantly bombarded by a range of sensory stimuli, from the traffic outside to the baby crying next door, to the hunger pains in the stomach. We cannot take everything in, but instead, employ a measure of selective perception, seeing and hearing what we choose. The perceptual focussing might be referred to as attention or awareness.

Selective Attention

Selective attention is the focussing of our attention on one stimulus to the exclusion of all others. Our brains will tend to focus on stimuli that we believe is most important at that time. For example, have you ever been on the phone and watching TV at the same time? Sometimes we will focus on what the person on the phone is saying. At other times, we may tune in more to what is on the television.

It is also true that we are constantly receiving and recording stimuli of which we are consciously unaware. At a party, you might be involved in a conversation with a friend, and not hear what is being said by others nearby, yet if one of them mentions your name, you will probably notice it immediately. Even if we wanted to attend to all stimuli, we could not. We receive so many different stimuli at any one moment that we would simply be overwhelmed by them if we consciously registered them all. We would not be able to function if we were aware of all the stimuli registered by our five physical senses and internal stimuli, such as thoughts, feelings, values, impressions and so on.

Your nervous system continues to register peripheral stimuli without you being consciously aware of it. These stimuli are received from the *fringe of our awareness*. The latter example shows that the process of selection is largely controlled by the level of pertinence or relevance which stimuli hold for us. Some people are not interested to know what other people say about them, or more likely, their attention is on other matters, so they may not hear their name being mentioned. In general, though in competition for our awareness, some stimuli and events have advantage over others because of their degree of relevance, or due to such factors such as surprise or intensity.

During ordinary waking consciousness, therefore, the individual tends to experience both active and passive consciousness.

- Passive consciousness receives incoming stimuli, but does not actively process or consciously register them.
- Active consciousness engages us in conscious mental processes such as planning, analysing, and following our goals and intentions. It seems reasonable to postulate a continuum between consciousness and unconsciousness, according to which there are degrees of consciousness, though there is no real consensus on where one ends and the other begins, or whether they are really distinguishable.

Factors Affecting Perception

We never experience the total situation, only parts of it. As stated earlier, through **selective attention**, we attend to only some stimuli and not to others. The same selectivity means that different people will perceive different things in any event because they are focused on different parts of the information available to them. We focus on the information that has the greatest attraction for us – in either a positive or a negative sense. For example, we see a huge wave approaching as we swim. If we focus on what we fear (drowning) or lack (swimming skills), we will perceive the situation as dangerous. If we focus on what we find enjoyable (challenge), we will perceive the situation as exciting. Thus, our concerns and needs affect our perception.

Other factors affecting perception include past experience, culture and emotions. **Past experience** has shaped our understanding of the world and our patterns of thought and behaviour. Experience has taught us to see how to perceive certain situations, what to expect from others or ourselves, and how to behave in different situations. For example, if most of our classroom experiences have been humiliating or unpleasant, we may enter a new classroom ready to fight and defend ourselves, or to be afraid.

Culture inclines us to view some behaviours as positive and others as negative.

For instance, if our culture teaches us that eye contact demonstrates openness and honesty, we will perceive people who avoid eye contact as having something to hide. In cultures where direct eye contact is considered rude or aggressive, indirect eye contact will be approved of, and perceived as polite. The problem is that because our cultural values and expectations surround us, we may believe that they are the only right ones, or the best ones. We may assume that they are normal, and should be shared by everyone.

Emotions affect our perceptions, for we may view events through the lens of strong emotions. The fear of a man who is robbed may cause him to perceive the criminals as bigger, meaner and more violent than they actually were. A man's attraction to a woman or visa versa may cause them to perceive qualities in the other person that are just not there.

Perceptual Biases

Perceptual biases are certain tendencies to perceive things in one way or another. They have the effect of closing us off from alternative perceptions that may be more accurate.

Stereotypes

Stereotypes are judgements about people and groups based on assumptions about groups to which they belong. They are based on generalisations (assuming everyone in the group shares certain qualities) and simplistic thinking (making judgements without sufficient knowledge). Stereotypes can be neutral (businessmen wear suits), positive (women are kinder), or negative (men are poor communicators). However, what is a positive or neutral stereotype for one person may be negative to another (e.g. women are naturally giving). Stereotypes came from relating beliefs and concepts that are not necessarily attached to each other (e.g. women and nurturing; men and chivalry). Finally, stereotypes are learned, and can be unlearned.

Halo Effect

This refers to the tendency to make positive judgements about a person of whom we have a positive impression (e.g. she's cooperative in class, so we assume that she is cooperative at work; he's a great sportsman, so he is probably trustworthy). We can also make negative judgement because of the halo effect (e.g. the employee had difficulty understanding a process, so he must be slow). The media use the halo effect (e.g. a popular singer is assumed to be an expert on breakfast cereals or make-up).

Similar to Me

This refers to our tendency to perceive more favourably others who are like us. Research shows that when superiors rate their subordinates, they tend to give higher ratings to those who most resemble them, for instance, in race, age, work habits, values, and style of dress.

Definitions:

Attribution – The way we explain certain behaviours.

Stereotype – An over-generalised, often false belief, about a particular group of people, usually but not always negative.

Attribution

Attribution is making judgements about the causes of behaviour. Generally, we make inferences about others from their behaviour, and we often ignore other possible explanations of their behaviour (e.g. someone falls off a ladder, and we assume he has been careless, whereas he might have had a dizzy spell).

Also, we make judgements about whether causes lie within or outside the person (i.e. whether they are due to personality or something external e.g. a colleague loses her job. Is it because she is a poor worker, or that the organisation's need changed?

You find yourself without friends. Is it that you are unattractive or difficult to get along with, or that others are getting mixed signals from you and don't know that you want to be friends?).

Some ways to ensure more accurate perceptions of others are to:

- observe the person in a range of situations (refer to earlier notes on personality traits)
- look for the person's motives in behaving as she/he does
- consider other explanations for the behaviour
- Talk with people (not just one person) who have known the person for a lengthy period

Perceptual Change

Our perceptions are often based on our beliefs about the world around us. Over time, we have expressed opinions, felt emotions and taken actions based on these perceptions, which increases our commitment to them. They have become part of who we are or who we want to be.

- **Cognitive dissonance** is a concept that partly explains this. We feel psychological discomfort when our behaviour and our beliefs are in conflict (dissonant). Therefore, once we say or do something, we tend to justify it rather than admit that we were wrong or unwise
- **Perceptual defence** refers to strategies that we use to avoid cognitive dissonance or to avoid inner change (which can be difficult). We use these strategies to protect or defend our perceptions when they are challenged by new experiences or information.
 - *Denial* – Denying information, evidence or the existence of things we do not believe in (e.g. People work in factories because they don't have the brains to get better jobs. You can't convince me otherwise).
 - *Modification or distortion* – Conflicting information is explained away by associating it with other ideas (e.g. I admit he is intelligent, but he's at the factory because he has no initiative to get ahead).
 - *Recognition but refusal to change* – This usually means that while the information is accepted, it is seen as an exception (e.g. Sure, he's intelligent, but he's different).
 - *Change in perception* – This may be a very small acknowledgement of the conflicting perception. We tend to change our perceptions bit by bit rather than all at once (e.g. well, some factory workers are smart). The easiest perceptual change is **accommodation** – finding a way to fit the new perception into our old belief system (e.g. I suppose things are changing. Factory work isn't as mindless as it used to be). The most difficult perceptual change is **modification of the belief system** because it can no longer be justified (e.g. I never knew how much skill and thought goes into your work, or that you enjoyed it so much. You have changed my whole thinking about what it means to be successful).



SELF ASSESSMENT

Perform the self assessment test titled 'test 4.2'.
If you answer incorrectly, review the notes and try the test again.

SET TASK

During the day, become aware of times when you are not fully focussed on your tasks. Write down examples of your selective attention. Consider what you were originally focussed on and what your attention wandered to. Why did your attention wander to the new stimuli? Write brief notes.



ASSIGNMENT

Download and do the assignment called 'Lesson 4 assignment'.