

# ENQUIRY 1

## WEEK 1 NOTES (CONDITIONING)

**Operant Conditioning** is a term that describes the way in which behaviour is modified by *its consequences*

Operant conditioning is a method of learning that **occurs through rewards and punishments** for behaviour.

Eg. Using the example with a child, when a child presses a blue button, they receive a treat as a reward, but when they press the red button they receive a mild electric shock. As a result, they learn to press the blue button but avoid the red button.

**Reinforcement** is any event that strengthens or increases the behaviour it follows. That is, a response is strengthened because it leads to rewarding consequences.

There are **two types of reinforcers**. These are called **primary reinforcers and secondary reinforcers**. Other rewards, such as money, can be very reinforcing too, but money itself does not have any innate value. People must learn to value money, whereas we don't have to learn the value of primary reinforcers - it just comes naturally. **Primary reinforcers occur naturally and do not require learning in order to work**. Primary reinforcers often have an evolutionary basis in that they aid in the survival of the species. Examples of primary reinforcers **include food, air, sleep, and water**.

Genetics and experience may also play a role in how reinforcing such things are. For example, pain can be considered a primary reinforcer. Pain possesses innate biological properties that can have a significant impact on behaviour. Pain is something that most people will learn through evolution to avoid.

On the contrary, **secondary reinforcers are learnt**. For example, rewards, such as money, can be very reinforcing too, but money itself does not have any innate value. People must learn to value money, whereas we don't have to learn the value of primary reinforcers - it just comes naturally.

There are two ways that reinforcement can lead to an increase in the probability of behaviour.

**positive reinforcement**; by positive we mean that we are adding something – for example receiving good marks for studying hard could increase the probability that you will study hard in future. – **you learn that studying hard leads to good marks**.

Examples of Positive reinforcement can include things like, **feeling good after exercise** or a **child getting a reward**, be it a story before bed, for cleaning their teeth

**negative reinforcement**; a response or behaviour is strengthened by stopping, removing, or avoiding a negative outcome or aversive stimulus. One of the best ways to remember negative reinforcement is to think of it as **something being subtracted from the situation**.

An example of this can include **taking an aspirin to stop a headache**. Or looking at a more applied example, a **nurse washing hands frequently before each potentially infectious patient** – so here you are **stopping a negative consequence in this case which would be passing on or catching an infection themselves**.

When and how often we reinforce behaviour is called a **schedule of reinforcement**.

**continuous reinforcement**; the desired behaviour is reinforced **every single time it occurs**.

Generally, this schedule is best used during the initial stages of learning in order to create a strong

association between the behaviour and the response. Once the response is firmly attached, reinforcement is usually switched to a partial reinforcement schedule.

So **partial schedules of reinforcement** is the process of **randomly rewarding someone for making a response on only some of the occasions that they make it.**

Then we have **variable schedules of reinforcement.** Variable ratio schedules **use a specific proportion but do not guarantee reinforcement in the same set pattern as in fixed ratio schedules.** variable ratio reinforcement is used by casinos to **attract gamblers.** In this example, a poker machine pays out an average win ratio, say five to one, but does not guarantee that every fifth bet (behaviour) will be rewarded (reinforcement) with a win.

Just like with reinforcement where we had positive and negative reinforcement, we also have **positive and negative punishment.**

**Positive punishment** is where you **add something, usually aversive or unpleasant, to decrease the probability of behaviour.** Examples of this may include, **smacking a child for misbehaving or glare when looking at the sun.**

The **goal of punishment is to decrease the behaviour that precedes it.** In the case of **negative punishment,** it involves **taking something good or desirable away in order to reduce the occurrence of a particular behaviour.** Examples of this **can include, fines for speeding or the withdrawal of affection when child throws a tantrum.**

**Maladaptive health related behaviours;** behaviours which are harmful to health if left unchecked **Models;** are what individuals are called when they are being observed in social settings

**Classical Conditioning;** is a form of learning in which one stimulus or event predicts the occurrence of another stimulus or event. Pavlov's dog is an example.

**Systematic desensitisation;** is a behavioural technique commonly used to treat fear, anxiety disorders and phobias.

**Fixed interval;** when the reinforcer (for eg. Candy) is delivered after a fixed period of time (for eg. Every 5 minutes if the dog sits down, then the dog gets a treat)

**Fixed ratio;** every time there's a desirable action, there is response

**Variable ratio;** the desired action happens infrequently however gets a response.

**Variable interval;** when the reinforcer is delivered at random points in time.

## WEEK 2 NOTES (DEVELOPMENT)

**Developmental psychology;** how children and adults change over time. Change can be influenced by a range of biological, psychological, social and even environmental factors.

**cognitive development;** involves moral understanding, conceptual understanding, even problem solving.

- Theory of cognitive development was developed by a man called **Jean Piaget.**
- **Schemas;** are organised patterns of thoughts and actions and these guide our interaction with the world. For instance, for a newborn baby when something comes near to its face it will turn its face towards it and if it gets a chance, it will suck on it.

- **Assimilation**; how a new experience is incorporated into existing schema. Using the example of the baby again, the primary schemer to begin with is “I’m hungry, there’s something soft near my face I’ll keep sucking until I feel satisfied” this assimilation is what a baby associates with being fed from either the breast or bottle until they are satisfied. So the primary schema is to suck on things until I get food.
- Another example is that of a young child who may first develop a schema for a horse. So she knows that a horse is large, has hair, four legs and a tail. When the girl encounters a cow for the first time, she might initially call it a horse- after all, it fits in with the schema for the characteristics for the horse; it’s a large animal that has hair, four legs and a tail. Once she is told that this is a different animal called a cow, she will modify her existing schemer for a horse and create a new schema for a cow.
- Piaget calls this accommodation; is how a new experience causes an existing schema to change.
- **Accommodation**; involves the altering of schemas as a result of new information or new experiences. New schemas may be developed during this process.
- Piaget said that there are **four major stages of cognitive development**.
- The first stage is what is called the **sensory motor stage (age 0-2)**. This goes from infancy to about the age of two years or so. We understand the world at this stage through our sensory experiences and with physical interactions with objects.
- The next stage is the **pre-operational stage (age 2-7)** where children start to use pretend play. This symbolic thinking is characterised by particular ways of thinking about things. This stage incorporates egocentrism which means that it’s very difficult, if not impossible, for a child at this age to imagine how things are from another person’s point of view.
  - This stage is also characterised by what we call **centration**. This is a tendency of children in this age group to focus only on one, and usually the most striking feature of what it is they are looking at or talking about.
  - **Egocentrism**; child's inability to take the perspective of another person
- The next stage is **concrete operational stage (age 7-11)**. This is characterised by the capacity to perform what are called basic mental operations about tangible, touchable or concrete objects in situations and we can do this in our minds. So classically we no longer need to count or add or subtract using our fingers. These objects now become concrete objects and we can say for example, if I have three apples and seven apples how many apples is that?
- The last stage, **formal operations (age 11+)**, we are able to reason about abstract situations not just concrete ones. We can form hypothesis. This means we can make guesses about why things have occurred and we can form ways of thinking about these hypothesis and testing them in a thoughtful way. The key things to think about with regard to Piaget and cognitive development are that he says “all these stages go one to the next. It is not expected that we get to the final stage without achieving all levels of being able to think at a particular stage, however this doesn’t mean we’re always thinking at that level.” Once you’ve achieved formal operations it doesn’t mean you’re no longer capable of slipping back into thinking concrete operationally or in fact, pre-operationally. We don’t always operate at our highest levels and that is very frequently dependant on the context in which we find ourselves. Often things like stress or illness can impair ability to inform at an optimal level causing us to relapse to another level for a short or long time.

**Normative influences** are events that occur in a similar manner for most people in a given group. For example, physical changes such as puberty or menopause.

On the other hand there are **non normative influences** which are unusual events that have a significant impact on an individual's life. These may include the death of a family member or a diagnosis of cancer.

When talking about development it is essential to consider critical developmental contributions. These include nature versus nurture and this refers to how much of what's going on with an individual is because of their genes, what they're born with and how much is because of the environment that they grew up in?

This debate within psychology is concerned with the extent to which particular aspects of behaviour are a product of either inheritance; being genetic, or acquired; being learnt characteristics.

So **nature** is what is inherited or genetic while **nurture** refers to all environmental influences after conception.

A **critical period**; is a period of time during which something has to happen in order for a person to develop normally and if that doesn't happen, they will not develop normally and they will never regain that capacity.

The classic example is the critical period in human beings for learning language. If we're not exposed to caring adults speaking to us and interacting with us in a way where they're obviously trying to communicate with us during our five years of life, we will not learn how to communicate. Even if after that five year period lapses, we're taken out of that abusive environment and we are communicated with, we will never learn to speak properly.

**Sensitive period** is the period during which it would be ideal for something to occur but if it doesn't occur then nevertheless the individual can recover and still go through that developmental stage relatively successfully, it will just happen or occur at a later stage.

An example of this may be an individual acquiring glandular fever. They may take a significant amount of time away from a learning environment however this sensitive period can be made up at a later stage without disrupting development.

One of the **classic discontinuous events** that occur for young women at some stage or another is puberty, and with this an adolescent's first period. Prior to that, they did not menstruate and suddenly they are now menstruating. This is a **discontinuous change**.

**Erikson's theory of psychosocial development** is a stage theory which looks at how people interact with other people and how people go through separate stages at different times throughout their life.

So his theory is that personality, which is the way we relate to ourselves and also relate to other people, develops through confronting a set of different crisis over our life time. Therefore we have to successfully accomplish each stage to move forward to the next stage.

The **first stage** of psychosocial development Erikson talks about is;

**Infancy**;

**Crisis**; trust versus mistrust

From the moment we're born through to the time a child is around about a year old, the crisis that the child is experiencing during this time is if they're going to be able to trust. The crisis is

a sense of basic trust versus mistrust. To be able to develop a sense of being able to trust, sufficient care must be met with adequate attention and when their needs are looked after well. What develops is a sense that it's okay for them to be alive in this world, the world is going to be alright. For example, a child will learn how to shuffle their bottom across the floor. They'll crawl then eventually get up on their hind legs and toddle around.

**Toddlerhood;** and this happens through the second year of life.

**Crisis;** autonomy versus self-doubt.

Now the child can initiate contact with their beings, they don't have to wait for someone to come to them when they're sitting on their blanket in the middle of the lounge room, they're now more mobile.

**Early childhood;** the stage of 3-5 years of age.

**Crisis;** initiative versus guilt

Now the child is no longer a toddler. When they stand up they're not off balance and they can stand on one foot, they can run, they can climb things, they can also explore their environment independently. The primary drive at this stage is to explore their environment in a communicative sense.

**Middle childhood;** around about the age of 6-12.

**Crisis;** industry/competence versus inferiority.

Industry, as in it's worthwhile to work, being industrious is good or competence, they can do stuff well enough.

So when a child resolves this crisis successfully, they come out of primary school thinking for example "if I put my mind to stuff I can do it alright. I'm not perfect but I can do my best" if they don't resolve it successfully then they end up feeling inferior to other people. Now this next stage of psycho social development is the stage of adolescence in Erikson's thinking.

**Teenage years;** age of 12 to about the age of 20 or so.

**Crisis;** identity versus role confusion.

For example, if a person is displaying the adolescent psychosocial crisis that will either lead to identity or knowing who they are and what they believe in or to role confusion, or not being sure of who they are or what they believe. Remember that this is called a **psychosocial crisis**, or sometimes a **psychosocial conflict**. In fact a key part of adolescence is exploring the two parts of the word **psycho social**.

Think about it like this, at this stage people are exploring and experimenting with different aspects of themselves. They are dressing differently, dying their hair perhaps, making their own mind up about college or other aspects of their life. These are all part of their inner self, they're psychology which is the first part of psycho social. On the other hand, their parents and the rest of society expects certain things from them. They are expected to dress and act a certain way, they are expected to behave in a certain way. Society is the second part of psycho social and it's all about their external forces.

**Early adulthood;** 20-40 years

**Crisis;** is that of intimacy versus isolation.

For example if we successfully resolve this crisis of intimacy versus isolation we end up feeling comfortable with ourselves, we end up having good friendships, we end up making some good romantic connection with somebody and we end up therefore creating a family of our own- whether that be gay, transgender or straight, we've successfully negotiated intimacy. The alternate to this is isolation. The next crisis we face involves asking ourselves what am I doing that actually means something? What am I generating?

**Middle adulthood;** 40-60 years

**Crisis;** generativity versus stagnation.

The important thing for people in this stage is contributing to society and doing things that benefit future generations. It refers to making your mark on the world through caring for others, creating things and accomplishing things that make a world a better place. For example taking up new hobbies, caring for grandchildren or friends. Whereas **stagnation** refers to the failure to find a way to contribute. These individuals may feel disconnected or uninvolved with their community and with their society as a whole. Those who are successful during this phase will feel that they are contributing to the world by being active in their home and community whereas those who fail to attain this skill will feel unproductive and uninvolved.

**final stage;** >65 years

**Crisis;** ego/integrity versus despair.

If we successfully negotiate this than the adult is enjoying their life at a time where they've hit around about retirement and reflecting on a life that's been relatively well lived. As we grow older, so I'm talking about 65 years and over, we become senior citizens and we tend to slow down our productivity and explore life as a retired person. It's during this time that we contemplate our accomplishments and are able to develop integrity if we see ourselves as leading a successful life. So Erik Erikson believed if we see our lives as unproductive, feel guilt about our past or feel that we did not achieve or accomplish our life goals, we become dissatisfied with life and develop despair which often leads to depression and hopelessness. So success in this stage will lead to the virtue of wisdom and wisdom enables a person to look back on their life with a sense of closure and completeness.