

TOPIC 3 LEARNING

Worksheet 11 Basic Concepts

1. **You enter a competition in which the challenge is to develop through practice a simple but completely new skill – something you have never seen or done before, such as dropping an egg onto a piece of carpet without breaking it, or rolling a table tennis ball off a table to make it bounce twice and end up in a cup placed on the floor. You will have 100 practice tries, then have ten chances to demonstrate your ability to do it. The catch is that you will be blindfolded and have your ears covered while you practice so you have no idea how successful your tries are. How well do you think you will go? Explain.**

Not very well. If you don't know whether a try has been successful or not, it will not be possible for you to refine your technique and improve. Your attempts will continue to be random.

2. **Why would this person feel such emotion walking onto a grassed surface in an empty arena where nothing much was happening?**

Because he has made an association between the venue and the excitement he has experienced there on several occasions in the past.

3. **Imagine if you began your Year 12 English course by writing several essays. Your teacher offers to write on your essays simply some comments as to how you could improve, or a mark out of 100, or both. Which option would you choose, and why?**

Probably the third one. The more feedback you can get about how you have performed, the more likely you are to improve your technique.

4. **Many years ago an ice-cream vendor drove the streets in pink-and-white vans playing the tune 'Greensleeves'. Kids would plead with parents for money and run out into the street to buy a soft-serve in a cone. A whole generation of children got immediately excited – and probably also salivated – at the very sound of Greensleeves, even if it was a different version played on the radio at a time when no ice-creams were on offer.**



Why should kids get so excited about a tune they didn't even really like?

Because they came to associate the tune with the expectation of getting an ice-cream. It caused a feeling of excitement in them.

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

Cases	What do they have in common?
1 and 3	The learning in these two scenarios involves receiving feedback so you know how successful your attempts have been and can adjust your behaviour accordingly.
2 and 4	In each of these two scenarios the person had formed an association between a certain place or event and the emotional response caused.

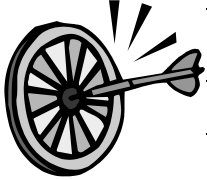
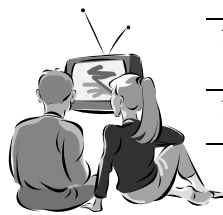
Answers here depend on personal experience. Here are some possible examples:

Type of case	Example of your own
An example where your ability to learn a new physical skill has depended on your awareness of whether your attempts are successful by seeing or hearing or in some other way knowing the outcome.	Learning how to hit a tennis ball depends on being able to see where it goes after hitting it, then adjusting the stroke where necessary.
An example where you have felt a strong emotion – happiness, elation, love, anger, etc – just by being at the same place as where you had earlier felt that emotion because of what was happening there.	Feeling sad when you enter a church where the funeral of a close friend was held.
An example in which you have improved at something at school as a direct result of the feedback you have received from earlier attempts to do it.	Writing a better report for an investigation after writing a draft and having the teacher offer comments about where it can be improved.
An example in which a piece of music has elicited a response in you as a result of what was happening at an earlier time when you had heard it.	If you heard a Christmas carol in the middle of the year it would still evoke the same feelings you get at Christmas time.

Learning is any relatively **enduring change** in either our **potential to perform particular behaviours** or our **knowledge** that results from **experience** .

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

Examples depend on your experience. Here are some possible examples:

	Active learning	Passive learning
Intentional learning 	Example 1: Learning to throw a dart accurately by practising many hundreds of times.	Example 1: Learning a new language by listening to many conversations and audio-tapes in that language.
	Example 2: Learning to play the piano by practising the scales for many hours.	Example 2: Learning to play chess by reading a book that explains how it is played.
Unintentional learning 	Example 1: Learning some basic wrestling techniques while having play fights with your younger brother.	Example 1: Learning some (very) basic social skills while watching soapies and movies on television.
	Example 2: Learning to walk as a baby.	Example 2: Learning about relationships while observing how your parents react to each other at home.

Learning to play chess – some possible ‘basic process’ questions:

1. Do you learn best by watching people play, by reading about it, or by playing?

2. When you are playing chess for the first time, how can you tell if you are playing well?

3. Would you learn more quickly if you had a discussion about your play after each game?

4. Do you learn most quickly when you are winning or when you are losing?

5. What exactly are you thinking while you are playing chess?

6. Do you learn quickest if you are feeling emotional or unemotional?

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

Example of Learning	Type of learning	Second example of this type of learning
When Julie bought a new pair of jeans, her friends told her she looked great in them. She now wears them more often than anything else she owns.	Operant Conditioning	Alan's mother thanks him every time he cleans his room, so he keeps doing it.
Studies have shown that young people are more likely to drink alcohol if their friends and parents are regular drinkers.	Learning by Observation	Children learn the manners they see their parents exhibit at the dinner table.
Many advertisers show their product in association with a pleasant image such as a happy person so we will feel good when we see their product.	Classical Conditioning	Video clips shown with hit songs on TV get us to associate the happy or energetic or sexy image with the song, and we remember this when we hear the song on radio later.

(Refer Page 68)

Classical Conditioning:

Features of classical conditioning	MCG example	Baby example
Before conditioning happens, one stimulus causes or elicits a natural <i>response</i> .	An exciting game of any sport at any venue will cause an <i>emotional reaction</i> in a keen sport fan	The feel of the nipple in its mouth causes an involuntary <i>sucking response</i> in the baby.
This stimulus is called the Unconditioned Stimulus (UCS)	The exciting sport is the Unconditioned Stimulus	The nipple in the mouth is the Unconditioned Stimulus.
Before conditioning, this stimulus causes an involuntary <i>response</i> .	The reaction of the sport fan to the game is the <i>feeling of excitement</i>	The response of the baby to the nipple in its mouth is to <i>suck</i> .
This response is called the Unconditioned Response (UCR)	The feeling of excitement is the Unconditioned Response	The sucking is the Unconditioned Response.
A second stimulus causes no response before conditioning, but does after conditioning.	The MCG does not initially cause any excitement, but after several occasions when exciting sport there has caused a response, the MCG itself becomes associated with the excitement and will itself cause a response	The smell of the breast does not cause any response at first, but after several times when that smell occurs at the same time as the feeling of the nipple in the mouth, the smell itself comes to cause the sucking response.
This stimulus is called the Conditioned Stimulus (CS)	The MCG is the Conditioned Stimulus	The smell of the breast is the Conditioned Stimulus.
The response that was previously caused only by the first stimulus, is now caused by the <i>second stimulus</i> .	The feeling of excitement was originally caused only by the sport, but is now caused by <i>the MCG itself</i>	The sucking was originally caused only by the feel of the nipple in the mouth, but is now caused by the <i>smell of the breast</i> itself.
This response is called the Conditioned Response (CR)	The feeling of excitement is the Conditioned Response	The sucking is the Conditioned Response.

(Refer Page 69)

Alex and the food poisoning:

In this example of Classical Conditioning, identify:

the UCS (Unconditioned Stimulus) = food poisoning

the UCR (Unconditioned Response) = nausea

the CS (Conditioned Stimulus) = smell of fish

the CR (Conditioned Response) = nausea

Explain how the CS, which originally caused no response at all in Alex, is now able to cause the CR:

The smell of fish originally caused no feeling of nausea for Alex, but after he smelled the fish at the same time as getting food poisoning he now associates the two and the smell of fish alone is enough to cause the nausea.

The cat/pain/crying example:

UCS = pain

UCR = crying

CS = sight of a cat

CR = crying

Create a scenario that these could be describing:

If a young child cries in response to pain, and if she is scratched by a cat (causing pain), she may come to associate the cat with the pain and cry in response to just being near a cat.

Jeremy and Shaun's near accident:

They were recently driving on a rural road when a truck coming in the opposite direction veered onto their side of the road. In avoiding the truck, they spun off the road, through trees and came luckily to a safe stop. They both recalled vividly that the song on the radio at that moment was 'Alive', and that the video clip that accompanies that song on television shows a truck crashing into a car. Suggest what reaction they both have when they hear that song now. Use the proper psychological terms to explain why.

The Unconditioned Stimulus was the near-crash, causing the Unconditioned Response of fear. Because the song was playing at this time, they now associate the two, and the song itself – the Conditioned Stimulus – is enough to cause the Conditioned Response of fear.

Operant Conditioning:

	Antecedent What led you to do what you did?	Response What did you do?	Consequence What happened as a result?	Learning How did your behaviour change?
Example 1 (good mark in Psych)	An assignment to be done.	Worked hard.	Good mark.	Spend even more time on next assignment.
Example 2 (ringing boyfriend)	Things to talk about	Ring boyfriend	Pleased to hear from you	Ring him more often
Example 3 (boss not interested)	Have a good idea	Tell the boss	Seems disinterested	Don't bother to tell him next time

Three examples:

SCENARIO	Describe the example	Antecedent	Response	Consequence	Learning
Your cat is hunting for mice.	Catches the mouse first try	Sees a mouse	Chases it	Catches it, eats it, gets a feed	Chases next mouse it sees
Your parents want help in the garden	Offer you a reward if you will help	Gardening to be done	You do some	Get money for it	Do it again next time
A friend damages the new CD you lent him.	Lend a friend a CD, it comes back scratched	Friend asks to borrow a CD	You lend it	Comes back scratched	Don't lend it next time he asks

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

(Refer Page 72)

The four ways consequences can change our behaviour:

NAME	Definition	Example 1	Example 2
Positive Reinforcement	Response increased by a positive stimulus (reward)	You keep telling a joke because friends keep laughing at it.	You keep asking because your parents keep giving you money when you ask
Negative Reinforcement	Response increased by removing a negative stimulus	You clean up your room to stop your parents complaining about its untidy state	You get up and give your baby sister her dummy to stop her crying
Punishment	Response decreased by giving a negative stimulus	Cats can be trained not to jump on chairs by squirting them with a water pistol when they do	You let your boyfriend see you are cross when he forgets Valentine's Day
Operant Extinction	Response decreased by removing a positive stimulus	Mother no longer puts as much effort into cooking because her family no longer thanks her for the meals	You soon stop pressing the buttons on the TV remote when the batteries run out

Examples that might be used by a parent:

	Example
Positive Reinforcement	Giving a young child a hug when he says 'thank you'
Negative Reinforcement	Picking up a baby when it is crying
Punishment	Time-out for the child in its bedroom for being naughty
Operant Extinction	Temper tantrums will usually stop more quickly if the parents do not respond to them

Types of reinforcers in parenting:

REINFORCER	Three examples used in parenting
Primary	<ol style="list-style-type: none"> 1. Food 2. Warmth 3. Hug (* this is widely regarded as a primary reinforcer now)
Tokens	<ol style="list-style-type: none"> 1. Pocket money 2. Presents 3. Time (as in time on the computer or watching TV)
Social	<ol style="list-style-type: none"> 1. Praise 2. Use of the mobile phone to message friends 3. Permission to have friends sleep over

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

Operant Conditioning in the classroom:

Your examples will differ from these – they depend on how your teachers work.

	Example
Positive Reinforcement used by the teacher	Good marks for good work
Negative Reinforcement used by the teacher	Offers to cancel your detention if you work well in class
Punishment used by the teacher	Detention for poor behaviour
Operant Extinction used by the teacher	Ignores students who interrupt the lesson by arriving late
Primary Reinforcer used by the teacher	Gives chocolate as a reward
Token (Reinforcer) used by the teacher	Marks
Social Reinforcer used by the teacher	Praise for good work or behaviour
Reinforcer consistently given soon after the behaviour	Marks (if the work is returned soon after being handed in)
Reinforcer that is given only after the behaviour	Marks (if you really do have to do good work to get good marks)

How operant conditioning can also work on your teacher:

	Example
Teacher receives Positive Reinforcement	Student says thank you for the help given by the teacher
Teacher receives Negative Reinforcement	Teacher turns on the heater when the room is cold
Teacher receives 'Punishment' , making response less likely	Students get noisy and restless if the work is monotonous
Teacher receives Operant Extinction	Stops running after-school help classes if students don't turn up
Teacher receives Primary Reinforcer	Pushes button on remote control and heater warms classroom
Teacher receives Token as reinforcer	Pay day!
Teacher receives Social Reinforcer	Students say thank you at end of school year

Reinforcement of disruptive classroom behaviour:

Are the reinforcers Primary, Token or Social reinforcers?

In most cases the reinforcers would be **social**. Poor behaviour often gains attention, laughter or other forms of recognition from friends in the room.

Here is a difficult question. Imagine you are the teacher into whose classroom a student has been sent. Or imagine this student has come into your Psychology class for the time-out. If he or she sits quietly the whole lesson and works very well, would it be appropriate for that teacher to offer a reward – including praise – for them having worked well, or is this just rewarding the bad behaviour that put them into the 'buddy room' in the first place? Set out your reasoning.

Both arguments make sense. However, since the behaviour that happened most immediately before the reward was the good work in the 'buddy room', the reward is more likely to reinforce that behaviour than the poor behaviour that happened at an earlier time and another place.

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

(Refer page 78)

Rewards for working well in class:

The 'Prediction 1' column has been left blank – this is your opinion only.

The 'Prediction 2' column is based on the research:

SCHEDULE OF REINFORCEMENT How I will deliver the rewards	Effectiveness Prediction 1	Effectiveness Prediction 2
I will give you a reward every time you show the behaviour I am encouraging (ie 90% use of class time)		1 (while it continues)
I will reward you every third time you show the behaviour I am encouraging		2
I will reward you after a variable number of times you show the behaviour I am encouraging (sometimes every second time, sometimes every fifth – but averaging every third time overall)		3
I will reward you the first time you show the behaviour I am encouraging after a variable interval (sometimes after 3 days, sometimes after 10 – but averaging every 7 days overall)		5
I will reward you the first time you show the response I am encouraging after a fixed interval (such as after each seven days - say after the start of every week)		4

Schedule of reinforcement	Example 1	Example 2
Continuous	A dog being taught to sit will learn most quickly if given a reward after each time it sits.	A child will toilet train quickly if its parents praise it every time it has a dry nappy
Fixed ratio	Some workers are paid on piecework schedules, such as for each 100 items they produce or pack.	A real estate agent receives a bonus each time she has sold ten properties
Variable ratio	Poker machines are programmed to pay out after a variable number of plays	Some 'lucky number' games at the show pay a prize on average once every 3 tries
Fixed interval	Teachers in government schools are paid every second Thursday.	At school you get a two day break after five days of work
Variable Interval	When fishing the rewards (catches) are irregular - but you keep trying because 'you never know when the big one is coming'.	You play three great games of football in a season, an average of one each seven weeks

Describe another situation in which your response to a certain stimulus or antecedent is reinforced, but after generalising this to other similar stimuli (situations) you learn that they don't all reinforce your behaviour the same way. So you begin to show Stimulus Discrimination:

When you go out with your friends (antecedent) you like to dress well (behaviour), and they always compliment you on your looks (continuous reinforcement). When you are with other people you also like to dress well (stimulus generalisation), but you soon realise that no-one in your family ever says anything nice to you (no reinforcement) so you don't bother to dress so well at home (stimulus discrimination).

(Refer page 80)

Observational Learning:

Scenario	What could you learn by observation of the model?
A ten year old child helps her mother cook the evening meal for the family.	Skills such as how to cut up vegetables; rules such as being hygienic while preparing food; attitudes such as a love of food and cooking
A teenager enjoys going to the car races and admires greatly the winning driver.	Skills of race driving; attitudes such as how to accept victory or Defeat, and the importance of safety in racing
A young football fan sees his AFL hero trip another player and get suspended for doing it.	Could learn the skills involved in tripping, but is more likely to learn from the consequences that breaking the rules is not a wise practice
A teenager watches lots of soapies, and sees all the young love relationships end in pain.	Learns how people interact (in the artificial scenario), and may learn that all love is destined to fail; may learn to view life in an excessively dramatic way
A child's father chastises him for hitting his little brother, and smacks him for being naughty.	May learn not to hit his little brother, but is more likely to learn that smacking/hitting is the correct way to resolve conflict

Examples of observational learning:

	Example 1:	Example 2:
Observational learning involves these four steps:	A child watches her father show her how to tie a shoe lace	A driving instructor shows a teenager how to reverse park
1. You must pay attention to the model	Watches the steps in making the tie	Watches the instructor do the park (or listens to him/her)
2. You must remember what you have observed	Remembers the steps in order	Remembers the steps in order
3. You must be able to reproduce what you saw the model do	Replicates the steps in correct order	Replicates the steps in correct order
4. You must be motivated to repeat what the model did, perhaps because their behaviour was successful or rewarded	Wants to tie her own laces, and sees the result of her father's attempt	Wants to be able to drive and park well, and sees the result of the instructor's attempt

Examples of Observational Learning:

Two examples are shown here – you will have others of your own:

Examples	Who was the model you paid attention to?	How well did you remember what the model had done?	How well did you reproduce the model's behaviour?	What motivated you to do what you had learned?
1. Learning to play tennis	Coach and other players	Well – could visualise the actions clearly	Not well at first, but better with practice	Wanted to play well and win games.
2. Learning to teach	Uni lecturers, and other teachers	Remembered the 'good' role models well	To some extent, but developed my own style	

Worksheet 12 Experiences, events and interventions

Classical Conditioning in Advertising

Your answers here will depend on the advertisement you have chosen, so the comments below will enable you to check whether you have answered correctly:

What is the UCS?

This should be the thing in the ad – music, people having fun, a sad or happy scene, for example – that causes the viewer to have an involuntary emotional reaction.

What is the UCR?

This is the viewer's emotional response – happiness, sadness, anger, fear, for example.

What is the CS?

This is the product being advertised, the thing that the advertisers want the viewers to have an emotional reaction to. It might, for example, be a brand of soft drink, and they want us to respond to seeing it by feeling happy.

What is the CR?

This is the same as the UCR – the emotional reaction we originally had to the UCS, but which we now have to the product (if the ad works).

What happened during the Conditioning Phase to form the association between the UCS and the CS?

In the conditioning phase we saw or heard the product and the UCS paired together in the ad, probably many times, and formed an association between them.

By the way – do you think it is working? Do you have any emotional reaction when you see this product out there for sale? Do you buy it?

Your response here depends on how you feel you react to the product being advertised. But beware – remember the conditioned response is usually involuntary, so you may be having a conditioned response without being aware of it!

Classical Conditioning in Overcoming Phobias:

A sample is done here – your answers will vary depending on the phobia you chose, but should still be consistent with the way classical conditioning works.

Selected phobia is **FEAR OF BLOOD**.

Here is how this phobia might have developed in a person who experiences it:

What is the UCS?

The UCS could have been pain.

What is the UCR?

The UCR could have been fear (in response to the pain, which is a threatening or frightening experience).

What is the CS?

The CS is the sight of blood.

What is the CR?

The CR is fear.

What happened during the Conditioning Phase to form the association between the UCS and the CS?

The simplest explanation for this example is that the person experienced pain when he cut himself, and had a fear response. (This might have been accentuated by the responses of others at the time, such as if his parents showed a fear response at seeing their child injured.) Because the pain and the blood happened at the same time, maybe more than once, an association between pain and blood developed. The blood was then enough to cause the fear response on its own.

In the systematic desensitisation for a fear of **spiders**, as an example, the list of fear situations could look like this:

Scale	Fear situation
0	Living in a country where no spiders at all exist.
10	Think of a picture of a small spider in a book.
20	Touch the web of a harmless garden spider.
30	Look at a painting of a spider on its web.
40	Watch a documentary about spiders on television.
50	Sit at a table with a spider in a jar in front of you.
60	Watch a person on television handling a large spider.
70	Sit next to a person handling a large spider.
80	Have a small spider on your hand.
90	Have a large spider crawl up your arm.
100	Allow a large spider to crawl across the back of your neck.

What is the original CS (the subject of the fear)?

Spiders

What is the original CR (the response the CS)?

Fear

What is the new CS (the new response to the CS)?

Relaxation

Examples of Operant Conditioning: Customer Loyalty Programs

(Refer page 89)

Analyse this example of Operant Conditioning by answering the nine questions identified above:

What is the antecedent (the situation in which the behaviour might occur)?

A time when money is to be spent.

What is the response (behaviour) the bank wants to encourage?

Use of the Altitude Card.

What is the consequence if the customer shows the desired response?

Points awarded.

What type of reinforcement is provided as a consequence (*positive, negative, punishment, extinction*)?

Positive reinforcement

What type of reinforcer is involved here (primary, secondary, token, social)?

Token

Is the reinforcer provided immediately after the desired response?

Yes they are credited to the person's account immediately, BUT the person does not become aware of them until the statement arrives some time later.

Is it provided only after the desired response?

Yes – no points if you do not use the card.

Is the reinforcement continuous or partial?

Continuous – one point for every dollar spent

What is the Schedule of Reinforcement in use here (fixed or variable, based on a ratio or an interval)?

None of these – they refer only to partial reinforcement.

Do you think Stimulus Generalisation or Stimulus Discrimination could be working here?

Either could: If the customer has more than one credit card and uses *any* card for a purchase, stimulus generalisation could be working. But if he uses *only* the Altitude card, then generalisation is working. (This may be one reason why financial institutions use distinctively coloured cards.)

Use your knowledge of Operant Conditioning, and the factors that affect its effectiveness, to *make three recommendations* to the bank as to how this program could be made more effective. (Ignore for the moment the fact that some of your recommendations might involve additional costs to the bank.)

HINT: Think about the last four questions above.

1. The bank could consider using a fixed ratio reward system, perhaps in addition to the existing reward system. This could involve, for example, bonus points, such as 100 bonus points every time the customer accrues 1000 points.
2. The bank should give more immediate reinforcement. If the customer received the points statement every month, the reinforcement would be more effective.
3. To more actively promote stimulus discrimination – to prevent the customer using just any card – the bank could make the card even more distinctive. This could include a distinctive shape as well as colour, plus other features.

Operant Conditioning in Behaviour Modification:

A contract could look like this:

BEHAVIOUR MODIFICATION CONTRACT
In this behaviour modification program I will aim to message my friends less. My baseline data shows that my current average is 27 messages per day, and I will aim to decrease this to 20 messages per day. My daily reward will be \$1 (from my parents) towards the new phone I have been wanting , and my weekly reward will be \$10 towards my end-of-year trip .
Signature

What is the antecedent (the situation in which the behaviour might occur)?

Any time I want to message a friend.

What is the response (behaviour) you want to develop?

Resist the urge.

What is the consequence if you show the desired response?

Daily \$1, weekly \$10 more.

What type of reinforcement is provided as a consequence (positive, negative, punishment, extinction)?

Positive reinforcement.

What type of reinforcer is involved here (primary, secondary, token, social)?

Token (money).

Is the reinforcer provided immediately after the desired response?

Not immediately, but soon after (daily).

Is it provided only after the desired response?

Yes – rewarded only if I meet the daily target.

Is the reinforcement continuous or partial?

Partial – not rewarded every time I resist the urge to message, but after a fixed period of time (each day).

What is the Schedule of Reinforcement in use here (fixed or variable, based on a ratio or an interval)?

Fixed interval – reward is given daily.

Do you think Stimulus Generalisation or Stimulus Discrimination could be working here?

Unlikely that generalisation would occur – the response follows a thought to message a friend, and it is unlikely that the person would also resist the urge to eat chocolate, or any other urge. Likely that discrimination will occur.

(Refer page 93)

Example of Observational Learning: Aggression and Television

In this set of questions, many answers are possible. Some examples are given – yours will depend on your own experiences of televised violence.

In the violence that children watch on television:

Who are the models displaying this violence? (List all the examples you can identify.)

These include cartoon characters, sportspersons, movie characters, and many others.

Do you think it is likely that children will remember the violence they see? (You will need to give more than one answer here – you might consider, for example, that they will remember violence from one source such as murders in movies, but not others such as fighting in cartoons. What do you think?)

It is likely that children will remember the violence they see, even if they do not consider it to be violence as such.

Do you think it is likely that children will be able to reproduce the acts of violence they see on television? (This is a complex question. Children who see people shot in movies might act this out with play guns later. But is this reproducing it? Then what happens if they have access to real guns later in life? And what other types of violence might they be able or unable to reproduce?)

Children will probably have a greater tendency to act it out because they have seen it, maybe many times, but whether they have the opportunity to do so is a different matter.

Do you think children would be motivated to act out the violence they have seen on television? (What are the consequences for the models on television? What types of things would children consider to be ‘rewards’ or ‘punishment’ for the models on TV?)

There are many factors that will affect whether the child is motivated to act out violence – their personality, the attitudes and values developed at home, friends’ actions, and so on. An important issue here is whether there are many examples where they see the model punished for the act of violence, or whether it is more likely to be rewarded.

Is a child who watches violence on television likely to learn a new behaviour, whether to do things already learned, or a general rule? (Give some examples to illustrate which you think might happen. It could of course be more than one of these.)

Probably all three. The child could see and copy a new behaviour, or could learn from the observed consequences (or lack of consequences) that something he already knows is OK to do, or could form a general rule such as ‘it is OK to hit boys but not girls’.

Are the models likely to be seen by the children as likeable, competent, trustworthy and as having high status or social power? (Give examples to illustrate your answer.)

This depends on who you identified as the models. Certainly sport heroes meet most or all of these criteria, and many cartoon and movie heroes meet many also.

Although it is an oversimplification, and based on your own perceptions rather than comprehensive data, what do you think your answers above say about this issue? Do you think children are more likely to act aggressively or violently if they are exposed to violence on television?

This depends on your earlier answers. The sample answers given here would suggest that it *is* more likely.

Examples involving more than one type of learning:

(Refer page 95)

Example 1: The Toilet Flush

What types of learning can you see in this example?

This example demonstrates **classical conditioning**, and also has elements of **operant conditioning**.

Rewrite the example using our learning terminology. You should be able to weave into your description at least 15 of the terms in the list above.

“The hot water acts as an UCS, and causes an UCR of avoidance by moving quickly out away from it. Because this happens at the same time as the sound of the toilet flush, an association between the two is formed, and soon the toilet flush alone (the CS) is enough to cause the response (CR). The consequence of the response of moving away from the hot water (the antecedent) is to reduce the pain – negative reinforcement – so it reinforces the behaviour. This is a primary reinforcer since the hot water is a survival threat, and, since we step aside every time, the reinforcement is continuous. It is an effective reinforcer since it is provided immediately after, and only after, the hot water is felt. A person in this situation would probably show stimulus discrimination and not step aside when other similar noises are heard, rather than stimulus generalisation. After having the plumbing fixed it would take a while until extinction occurred, but it eventually would.”

Example 2: Training your dog to sit

What types of learning can you see in this example?

This technique is based on **operant conditioning**, and also illustrates some aspects of **classical conditioning**.

Rewrite the example using our learning terminology. You should be able to weave into your description at least 15 of the terms in the list above.

“The antecedent for the behaviour is the dog approaching you. If its response is to sit in front of you, then the consequence is being given a treat and praise. This acts as a positive reinforcer, making the response more likely the next time it approaches you. The treat is a primary reinforcer, and is effective since it is given immediately after, and only after, it sits in front of you. The dog shows stimulus generalisation, sitting for others too, but soon learns that no reinforcer is given there so comes to exhibit stimulus discrimination, sitting only for you. The food at first acts as an UCS, causing the excitement and tail-wagging response, the UCR. Since this happens at the same time as your praise, the dog soon forms an association between the two, until eventually the praise alone – the CS – is sufficient to cause the tail-wagging – the CR.”

Worksheet 13 Social Issues and Personal Growth

A social issue: Learning to drive legally

Demerit Points

Aspects of Operant conditioning	How these apply to the demerit point system
Operant Reinforcement: What things act as reinforcers here? Are they <i>positive reinforcers</i> , <i>negative reinforcers</i> or <i>punishment</i> ? Explain your reasoning.	The demerit points act as reinforcers. They are a punishment.
Types of Reinforcers: Are the reinforcers <i>primary reinforcers</i> , <i>secondary reinforcers</i> , <i>tokens</i> or <i>social reinforcers</i> ? Explain.	They are token reinforcers (maybe social too since losing points can be embarrassing)
Immediate Reinforcement: Is the reinforcer applied <i>immediately</i> (or at least very soon) <i>after</i> the behaviour occurs? Explain.	Yes – as soon as you receive your infringement notice you are aware of the demerit points
Contingent Reinforcement: Is the reinforcer applied <i>only after</i> the behaviour occurs? Explain.	Yes – no demerit points if no road laws broken
Schedule of Reinforcement: Is the reinforcement <i>continuous</i> or <i>partial</i> ? Is the schedule <i>fixed</i> or <i>variable</i> , and based on <i>ratio</i> or <i>interval</i> ? Explain.	Partial – you do not get demerit points every time you break the road laws, since you do not always get caught. It is on a variable ratio – you get caught on average about once every ??? times you break a road law while driving (you guess the number!)
Stimulus Generalisation: Is the driver likely to generalise so as to display the learned behaviour in situations similar to where the reinforcement happened? Explain.	Yes – if you get caught speeding at one place you are likely to avoid speeding at other places too
Stimulus Discrimination: Is the driver likely to discriminate and show the learned behaviour only in the situation where the reinforcement occurred? Explain.	Unlikely – but possible if that place is known to be somewhere police often check speeds

What do you think? Is this program likely to be effective? Explain your reasoning.

Several aspects suggest it is likely to be effective (immediacy and contingency of reinforcement), but because the reinforcement is not continuous people will assume they are likely to ‘get away with it’ on most occasions. It also does not reward good driving behaviour.

A different program

Aspects of operant conditioning	How these apply to the Drive Right system
Operant Reinforcement: What things act as reinforcers here? Are they <i>positive reinforcers</i> , <i>negative reinforcers</i> or <i>punishment</i> ? Explain your reasoning.	Prizes – positive reinforcers.
Types of Reinforcers: Are the reinforcers <i>primary reinforcers</i> , <i>secondary reinforcers</i> , <i>tokens</i> or <i>social reinforcers</i> ? Explain.	Tokens.
Immediate Reinforcement: Is the reinforcer applied <i>immediately</i> (or at least very soon) <i>after</i> the behaviour occurs? Explain.	No – it may take some time before the reward is received.
Contingent Reinforcement: Is the reinforcer applied <i>only after</i> the behaviour occurs? Explain.	Yes and no – you will only receive a ‘thank you pack’ if you are spotted driving courteously (the desired behaviour), but all participants are in the other draws whether they drive well or not
Schedule of Reinforcement: Is the reinforcement <i>continuous</i> or <i>partial</i> ? Is the schedule <i>fixed</i> or <i>variable</i> , and based on <i>ratio</i> or <i>interval</i> ? Explain.	Partial – you do not receive a reward every time you enter the promotion, or every time you drive well. It is on a variable ratio schedule.
Stimulus Generalisation: Is the driver likely to generalise so as to display the learned behaviour in situations similar to where the reinforcement happened? Explain.	Yes – being rewarded makes it more likely for a driver to drive well anywhere (especially since she may not even know where or when she was spotted).
Stimulus Discrimination: Is the driver likely to discriminate and show the learned behaviour only in the situation where the reinforcement occurred? Explain.	No (see above)

What do you think? Is this program likely to be effective? Explain your reasoning.

Yes, because it rewards and promotes good driving, however the lack of immediacy in the reward system makes the reinforcer less effective.

A personal issue: Shyness

Classical Conditioning for Shyness

Describe the first step in the desensitisation program for a shy person. Learn a relaxation technique.

Hierarchy of fear situations for a shy person. Here are some sample answers – yours will vary from this.

Scale	Fear situation
0	Sitting quietly in my bedroom listening to my music.
10	Watching a DVD movie with a friend.
20	Walking alone in the forest.
30	Walking to school with friends
40	Asking the teacher for an extension on an assignment
50	Having a discussion over dinner with a friend’s family
60	Meeting workmates the first day on a new job.
70	Doing an interview for a job.
80	Doing an oral presentation in class.
90	Making a planned thank you speech at my wedding.
100	Being called on to make an impromptu speech to a large group of people, including television cameras.

Finally, explain how the shy person could be taken through a desensitisation process using what has been established in steps 1 and 2 above:

Place himself in fear situation 1 (0% fear), and do the relaxation. When this is mastered, move to situation 2. Continue until it is possible to face situation 10 (100% fear) while still being able to have a relaxation response.

In this example:

What is the original CS (the subject of the fear)?

Social situations

What is the original CR (the response the CS)?

Fear

What is the new CR (the new response to the CS)?

Relaxation

(Refer page 103)

Operant conditioning for shyness?

Review the **Behaviour Modification** approach in Worksheet 12 if necessary, then answer the following questions to see how we might use the approach for a shy person:

What would this person be recording in the first week of Baseline Data?

The number of times per day (on average) he initiated conversations with others.

Describe what the person would do in weeks 2, 3 and 4 of the program.

Attempt to initiate conversations more often, recording how often they did this and whether they reached their daily and weekly targets. When they did, they would give themselves the daily and/or weekly rewards.

What would they do in week 5?

Continue to attempt to initiate conversations more often – aiming for their targets – but without daily or weekly rewards.

Review this example by answering these questions:

What is the antecedent (the situation in which the desired behaviour might occur)?

Meeting another person.

What is the response (behaviour) the shy person wants to develop?

Initiating a conversation.

What is the consequence if they show the desired response?

Recording the event on the daily total, and a reward if the daily or weekly target is reached.

What type of reinforcement is provided as a consequence (*positive, negative, punishment, extinction*)?

Positive reinforcement.

What type of reinforcer is most likely to be involved here - *primary, secondary, token, social*? (It could be any of these, but think about what a shy person might choose.)

Probably token (money, gift, etc) – probably not social!

Is the reinforcer provided immediately after the desired response?

Yes – simply recording the conversation in the daily tally sheet is an immediate reinforcement, even if the reward itself does not come till later.

Is it provided only after the desired response?

Yes – as long as the person is honest.

Is the reinforcement continuous or partial?

Continuous (every conversation is recorded)

What is the **Schedule of Reinforcement** in use here (**fixed** or **variable**, based on a **ratio** or an **interval**)?

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

Recording the conversations is continuous, but the reward itself only comes after several conversations have been initiated so it based on a fixed ratio (also fixed interval – every day).

Do you think **Stimulus Generalisation** or **Stimulus Discrimination** could be working here?

Stimulus generalisation could work here as the person could apply the same behaviour to all people, not just those who 'counted' in the tally sheet. For example, the person might decide not to include talking to family members as 'initiated conversations', but might find herself doing this more readily anyway.

Worksheet 14 Methods of Investigation

Animal research: where can we observe them?

Answers here will be based partly on personal opinion. Some examples are shown:

Research Locations →	Field	Zoos and sanctuaries	Laboratory
Advantages	Can study the animal's natural behaviour	Conditions can be controlled	Animal's history is known
	Able to observe interactions with other animals	Many types of animals can be studied	Variables can be controlled
	Can study a wide range of animal behaviours	Findings can be used as the basis for study in the wild	Hypotheses can be tested
Disadvantages	Physical difficulties	Artificial conditions	Artificial conditions
	Animals may move over large distances	Cannot control all variables	Behaviour is not natural
	Findings may not apply to other areas	Seldom able to interact with other species	Ethical issues of keeping animals in captivity

Review of forms of psychological research:

Examples are shown. Many others are possible.

Investigation Designs →	Experimental	Quantitative Observational	Qualitative
Methods of assessing responses ↓	Manipulate the independent variable – measure the results	Observe outcome of natural variation in the independent variable	Collecting information to answer a particular question
Objective Quantitative Numerical measurement that does not involve opinion (reaction time, blood pressure, scores on a test, counts from a focus group, etc)	Measure how long it takes a pigeon to learn to peck a bar 100 times to get a pellet of food.	Measure whether males or females commit more driving offences.	Count the number of times students list optimistic and pessimistic explanations for failure in an exam.
Subjective Quantitative Numerical measurement that is based on opinion or personal input (self-reports, rating scales, check-lists, questionnaires, polls, etc)	Involve two groups of people in safe driving programs, one using demerit points and one in 'Drive Right'. Collect ratings as to their effectiveness.	Ask people of different age groups to rate the effectiveness of different anti-smoking advertisements.	Ask people to rate the level of violence in different TV programs.
Qualitative Verbal, non-numerical data (focus group records, Delphi technique records, questionnaires, checklists, interviews, etc)	Discussion among groups about why they did or did not change their driving.	Survey different people as to the reasons why they react as they do in potential 'road rage' situations.	Ask people to discuss the effects on children of violence in computer games.

Worksheet 15 Ethical Issues

Some rules of ethics for classroom research

	Little Albert experiments	Bobo doll experiments	Fear conditioning in dogs
Fairness What could the researchers do to make the study fair to the participants? Could they inform them about what they could expect to experience?	Not fair, and a baby cannot be informed.	Difficult to fully inform the children.	Cannot inform animals. Can inform their owners
		This would compromise the experiment.	(But these dogs were probably owned by the
			research institution.)
Informed Consent Is it possible to gain informed consent ? Are the subjects free to withdraw from the experiment if they want to? Are they being coerced into, or rewarded for, participating?	Informed consent was not gained from Albert's parents, and	Presumably the parents gave consent (but fully informed?)	Presumably the 'owners' gave consent.
	could not be gained from him.	Subjects were not free to withdraw.	They were not free to withdraw.
	He was not free to withdraw		Coerced (forced?) to participate.
Deception Is any deception being used? Is an unreasonable level of deception being used? Is deception necessary for the purposes of this study?	Deception was used, since Albert was led	Some deception seemed to be used.	In a sense it is deception, since the
	to believe he was playing with friendly	Children did not know what to expect.	dogs would probably have entered the
	animals.		facility trustingly.
Debriefing How will they provide the opportunity for the participants to raise concerns about the research? How will they explain why deception was necessary? How will they explain the purpose of the study? How will they tell if there were any negative effects from their participation?	Debriefing not possible with a baby.	Difficult with children. Could debrief parents.	Cannot debrief dogs, but can remove fear.
	Researchers were aware of negative effects, and apparently did not correct them.	Children could be given counselling.	
	Could have removed Albert's fear later.		
Conclusion If it was your pet dog or your son or daughter in this experiment, are you satisfied that ethical issues have been addressed? Would you consent to him or her participating?	No	Possibly, if sessions provided later to help desensitise children.	No
	No		No

STAGE 2 PSYCHOLOGY WORKBOOK TOPIC 3 ANSWERS

These examples are based on the principles above:

1. Any activity in which you are involved must be fair to you

2. You must be informed about exactly what to expect in the activity.

3. You must give your consent to participating.

4. You have the right to withdraw at any time from the activity.

5. You must not be coerced into participating nor penalised for withdrawing.

6. Only reasonable and necessary deception may be used.

7. You must have the opportunity to raise question or concerns about what has occurred.

8. It must be explained to you why any deception was used.

9. The purpose of the study must be clearly explained.

10. You must be protected from any harm, including physical and psychological, and your anonymity must be protected at all times.
