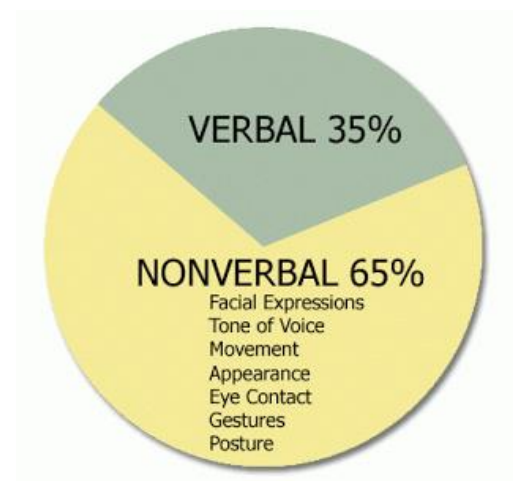




James Gillespie's High School

National 5 Psychology

Social Psychology: Non-Verbal Communication



For the topic of non-verbal communication (NVC), candidates must be able to:

describe types of NVC, which must include the functions of:

- eye contact
- facial expression
- body language (postures and gestures)

describe and explain the contribution of nature and nurture to NVC, which must include:

- personal space
- cultural differences
- universal types of NVC
- gender differences
- status differences

describe the main aims, method/procedure and results of a study relating to:

- nature in NVC
- nurture in NVC
- explain one strength and one weakness of the studies used

Communication

We communicate with others using **speech**, **paralanguage** (how we give extra meaning to what we are saying through emphasis and pauses) and **body language** (non-verbal communication, NVC).

NVC

Definition:

Communication without using words or symbols for words

NVC includes our **bodily movements**, and forms of expression without words which can **express** our **emotions**:

- facial expressions
- gestures
- postures.

What are the functions of NVC?

NVC helps us to **emphasise** what we are saying, and can even **replace speech** entirely. NVC can **regulate interactions**, provide information on **mood** and even **personality**, give **structure** and **feedback** in conversations, keep **social order**, and it can even be used to try detect lies.

We all read other people's NVC and express it ourselves, even when we don't want to! For example, think of something which made you really happy recently. You will probably find that your face breaks out into a very slight smile...



Writing task

1. In which ways do humans communicate? List some animals and define how they communicate. Are there any similarities?
2. Define non-verbal communication
3. What does NVC include?
4. Why do we use NVC?



Class work

5. **With a partner:** Complete the following box analysing your understanding of some aspects of NVC. The first is done for you.

Emotion/ Attitude	How might the person's face look?	Describe their bodily posture
Happy	Mouth turned upwards at corners, cheeks raised, eyes slightly narrowed, wrinkle lines on skin around eyes	Probably head lifted or maybe thrown back a little -body relaxed with shoulders back eyes looking at source of enjoyment
Sad		
Angry		
Afraid		
Worried		
Annoyed		
Disgust		
Surprise		
Embarrassment		
Nervousness		

6. In a group:

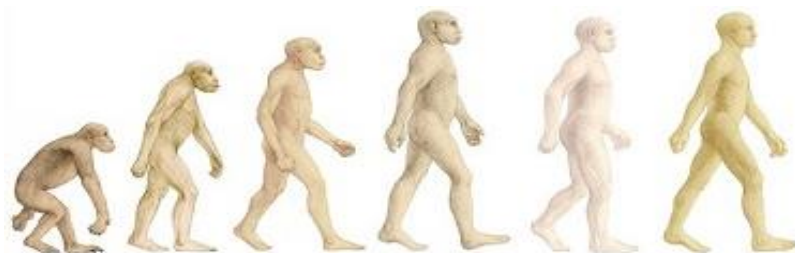
- a. Each person gets a turn in expressing these emotions/attitudes. The others in the group give you a mark out of 10 for how well you did it.
- b. Try now to express the same emotions/attitudes as if you don't really mean them. Get marked out of 10 again. What did you do differently? Why did you do it?

FUNCTIONS OF FACIAL EXPRESSIONS IN NVC



Guillame Duchenne (1806-1875) carried out experiments where he applied tiny **electrodes** to faces to force **face muscles** into particular expressions. Your face has an incredible number of different **muscles** for its relatively small area. This suggests that facial expressions have a very important function. They **convey meaning** which sometimes supports (or goes against) our **vocalisations**. In fact, facial expression could have been a way for humans to communicate **before** the evolution of complex language (Think about how much more you're likely to use facial expressions if you're trying to speak to someone whose language you don't know!). Animals also use NVC because they don't have **complex language skills**.

Most facial expressions are **voluntary** – we choose to do them. Some however are **involuntary** and sometimes these are the ones which give us away when we're trying not to communicate something. The most likely emotional states which are conveyed by facial expressions are: **joy, surprise, sadness, anger, disgust, fear, and contempt**. The expression of these are universally recognised.....well almost. There is recent evidence that there is some confusion about certain facial expressions across cultures. A team at Glasgow University (Jack et al., 2009) found that people from **East Asia** (China/Japan/Korea etc) were likely to **confuse** facial expressions for fear and surprise whereas **European** did not. Furthermore, people with problems with their brain sometimes don't recognise certain facial features – for example in the case of **autism**.



Charles Darwin is best known for his theory of **evolution**. Part of this involved him studying in fine detail both human and animal **behaviour**. His work, *The Expression of the Emotions in Man and Animals* was published in 1872. Darwin travelled all over the world during his famous voyage on HMS Beagle. On his travels he recognised that certain **facial expressions were common across the world**. He wrote; "...*the young and the old of widely different races, both with man and animals, express the same state of mind by the same movements.*" Darwin believed that this **universality** of expression across species was an indicator

of **evolution** – that we have all **evolved** from common ancestors. Darwin argued that facial expressions **evolved** as a way to help us **communicate** and so ensure our **survival**. Generally speaking there are **six** facial expressions which seem to be universal. These are: **Happiness, Sadness, Anger, Fear, Surprise and Disgust**.

Ekman and Friesen (1967, 69 and 71) produced some pretty convincing research in support of the **evolutionary theory**. They showed expressions made by Americans to a tribe in New Guinea. These people had hardly ever seen a white face before, but could correctly recognise the emotions linked to the facial expressions. Ekman and Friesen also photographed the facial reactions of the Fore people and took those back to the USA where the emotions were recognised. The conclusion is that facial expressions are **universal** and so must be **inborn** (although in this research some emotions were better recognised than others).

The evolutionary theory is further supported by modern **brain science** which shows that certain parts of the brain are more active when displaying certain emotions (**Murphy et al 2003**). Also, when **brain damage** occurs this can lead to people being unable to recognise or express certain facial expressions – suggesting that reading and expressing facial expressions is closely linked to how our brains are **‘wired up’** from birth (eg the Case studies of H.M., S.M. and Phineas Gage).

Skinner (1957) argued that emotions are the result of **operant conditioning** – we learn them as we grow up by responding to others. This means that facial expressions and the emotions linked to them are **learned** through our **interactions** with **others**.



Writing task

7. Copy and complete the following:

Charles _____ travelled the world uncovering the theory of _____. In his work, the _____ of the _____ of man and animals he set out his findings about human and animal _____. He argued that certain facial _____ are universal. These expressions help us to _____ to our surroundings and so make us more likely to _____. This makes facial expressions _____.

8. Which emotions can we display with our face? List at least 10!

9. Explain the principle of the evolutionary theory.

10. What did each of these researchers find? Copy and complete the table.

Researcher (s)	Theory/findings
Darwin	
Skinner	
Ekman & Friesen	
Murphy et al	



Class work

11. Which smile is genuine, which one is fake (also called social smile or Duchenne smile)? What makes the difference?



Explanation:

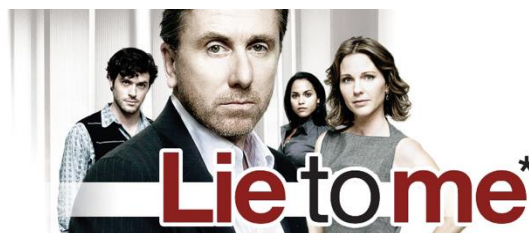
12. Answer these questions as fully as you can:

- a. How might a facial expression help you to survive?
- b. What is the probable purpose of facial expressions?
- c. Why might you use more facial expressions and gestures when speaking to someone whose language you don't speak?
- d. Why might an involuntary facial expression cause you problems?!
- e. Name three of the most common facial expressions and describe or draw what you think they look like.
- f. In what ways would your life be different if you could not identify certain facial expressions? (or any!)

MEDIA RESOURCES

Lie to me

In this American crime drama series, Dr Cal Lightman and his colleagues assist in investigations interpreting micro-expressions through the Facial Action Coding System and body language. The show is inspired by the work of Paul Ekman, the world's foremost expert on facial expressions. He is the author of 15 books, including "telling lies" and "emotions revealed".



Activity: Note down all the expressions you see in the programme and what emotion they are communicating. Example: raised eyebrows- show surprise

FUNCTION OF EYE CONTACT IN NVC

Look at the pictures below. Which one do you prefer?



The chances are that the majority of the class chose the second image. These images are **exactly the same**. In the second one, the **pupils** have been artificially enlarged (**dilated**) using digital imaging.

Hess (1963) demonstrated that we are more likely to prefer someone with **dilated** pupils than with **constricted** ones. He showed images like the one above to a range of people and asked them to rate the **attractiveness** of the person. There was a strong link (**correlation**) between attractiveness and **dilated** pupils. He argued that this was another non-verbal signal we give out to show our **interest in a person**, and that we can read this even if we're not consciously aware of it. This means that this must be an **innate** behaviour (**nature**).

Why is this happening? The simple answer is that when we see something we like we dilate our pupils so that more light falls on the **retina** at the back of our eye. This **improves our vision** and means we can see more. This is an **automatic** signal from the brain. Research also exists to show that we are more likely to dilate our pupils when looking at nude images (no matter which gender!) than clothed ones. However... beware! Pupil dilation can also be caused by **illness**, **drugs**, as well as the amount of **light** present.

Eyes can sometimes reveal what we're really thinking. For example, how **genuine someone's smile is** can usually best be judged by seeing if they smile 'with their eyes'.

Eye contact - or **gaze** - can also be used to **demonstrate dominance**. Think about 'staring someone down'. **Dovidio et al** (1988) showed that dominant people look more when **speaking** and '**lower status**' people look more when **listening**.



Holding someone's gaze to show that we **like them** is also a NVC skill done with the eyes. **Argyle & Dean** (1965) demonstrated that we are **more likely** to make eye contact with someone we like and will **hold** this eye contact for **longer**. **Kleinke** (1986) showed that a high level of eye contact shows that you like what you are looking at!

Lynn and Mynier (1993) found that **eye contact can affect the amount of tips** waitresses receive. When waitresses squatted down when taking orders, at which point eye contact is more possible), larger tips were received compared to when they took orders standing up.

Finally when **lying**, some people find it very difficult to maintain eye contact, whereas skilled liars make very definite eye contact while lying!!



Writing task

13. What were the findings of Hess' research?
14. Why do pupils dilate when we see something we like?
15. What else causes pupil dilation?
16. What can a gaze tell us about people?



Class work

17. **Have** a look through some fashion magazines, looking closely at the eyes of the models. How many seem to have dilated pupils? What % of the total number of models is this? Try to make sure you look at males and females.
18. **Choose** six different images from the fashion magazines. Present them to your partner, each one at a time. They should rate how much they like the image. Position yourself so that you can see how much their pupils constrict or dilate and note this down. Now match up their ratings with your 'measurements' of their pupils. (Make sure you have the following controls in place: light position/level in the room and make sure the participant does not look at you!)

FUNCTIONS OF BODY LANGUAGE IN NVC

GESTURES

Gestures are bodily movements which stand for something and can be used as an **aid to speech** – for example for **emphasis**. If you want to say “No!” and make it clear that you mean it you might add some movement of your hands for emphasis. Using gestures can help to make what you are saying more easily **understood** by the person you’re saying it to. It may well have something to do with the way your brain processes information. **Visual** memories are ‘stronger’ than **auditory** (verbal) ones (probably because your brain has to ‘process’ them twice) so adding a visual signal to your verbal statement means it will be more effective.



Gestures can also **replace language**. This can be the case when speaking is impossible (in a crowd), over a distance, or when you don’t share a **common spoken language**. Here, you can probably get by through miming the thing you’re trying to communicate – such as when you’re in a foreign country.



Gestures probably evolved before spoken language. As language evolved and people migrated, gestures became geographically isolated and therefore developed in different ways around the world – so that gestures can mean very different things in different **cultures**.



Writing task



19. When do people use gestures?

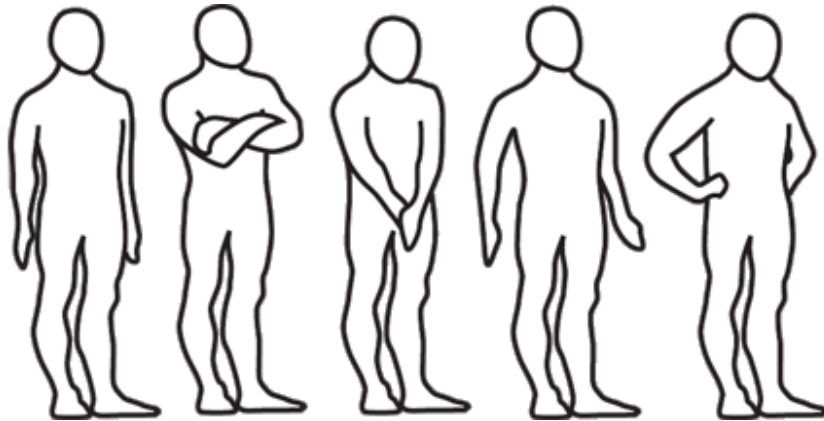
20. Do gestures mean the same world-wide? Explain and give at least one example.



Class work

Greeting gestures are probably particularly important ones as these are usually our first signal to someone else. There are very big differences around the world about how these are done, and they say a lot about the relative social status of the people interacting. Here are some examples

21. How would you interpret these postures?



22. **Describe** what you think will be happening when using the gestures listed below, and who is likely to do it and how and where this is likely to happen – try to include as many variations of each as you can.

High five, handshake, fist bump, lock and shake, air kiss, bow, namaste

POSTURES



Posture is about how we **carry ourselves** bodily. We can use our body to **signal emotions, attitudes** and to **aid or replace speech** just like all forms of NVC.

Posture can involve the **whole body** or just **sections** of the body. It can also be used to signal through a combination of factors where sometimes the NVC **helps** express the underlying emotion or attitude and sometimes of course does the **opposite!**

Two general postural situations give an overall picture. The first is

Open/Closed posture. We all have ways of **shielding** ourselves from others and **hiding** our body. This might be by folding our arms or 'hugging ourselves'. It might be by 'making ourselves small' These closed postures suggest that we're **uncomfortable** and **negative** about something (or someone). The opposite of this is a posture which is open. Here, we make ourselves '**larger**' and don't put any **barriers** up between ourselves and other things. This indicates that we are **comfortable**.

The other major postural message comes through the difference between '**standing tall**' where you signal power (**dominance**), happiness and so on and '**slumping**' where you signal being **down** and **submissive**.

Compare the posture of a footballer who has just scored a goal and one who has just missed a penalty for example.

Postural mirroring is an important feature of NVC and posture. This is where people copy each other's postures during interactions. It seems to help improve social interactions.

Posture helps us to make a judgement about the person's emotional state or what they are trying to signal to us through the overall positioning of their whole body. However, there are also specific body parts which do this as part of overall postures.

- **Head:** Tilted backwards = arrogance and superiority; Thrust forward from shoulders = aggression
Tilted forward, eyes looking up = disapproval; Shaking; = disagreement; Side tilt (canting) = interest; Lowered = submissiveness, worry. Head propped in hand = boredom
- **Legs & feet:** crossed = self-protection; open = dominance/invite (depends!) feet position = generally more likely to point at source of interest; Shuffling = nervousness/boredom
- **Hands:** open/upwards palm = warmth and invite; downwards palm = dominance/control wrist display = interest; closed fist = anger; finger pointing = aggression; hands clasping each other = self-comforting; wringing hands = nervousness; hand-hiding = self-protection/guilt. Handshake palm up = submission, palm down = dominance Hand over mouth/nose touch – embarrassment



Writing task

23. What do people signal with their posture?
24. Explain the meaning of closed and open postures.
25. How are dominance and submissiveness portrayed?
26. What is postural mirroring?



Class work

27. **Here** are a series of body postures. For each one, explain what you think is being signalled and explain the reasons for your choice.



28. Here are three situations where you want to use your body language for a specific purpose. For each one, describe what you might try to do with your facial expression, eyes, body posture.

- a. you are having an interview for a job you really want
- b. you are trying to convince a teacher that your excuse for not doing your homework is a genuine excuse
- c. you are trying to chat someone up
- d. you have done something wrong and you're telling someone about it but seeking their sympathy



29. Put the wooden man in class into a series of postures which signal an emotion or attitude. Now see who can guess what emotion or attitude is being displayed.

PRACTICE EXAM QUESTIONS

- A. Explain the function of facial expression in NVC (4)
- B. Explain the function of eye contact in NVC (4)
- C. Explain the function of gestures and postures in NVC (4)



NATURE VERSUS NURTURE

NATURE



Nature in NVC refers to this behaviour being caused by genes inherited from parents. Some Psychologists argue that facial expressions are universal, they believe that types of NVC are the same everywhere. Supporting the idea that NVC is caused by nature is the idea that there are similarities between human and monkey NVC, especially in showing emotion. (We share a lot of the same DNA) Some human signals are innate rather than learnt.

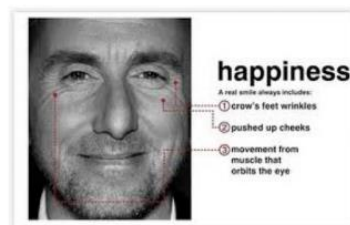
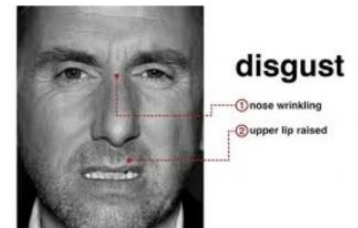
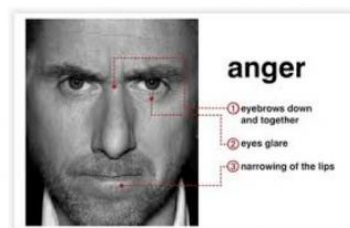
The evolutionary theory suggests that behaviours are instinctive and natural. Over time humans and animals have evolved to pass on their genes and some nonverbal communication has evolved to help us survive and reproduce. For example:

Charles Darwin wrote in his 1872 book, *The Expression of The Emotions in Man and Animals* that “facial expressions of emotion are universal, not learned differently in each culture”. There have been arguments both in favour and against ever since.

Several studies since then have attempted to classify human emotions, and demonstrate how your face can give away your emotional state. It has been argued that people are generally relatively skilled at telling another person's mood, simply by taking a glance at them.

Paul Ekman, who pioneered research into emotion in the 1960s, determined that there were six core emotions, which he termed universal emotion

Joy - (Sometimes referred to as 'Happiness') - symbolized by raising of the mouth corners (an obvious smile) and tightening of the eyelids



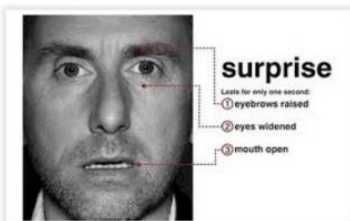
Surprise - symbolized by eyebrows arching, eyes opening wide and exposing more whites of the eyes, with the jaw dropping slightly

Sadness - symbolized by lowering of the mouth corners, the eyebrows descending to the inner corners and the eyelids drooping



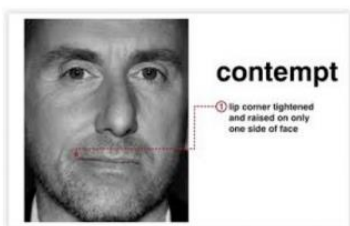
Anger - symbolized by eyebrows lowering, lips pressing firmly and eyes bulging

Disgust - symbolized by the upper lip raising, nose bridge wrinkling and cheeks raising



Fear - the upper eyelids raise, eyes open and the lips stretch horizontally

There is a seventh emotion that is sometimes considered universal.



Contempt - symbolized by half of the upper lip tightening up and often the head is tilted slightly back.

What about other obvious emotions we feel, such as guilt, shame, jealousy and pride? While we genuinely feel these as emotions, we do not tend to show clear and obvious expressions. That is probably why so many people

can hide these emotions from those around them - these emotions often do not show on their faces at all.

Over time, Ekman expanded his model and added **additional emotions** during the 1990's. He added contempt as a universal emotion, as well as: amusement, embarrassment, excitement, guilt, pride in achievement, relief, satisfaction, sensory pleasure, and shame.

Some of these can be seen in microexpressions. Microexpressions are very **quick facial expressions involuntarily made by people in certain circumstances**. It is almost impossible to hide microexpressions. They often occur in a fraction of a second and can be captured by high speed cameras and used for analysis.

A recent study at San Francisco State University supports the argument that our facial expressions are **innate** – this means that we are born with them having inherited them from our parents through our DNA. Matsumoto (2009) and his team compared 4,800 photographs of expressions of sighted and blind judo athletes at medal ceremonies at the 2004 Olympic and Paralympic Games. The faces of gold and silver medal winners were closely examined. Gold medallists showed **genuine joy** at their victory, Silver and Bronze medallist positions often produced "social smiles" – smiles involving only mouth movement, suggesting that they may be artificial rather than genuine. The researchers concluded that sighted and blind competitors showed or controlled their expressions in the same way. Now the blind athletes cannot be copying facial expressions because they have never seen one.

This matches up with the research of **Eibl-eibesfeldt (1973)** who showed that **blind** babies express the same range of facial expressions that sighted babies do and that babies who have been **deaf** since birth laugh when happy. This must means that these are **inborn expressions**.



Writing task

30. Draw emoticons of the universal facial expressions.
31. Explain why facial expressions are believed to be universal.
32. What is a micro expression?
33. Why do some people argue that facial expressions are learned?

RESEARCH STUDY: EKMAN AND FRIESEN (1971) THE UNIVERSAL NATURE OF FACIAL EXPRESSIONS

Aim: Ekman and Friesen aimed to find out whether facial expressions are universal.

Method: They studied the Fore people in Papua New Guinea, a group that had been isolated for thousands of years, living in a Stone Age culture. The tribe had very little contact with the outside world before the 1950s, and although some had since met and interacted with outsiders, the researchers picked participants who had experienced very little of such contact. They had never learned a Western language, seen a movie or worked for an outsider. The sample included 189 adults and 130 children, around 3 per cent of the total Fore population. For comparison, researchers also studied 23 adults who had extensive contact with Westerners. A task was chosen that involved looking at two to three pictures of facial expressions while the researcher read out a short scenario that indicated an emotion, for example, "her mother had died and she feels very sad". The participant then had to point to the face picture that indicated the emotion.



Findings: Responses were very similar to those previously found by Western subjects. Importantly, there were no significant differences between the Westernised and isolated groups, suggesting that exposure to Western colonists had not affected Fore perceptions of facial expressions. The one error that was commonly found was in distinguishing fear from surprise. No gender differences were found, except that Fore women were less enthusiastic about taking part in the study. There were also no age differences, with six to seven-year-old children responding the same as older Fore individuals and with as much accuracy. The researchers concluded that certain facial expressions are universally associated with particular emotions in all human cultures. ~They accepted that fear had not been well distinguished from surprise and noted that it was unclear whether this is because culture does play some role in modifying innate facial expressions, or because among the Fore people, fearful events, such as an attack by another tribe, are generally also surprising.

Strengths:

Large sample who had very little contact with the outside world.

Work with blind children show the same facial expressions as sighted children (Eibler-Eiblerfeldt)



Weaknesses:

Smith and Bond (1993) argued that relatively few emotions are truly universal. Matsumoto (1989) found that Japanese people were poorer at identifying images of negative emotions- perhaps because it is less culturally acceptable to express these emotions in Japan than elsewhere.





Writing task

29. Draw emoticons of the universal facial expressions.
30. Explain why facial expressions are believed to be universal.
31. What is a micro expression?
32. Why do some people argue that facial expressions are learned?



Class work

33. Match up the following!

Feature of Evolution	Examples
Warding off potential enemies or threats	Touching a person's arm as a sign of liking or as reassurance.
Reducing conflict or threat	Eyes widen as a sign of finding someone attractive
Allowing people to co-operate so that can help each other to survive	Using open gestures as a sign of concern and support.
Allowing people to court each other	Avoiding direct eye contact as a sign of backing down.
Making a person appear attractive to the opposite sex	Men stand taller and 'puff out' their chests as a sign that they are strong and good protectors.
Helping people to communicate within a relationship.	Bearing your teeth as a sign of aggression.



Writing task

34. Summarise the Ekman and Friesen(1971) study either by

- a. Creating a leaflet
- b. Making a poster
- c. Writing an extended answer response

Make sure to mention: aim, method, results, conclusion, and at least one strength and one weakness.

NURTURE

Counter argument: Facial expressions are caused by *nurture*.

Not everyone agrees with the concept of there being recognized human emotional expressions. Lisa Feldman Barrett tested photos on a remote tribe in Namibia called the Himba. The Himba members were able to sort all of the **smiling faces** into a pile (they called "laughing") and all of the **wide-eyed photos** into a pile (they called "looking"), but were unable to sort other photos into obvious piles reflecting emotions.



Sighted babies spend a lot of time looking at faces. It is the only way that they can work out who a person is and what their mood is. The faces of others are a strong indication to the baby of what the person's emotional state is because they **associate** other **indicators** with the face. For example, loud shouting at a baby or child will usually be **associated** with an angry facial expression. This is called **Classical Conditioning**.

Babies also **copy** the faces they see. This is called **social learning theory** and means that we learn our range of expressions by copying what others do in those situations. If mum smiles at baby, the baby is likely to smile back.

CONTRIBUTION OF CULTURAL DIFFERENCES IN NVC



Throughout human history, people have **moved around (migrated)**. As groups drifted apart, they developed their own way of doing things. This is called their **culture** (not the same thing as a country). The more **geographically isolated** they were the bigger their differences could become. This

also happened with NVC. Although many features of NVC are universal, some are **culture-specific**. So beware – what means one thing somewhere might mean something completely different in another place!

As opposed to the evolutionary theory that suggests that our behaviours are inherited, the **Social Learning Theory suggests that behaviours are learned** (observation, imitation, reinforcement, punishment, role models), explaining why they differ across cultures. It is how a person's behaviour

with, towards and around others develops as a result of observing and intimidating others, both consciously and unconsciously.

The kind of body language that often differs:

Head movements- In most places a nod means yes and a head shake no – but in Greece it's the other way around. In Turkey, 'no' is expressed by tossing the head backwards and rolling your eyes up (Rubin 1973) In India, yes is expressed by shaking the head from side to side.

Emotional expression – This is encouraged in Mediterranean cultures but discouraged in Northern Europe and Asia. Negative emotions displayed in public is unacceptable in Japan but expected in many Middle Eastern cultures (Hogg & Vaughan 1995)

Proximity – People in Arab countries and in Latin America get physically closer than people in Asia and Europe (Hall 1996). Baxter (1970) showed that personal distances varied according to where it takes place. African-Americans interact more closely in indoor settings, whereas Mexican-Americans come closest in outdoor settings.

Eye contact – Europeans generally make some eye contact during conversation whereas Afro-Caribbean people avoid it because it is rude. Police in London were specifically taught this so that they did not misinterpret the eye movements of Afro-Caribbean people as "shifty". Asian cultures tend to interpret avoiding eye contact as being rude whereas it is encouraged in European cultures.

Greetings and Goodbyes: Middle Eastern Cultures tend to shake hands, kiss and hug – but this can be done differently in different countries. In the Far East, bowing is a very complicated business which is linked to the status of the two people doing it. Many cultures have elaborate handshakes and do so when meeting and saying goodbye. There are also important rules across cultures about what form of greetings are acceptable between men and women in different 'degrees' of relationships.



Gestures: The thumbs up generally means good, but is very rude in most Arab cultures. The OK gesture means OK in most places – but money in Japan. It's very rude in Brazil and Arab countries, but also in Japan if you do it while shaking your fist.

Hall (1996) conducted cross-cultural research. He found that in cultures **high in 'sensory contact'** (such as French, Greek and Arabic) personal distances are much **closer** than in low 'sensory contact' cultures (such as American, English, and Swiss). Because of these differences, someone standing too far away could cause offence in one culture, and standing too close could cause discomfort in another.

However, **Remland et al** (1995) found that Irish and Scottish people stand closer when speaking than Italians and Greeks which goes against the findings of Hall!



Baxter (1970) showed that personal distances varied according to the setting. African-Americans interacted more closely in indoor settings, whereas Mexican-Americans were closest in outdoor settings.

It's important to understand the personal space requirements of a different culture, so that you're not perceived as rude (by standing too far away) or pushy (by standing too close).

These cultural differences are mostly **learned (nurture)** and are sometimes very closely linked to whether the culture is **collectivist** (eg Asia) or **individualist** (eg UK).



Writing task

35. Why is some NVC culture-specific?

36. Complete the following table showing how different NVC rules apply in different cultures. One is done for you.

NVC Feature	Style in Culture 1	Style in Culture 2
Head movement	Scotland – nod = yes	Greece – nod = no
Expression of emotion		
Proximity		
Eye contact		
Greetings/Goodbyes		
Gestures		

If the eyes are 'Windows to the Soul' – are the windows the same in the East and the West? – Yuki et al (2007).



There are differences in the way that people from North America and Europe, and people from East Asia express their emotions.

Aim

Ekman (1989) had already demonstrated that **basic facial expressions** were **universal**, however other social psychologists had begun to find evidence that there were **subtle differences** in the way people from different **cultures** interpret emotions. Yuki et al wanted to explore if there was a difference between the way Japanese (the 'East') and American (the 'West') people interpret facial expressions.

Hypothesis

Given that the **eyes are more difficult to control** than the mouth when people express emotions, Yuki et al predicted that individuals in cultures where it is normal to hide your emotions (such as Japan) would focus more strongly on the eyes than the mouth when interpreting others' emotions. By contrast, they predicted that people in cultures where it is normal to be open about your emotions (such as the US) would tend to interpret emotions based on the position of the mouth, because it is the **most expressive part of the face**.

Procedure

The participants were 118 American volunteers, and 95 Japanese volunteers. All were university students. The participants completed a questionnaire in which they ranked the emotional expression of six different computer generated faces (emoticons). These had combinations of '**happy**' and '**sad**' eyes, and '**happy**' and '**sad**' mouths. Participants were asked to rate how happy the face was, on a scale from 1 (Very Sad) to 9 (Very Happy).

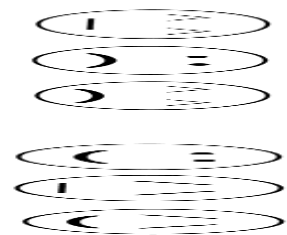
Results

The results showed that the two cultures responded differently to the emoticons. **Japanese** participants gave higher ratings for **happy eyes**. American participants gave higher ratings for **happy mouths**.

There are cultural differences in how emotions are expressed and interpreted in faces. This suggests that our **upbringing** and **cultural background** influences the way we understand **non-verbal communication** – **nurture** has an influence as well as **nature**.

Evaluation

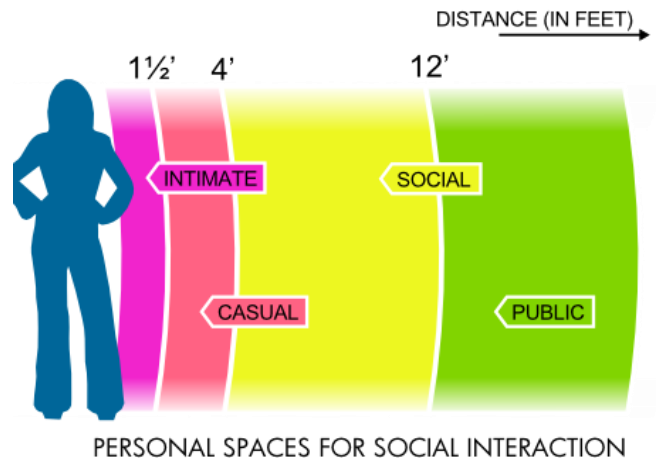
1. The experiment **lacks ecological validity** – we are never asked to 'rate' our emotional responses to faces like this in the real world. The dependent variable was measured using a psychological scale, 1-9. This is over simplifying a complex emotional response.
2. The participants were all from the same age group and the sample is therefore **not representative**. There are only two cultures represented in the study – our societies are more complex than this, and growing up in a multicultural place might impact on the way we interpret faces.



The top row of emoticons have 'happy eyes', whilst the bottom row of emoticons have 'sad eyes'.

Proximity

You've probably once said to someone, "Give me some space!" You meant what is called "personal space". The NVC psychologist **Hall (1959)** said that **personal space** is "an emotionally charged bubble of space which surrounds each individual". Hall called personal space needs **proxemics** and he identified four distances of personal space:



Personal space	Distance	Social use
Intimate distance	0 - 0.5 m	Used for an intimate relationship, as well as social circumstances such as shaking hands or sports such as wrestling.
Personal/casual distance	0.5 - 1.5 m	Maintained by close friends and acquaintances and enables conversations to take place.
Social distance	1.5 - 4.0 m	For more formal situations, such as people who are acquaintances or in business transactions.
Public distance	Over 4.0 m	The distance between one person and a group, for example at a lecture, at a concert or political rally.

Proximity relates to how **comfortable** we feel about a person and so how '**close**' we let them get (both psychologically and physically)



Writing task

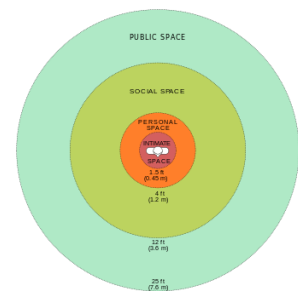
37. Define personal space.

38. Explain the four distances/zones of personal space.



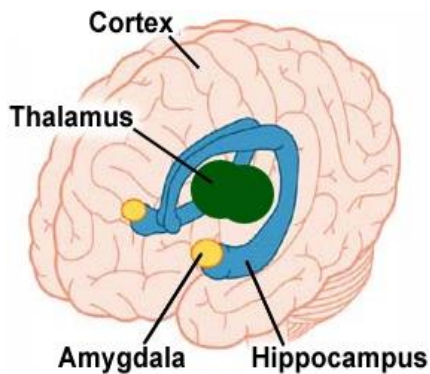
Class work

39. Design an experiment to measure differences in personal space.



Biological reasons why we don't want to get too close to other people - Kennedy et al (2009).

Psychologists already knew that the **amygdala** plays an important role in **emotions** and **social awareness**.



Aim

Kennedy et al based their research on what psychologists already know about a part of the brain called the **amygdala**. This small section deep inside the brain is responsible for **decision making** and **emotional responses**.

People automatically move themselves to maintain a comfortable **personal distance** from other people during social interaction.

Hypothesis

Kennedy's team hypothesised that the amygdala might have something to do with our sense of personal space.

Procedure

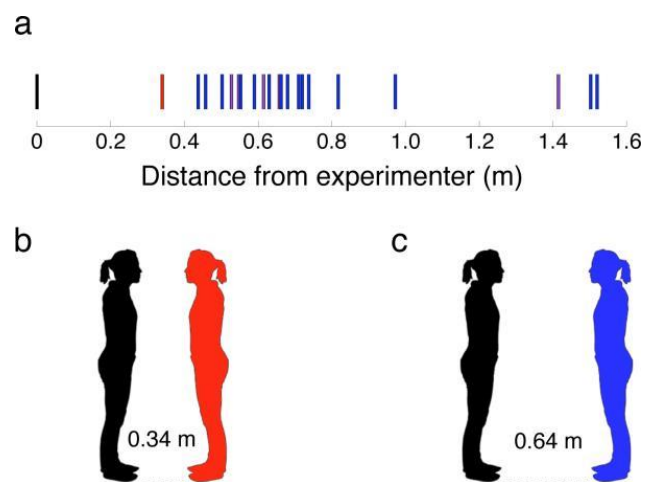
The researchers studied **S.M.** – a 42-year-old woman who had suffered extensive damage to her amygdala. S.M. indicated the position she felt most comfortable as a female experimenter approached her from 4.7m across a room. The distances were measured using a digital laser measurer. This was repeated four times. The same experiment was then carried out with control subjects.

Results

S.M.'s preferred distance – a mean of **0.34m** – was smaller than the preferred distance of any comparison group. The mean of the comparison group was **0.64m**. Her preferred distance was smaller than any of the control group by a statistically significant distance.

Evaluation

1. This was a **case study** of one person – S.M. – with damage to her amygdala. Unless the same experiment is repeated with a **bigger sample**, we cannot apply the results to the entire population. There might be **other reasons** why S.M. felt differently about her personal space compared to the other participants.
2. This research doesn't explain why **situational** and **personal** factors - such as whether we like a person, whether they are members of our family, or whether we are in a social or formal situation (at the park, in school, at a job interview) - have an impact on **how close** we are willing to get to another person.



(a) Shows all of the experiment's results (b) Shows S.M.'s preferred mean distance from the experimenter. (c) shows the control participant's mean preferred distance from the experimenter. Shown to scale.

Humans are actually quite **weak** physically. Compared with most other species they aren't as strong or fast or agile – what they do have is the most **developed brain**. Over millions of years of **evolutionary history**, the development of this brain led to differences in behaviour between the **genders**. In order to overcome our physical weaknesses, we developed the ability to **communicate complex ideas** – which helped us to **cooperate** and so made it more likely that we would **survive**. But males and females quickly took on different roles. This was because females have babies!

Males tended to hunt and provide whereas females tended to bring up the children (human children also take a long time to mature). So, evolution favoured **physical development in men** and more **nurturing development in women**. However, both had to communicate – but men tended to communicate more **functionally** (directions, instructions) whereas women talked about **emotions and feelings**. This helped the men in the **hunt** and the women in the **child-rearing**. This is because the men on the hunt needed to get the job done and the emotions involved were not important – whereas with women, social and emotional support is necessary to help bring children up. This also probably explains why men and women react to **stress** differently – where men engage in '**fight or flight**' (fighting it or running away) whereas women '**tend and befriend**' – (seek out support from others). Both used NVC, but gender differences occurred which may be partly **innate** (nature), but also **learned** (nurture). These differences are still around today.



- **Smiling** – Women tend to smile more than men in social situations (**Hall 1984**).
- **Eye contact** – Men tend to make more direct eye contact than women and they tend to look more while speaking whereas women look more while listening (**Dovidio 1988**).
- **Pupil dilation** - **Hess and Polt** (1960) found that the pupils of women dilated more to pictures of babies, mothers and babies, and nude men, while the pupils of men dilated more to pictures of landscapes and nude women.
- **Decoding (understanding) NVC cues** – **Smith, Archer & Constanzo** (1991) found that women are better at 'reading NVC' than men.
- **Proximity**- **Hall** (1984) found that men prefer more personal space than women. Women tend to use touch more than men and are better at knowing what touch means than men.
- **Interruptions** – **Zimmerman & West** (1975) showed that in conversations, men interrupted more than women, however, the research of **Carli** (1989) shows that there is not much difference between genders in interrupting! [this research has also been backed up by **Irish & Hall** (1995) in their studies of medical discussions]

Gender differences could be **innate (nature)** – in that **evolution** has **selected** different NVC abilities in men and women throughout human development and these are passed on in our DNA. However it could also be **learned (nurture)** because boys are more likely to **copy** "male" behaviours than female ones.



Writing task

40. Copy & complete the following paragraph which explains how evolution might be linked to gender differences in NVC.

Human physical weakness may have been overcome throughout evolutionary history by the development of the _____. This development gave us the ability to _____ better which allowed us to cooperate in groups. This made it more likely that we would _____. Men tended to need physical development so they could _____, whereas women developed nurturing skills so they could care for their _____. Women therefore needed more social support and this meant they developed better _____ skills.

41. Explain how smiling, eye contact, pupil dilation, decoding NVC, proximity and interruptions differ between males and females.



Class work

42. Complete the following table by showing whether the statement is **True or False**. If it is true, add the **researcher name(s)** in the correct box.

Statement	True/False?
Women are more likely to smile in social situations than men	
Men make less direct eye contact than women	
Men tend to look more when talking and women look more while listening	
Men's pupils are likely to dilate when looking at landscapes	
Women tend to stand closer to others than men do	
Men and women probably interrupt equally often in conversations	

Three types of body language that communicate high or low status

1. Stillness and slowness versus quickness and fidgeting

This is the physical manifestation of the kind of laid-back energy we talked about above. High status players keep more still than most people, and move more slowly. Power goes to those who are still. Quick movement, especially in the head and neck, is a signal of submission.



In movies and T.V., what kind of characters demonstrate quick, quirky or fidgety movements? Usually characters who are disturbed or malicious. Physical quirks and fidgeting show anxiety and discomfort, and emphasize low status.

2. Expansive versus contractive

High status players allow their body and their energy to expand into the universe, whereas low status players shrink up.

Mehrabian (1972) demonstrated that a 'high status' person will stand straight but **relaxed** whereas a 'lower status' person will stand more **tensely**.

High status players show a lot of comfortability, and tend to stretch out and **take up a lot of space**. When seated, many times they will **lean back slightly**, opening their sternum and shoulders as if **sending energy** out from their chest. They **look ever so slightly more relaxed** than what would be appropriate. It's a matter of taking up space, which is analogous to marking territory.

3. Eye contact

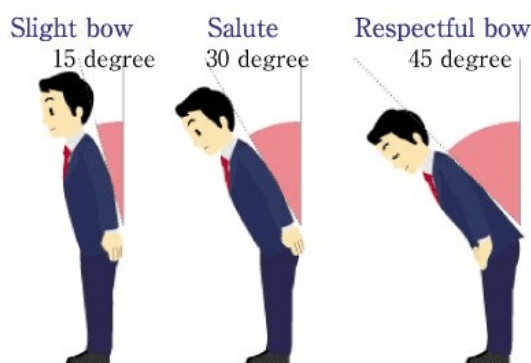
We think that a high status player holds direct eye contact, whereas a low status player looks away. Almost, but not quite. The difference is **not looking-at** versus **looking-away**. If someone looks at you, and that causes you to look away, that shows low status behaviour because you were made to disengage by someone else. But high status players rarely stare at people. You can tell the high status person because they are sending their energy *slightly past* the person they are engaging, like they are not fully acknowledging them. The key is *why* are you using direct or indirect eye contact. If you are staring at someone because you *really want to engage them*, that's a low status trait. If you are looking past someone out of casual nonchalance, that's a high status trait.

Socio-economic status

Socioeconomic status (SES) is determined by a number of factors such as wealth, occupation and schools attended. Psychologists Michael W. Kraus and Dacher Keltner (2009) wanted to see if non-verbal cues (that is, body language) can indicate our SES.

Participants were videotaped in one-on-one interviews. They looked for two types of behaviours: **disengagement behaviors** (including fidgeting with personal objects and doodling) and **engagement behaviors** (including head nodding, laughing and eye contact).

The results revealed that nonverbal cues can give away a person's SES. Upper-SES participants displayed more disengagement cues (e.g., doodling) and fewer engagement cues (e.g., head nods, laughs) than did lower-SES participants. In addition, when a separate group of observers were shown 60 second clips of the videos, they were able to correctly guess the participants' SES background, based on their body language.



These results have implications for understanding the effect of SES on social interactions and patterns of disengagement and engagement in other realms.

Greeting in Japan reflects status

In Japan, handshakes, kissing and bear hugs have not become established. Bodily contact is considered impolite. On first meeting, business cards are exchanged, each person assesses the others status and appropriate bowing follows. The person with the highest status bowing the last and the one with the least status bowing the most.






Writing task

43. Explain the three types of body language that communicate high or low status.
44. How is socio-economic status linked to body language?
45. How do Japanese people treat people differently depending on their status?

Non-verbal communication Self-Assessment Table

Complete the table below to rate how confident you are about your ability to do the following:

Rate how confident you are in doing the following:			
I am able to describe what facial expressions mean			
I am able to describe how eye contact matters in NVC			
I am able to describe how people use body language (gestures and postures) to convey meaning			
I am able to describe and explain how personal space affects NVC			
I am able to describe and explain how cultural differences affect NVC			
I am able to describe and explain the types of NVC that are considered universal			
I am able to describe and explain how gender affects NVC			
I am able to describe and explain how status affects NVC			
I am able to describe how NVC can be explained from a nature and nurture standpoint			
I am able to outline and evaluate the Ekman and Friesen (1971) study			
I am able to outline and evaluate the Yuki et al (2007) study			