

## Lecture 1: Non-verbal communication

Non-verbal behaviour: communicative actions that don't have verbal content.

Non-verbal communication (may reveal unconscious thoughts/feelings):

- Encoding: sending/transmitting non-verbal cues
- Decoding: receiving/retrieving non-verbal cues.

Types of non-verbal behaviour:

- Body posture
- Eye gaze
- Facial expressions
- Proxemics (how closely we position ourselves to others)
- Gestures
- Haptic (movements)

Body Posture

- Body Posture communicates information to others (research typically looks at perceptions of **dominance**)

EXPERIMENT: Schwartz et.al (1982) had participants rate a standing figure to be more dominant than a seated figure

EXPERIMENT: Rule et.al (2012) demonstrated that participants identify dominance or submission in a figure based on body posture and head posture within 40ms of exposure.

EXPERIMENT: Koppensteiner et.al (2016) Politicians converted to stick figures were rated more dominance when they used expansive movements/gestures both vertically and horizontally.

- Expansive movements decrease perceived trustworthiness but increase perceived dominance.

- Body Posture communicates information

EXPERIMENT: Petty and Brinol (2009) researched how body posture can affect inferences about one's self. Participants were asked to list three positive/negative personal traits about professional future placed in either a confident position (erect back) or a doubtful position (slouched). RESULTS: indicated that participants in the confident position were able to list twice as many positive statements. With attributions of self-attitude raising from 5.5 to 7.8.

- Body Posture and memory retrieval

Memory is better retrieved when BP is the same at formation and retrieval.

EXPERIMENT: Dijkstra et.al (2006) analysed the reaction time to generate memory recall 14 days after formation in either a congruent (same) or incongruent (different) body positions. RESULTS: indicated that memory recall was faster and more accurate when in congruent vs. incongruent body positions.

- This effect occurs in all age groups but is stronger for young adults than older individuals.
- Body Posture and romantic attraction
 

EXPERIMENT: Vacharkulksemsuk et.al (2016) analysed dating profiles that featured expansive vs. contractive postures and found they were more likely to receive a match this is likely due to perceived dominance.
- Body Posture and testosterone
 

TED talk by Amy Cuddy claimed that 'power posing' is shown to increase testosterone.

  - Statement received criticism about experiments research and reliability.

EXPEIRMENT: Jones et.al (2017) tested whether 'power posing' has an effect on testosterone levels. RESULTS: indicated that there was not a statistically significant difference on any behavioural or hormonal measure.
- Body Posture across cultures
 

EXPERIMENT: Park et. al (2013) measured self-reported power when placed in 4 different positions; expansive hands spread on desk, expansive upright sitting position, expansive feet on desk and, constricted sitting. RESULTS: indicated that for the expansive feet on desk pose participants born in the U.S reported high self-reported power while participants born in East Asia self-reported this pose low (seen as disrespectful)

  - Indicating that some of these postures are learnt rather than innate.

## Eye Gaze

EXPERIMENT: Rogers et.al (2018) used head-mounted eye trackers to analyse whether people look at another's eyes or face when having a 4 minute 'getting acquainted' conversation. RESULTS: indicated that participants subjectively perceived making eye-contact for 70% of the conversation. Actual data reveals that mutual eye contact occurred 0-45% of the conversation (very brief instances) while mutual face gaze occurred 60% of the time for longer periods (approx. 2.2 seconds)

- Non-face gaze occurred 29% when talking and 10% when listening.

## Facial Expressions (smiles)

EXPERIMENT: Gunnery et.al (2013) analysed whether participants could determine the difference between a genuine or fake smile. First participants were asked to fake 'genuine' smiles and then imitate a Duchenne smile (activates the 3 core facial muscles for smiling) from photograph. Then participants rated other participants photos on genuineness. RESULTS: indicated that genuineness correlated with deliberately produced Duchenne smiles.

There are 3 facial muscles involved in smiling

- Corrugator supercilii (dimples above the eyebrow)

- Orbicularis oculi (muscles at the corner of the eye- smile lines)
- Zygomaticus major (muscles in cheek that curves the lips)

EXPERIMENT: Krumhuber et.al (2014) analysed whether individuals mimic other people's expressions (smile mimicry). Participants watched a short film that either featured genuine or fake smiles and the own smile activity was recorded. RESULTS: indicated that features of genuine smiles elicited more smile mimicry than fake smiles.

- Rated least effective to most to determine smile mimicry: Zygomaticus major, orbicularis oculi then, corrugator supercilii.

#### Proxemics (Proximity to another)

Proxemics could be a subtle measure of attraction, comfort, or interaction openness.

EXPERIMENT: Marinovic et.al (2017) aimed to determine proxemics following watching a video featuring ostracism. Participants were asked to watch a video that featured or did not feature ostracism then they were measured on how closely they close to sit in relation to the experimenter. RESULTS: those that views ostracism chose to sit further way from the experimenter.

EXPERIMENT: Kuntsman et.al (2016) identified that white participants who felt financially threatened chose to sit further way from a low SES target than those who were not threatened.

- Therefore, proxemics can be used as a measure of prejudice towards outgroup members

#### Gestures

Gestures = non-verbal bodily communication that are usually symbolic, but commonly understood (i.e. digitus impudicus- middle finger).

EXPERIMENT: Chandler and Schwarz (2009) analyses the effect different gestures (raising middle figure, thumb, or index figure) can have on someone's perceived aggressiveness and negativity. RESULTS: for perceived aggression raising the middle finger is rated higher than raising the index finger. While for negativity, raising the thumb is less negative than raising one's index finger.

#### Haptic

Haptic = touch and movement are used to communicate many emotions.

EXPERIMENT: Hertenstein et.al (2009) analysed what haptics communicated emotionally. Participants were placed in pairs, the first person was asked to communicate; fear, anger, happiness, sadness, disgust, love, surprise, and sympathy through touch. Person two, would decode this touch and choose an emotion they thought was being communicated.

- Anger = hitting
- Fear = trembling
- Sadness = stroking

- Disgust = pushing
- Surprise = squeezing
- Happiness = swinging
- Love = stroking
- Sympathy = patting

EXPERIMENT: App et.al (2011) participants asked to send emotions to an imagined same-sex mannequin who was their friend and experimenters recorded the type of haptic they used (touch, face, or body). The emotions were broken down into 3 groups by the experimenters.

- Social status emotions (pride, embarrassment, guilt, and shame)  
= predominantly body.
- Survival emotions (anger, disgust, fear, happiness, and sadness)  
= predominantly face
- Intimate relation emotions (love and sympathy)  
= predominantly touch.