
Why Do We Instantaneously Judge People?

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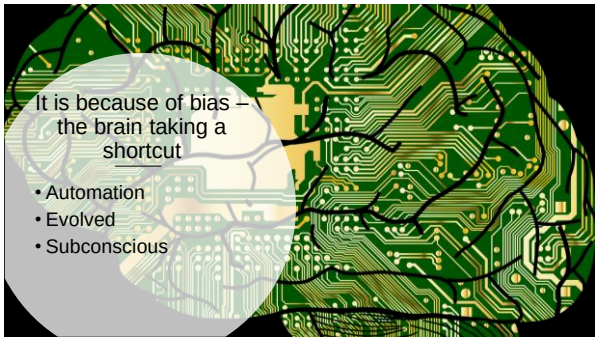
It is because of bias – the brain taking a shortcut
• Automation
• Evolved
• Subconscious

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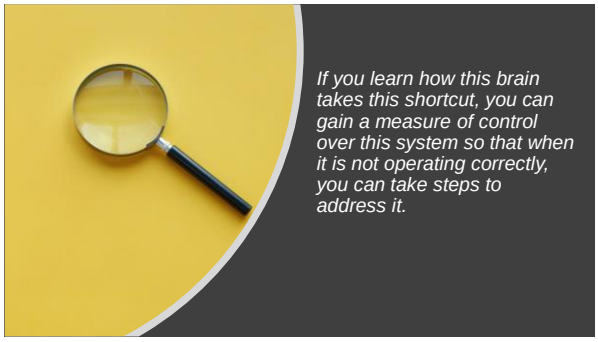
If you learn how this brain takes this shortcut, you can gain a measure of control over this system so that when it is not operating correctly, you can take steps to address it.

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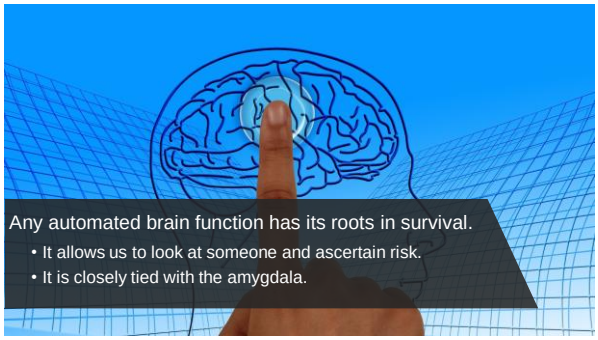

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1. I Hear You Talking but I Only See What You Are Saying

- The Amygdala is not primarily involved in language when making interpersonal judgments.
  - The more intense the discussion the lower the ability to accurately process verbal information.
- Language related to interpersonal judgments is associated with the dmPFC (Harris et al., 2005; Mitchell et al., 2002, 2005; Ochsner et al., 2005; Sugiura et al., 2004; Zysset et al., 2002).
  - The dmPFC is not involved in formulating impressions of others (Schiller et al., 2009).

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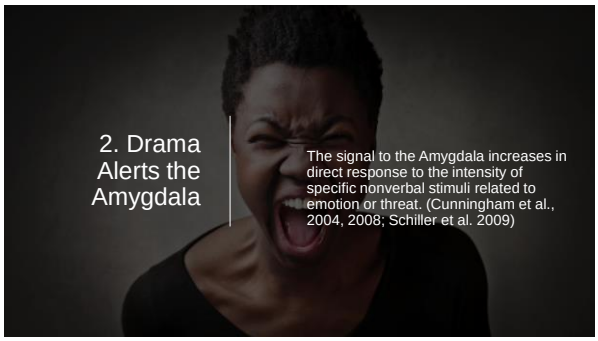
2. Drama Alerts the Amygdala
The signal to the Amygdala increases in direct response to the intensity of specific nonverbal stimuli related to emotion or threat. (Cunningham et al., 2004, 2008; Schiller et al. 2009)

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3. There is Always Conscious and Subconscious Monitoring
• The amygdala is always processing all emotional nonverbal cues you encounter.
- Some conscious
- Some subconscious
- The chemical impact is the same whether the amygdala monitoring leads to conscious or subconscious awareness.
• The amygdala is processing nonverbal stimuli
- Independently from attentional resources or awareness
• Implicitly and automatically
• (Engell et al., 2007; Phelps and LeDoux, 2005; Phelps et al., 2000; Todorov and Engell, 2008; Winston et al., 2002)

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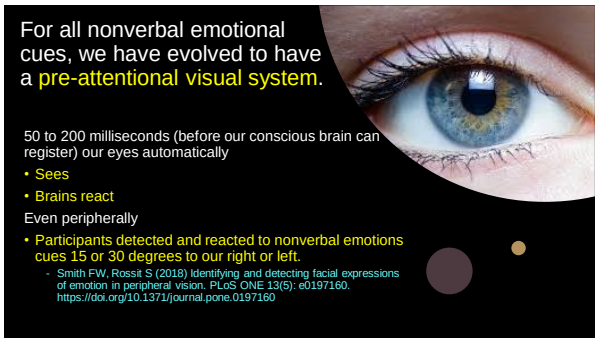
For all nonverbal emotional cues, we have evolved to have a pre-attentional visual system.
50 to 200 milliseconds (before our conscious brain can register) our eyes automatically
• Sees
• Brains react
Even peripherally
• Participants detected and reacted to nonverbal emotions cues 15 or 30 degrees to our right or left.
- Smith FW, Rossit S (2018) Identifying and detecting facial expressions of emotion in peripheral vision. PLoS ONE 13(5): e0197160. https://doi.org/10.1371/journal.pone.0197160

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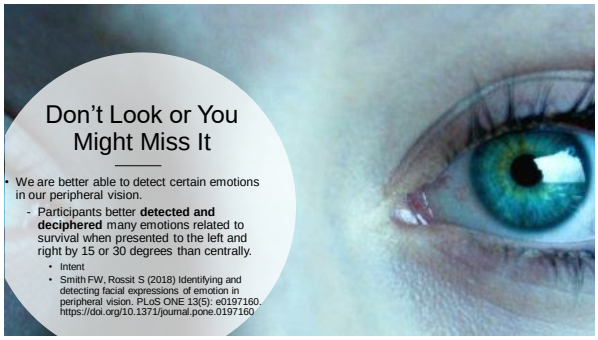
Don't Look or You Might Miss It
We are better able to detect certain emotions in our peripheral vision.
Participants better detected and deciphered many emotions related to survival when presented to the left and right by 15 or 30 degrees than centrally.
Intent
Smith FW, Rossit S (2018) Identifying and detecting facial expressions of emotion in peripheral vision. PLoS ONE 13(5): e0197160. https://doi.org/10.1371/journal.pone.0197160

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Females Possess a Subtle Advantage in Processing Emotional Expressions to Males.
Small but reliable
We think it is more significant because behavioral response patterns are different
(McClure, 2000)

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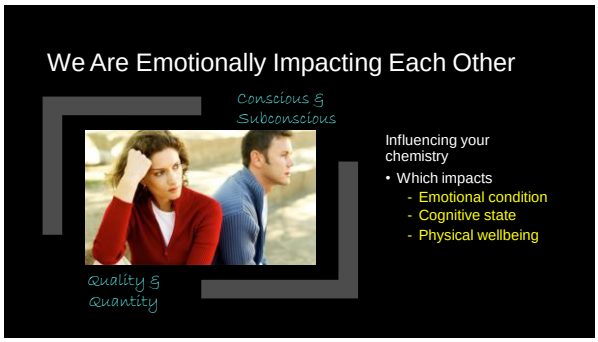
We Are Emotionally Impacting Each Other
Conscious & Subconscious
Quality & Quantity
Influencing your chemistry
Which impacts
Emotional condition
Cognitive state
Physical wellbeing

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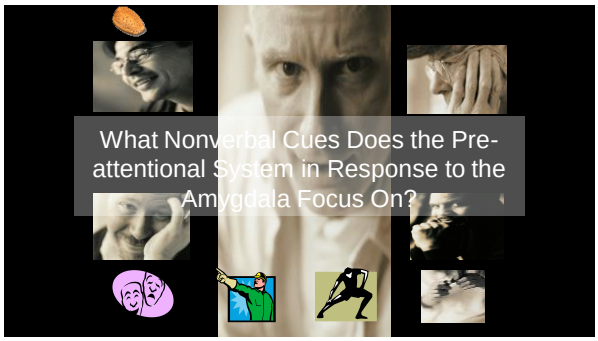
What Nonverbal Cues Does the Pre-attentional System in Response to the Amygdala Focus On?

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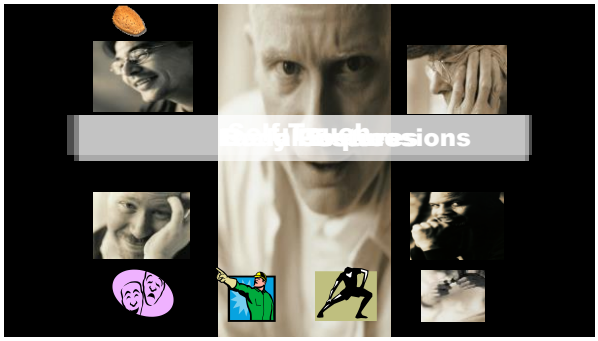
sions

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17

EYE ACCESSING CUES

V--- Visual

A---Auditory

K---

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Age Chart – Facial Discrimination

- By age 1
  - The ability to accurately label emotions (Gross & Ballif, 1991)
- Between 9 and 10 years
  - Prominent improvements in accuracy
- Between 13 and 14 years
  - Additional jump in accuracy and response (Kolb, Wilson, & Taylor, 1992).
- Adult (20 to 39)
  - Transition to discrimination and response peak
- Older adult (50 to 64)
  - A drop in emotional expression
    - Experience less negative affect (Carstensen, Pasupathi, Mayr, & Nesslroade, 2000; Charles, Reynolds, & Gatz, 2001; Phillips et al., 2006)
    - Fewer outward displays of emotion (Magai, Cosedine, Krivoshekova, Kudadjic-Gyamfi, & McPherson, 2006; Phillips, Henry, Hosie, & Milne, 2006)
    - Decreased magnitude of emotional memory (Charles, Mather, & Carstensen, 2003)
    - Threat detection processes intact (Mather & Knight, 2006)
- 65 and older
  - Facial expression recognition deficits towards threat detection processes (Burke & Mackay, 1997).

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Hand Gestures
• The limbic system takes control of hands quicker and more directly than any part of the body.
• Subconscious interpretation of truth
• First formal language in infants and in history
– Improves infant language acquisition (Goodwyn, Acredolo, and Brown 2000)
– Improves the number of verbal commands that a dog can learn

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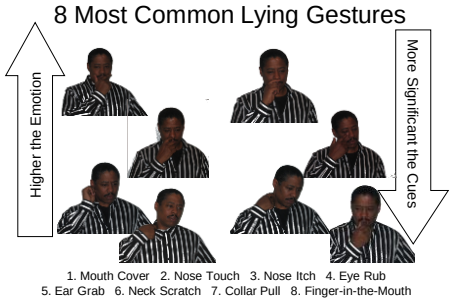
8 Most Common Lying Gestures
Higher the Emotion
More Significant the Cues
1. Mouth Cover 2. Nose Touch 3. Nose Itch 4. Eye Rub
5. Ear Grab 6. Neck Scratch 7. Collar Pull 8. Finger-in-the-Mouth

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Early Posterior Negativity (EPN) test show enhanced observation of hand gestures, with a greater observation of negative gestures (Flaisch et al., 2009, 2011).

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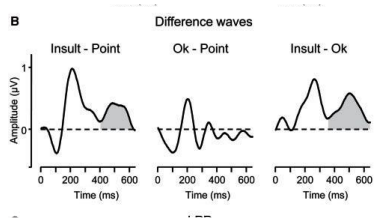
Monitoring of Hand Gestures from 200 to 700ms



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Eyes Have Alertness to Hands

- Sensor tracking - early posterior negativity (EPN) and late positive potential (LPP)
  - Neutral control gestures - lowest activation
  - Hand gestures that convey approval – higher activation
  - Hand gestures that convey insult – highest activation in both regions
    - Activate body response
- Insulting gestures compared to insulting words – significantly more than negative words

- (T. Flaisch et al. 2011)

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Positive Gestures and Productivity

Especially if There is Good Rapport

- Gesturing reduce the load on working memory (cf. Marstaller and Burianová, 2013) and cognitive load in general (Pouw et al., 2014).
  - Better memory and comprehension
- The higher the empathy the more effective gestures are on conveying meaning in language, (Chu et al. 2014)
  - Communication between workers is improved by empathy
  - Less communication errors

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Look at the Following Video

https://www.youtube.com/watch?v=SSamEqtPVao&t=201s
Begin 20 seconds
End 3:23

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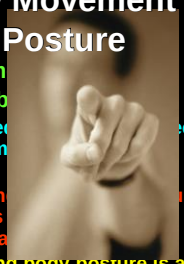
Body Movement & Posture



Dramatic m
sustained b
- **Sustaine** **econds, a body m** **a posture**
- **Mimickin** **ure provides emotiona**
- **Mimicking body posture is a method to build rapport**

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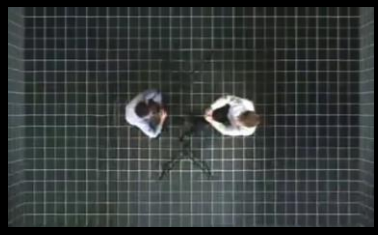
https://www.youtube.com/watch?v=Hruf1p3ke7U&t=184s
first 2:34



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Mirror Neurons

- Mirror neurons provide a neural mechanism by which the actions and intentions of others can be automatically understood.
- Children with autism show no mirror neuron activity
  - A dysfunctional 'mirror neuron system' may underlie the social deficits.
- Process
  - Mirror neuron system – matches the movements of others
  - Limbic system – produces chemical signals which code responses
  - The insula - acts as an interface between the mirror neuron system and the limbic system in order to translate what is observed or imitated into its internally felt emotional significance.
    - Rizzolatti, G. & Craighero, L. Annu. Rev. Neurosci. 27, 169–192 (2004).
    - Carr, L. et al. Proc. Natl. Acad. Sci. USA 100, 5497–5502 (2003).
    - Leslie, K.R., Johnson-Frey, S.H. & Grafton, S.T. NeuroImage 21, 601–607 (2004).

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An Evolutionary Link Between Gestural Body Movement and Language

- National Academy of Sciences found that blind individuals produce many of the same emotional movements and gestures
  - Could not have been learned
- The product of the limbic system
  - Why it is so easily produced and interpreted
    - (Hewes et al., 1973; Harnad et al., 1976; Rizzolatti and Arbib, 1998; Corballis, 2003)

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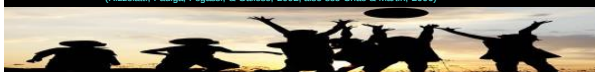
Mirror Neuron Circuits Play Two Role in Adaptive Behavior

1. Support fast learning (Gallese, 2003)
   - Pattern behaviors are highly influential
   - We are repeating it over and over again
     - Learning
     - Chemistry
2. Responsible for social empathy and cooperation (Decéty & Chaminade, 2003; Hatfield, Cacioppo, & Rapson, 1992)
   - A deeper understanding of another
   - Modifying our behavior to be a member of the team
     - (Rizzolatti, Fadiga, Fogassi, & Gallese, 2002; also see Chao & Martin, 2000)



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We Notice All Emotional Cues Consciously and Subconsciously

- Conscious
  - Brain process movements of other
  - Level of brain activity increase in direct correlation to the intensity of emotional cues processed
    - Eye oscillation increasing improving vision and focus
    - Oscillation in the region of the brain monitoring the movement increases interpreting the meaning of movement
- Oscillation directly correlated to amygdala response
- Negative emotional range surpasses the highest positive emotional range
  - Survival
- At the higher levels of emotional processing, the body is ramped up to respond
- Subconscious
  - The same exact responses demonstrated in subconscious monitoring of emotional cues

(Borgomaneri et al., 2014; de Gelder et al., 2004, 2010; Kret et al, 2011; Schupp et al., 2003, 2004b; Thom et al., 2014; Sato et al., 2001; Schupp et al., 2004a; Frühholz et al., 2011; Calvo and Beltrán, 2014)

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Three Key Points to Remember

1. We are on alert for emotional cues
2. We respond in kind to the intensity of the emotional cue
3. We ramp up to respond to intensity

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Seeing Nonverbal Emotional Body Movements

- Pleasant or unpleasant emotional movements activate subcortical structures in the amygdala.
- Impacting your chemistry altering the emotional condition
  - Posture in chair
  - You as well as those around you
- The more emotionally intense the stronger the amygdala reaction and subsequent chemical response
  - Adolphs, R. (2002). Neural systems for recognizing emotion. Curr. Opin. Neurobiol. 12, 169–177.
  - Dolan, R.J. (2002). Emotion, Cognition and Behavior. Science 8, 1191–1194.

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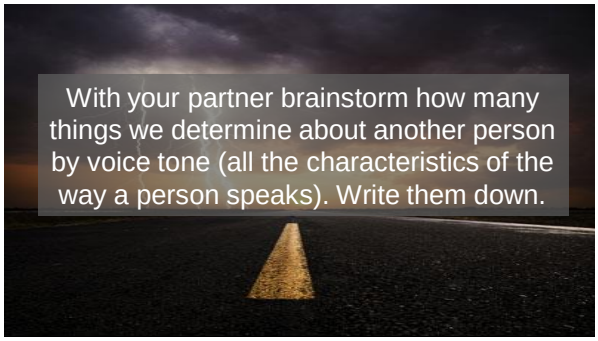

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1. Age
2. Gender
3. Race
4. Language
5. Culture
6. Sick
7. Size
8. Powerful
9. Strong
10. Weak
11. Dying
12. Tired
13. Familiar person
14. Angry
15. Calm
16. Anxious
17. Excited
18. Sad
19. Happy
20. Fearful
21. Apprehensive
22. Stressed
23. Sexy
24. Serious
25. Authoritative
26. Condescending
27. Submissive
28. Obnoxious
29. Annoyed
30. Irritated
31. Disgusted
32. Goofy
33. Hared/rushed
34. Surprised
35. Disappointed
36. Uninterested

50

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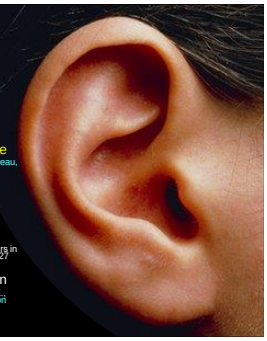
You Hear Emotion Before You Process Words

- 150 to 200 ms – emotional tones
  - Amygdala activation to positive and negative vocalizations compared to neutral ones (Fecteau, Belin, Joanette, & Armony, 2007)
- Around 300 ms - identity match (who, gender, age, health, race…)
  - Paralinguistic features encoding different pieces of information about a speaker
    - Superior temporal gyrus
      - Max Planck Institute "Where Voice Recognition Occurs in the Brain." NeuroscienceNews. NeuroscienceNews, 27 December 2017.
- After emotions and identifiers – word recognition
  - Spreckelmeyer, K. N., Kutas, M., Urbach, T., Altenmüller, E., and Münte, T. F. (2009). Neural processing of vocal emotion and identity. Brain Cogn. 69, 121–126. doi: 10.1016/j.bandc.2008.06.003



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Your Tone of Voice Is Controlled by Your Brain

- Chang and his colleagues found that the bilateral dorsal laryngeal motor cortex (dLMC), signals voice tones.
- They could evoke movement of the muscles in the larynx with small electrical currents to the dLMC.
- The input to the dLMC come from the cortex when calm and from amygdala when aroused.

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Contest

"I never said she stole my money"

- By changing the tone, inflection, or emphasis on a word, how many meanings can two people come up with?
- Couple with the most variations wins!
- You must be able to perform each variation and the audience agrees it is different from the others performed to validate count.
- If the audience changes the count, another team with more variations can perform for the prize.

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So as You Think You Do

You Are Speaking but Your Lip Aren't Moving

- When you engage in inner speech the same mechanism of outer speech are all engaged - 'as a kind of action'.
  - Inner speech sends electrical signals that tell the mouth, tongue, and lips to move and talk.
- A clear example of how empathy can trigger the same chemical experience in the observer to a lesser extent because the body mimics in the same exact physical process.
  - Whitford TJ, Jack BN, Pearson D, Griffiths O, Luque D, Harris AWF, Spencer KM, Le Pelley ME. (2017). Neurophysiological evidence of efference copies to inner speech. eLife, 6, e28197. https://elifesciences.org/articles/28197

What You Say to Yourself Impacts Your Biology

Sadness
Depression
Anger

Repeat a Different Message

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Gender Differences In Voice Processing

- Females process voices slightly differently than males in the middle temporal gyrus and the middle superior temporal gyrus.
- Females are better able to assess vocal and nonvocal sounds than males.
  - Ahrens et al., 2014 M. M. Ahrens, B. Awwad Shiekh Hasan, B.L. Giordano, P. Belin Gender differences in the temporal voice areas Front. Neurosci., 8 (2014), 10.3389/fnins.2014.00228

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The Many Levels of Bias

- Personal biases – taught or a product of experiences
- Environmental – created by patterns in the environment
- Societal – the shared majority opinion

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Bias

Personal

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Infants Attend More to Information Perceived Negatively (Mastropieri & Turkewitz, 1999)

How does this impact daily life:

- Infants around age 1 in new situations, use the perceptions of others to form their own.
  - Infants consistently were influenced by the negative response of maternal figure than the positive (Mumme, Fernald, and Herrera 1996).

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Bias

Environment

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Any Pattern You See with Regularity Will Create Bias

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Bias Study

Ann Arbor Public Schools			
Interviewed	Staff 283	Students 279	Parents 130
Total	692		

- Disproportionate patterns create bias

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Example

- Disproportionate patterns create bias
  - Good students/Bad students (Asian factor - 13% student population)

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Bias

Societal

65

Bias

Persistent disproportionate patterns in society create bias

- Society (most familiar)
  - Race
  - Culture
  - Gender

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Hard to Live Within This Culture & Not Develop Bias in Relation to Black Males

Messages are constant

- Internet
- TV
- Radio
- Newspapers
- Conversations

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Harvard Bias Study

- Found that regardless of race or gender most Americans associate black males to crime and violence today (Levin & Banaji 2006; Dunham & Banaji, 2006; Baron & Banaji, 2006; Kalis, Banaji, & Kosslyn, 2008; Sabin, Nosek, Greenwald, & Rivara, 2009; Stanley, Sokol-Hessner, Banaji, & Phelps, 2011; Cunningham, et al. 2004; Mazzocco, et al. 2006; Green, et al. 2007).

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Findings

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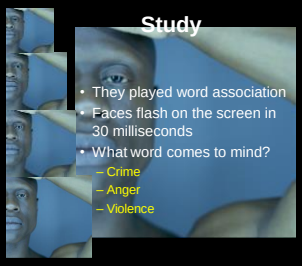

Study

- They played word association
- Faces flash on the screen in 30 milliseconds
- What word comes to mind?
  - Crime
  - Anger
  - Violence

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Study

- Whites were shown faces
  - 30 milliseconds
    - Too quickly for them to notice them
- Yet black faces still triggered activity in the amygdala
- When the pictures slowed - for a half a second
- Black faces caused heightened activity in the prefrontal cortex indicating internal conflict.
  - What they were feeling and what they believed were in conflict

Wil A. Cunningham 2004

It is not surprising - watch TV, listen to the radio, read a newspaper and one cannot escape the association of black males to crime, violence, and danger.

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Amygdala Response

- It is the amygdala that inspired the first investigations to race and mental processing.
- Amygdala processes emotions
  - The history of race relations in the US, especially black-white relations, is fraught with complex emotions, including fear, hostility and lack of trust.

72

Amygdala and Faces

- Numerous studies have found greater amygdala activity to outgroup race faces than to ingroup faces.

- Stanley DA, et al. Race and reputation: perceived racial group trustworthiness influences the neural correlates of trust decisions. Phil Trans R Soc Lond B. 2012; 367:744–753. [PubMed: 22271789]
- Hart AJ, et al. Differential response in the human amygdala to racial outgroup versus ingroup face stimuli. Neuroreport. 2000; 11:2351–2355. [PubMed: 10943684]
- Richeson JA, et al. An fMRI investigation of the impact of interracial contact on executive function. Nat Neurosci. 2003; 6:1323–1328. [PubMed: 14625557]
- Cunningham WA, et al. Separable neural components in the processing of black and white faces. Psychol Sci. 2004; 15:806–813. [PubMed: 15563325]
- Wheeler ME, Fiske ST. Controlling racial prejudice: social-cognitive goals affect amygdala and stereotype activation. Psychol Sci. 2005; 16:56–63. [PubMed: 15660852]
- Ronquillo J, et al. The effects of skin tone on race-related amygdala activity: an fMRI
- investigation. Soc Cogn Affect Neurosci. 2007; 2:39–44. [PubMed: 18985117]
- Richeson JA, Todd AR, Trawalter S, Baird AA. Eye-gaze direction modulates race-related amygdala activity. Group Process Intergroup Relat. 2008; 11:233–246.
- Krill AL, Platek SM. In-group and out-group membership mediates anterior cingulate activation to social exclusion. Front Evol Neurosci. 2009; 1:1. [PubMed: 19597548]
- Forbes CE, Cox CL, Schmader T, Ryan L. Negative stereotype activation alters interaction between neural correlates of arousal, inhibition and cognitive control. Soc Cogn Affect Neurosci. Sep 27.2011 published online; 10.1093/scan/nsr052

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Amygdala and Faces

- Some studies found greater amygdala activation black versus white in American
  - Poverty
    - Richeson JA, et al. An fMRI investigation of the impact of interracial contact on executive function. Nat Neurosci. 2003; 6:1323–1328. [PubMed: 14625557]
    - Phelps EA, et al. Performance on indirect measures of race evaluation predicts amygdala activation. J Cogn Neurosci. 2000; 12:729–738. [PubMed: 11054916]

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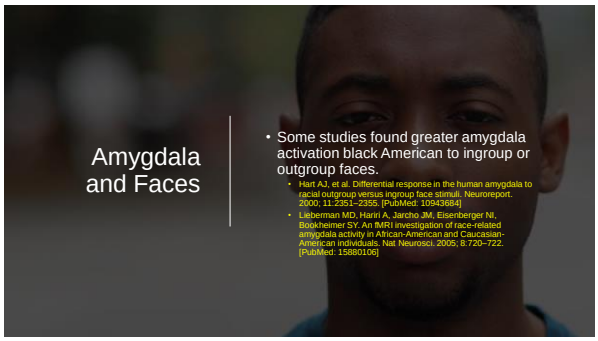

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Societal Bias Does Not Discriminate

"There is nothing more painful to me at this stage in my life than to walk down the street and hear footsteps and start thinking about robbery then look around and see somebody white and feel relieved." *Jesse Jackson*

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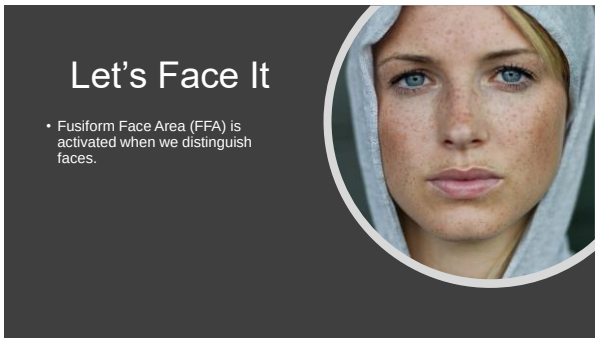

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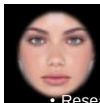
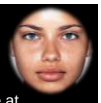


More Accurately Recognize Ingroup Members



- Research shows that individuals are faster and more accurate at recognizing faces of ingroup members (same race) than outgroup members (other-race).
  - Malpass RS, Kravitz J. Recognition for faces of own and other race. J Pers Soc Psychol. 1969; 13:330–334. [PubMed: 5359231]
  - Brigham JC, Malpass RS. The role of experience and contact in the recognition of faces of own and other-race persons. J Soc Issues. 1985; 41:139–155.
- Participants exhibit greater FFA activation when viewing same-race faces compared with other-race faces.
  - Correlates with the memory advantage for same-race faces.
    - Caldara R, et al. Face versus non-face object perception and the "other-race" effect: a spatiotemporal event-related potential study. Clin Neurophysiol. 2003; 114:515–528. [PubMed: 12705432]
    - Ito TA, Thompson E, Cacioppo JT. Tracking the time course of social perception: the effects of racial cues on event-related brain potentials. Pers Soc Psychol Bull. 2004; 30:1267–1280. [PubMed: 15466600]

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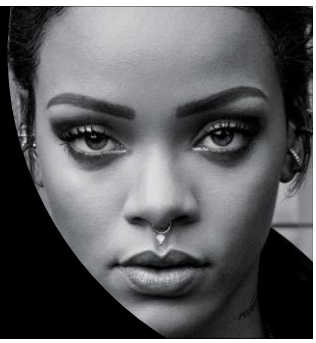
Short Cut – Process Details Ingroup

- Researchers found cross-race effect processes outgroup members primarily at the category level (race group) at the expense of encoding individuating information.
  - Ostrom TM, Carpenter SL, Sedikides C, Li F. Differential processing of in-group and out-group information. J Pers Soc Psychol. 1993; 64:21–34.
  - Sangrigoli S, Pallier C, Argenti AM, Ventureyra VAG, de Schonen S. Reversibility of the other-race effect in face recognition during childhood. Psychol Sci. 2005; 16:440–444. [PubMed: 15943669]
  - Young SG, Hugenberg K. Individuation motivation and face experience can operate jointly to produce the own-race bias. Soc Psychol Personal Sci. 2012; 3:80–87.

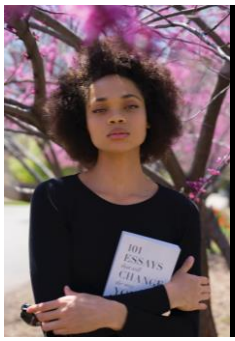
79

The Empathy Effect



- This mental process produces lower empathy for out of group members

80



Reading and Empathy

- Empathy improves reading comprehension.
- Reading books in which the reader feels 'transported' by the narrative increase empathy.
- Stansfield, J., & Bunce, L. (2014). The Relationship Between Empathy and Reading Fiction: Separate Roles for Cognitive and Affective Components. Journal of European Psychology Students, 5(3), 9–18. DOI: http://doi.org/10.5334/jeps.ca

81

Sociopolitical Context Helps Explain Harvard Bias Study Findings

82

How Did We Get Here?

Association of Blacks to Crime and Violence

- 1644 – 1st African slave in America
- 1863 – Emancipation Proclamation
- = 244 years *with* slavery
  - Theological arguments used – cursed race or less than human
- = 158 years *without* slavery

83

Convict Leasing

- In 1951, almost 90 years after the passage of the Emancipation Proclamation Congress passed explicit statutes outlawing slavery.
  - The practice of renting prisoners as labor at a fraction of the cost of regular workers was called *convict leasing*.
  - 90 percent of individuals incarcerated and forced into hard labor in the South were black males (Blackmon, 2008).
- Blacks were arrested and prosecuted for noncriminal acts.
  - Vagrancy statutes made it a crime to be unemployed.
  - Trial records indicate spikes in arrests during harvest times and when large companies needed an influx of workers.
- When the Emancipation Proclamation passed 92 percent of all blacks in America lived in the South (Jones, 1985).
- As late as 1900 approximately 90 percent of blacks still lived in the South (Jones, 1985).

The southern black experience is pervasive to black culture.

84

Ancient History

- In 1951, Congress passed explicit statutes outlawing *convict leasing*.
- = 70 years w/o some form of slavery

85

Harvard Bias Study

Found that regardless of race or gender most Americans associate black males to crime and violence today (Levin & Banaji 2006; Dunham & Banaji, 2006; Baron & Banaji, 2006; Kalis, Banaji, & Kosslyn, 2008; Sabin, Nosek, Greenwald, & Rivara, 2009; Stanley, Sokol-Hessner, Banaji, & Phelps, 2011; Cunningham, et al. 2004; Mazzocco, et al. 2006; Green, et al. 2007).

86

Cultural Archetypes

Cultural archetypes are universal patterns across cultures or common to a culture.

- Police – "two people from different cultures can look at the same event and have very different reactions."
- Black culture
  - Anxiety concerning police – altering nonverbal behavior
  - Based on patterns – they are right
- Police have anxiety concerning blacks and Latinos – altering nonverbal behavior
  - Based on patterns – they are right

= What you see today

However, the majority of blacks/Latinos are not criminals nor are the majority of police looking to harm people of color.

87

The New York Times, "Folly's Antidote"
Arthur Schlesinger

88

"Folly's Antidote"

Arthur Schlesinger

"Conceptions of the past are far from stable. They are perennially revised by the urgencies of the present. When new urgencies arise in our times and lives, the historian's spotlight shifts, probing at last into the darkness, throwing into sharp relief things that were always there but that earlier historians had carelessly excised from the collective memory. New voices ring out of the historical dark and demand to be heard"

89

If conceptions of the past are far from stable. Then curriculums must be revised by the urgencies of the present.

90

All Rise

- Harriet Tubman
  - Underground railroad leader
- Dr. Martin Luther King Jr.
  - Civil rights leader
- Rosa Parks
  - Bus-riding activist
- Thurgood Marshall
  - U.S. Supreme Court justice




91

Ralph Johnson Bunche

First African American to be honored in 1950 with the Nobel Peace Prize for his mediation in Israel.

92

Musa Keita I

Business Insider called him the richest person of all time.

93

Dr. Patricia Bath

First African American to complete a residency in ophthalmology and inventor of the Laserphaco Probe.

94

Garrett Morgan

Inventor who many believe to have designed the prototype for the gas mask and the traffic light.

95

What Is the Difference Between the Two Lists

- Harriet Tubman
- Dr. Martin Luther King, Jr.
- Rosa Parks
- Thurgood Marshall
- Ralph Johnson Bunche
- Musa Keita I
- Dr. Patricia Bath
- Garrett Morgan

Are You the President?

96

Curriculum and Bias

- Educators must consider how curriculums create collective memory and have, therefore, biased students unwittingly.
- It is clear that the lessons of the past have not reshaped our collective conscious from the biases that plague American society.
- If education maintains the status quo, it will pass on to the next generation a future that perpetuates the past.

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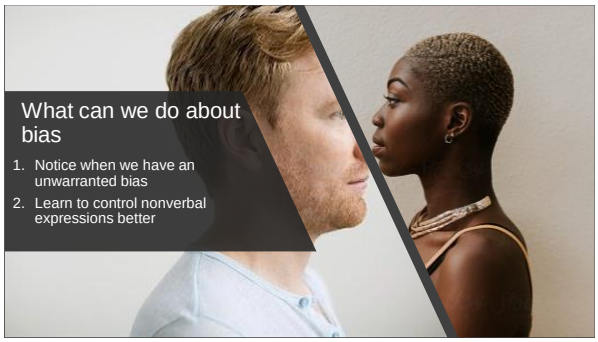


98

Emotional Control

- Higher out-group response is lowered when the dorsolateral prefrontal cortex (DLPFC) is more active because it regulates the amygdala.
  - People who have greater emotional control can better diminish emotional bias responses.
    - Cunningham WA, et al. Separable neural components in the processing of black and white faces. Psychol Sci. 2004; 15:806–813. [PubMed: 15563325]

99

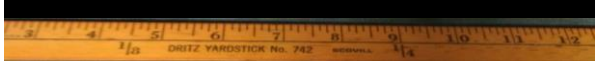
Learning Bias Associations Are Not True Rule
3. Understand the social-political context that produces societal biases

- Long-term biases in America
  - Black males are inherently violent

100

4. Admiration and Respect Reduces Bias

- Exception Rule
  - Race-based preferences diminished when familiar or admired individual was viewed.
    - Richeson JA, et al. An fMRI investigation of the impact of interracial contact on executive function. Nat Neurosci. 2003; 6:1323–1328. [PubMed: 14625557]



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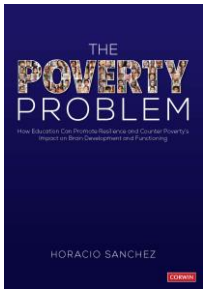
This may be the most important education book published recently.
- Julie Porter

The most impactful educational book you'll read!!
- Tracy Lafreniere

This book will shape our roadmap toward the essential reform we need in education!
- Vivian Scavo



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