Understanding Emotions

How does this man feel in each of these photos?
Emotions

- Lecture Overview
  - What are Emotions?
  - Facial displays of emotion
  - Culture-based and sex-based differences
Definitions

Spend next few minutes arriving at a definition of ‘emotion’. This definition should include descriptions of the experience of emotion as well as the function of emotion. You might try applying your definition to 1 emotion from the following list:

- Anger
- Happiness
- Sadness
- Jealousy
...Definitions: Experience

- Various definitions, depending on whom you ask

- Emotions may be characterised by these components:
  - Feelings
  - Expressive reactions
  - Physiological reactions
  - Behaviour
  - Cognitions
  - Neural processes
  - Emotion elicitors

- There is disagreement
Definition: Function

- Emotions have been/are evolutionarily adaptive
- Emotions have been/are socially adaptive
Which face stands out more?
Basic Theories of Emotion

- **James-Lange Theory**
  
  A common sense idea:
  
  Elicitor $\rightarrow$ Psychological experience $\rightarrow$ Physiological state changes

- **BUT, James-Lange theory:**
  
  Elicitor $\rightarrow$ Physiological state changes $\rightarrow$ Psychological experience
...Basic Theories of Emotion

- Problems w/ James-Lange Theory (according to Cannon-Bard):
  
  1) The same physiological changes occur in different emotional states
  2) Total separation of the viscera from the CNS does not alter emotional behaviour

- Cannon-Bard: experience physiological arousal and psychological experience at same time. Theory gives no attention to thoughts or behaviour.
Basic Theories of Emotion

- **Schacter & Singer Two-factor Theory** -

  Elicitor → Physiological state changes → Reasoning (Cognition) → Psychological experience

- I.e., An event causes physiological arousal first. People must identify a reason for this and then they are able to experience and label the emotion.
Research Example: Two Factor Theory of Arousal

  - Male participants approached by attractive woman or man on one of two bridges
  - Bridge 1: Scary!


...Research Example

- Bridge 2: Not Scary!

- The confederate asked men to write a brief story about a picture and, further, gave her/his phone number should they have further questions.

- The researchers coded the stories for sexual content and kept track of how many men from Bridge 1 vs. 2 called the confederate.

- What do you think happened?
Research Example

sexual imagery in story

- Female interviewer: Sturdy bridge - 2
- Male interviewer: Shaky bridge - 1, Sturdy bridge - 3

Graph showing the number of sexual imagery in stories by gender and type.
...Research Example

![Bar graph showing percent of Ps phoning interviewer by gender. The graph indicates that a higher percentage of females phon the term 'sturdy bridge' compared to males, with 'shaky bridge' being less common for both genders.](image)
Research Example

- Findings support the Two-factor theory

- Perhaps explains why people like to go on dates to scary movies?
Basic Theories of Emotion

- Cognitive Appraisal Theory – Sometimes emotions result from an interpretation of a situation in the absence of any arousal.
- I.e., emotions depend on how the perceiver explains the event
  - Two kinds of appraisals (though there are many) are especially important:
    - Does the event have good or bad implications?
    - What caused the event?
Identify the emotion on this face
... Identify the emotion on this face
... Identify the emotion on this face
... Identify the emotion on this face
... Identify the emotion on this face
Facial Expressions of Emotion

- Another Basic Theory of Emotion – Charles Darwin: Emotions have concomitant facial expressions which are
  - Innate
  - Species-specific
  - Universally understood within each species
  - Evolutionarily adaptive
Contemporary Darwinism: Methods of Assessment

- Three different approaches have been used to assess the Universality of facial expressions:
  
  1) Members of various cultures observed when spontaneously making facial expressions or purposefully making facial expressions (in response to a request) in different emotional contexts.
  2) Studies of children born blind and deaf.
  3) Photographs of faces have been shown to observers who have been asked to identify the emotion displayed.
Contemporary Darwinism: Ekman

- Ekman & Friesen 1971 - Identification of Emotional Expressions
  - Located isolated group of people (Fore of New Guinea)
  - Participants shown 3 photographs of facial expressions of emotion (either happiness, sadness, anger, surprise, disgust, and/or fear)
  - Participants hear a brief story involving the emotion depicted in one of the photographs
  - Results: For all emotion stories except fear, the % of participants choosing the correct expression ranged from 64%-100%
Contemporary Darwinism

- Ekman & colleagues, 1987
  - Using a similar judgment task, they asked people in 10 different cultures to match facial expressions to labels of emotion terms
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Cross-cultural Variation

- Culture may modulate encoding and decoding of facial expressions via
  - Display rules
  - Ingroup familiarity
Cross-cultural variation

- **Display Rules** - Specify when it is appropriate to display certain emotions.

- Display rules can both discourage and encourage emotional expression.
Research Example: Display Rules

Ekman (1973):

- Observed facial expressions of participants while they were watching a stressful film in private, and then discussing it in public

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<th>U.S.</th>
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<td>Public</td>
<td>pos emotions</td>
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Matsumoto (1990) explains these differences in terms of individualism vs. collectivism.

Collectivists (typically Asian and South American cultures) — it is important to avoid reflecting negatively upon the group, hence, they are less likely to show negative affect in public.

Individualists (typically in Western cultures) — direct communication is important, hence, they are less likely to mask their negative affect.
Individualism vs. Collectivism

• Individualism
  1. Fostering independence and individual achievement
  2. Promoting self-expression, individual thinking, personal choice
  3. Associated with egalitarian relationships and flexibility in roles (e.g., upward mobility)
  4. Understanding the physical world as knowable apart from its meaning for human life
  5. Associated with private property, individual ownership

• Collectivism
  1. Fostering interdependence and group success.
  2. Promoting adherence to norms, respect for authority/elders, group consensus
  3. Associated with stable, hierarchical roles (dependent on gender, family background, age)
  4. Understanding the physical world in the context of its meaning for human life
  5. Associated with shared property, group ownership
In-group Familiarity

- Elfenbein & Ambady, 2002 - Hypothesised that emotional expression recognition should be higher when emotions are expressed and interpreted by same cultural group
  - Meta-analysis found: Emotion recognition judgments by persons of same cultural group as posers were an average 9.3% more accurate

- There is a similar, weaker, effect for cross-racial emotion identification (within same culture; Nowicki, Glanville, Demertzis, 1998)
Sex differences

- Research indicates women are more emotionally expressive (in terms of facial expressiveness) than men, especially with respect to *smiling*, though there is also evidence with respect to facial displays of *disgust, fear, sadness* & *surprise*

- Why?
Sex Differences

Why?

- Perhaps women feel the emotions more intensely than men.
- Or, perhaps men and women have different ‘thresholds’ for the experience vs. display of emotions.
  - Research suggests that socialization concerning emotion centres more distinctly on its display than its experience.
  - Men and women – though they may display emotions differently – may experience them to the same extent.
  - Research by Kring & Gordon (1998) supports this framework: Thus, sex-based display rules govern the expression of emotion in men and women.
Display Rules: Culture x Gender

Findings:

- Japanese women will often hide wide smiles behind their hands, while Western women are encouraged to smile broadly and often.

- Negative emotions are not supposed to be expressed intensely by either men or women in Japan, whereas cultural norms in Western cultures dictate that men and women may display negative emotions, but only of particular kinds (males: anger; females: sadness, fear).
Take Home Messages

- There are a variety of definitions of emotion, some of which give priority to the physiological component, and/or the cognitive component, or even the evolutionary basis.

- Research on the universality of facial expressions of emotions stems from the Darwinian (evolutionary) tradition:
  - There is a great deal of research giving credence to this point of view, at least for a limited number of ‘basic’ emotions.
  - Still, there exists cultural variability, whether that culture be defined by national boarders, ethnic identity, or sex.