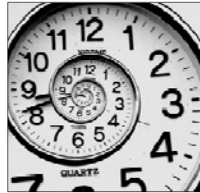


Emotion over Time Development



Infant Emotion

- Poses challenges to study
- Have to infer emotion from behavior
- Socialization of Emotion
 - Label observed behavior to teach emotion language
- Care of infants based entirely on observation
 - Cries/ smiles convey needs



Newborn Crying

- Newborn crying expresses distress
- Protest against what they don't like
- Triggers immediate response from caregivers
- Can you see the evolutionary advantage?
- What triggers crying?
 - Hunger, discomfort
 - Also cry when other newborns cry – sympathetic crying
 - Diminishes some around 6 months,
 - then emerges in more sophisticated forms of empathy around 18 months
 - Cause unknown



Newborn Smiling

- Early on... not connected to social interaction
- Most common during REM sleep
- By 3 weeks – smile in response to parent play
- 6-8 weeks, smile in response to another's smile
- Why does social smiling start at 6-8 weeks?
 - Visual development



Newborn Fear

- Moro Response/ infant startle
- Is startle the same as fear?
- It's unclear
- Secondary appraisal is not present yet



Early infant emotion appears to be tightly linked to physiological experiences and less related to complex social interactions and goals

Do newborns have basic emotions?

- Three views
- **One:** have potential for the basic emotions
- **Two:** distress is a blend of all basic emotions which differentiate with time
- **Three:** lack basic emotions

Evolutionary Theoretical Perspective – what would they believe?

Social Construction Perspective – what would they believe?

- One large scale study of infants 2 hours to 21 months took photographs of strong infant emotion

infants less than 3 months did not have facial display adults could recognize as discrete emotion

Later in Infancy

- With experience babies show more coherent emotional responses



- One study: one, four, seven month infants
- Researchers restrained one of the infants' arms

- **One month:** partial anger display in the face/ eyes closed
- **Four months:** more complete anger display/ gaze on restrained arm
- **Seven months:** prototypical anger display/ gaze on experimenter & parent

- *Researchers argued that the emotion became more differentiated and the cause of their distress more localized with age*

Facial Display of Infants

- Infant facial display is less clearly differentiated than in adults
- Their body movements more clearly differentiate emotions
- In addition, young children have trouble differentiating among different negative and positive emotions in facial expression
- Even so – they clearly do express the basic emotions in the first year



Role of Maturation



- Visual and muscle maturation paves the way for emotion
- Cognitive maturation enables simple secondary appraisal
 - (recall the arm restraint study)
 - Development of sense of self necessary for self conscious emotion
 - Theory of Mind emerges around age 4
 - Awareness that others 'think' like you do
 - Others may watch, evaluate, trick you
 - Leads to understanding about how emotion impacts others' thinking/ behavior
- Social development
 - Learn the cultural/ family expectations about emotion
 - Learn role of emotion in peer relations as they begin to play with other kids

Socialization of Emotion I



- Adult 'joining' in infant emotion experience
- Interactional Synchronicity/ Primary Intersubjectivity
 - Parent/ baby match their emotions within seconds
 - Match rate and rhythm of babbling and talking
- Joint Attention/ Secondary Intersubjectivity
 - Parent/ baby share their experience of a third object/ person
 - important for language development
 - learn how to react to shared situations: social referencing

Socialization of Emotion II

- Survey of 48 countries – large agreement in emotional goals
- Happy/ low fear/ control anger
- After age 3, restrain aggression
- Parents discuss emotion more with female children
 - parents control anger and fear more in male children
 - parents encourage happy expression more in female children
- When do they learn emotional suppression? (hiding feelings)
 - in place by age 3
 - ability to control negative feelings predicts academic & social success



Emotion Language

- Start to use emotion words between 12-24 months
- How well do they understand the emotions?
- One study: observed toddlers using emotion words
 - used the words in appropriate times and ways
- Another study: observed when toddlers expressed basic emotions
 - asked playmates who observed it what cause the emotion
 - 66% if the time playmates & observers agreed



Emotion & Parenting

- Parent behaviors convey expectations
- One study: Japanese/ American mothers yelled at 11 month olds
American babies – paused briefly, then kept approaching toy
Japanese babies – paused far longer
- Conclusion: American babies more used to anger and take it less seriously
- Another study: asked Japanese & American parents about misbehavior
American: demand compliance
creates class of will/ angry responses

Japanese: appeal to child's desire to please and cooperate
creates positive social emotions

Attachment & Emotion

- Emotional bond with caregivers
- Varies with style of parenting
responsive & warm – secure attachment
smothering or ignoring – anxious attachment
distant or rejecting – avoidant attachment
- Established bonds give rise to anxiety/ about 6 months of age
 - Separation anxiety: fears associated with caregiver leaving
 - Stranger anxiety: fears of unfamiliar people



Emotion in Adolescence

- Elevated emotional responses during puberty
 - More freedom puts them in emotionally intense situations
 - Hormones contribute to emotions
 - Frontal lobes still under development
- Inhibition of impulse – improves over adolescence
- Risk taking
 - Adolescents take longer to decide if something is a good idea or not
 - Under time pressure, more likely to take risks
 - Under peer pressure, more likely to take risks



Emotion across the Lifespan

- There is some stability over the lifespan
 - Age seven to thirty five, .24 correlation of distress at both times
 - Duchenne smiles in yearbook
 - In adulthood: happier, more agreeable, more competent
less likely to be divorced
- Handle conflict with greater calm
 - Less likely to quarrel with age
 - More likely to express affection during conflict with age
- Physiological Reactions to Negative emotions
 - Lessen with age/ less reactive



Don't sweat the small stuff

Intensity in Emotion

- With age, emotional matters become more important
- Greater memory for emotional elements in a story
- Report fewer negative events in their lives
- One study: individuals 18-94 carried pagers paged several times a day to report mood
 - all ages report similar levels of positive emotions
 - older adults report feeling fewer negative emotions
- Older adults' brains respond more to happy photos in studies
Younger adults' brains respond more to sad/ frightening photos
- Why??
 - Fewer actual worries as long as health is good
 - Shift attention toward positive events (gratitude)

Regulation



- Older but Wiser??
- One study: name 6 people you know well & describe a recent irritation
 - older adults describe less intense conflicts
 - much less likely to respond with anger
 - handle anger with more calm and forgiveness
- Studies positive reappraisal
 - Older adults do this more effectively
 - Have less physiological response/ report reduced distress
 - Benefits of experience??

Emotion or Not?



WE CAN START TO ANSWER SOME OF THESE QUESTIONS

- What is and what is not an emotion? How are moods and feelings different?
- Is there emotion-specific physiology?
- Are there universal antecedents to emotion? Universal emotions?
- What is the function of emotion?
- Can emotion be unconscious? Can we control it?
- What is the relationship between cognition/ learning/ memory and emotion?
- How does emotion develop and can we alter our emotional responses as adults?
- How can we foster our own happiness and other positive states?

