Human Bonding
HD 3620

Professor Hazan
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[Canvas Site: HD 3620 - Hazan - Spring 2024]

Announcements

Extra Credit update:

SONA and UTA discussions

Topics Today:

attachment figure(s) "selection," plus additional factors that ensure bonding, plus reactions to separation, also physiological co-regulation, and co-sleeping

Attachment figure "selection" factors

propinquity (who's around?)

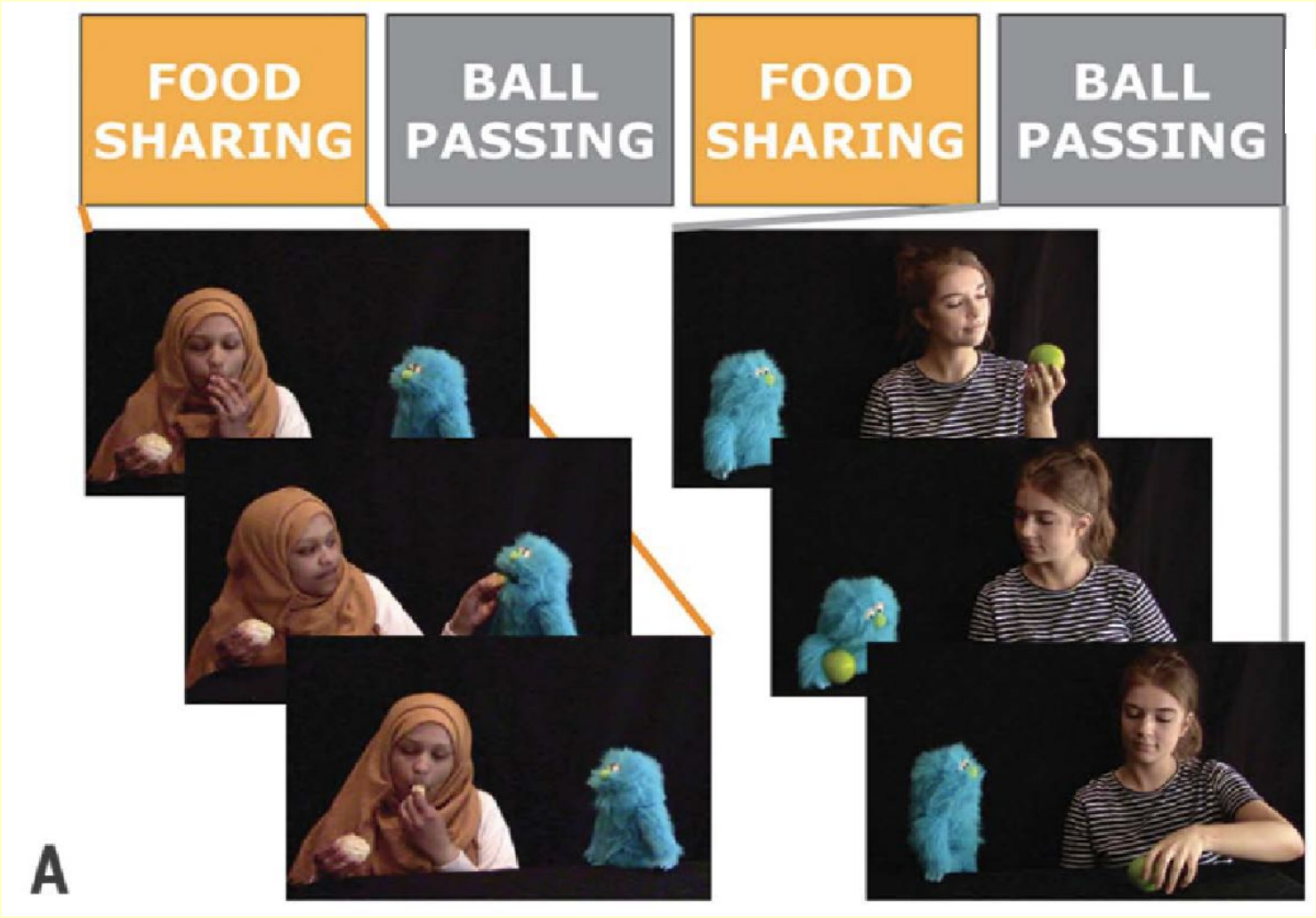
familiarity (especially, distress alleviation)

physical maturity

and physical intimacy

Example: recent study published in *Science*

on the topic of saliva sharing


FOOD SHARING
BALL PASSING
FOOD SHARING
BALL PASSING
A

a kiss tells the tale

Young humans are remarkably helpless, relying entirely on the adult humans around them for survival. However, not all adults are as invested in the care of a particular child, and there is benefit in being able to determine from a very young age which relationships are close (and which are not).

Three Adaptive Challenges for humans to survive as a species

(and corresponding behavioral systems)

survive to reproductive age

- attachment system

successfully reproduce

- sexual mating system

support offspring to reproductive age

- parental/caregiving system

Factors that Promote Bonding
(by activating the Parental/Caregiving System)

infants' neotenous features

infants' soft, smooth skin (& touch sensitivity)

aversiveness of infant cries (video)

appeal of infant laughter (videos)

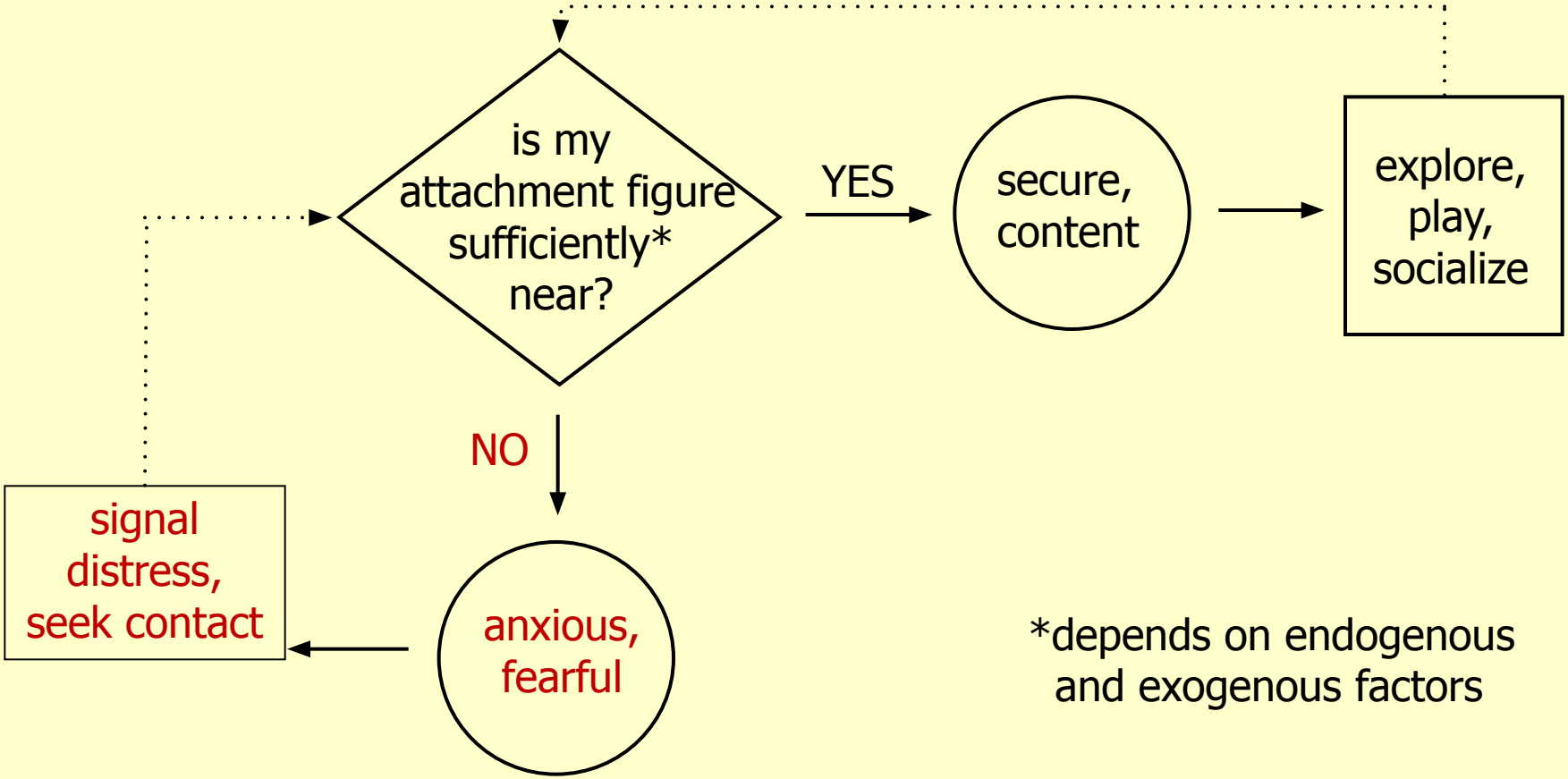
"motherese," "parentese," baby talk, IDS (videos)

Infants' attraction to faces, especially eyes

soothing ventro-ventral contact (videos)

oxytocin (OT): labor, lactation, sexual orgasm

Attachment Behavioral System (reactions to separation)



*depends on endogenous and exogenous factors

Reactions to Separation ("Bowlby's terms")

Immediate, acute reaction
("protest")

Slower-developing reaction
("despair")

Explanation for this bi-phasic response?
enter rat researcher Myron Hofer

Hofer, 2006

(see reading for details)

Background & Methods

pups in "despair" phase? what exactly do they miss?

experiments reintroduced each maternal feature

Examples: bradycardia (milk), inactivity (warmth), reduced growth hormone (touch), and so on...

Results: each symptom was tied to a specific feature!

Conclusions...

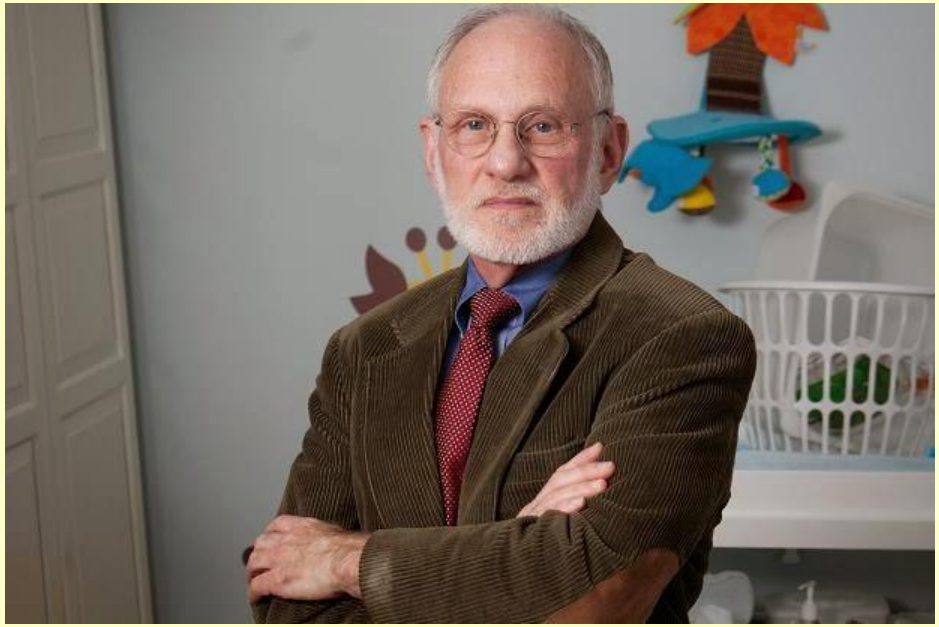
Psychological and physiological co-regulation is an inherent feature of attachment

Psychological and physiological dis-regulation as a result of separation from attachment figures

Later, co-regulation in romantic couples and dis-regulating effects of couple separations

"At the most basic level, the biological one, we are connected and embedded in each others' biological rhythms, not only in utero, at birth, or in early infancy, but through the life span."

Pipp & Harmon, 1987



Dr. Richard Ferber

how to "Ferberize" your baby

(see Wright reading for details)

cultural variation in sleep arrangements

isolated sleeping is both new and rare (~10%)

cultural variation in SIDS (1-4 months)

(in u.s., ~2,500/yr, among highest)

any link??

Parent-Infant Co-Sleeping

Research by McKenna et al.

Potential SIDS contributors

- Routine apneas
- Repositioning of larynx
- Relocation of breathing control
- Solitary sleeping??

Method (3 nights: first usual, then randomized)

Findings (co- vs. solitary-sleeping):

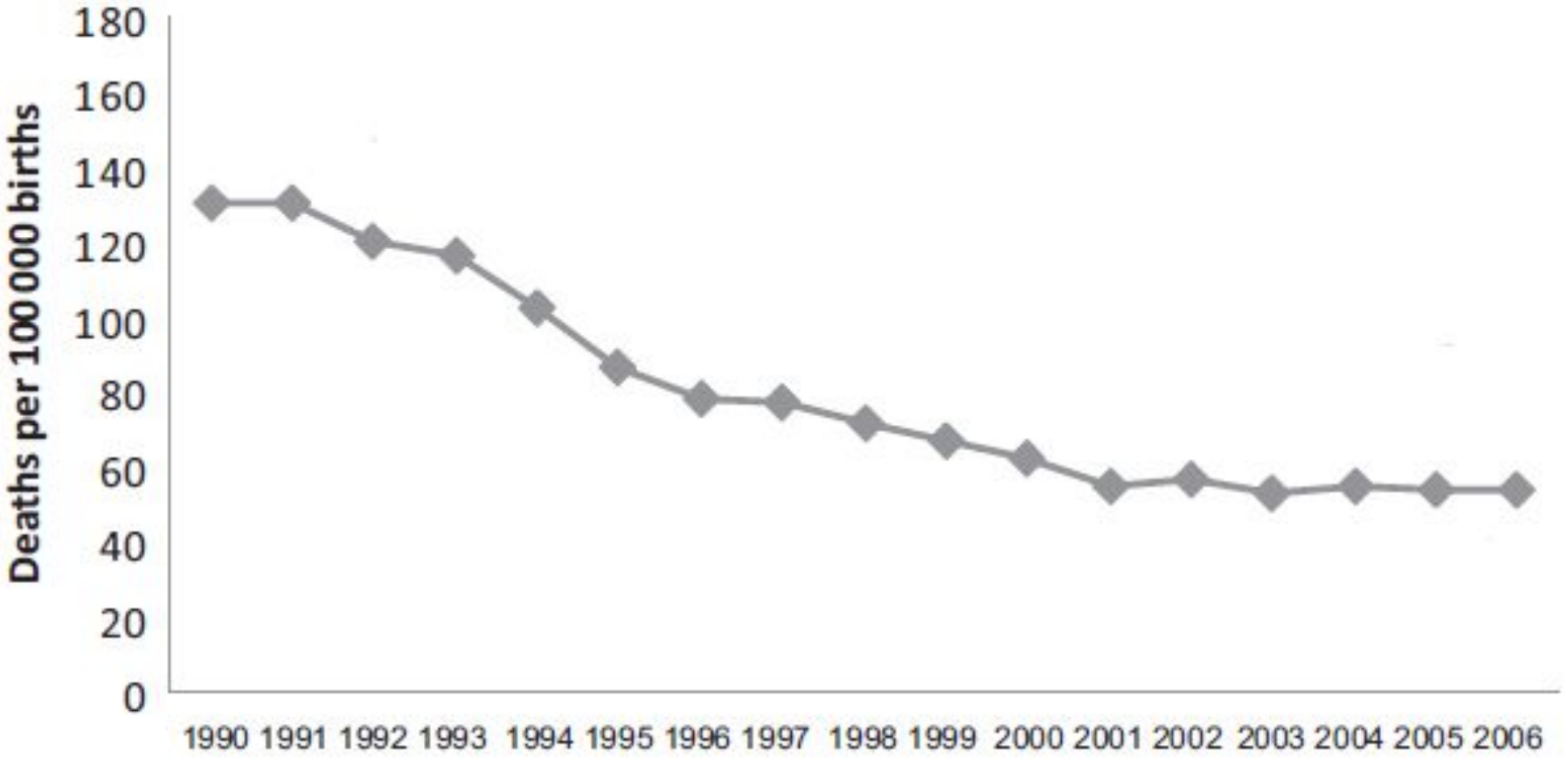
more waking, more nursing, more adjustments, and less time in "deep" phases of sleep

Around the same time...

American Academy of Pediatrics

does NOT recommend! (prone)

does recommend "back to sleep!" (supine)


Deaths per 100 000 births
180
160
140
120
100
80
60
40
20
0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

AAP (American Academy of Pediatrics) recommends room sharing, but <u>not</u> bed sharing

"Tummy Time"

AAP also recommends

supervised, awake "tummy time"