

# The impact of dispositional healthy and unhealthy self-conscious emotions on perceptual decision making

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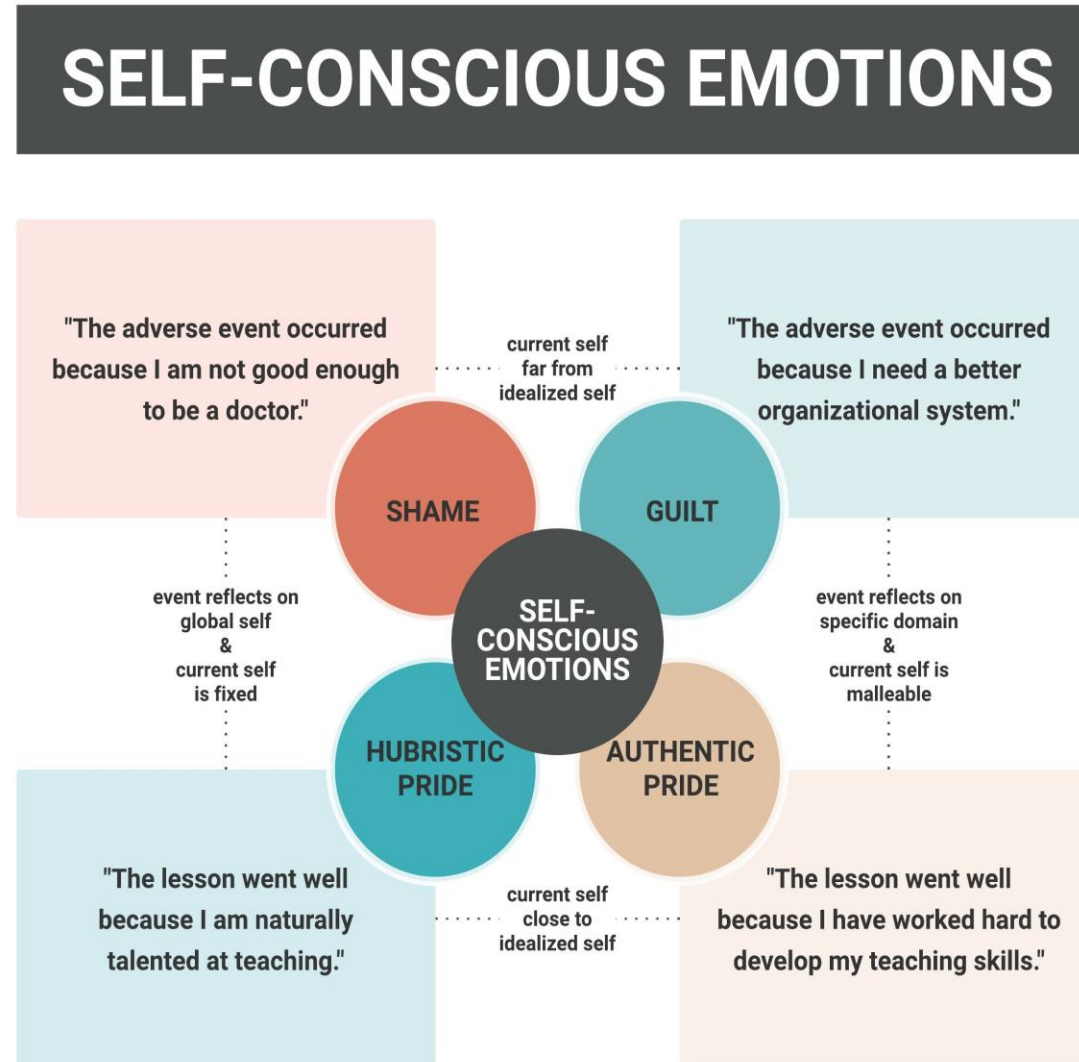
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# What are self-conscious emotions?

- ▶ Emotions: many possible ways of categorization
- ▶ One category is that of self-conscious emotions
- ▶ Arise from self-reflection and self-evaluation: how we are perceived by others
- ▶ Require cognitive development and ability to understand social norms



# What do we mean by *healthy and unhealthy* self-conscious emotions?

- ▶ The triggering situation is the same, the consequences are different: positive and negative emotions - Fredrickson's Broaden and Build Theory (1998)
- ▶ dispositional self-conscious emotions



## Key dimensions on which shame and guilt differ

	<u>Shame</u>	<u>Guilt</u>
Focus of evaluation	Global self: "I did that horrible thing"	Specific behavior: "I <i>did</i> that horrible <i>thing</i> "
Degree of distress	Generally more painful than guilt	Generally less painful than shame
Phenomenological experience	Shrinking, feeling small, feeling worthless, powerless	Tension, remorse, regret
Operation of "self"	Self "split" into observing and observed "selves"	Unified self intact
Impact on "self"	Self impaired by global devaluation	Self unimpaired by global devaluation
Concern vis-à-vis the "other"	Concern with others' evaluation of self	Concern with one's effect on others
Counterfactual processes	Mentally undoing some aspect of the self	Mentally undoing some aspect of behavior
Motivational features	Desire to hide, escape, or strike back	Desire to confess, apologize, or repair

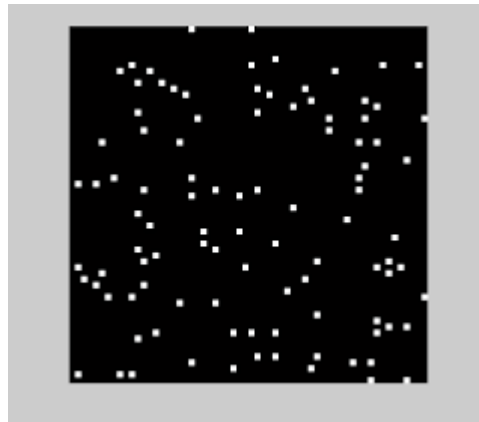
Context	Hubristic pride	Authentic pride
Object of evaluation <sup>2</sup>	Self	Action or behavior
Current and ideal self-representations <sup>2</sup>	Congruent	Congruent
Attributional pattern <sup>2</sup>	Internal, stable, global, uncontrollable	Internal, unstable, specific, controllable
Action tendencies <sup>22,52,53</sup>	Motivates narcissists' self-enhancing quest for status and dominance	Fosters acquirement of skills, genuine self-esteem, and perseverance at difficult tasks
Purpose <sup>3,22,53,54</sup>	Minimize excessive shame, exert dominance	Build genuine self-esteem, promote achievement
Outcomes <sup>3,22,52,53,55,56</sup>	Impaired relationships, poor mental health outcomes, arrogance, conceit, antisocial behaviors, aggression, hostility, poor relationship quality	Achievement of mastery goals and competence confidence, prosocial behaviors, genuine self-esteem

<sup>a</sup>Table format adapted from Kim et al.<sup>4</sup>



# Perceptual decision making

- ▶ Mainly input-driven
- ▶ RDM: random dot motion
- ▶ Information detection, then decision making (moving right or left)
- ▶ Noisy sensory information
- ▶ Speed-accuracy trade-off
- ▶ COHERENCE OF DOT MOTION AND THE DISPLAY TIME CAN BE VARIED
- ▶ Everyday examples:
  - ▶ Driving in the rain
  - ▶ Recognizing a friend in the crowd
  - ▶ Reading a blurry text



# Method - Hypotheses and Sample

- ▶ N= 678
- ▶ Female N= 242, Male N=208
- ▶ Athletes N= 189 and non-athletes N=262 (we handled them together here)
- ▶ Hungarian University of Sport Science, Széchenyi István University, Eötvös Loránd University=
- ▶ Age  $m=24.1$   $SD=8.33$

RESEARCH QUESTION: HOW EMOTIONS (DISPOSITIONAL AND ONGOING) INFLUENCE PERCEPTUAL DECISION MAKING?

- ▶ Many hypotheses can be formulated - HOW DIFFERENT EMOTIONS THEMSELVES VARY
- ▶ H1. HIGH DISPOSITIONAL **SHAME** LEADS TO SLOWER DECISIONS THEN LOW DISPOSITIONAL SHAME
- ▶ H2. HIGH DISPOSITIONAL **GUILT** LEADS TO SLOWER DECISIONS THEN LOW DISPOSITIONAL GUILT
- ▶ H3. HIGH DISPOSITIONAL ALPHA PRIDE (**HUBRIS**) LEADS TO FASTER DECISIONS THEN LOW DISPOSITIONAL ALPHA PRIDE
- ▶ H4. HIGH DISPOSITIONAL **BETA PRIDE** LEADS TO FASTER DECISIONS THEN LOW DISPOSITIONAL BETA PRIDE

# Method - Measurement tools and procedure

## Session 1: online

- ▶ Consent form, GDPR declaration
- ▶ TOSCA-3: scenario-based, 16 situations

shame, guilt, alpha pride/hubristic, beta pride/pride (detached, externalization)

- ▶ Demographic questions
  - ▶ Age, gender, place of living
  - ▶ Handedness
  - ▶ Played sport
  - ▶ Athletic experience

## Session 2: lab experiment

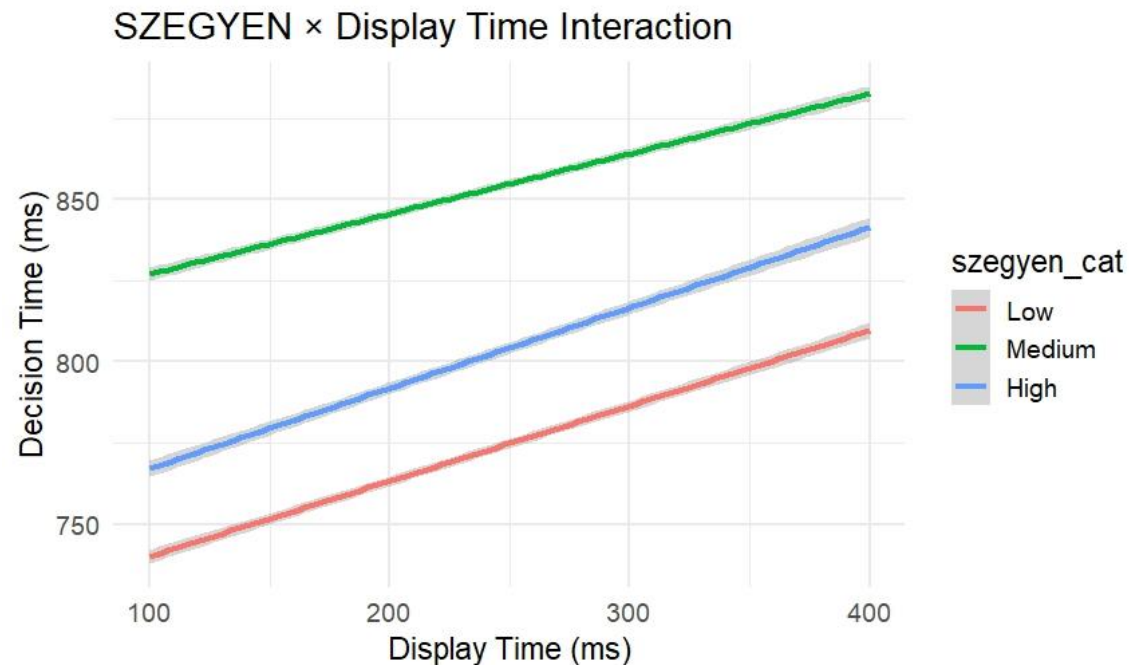
- ▶ Check of reaction time (awareness)
- ▶ Experimental manipulation
- ▶ RDM (**velocity** and accuracy)
  - ▶ coherence/**display time**  
100/200/300/400 ms
- ▶ Manipulation check
  - ▶ Intensity and type of emotional experience (diverse questions)
  - ▶ LIF (self-awareness)

	Self-conscious (emotions)		Basic (emotions)
	Behaviour	Self	
Positive	Pride	Hubristic Pride	Happiness
Negative	Guilt	Shame	Anger
Control for valence	Mirror		Arousal
Control for emotion	No emotion induced		

# RESULTS - SHAME (and decision time IA)

THE LONGER THE DISPLAY TIME IS, THE SLOWER THE DECISION IS TAKEN IN EACH DISPOSITIONAL EMOTION

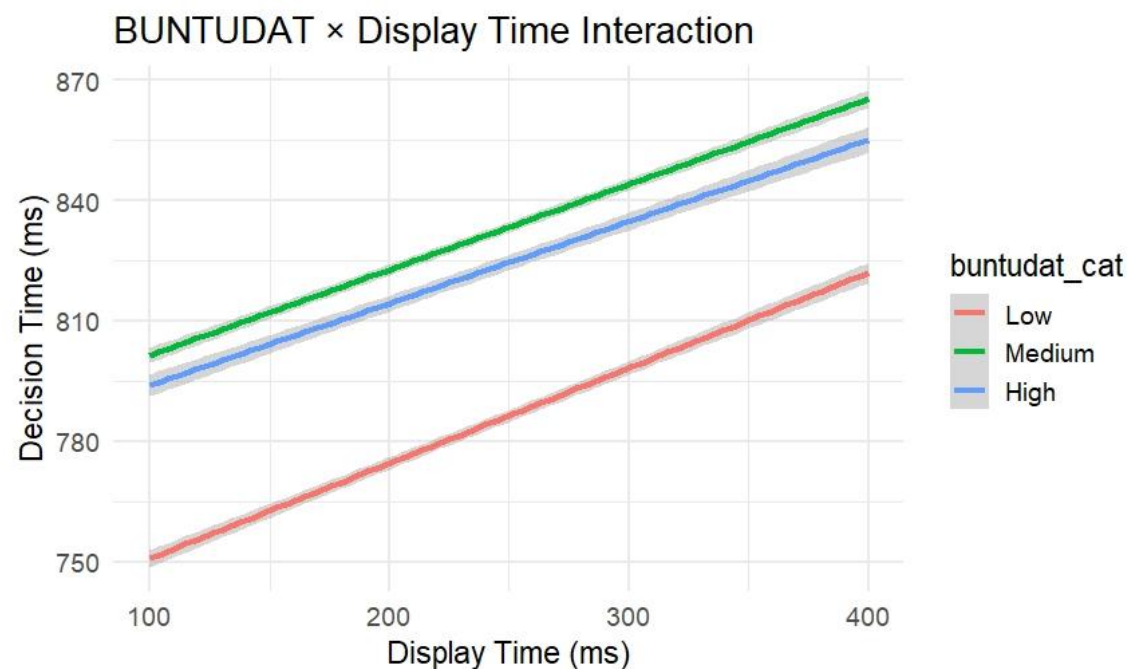
A linear mixed-effects model revealed no significant main effect of shame ( $b = 4239$ ,  $p = .37$ ). The interaction between guilt and display time was significant ( $b = 0.2295$ ,  $p < .001$ ), indicating that individuals medium in guilt showed less of an increase in reaction time with increasing display time





# RESULTS - GUILT (and decision time IA)

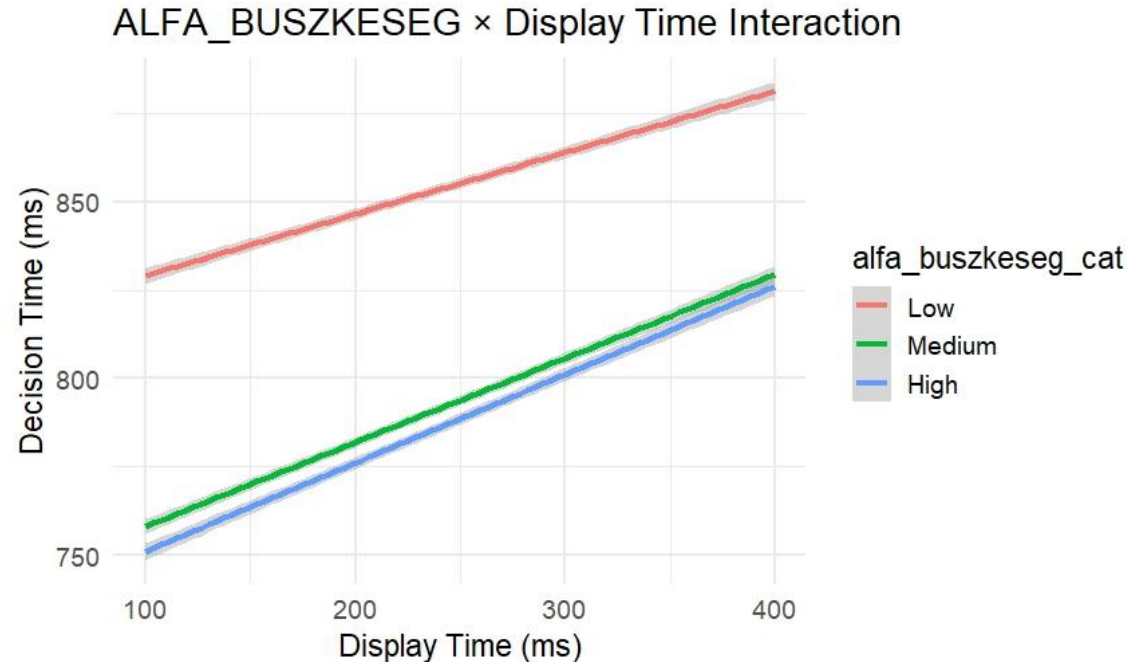
A linear mixed-effects model revealed a significant main effect of guilt ( $b = 6.97$ ,  $p = .0098$ ). The interaction between guilt and display time was significant ( $b = -0.026$ ,  $p < .001$ ), indicating that individuals high in guilt showed less of an increase in reaction time with increasing display time





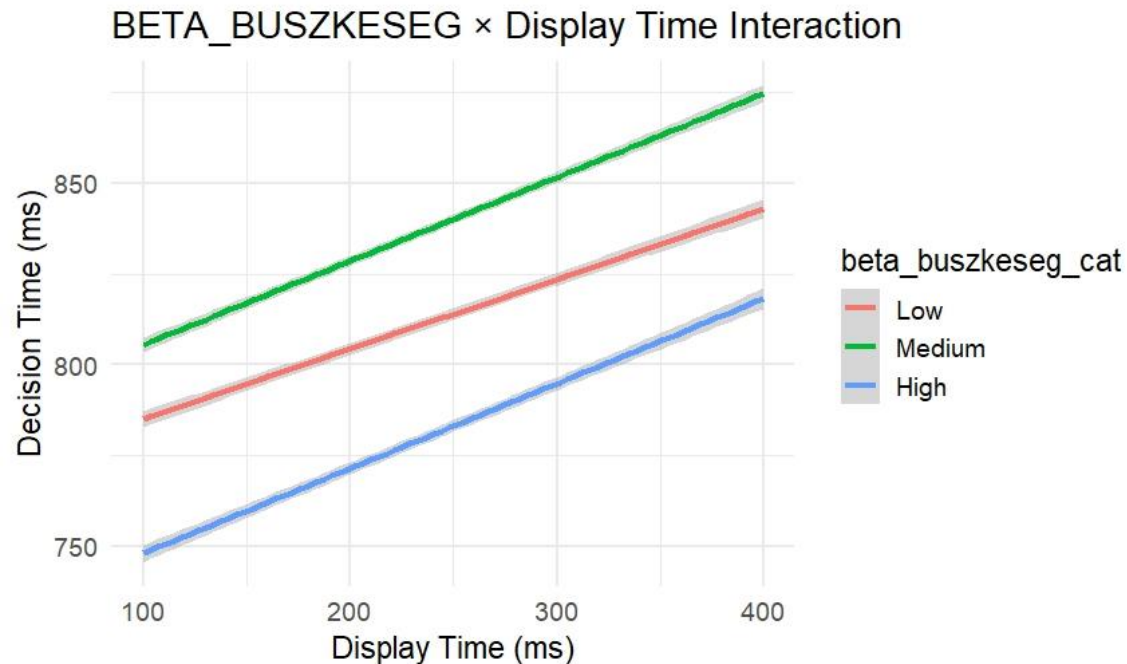
# RESULTS - ALPHA PRIDE/HUBRIS (and decision time IA)

- ▶ alpha pride had no significant main effect on decision time ( $b = -3.47$ ,  $p = .29$ )
- ▶ interaction with display time was significant ( $b = 0.020$ ,  $p = .0001$ ): individuals high in alpha pride showed a steeper increase in reaction time as display duration increased



# RESULTS - BETA PRIDE/AUTHENTIC (and decision time IA)

- Both the main effect of beta pride ( $b = -6.92$ ,  $p = .0024$ ) and its interaction with display time ( $b = 0.032$ ,  $p < .001$ ) were significant: higher levels of beta pride are linked to generally faster decision times, but the advantage decreases slightly as display time increases



# Consequences

- ▶ Dispositional emotions influence the velocity of perceptual decision making
- ▶ low guilt and high beta (authentic) pride proved to be the fastest regarding decision time:
  - ▶ dispositional emotions focusing on the self do not have a main effect on perceptual decision making
  - ▶ dispositional emotions focusing on the behaviour have a main effect on perceptual decision making in accordance with their valence
  - ▶ Interactions show a complicated picture regarding display time

# Limitations

- ▶ Far too difficult research design, too many variables and it is difficult to simplify the research hypotheses and formulate a compact understanding of the phenomenon
- ▶ Here we are investigating the interactions with display times, coherence of dot motion can work differently
- ▶ We are now talking about dispositional emotions, the actual ones can work differently - and dispositional emotions may influence them
- ▶ Single dispositional emotions were measured - cluster analysis is still to be executed
- ▶ Complex decisions could work differently, we cannot extrapolate these findings to them

# Why should we talk about all this regarding LLL?

- ▶ As sustainability means far more than *being green*, It's about how to live responsibly for the world's (society, environment, etc). And for your own sake and best interest:
- ▶ *Dispositions to different emotions lead to differences even at perceptual level*
- ▶ *Focusing on behavior can help, especially when it comes to positive emotions: we need to teach everyone to be proud of their achievements (in align with Dweck's mindset theory - fixed or growth mindset and Deci and Ryan's SDT):*
  - ▶ *Praising effort*
  - ▶ *Challenging tasks*
  - ▶ *Emphasising pleasure during the learning process*
  - ▶ *Emphasising positive values like stamina and effort*