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## Introduction

- Attachment is the emotional bond an infant develops with its caregiver (Bowlby, 1982) and has been shown to play important roles in both developing one's comfort with intimacy and future relationships (Gabriel, Carvallo, Jaremka, & Tippin, 2008)
- Previous research in our lab has shown that the tendency to avoid intimacy has important implications for one's psychological experience depending on whether or not a friend's positive or negative traits are brought to mind (Lupien, Harris, Seery, & Gabriel, 2011)
- People who are comfortable with intimacy (**non-avoidants**) are more likely to assimilate and view themselves as similar to their friends, whereas people who have a tendency to avoid intimacy (**avoidants**) are more likely to contrast and view themselves as different from their friends (Gabriel, Carvallo, Jaremka, & Tippin, 2008)
  - Non-avoidants derive benefits from thinking about a friend's positive traits presumably because they are more comfortable with intimacy and tend to assimilate, whereas avoidants derive benefits from thinking about a friend's negative traits presumably because they are less comfortable with intimacy and tend to contrast
  - However, avoidants still have friendships and enjoy companionship, and thus it is reasonable to assume that they must assimilate on something in order to maintain connections and relationships
    - Because they are reluctant to become intimate, they may be more comfortable assimilating on friendship qualities that are less intimate in nature
- Recent research in our lab has shown that the likelihood of assimilating versus contrasting one's friendships may be additionally dependent on whether that person is assimilating or contrasting on core versus superficial traits (Lupien, Harris, Seery, & Gabriel, 2011)
  - **Core values** can be described as values and beliefs that define a person and influence how they act and think in their daily lives
  - **Superficial traits** are daily behaviors and activities and can be described as the different ways in which people spend their time

## Purpose:

- Expand upon the previous research in our lab to test the ways in which avoidance of intimacy dictates psychological experiences (i.e., evaluations of personal resources versus situational demands) when people are asked to assimilate versus contrast on either core versus superficial friendship qualities
- To assess psychological experiences, we applied the biopsychosocial model of challenge/threat (BPS; Blascovich, 2008; Blascovich & Tomaka, 1996) and measured cardiovascular responses
- Cardiovascular responses do not depend on conscious attention or self-report
  - Provides insight into experience *during* performance rather than relying on pro- or retrospective reports

## Biopsychosocial Model of Challenge/Threat:

- Evaluations of demands and resources determine the extent to which a relatively positive motivational state (challenge) versus a negative state (threat) is experienced during a motivated performance situation (goal relevant situation that requires active coping in which one must act instrumentally to achieve a self-relevant objective, i.e., active goal pursuit)
- A constellation of cardiovascular responses indexes task engagement and differentiates challenge from threat

- **Challenge** occurs when evaluated personal resources are high and situational demands are low
  - Increase in heart rate (HR) from resting baseline - heart beats faster
  - Increase in ventricular contractility (VC) - heart beats harder
  - Decrease in total peripheral resistance (TPR) - arteries dilate
  - Increase in cardiac output (CO) - heart pumps more blood
- **Threat** occurs when evaluated situational demands are high and personal resources are low
  - Like during challenge: increase in HR and VC
  - Unlike during challenge:
    - Increase in TPR
    - Decrease or no change in CO

## Method

### Participants:

- 151 undergraduate students (77 men; 74 women)

### Procedure:

- Sat for a 5-minute resting baseline after physiological sensors were attached
- Prompted to think of a friend with whom they spend time on a regular basis
- Depending on condition, participants were asked to think of a friend who either has a number of core values that are similar to or different from their own, or a number of superficial traits that are similar to or different from their own
- Participants were asked to complete some filler questions on the computer along with the Bartholomew and Horowitz (1991) attachment scale embedded in them
  - A continuous variable representing avoidance was calculated
- Participants were instructed to write and speak about their friend, focusing on either similarities or differences and either core values or superficial traits while their physiological responses were assessed

- Participants answered questions about their perceptions and experiences during the activities
- Physiological sensors were removed, and participants were thanked and debriefed

### Comparison Manipulation:

- **Assimilation:**
  - Participants were asked to discuss the similarities between themselves and their friend
- **Contrast:**
  - Participants were asked to discuss the differences between themselves and their friend

### Friendship Aspect Manipulation:

- **Core Traits:**
  - Participants were asked to discuss their own and their friend's core values
- **Superficial Traits:**
  - Participants were asked to discuss their own and their friend's daily behaviors and activities

### Dependant Variables:

- Cardiovascular reactivity markers of challenge/threat

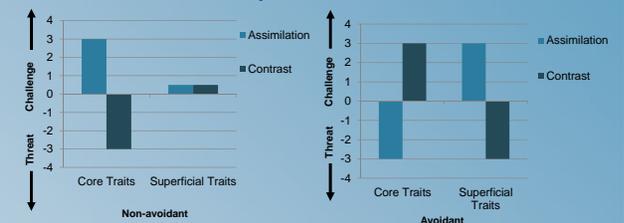
### Current Status:

- Data collection is complete; scoring of physiological data is currently underway

## Hypotheses:

- 3-way interaction among attachment style, comparison type, and friendship aspect
  - Non-avoidant attachment style: more comfortable with and seek out intimacy
    - They should experience challenge (evaluate higher resources and lower demands) when asked to assimilate on core values versus superficial traits
    - Within Non-avoidant attachment style, 2-way interaction between comparison and topic
      - Assimilation: Challenge when discussing core traits
      - Contrast: Threat when discussing core traits
  - Avoidant attachment style: less comfortable with and avoid intimacy
    - They should experience challenge (evaluate higher resources and lower demands) when asked to assimilate on superficial traits versus core values
    - Within Avoidant attachment style, 2-way interaction between comparison and topic
      - Assimilation: Challenge when discussing superficial traits, threat when discussing core traits
      - Contrast: Challenge when discussing core traits, threat when discussing superficial traits

## Expected Results

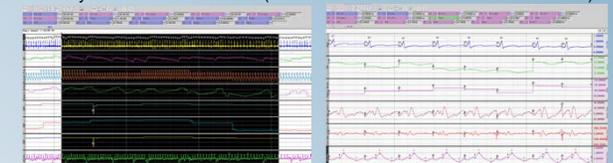


## Analytical Strategy:

- Attachment style will be treated as a continuous variable and thus a regression analysis will be used
- Index scores combining TPR and CO will be created to produce a standardized index score of challenge/threat (higher values indicate greater challenge)

## Physiological Scoring

- After important minutes of interest are selected and averaged, cardiovascular reactivity values will be created (baseline value subtracted from task value)



## Conclusion

- This study should extend previous research to provide further insight into how intimacy avoidance (developed from the infant-caregiver bond) affects the ways in which one is comfortable in friendships.
  - Specifically, those with avoidant attachment style may still seek out connections and friendships, which are important for psychological well-being, but may do so in a way that is less threatening by assimilating on more superficial, less intimate friendship qualities.