# Effects of Gender on Empathy and Prosocial Behavior

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# Background

- 2 types of empathy of interest to this study:
- Trait cognitive empathy: perspective taking, fantasy
- Trait emotional empathy: sympathy and compassion
- Evidence suggests older adults report higher levels of emotional empathy, but younger adults report higher levels of cognitive empathy.<sup>1-4</sup>
- Previous studies support the evidence older women report higher emotional and cognitive empathy than older men.<sup>2-4</sup>
- Based on Daniel Batson's Empathy Altruism Hypothesis, higher empathy leads to greater prosocial behavior, however there is limited research on whether gender plays a role in prosocial behavior in older adults<sup>5</sup>
- Older adults tend to identify less with their gender than younger adults, which could have an effect on empathy and prosocial behavior<sup>4</sup>
- This is the first study to investigate the effects of gender roles on prosocial behavior in empathy in older adults specifically.

## Methods

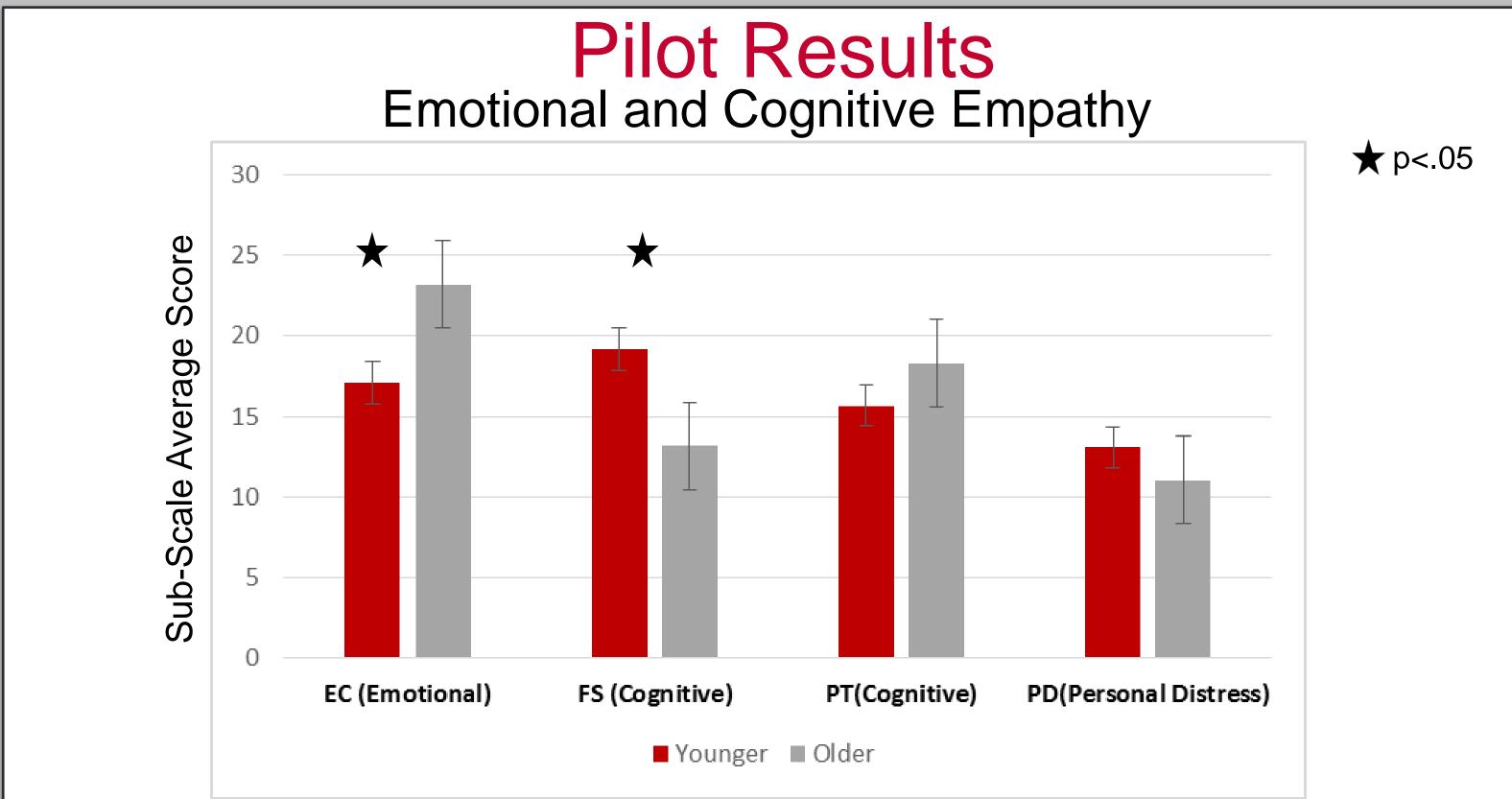
- Investigated relationship between gender role and age with prosocial behavior and empathy
- Older (55-90) and younger (19-35) healthy adults recruited from Omaha, Nebraska area

#### **Empathy Induction**

- Read note from confederate, either neutral (running errands) or empathy (skin cancer)
- Play dictator game with both neutral and empathy confederate
- Rate feelings before/after reading each note (state emotional empathy)
   Measures
- Empathy Measure: Interpersonal Reactivity Index (IRI)
- Emotional Empathy: Empathetic concern sub-scale
- Cognitive Empathy: Perspective taking subscale, fantasy subscale
- Prosocial Measure: \$ Offer
- Gender Role: BSRI-12 (Bem Sex Role Inventory-12 item version)

#### Participants: 22

	Sample	Younger	Older
N	22	12	10
Sex. (M/F)	2 M/ 20 F	0M/12F	2M/8F
Age, Yrs. (M, SD)	43.5 (26.3)	20.8 (2.7)	70.6 (9.9)
Age Range, Yrs.	19-88	19-28	58-88



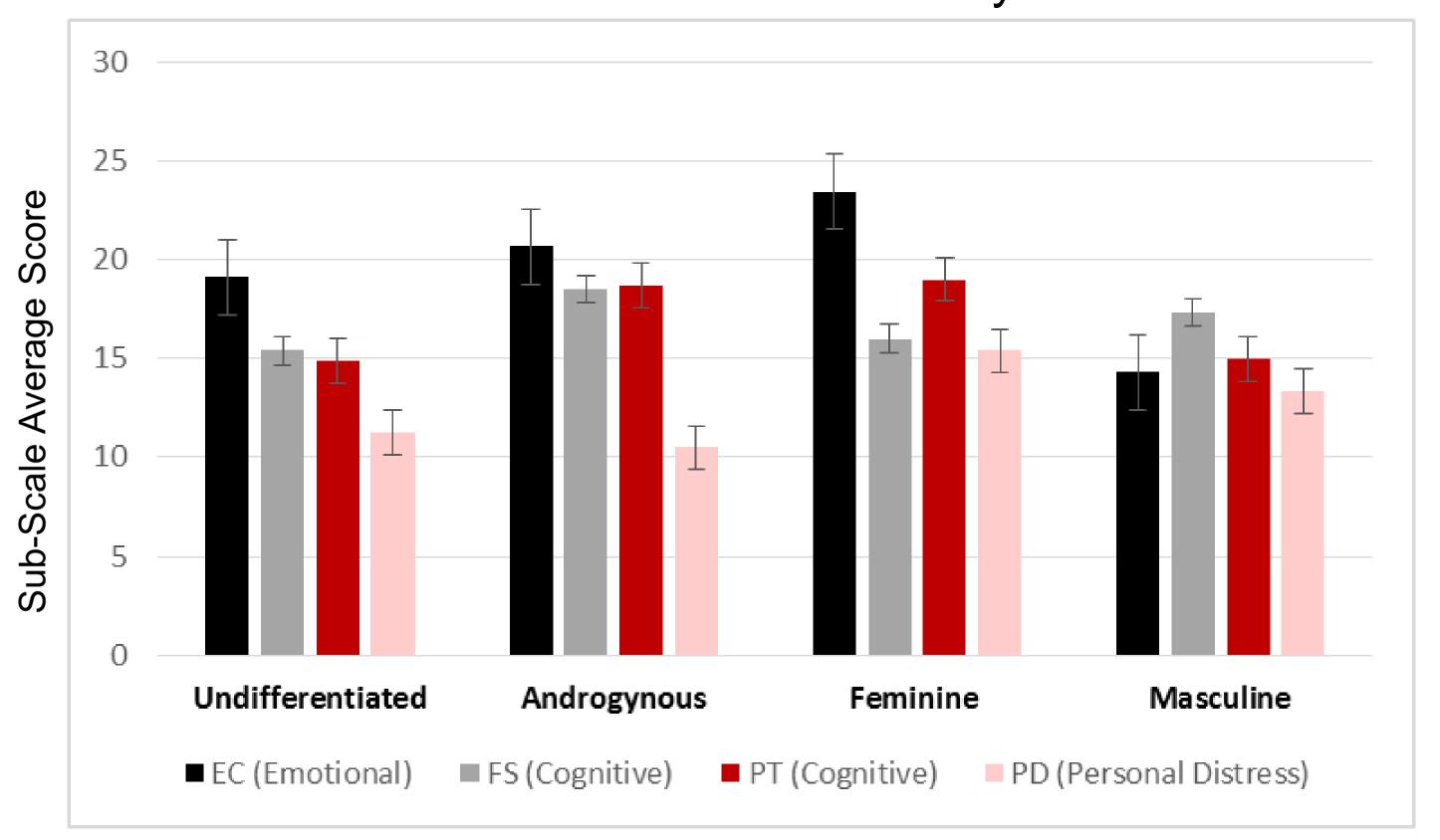
- Older adults have greater emotional empathy but less cognitive empathy on the Fantasy subscale (empathy for fictional characters) than younger adults
- Significant findings: Cohen's *d*=0.5 indicative of a medium effect size

#### **Prosocial Behavior**

	Neutral Offer	<b>Empathy Offer</b>	Offer Difference
Sample <i>M</i> (SD)	3.7 (2.2)	7.4 (1.8)	3.7 (2.8)
Younger Adults <i>M (SD)</i>	3.3 (1.9)	7.3 (1.7)	4.0 (2.7)
Older Adults <i>M (SD)</i>	4.3 (2.6)	7.5 (2.0)	3.2 (3.0)

- Older women are hypothesized to show greater prosocial behavior as sample size increases
- Individuals that score feminine on the BSRI-12 are hypothesized to be more prosocial than Undifferentiated, Androgynous or Masculine Individuals

#### Bem Sex Role Inventory



• Feminine individuals trending towards self-reporting higher emotional and cognitive empathy than masculine individuals

### Discussion

- Significant results from the IRI so far are consistent with findings from the previous literature<sup>1-4</sup>
- The tendency for older adults to show more emotional concern reflects their increased prioritization of social relationships, known as the socioemotional selectivity theory<sup>6</sup>
- Significantly lower scores for older adults on the fantasy subscale suggests aging may effect only certain domains of empathy.
- Although only a trend in the current data, some studies have reported females (feminine) reporting higher emotional and cognitive empathy than males (masculine), which could effect prosocial behavior<sup>2-4</sup>
- Examining gender differences in BSRI-12 scores and their relationships to prosocial behavior and empathy subscales could lead to valuable insight on the emotional state of older adults

#### **Future Directions**

 State emotional empathy (emotional concern in the moment) differences have not been investigated in older adults, especially in regard to gender<sup>1</sup>

## References

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