**Introduction**

- **Psychopathy**: Pattern marked by disregard for others
  - **Primary**: Manipulative and indifferent to the pain of others. Main feature is lack of empathy.
  - **Secondary**: Anxious, impulsive temperament with disposition to lie and steal.
- **Empathy**:
  - **Cognitive**: Mentally recognize others emotions.
  - **Affective**: Emotional experience in response to an emotional reaction of another.
  - **Explicit**: Conscious processing; often self-report.
  - **Implicit**: Spontaneous and unconscious reaction to emotional situation or others emotions.

- Despite the theorized empathy deficit, some research indicates that the ability to recognize, use, and understand emotion appears unimpaired for those with psychopathic attributes (e.g., Glaser & Lutz-Zois, 2014; Lishner et al., 2012).

- These results may be due to the use of self-report measures and the failure to assess implicit, affective empathy (Vidal et al., 2010).

- Those with primary psychopathy may cognitively understand the emotions of others, but lack the ability to experience the feelings of others vicariously (i.e., affective empathy). Further, they may be better able to feign empathy on self-report measures than physiological measures.

- Thus, the current study examined the relationship between psychopathy and empathy as a function of implicit versus explicit, and cognitive versus affective empathy measures.

**Method**

- **Participants**:
  - 125 Female, 60 Male Undergraduates from an introductory psychology course. Age: 18.92 years (range: 17-37).
  - 82.8% Caucasian; 5.4% Hispanic; 4.8% African American; 2.7% Asian; 1.6% Middle Eastern; 1.6% Multi-ethnic

- **Procedure**:
  - Individually, participants: (1) completed a word search for a baseline heart rate (HR), (2) listened to an empathy-evoking broadcast with listening instructions (Control or Empathetic), and (3) remained seated for 2 additional minutes. HR was recorded continually at 30s intervals for all tasks.

- In groups, participants completed the following measures:
  - Primary and Secondary Psychopathy (PP and SP)
  - LSР (Levenson, 1996)
  - Explicit cognitive empathy (EC)
  - TEIQ-SF (Petrides & Furnham, 2006)
  - IRI (Davis, 1980) subscales
  - Explicit affective empathy (EA)
  - IRI (Davis, 1980) subscales
  - Implicit cognitive empathy (IC)
  - RMET (Baron-Cohen et al., 2001)
  - Implicit affective empathy (IA)

**Results**

- Preliminary analyses examined zero-order correlations between all variables (Table 1). Hypotheses were tested with partial correlations between psychopathy type and empathy controlling for the other psychopathy type (Table 2).

- Contrary to hypotheses, significant, negative partial correlations were found between PP and all indices of EA, EC, and IC empathy. Those higher in primary psychopathy were less likely to experience these types of empathy than those lower in primary psychopathy. The relationship between PP and IA was not significant.

- The results indicated a significant, positive partial correlation between SP & EA, but a negative correlation between SP & EC. This suggests that those higher in secondary psychopathy were more likely to experience affective empathy and less likely to experience cognitive empathy than those lower in secondary psychopathy.

**Discussion**

- The general pattern of correlations was more distinct when partial correlations were used, and while contrary to study hypotheses, was consistent with theoretical accounts of the differences between primary and secondary psychopathy.

- A key difference between the current and previous studies is the use of partial correlations, in which we controlled for the overlapping characteristics between psychopathy types.

- Limitations to address in future research include a lack of a clinical or criminal sample and a single physiological index of implicit empathy.

**References**


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