Oct 25th, 3:00 PM - 5:00 PM

Does Face Recognition Correlate with Narcissism? A Replication.

Sherryse Corrow
s-corrow@bethel.edu

Facial Recognition and Narcissism (A Replication)

Gabriella Romero-Ayala, Zane Kingsbury, Marin Foss, Kellie Schmidt, Sherryse Corrow

Introduction

- Studying individual differences in face processing may help to inform our understanding of face processing deficits (Wilmer, 2017).
- Previous studies have shown that those who are more sociable (e.g., extraverted or empathic) are better able to recognize faces (Bate et al., 2010; Lander & Poyarekar, 2015, Li et al., 2010).
- Less research has focused on less sociability and its effect on face recognition.

Narcissism: Excessive interest in or admiration of oneself and one's physical appearance.

Question

Do those higher in narcissistic personality traits have lower face recognition ability?

The Original Study

Giacomin, M., Brinton, C., & Rule, N.O. (2021). Narcissistic individuals exhibit poor recognition memory. *Journal of Personality. 00*, 15.

Their Results

r(371) = -0.25, p < 0.01
CI: [-0.35, -0.14]

They found a significant correlation between face recognition ability and narcissism.

Their Participants | Our Participants

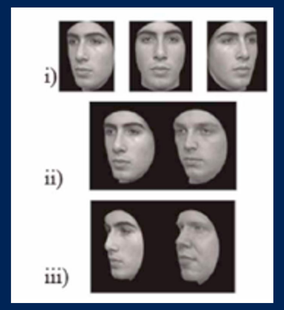
- *A priori* power analysis required 314 participants for 95% power in a two-tailed small to medium correlation of .20.
- N=373
- Testing in Amazon's Mechanical Turk.

- *A priori* power analysis based on their results required 123 participants for 80% power to detect a two-tailed correlation of .25.
- N= 146
- Testing in Pavlovia/Prolific

Their Method | Our Method

1. Surprise Face Learning (40 Neutral Male Faces with Hair, 3s each)
2. Distractor Task (2 minutes of self-report measures)
3. Old-New Face Test (40 Old & 40 New), calculating A'.
4. NPI - 16: Narcissistic Personality Inventory with 16 items.
   a. E.g., "I really like to be the center of attention."
   b. Forced-choice statements

1. Cambridge Face Memory Task (Duchaine & Nakayama, 2006)

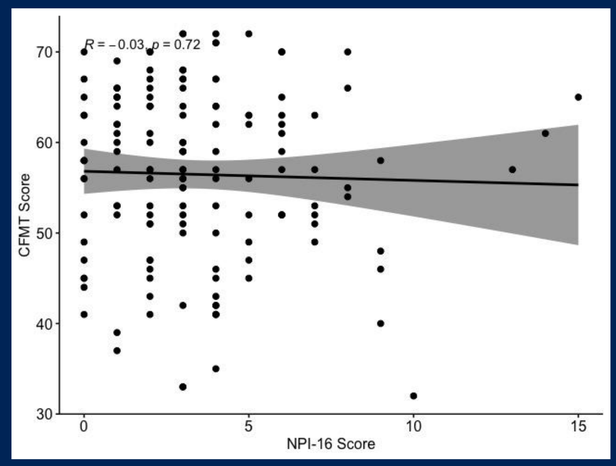


2. NPI - 16 (Ames et al., 2006).

Key Differences

Their Study	Our Study
Surprise face recognition task.	Face recognition task expected.
In-house old/new face recognition task.	Well validated CFMT.
Faces included hair & single angle.	Cropped faces with multiple angles.
Recruited with MTurk	Recruited with Prolific (better vetting).
Did not include a mid-study attention check.	Included an attention check.

Results



CI: [-0.19, 0.13]
r_τ = -0.03, p=0.66

Take Home Message

We were unable to replicate the finding that narcissism predicts face recognition ability.

Discussion

- Study differences could explain the lack of replication. This replication was conceptual.
- Narcissism may be more closely related to surprise tests of object memory. However, Giacomin et al found a relationship between an expected house recognition test and narcissism.
- Future work should further replicate the association between general recognition memory and narcissism.