

Spontaneous Perspective-Taking and Psychopathic Traits

Callie Jones
COL 2021

Dr. Rebecca Waller
Department of Psychology

Introduction

- ❖ **Perspective-taking** (i.e., Theory of Mind): understand situation, beliefs, or intentions of others
- ❖ **Cognitive perspective-taking**: elaborated and complex system that allows for understand of others' mental states.
- ❖ **Spontaneous visual perspective-taking**: unconscious tracking of where people and objects are in space.
- ❖ Evidenced by: **dot perspective-taking task (Fig 1)** where number of dots a participant sees is the same (**consistent**) or different (**inconsistent**) to an avatar with two trial types:
 - **Self**: verify number = what *they* can see
 - **Other**: verify number = what *avatar* can see
- ❖ **Prior research**: people react slower to inconsistent-other trials: i.e., **spontaneously process other people's perspective**
- ❖ **Debate**: tasks assesses attention to directional cues because effect also emerges using an (non-social) arrow
- ❖ **Prior studies are limited**: (1) small sample sizes of undergraduates; (2) repeated-measures designs with participants primed by completing both avatar and arrow conditions; (3) not matching avatar to participant on race.

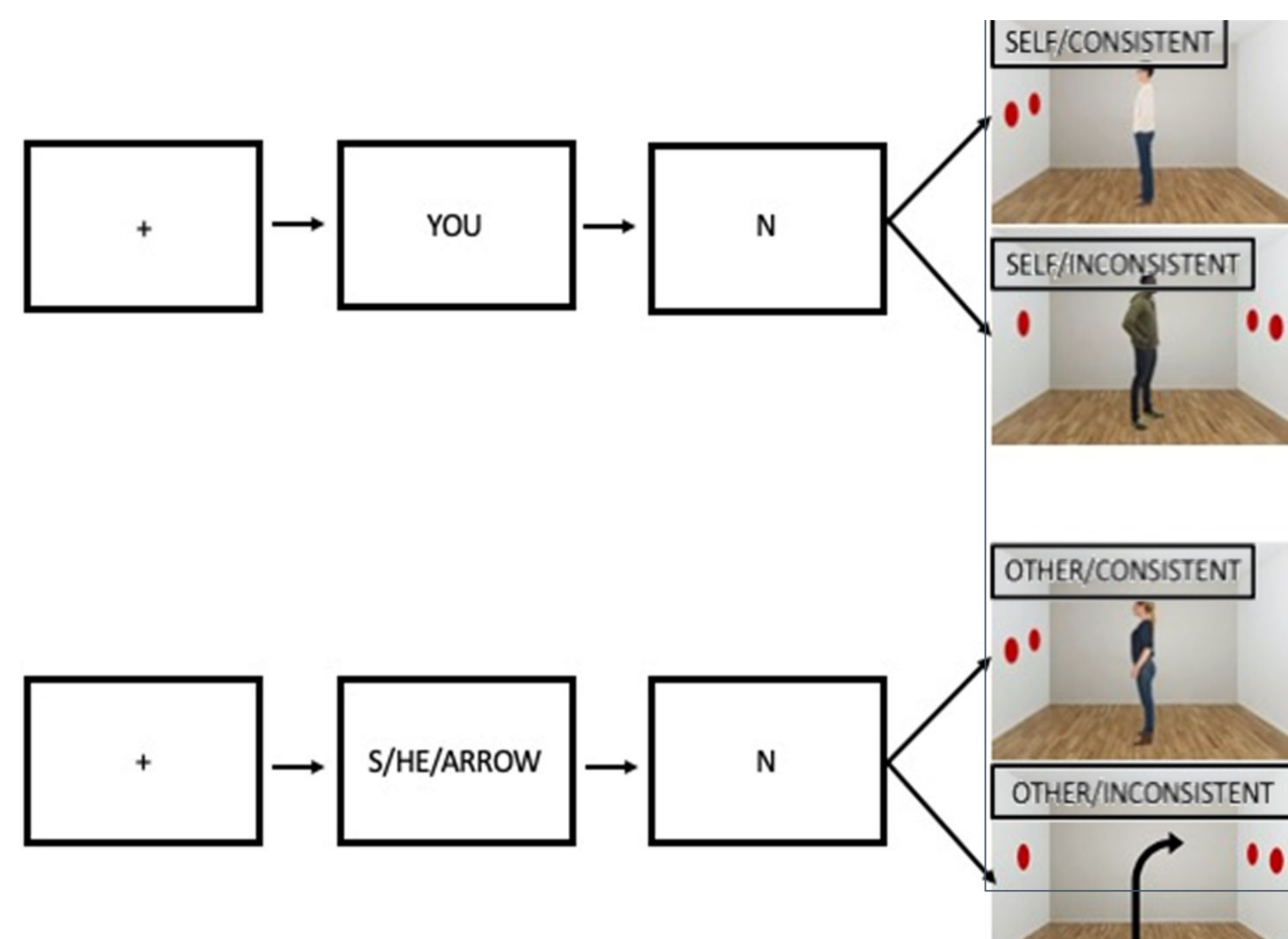


Figure 1: Experimental Paradigm



EDEN Lab
emotion, development, environment, & neurogenetics

Investigating the Operationalization of Spontaneous Perspective-Taking to Inform our Understanding of Psychopathic Traits

Introduction (Cont.)

- ❖ **Psychopathy** is characterized by **Factor 1**: deficits in empathy and guilt, conning, and manipulateness; **Factor 2**: impulsive, irresponsible, and antisocial behaviors
- ❖ One prior study found that incarcerated psychopaths showed less interference by the avatar's perspective thought to explain deficits in guilt and empathy (Drayton et al., 2018).
- ❖ The current study investigated the **arrow versus avatar operationalization of spontaneous perspective-taking** and further explored whether perspective-taking deficits were related to **psychopathic traits** in a community sample.

Methods

- ❖ Participants (N=440) recruited in the US via MTurk
- ❖ Completed dot perspective task and allocated to an arrow (non-social) or avatar condition. The avatar was matched to the participant on race and gender.
- ❖ Psychopathic traits were assessed via the Self-Report Psychopathy (Neumann & Pardini, 2012).

Analytic Strategy

- ❖ Excluded trials that were: incorrect, timed-out, RT <200ms, or > 3SD from participant's mean correct response for that trial type.
- ❖ Removed participants > 20% of trials excluded
- ❖ General linear models (GLM) to test whether: (1) perspective and consistency predicted RT; (2) interference type (i.e., own vs. avatar/arrow perspective) predicted RT; (3) psychopathic traits and interference type were related.

Hypotheses

- ❖ **Hyp 1**: There will be **significant effect of consistency on RT** (i.e., participants faster for consistent vs. inconsistent trials), but only for avatar, not arrow, condition
- ❖ **Hyp 2**: **Higher psychopathic traits will be related to faster RT on "other" trials**. That is, higher psychopathic traits will be related to less interference by the avatar's perspective. This effect will be specific to the avatar, not the arrow, condition