# Assessing Threat Responses towards the Symptoms and Diagnosis of Schizophrenia by Measuring Visual Perceptual Biases

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## Introduction

➢ Stigma towards individuals diagnosed with schizophrenia continues despite increasing public knowledge about the disorder.[1]

➢ Questionnaires are used almost exclusively to assess stigma despite self-report biases affecting their validity.[2]
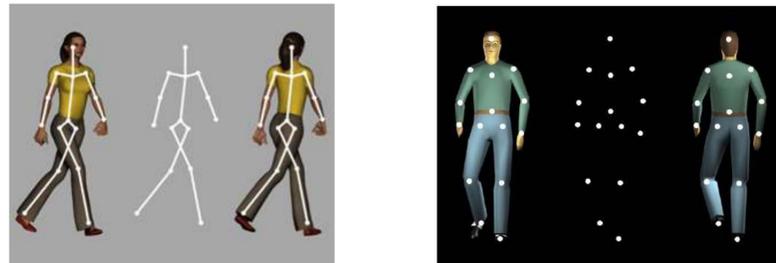
**Purpose**: To implicitly measure perceived threat towards people with schizophrenia using facing-the-viewer (FTV) biases.

**Hypotheses**: We hypothesized that FTV biases would be greater in response to labels and symptoms.

## Methods

**Design**: Participants were randomly assigned to one of the four conditions that involved talking to a confederate.

| Peer Label Symptoms Absent | Schizophrenia Label Symptoms Absent |
|---|---|
| Peer Label Symptoms Present | Schizophrenia Label Symptoms Present |

**Measures**: We assessed participants' stigma towards schizophrenia with both implicit and explicit measures.

| Dependent Variable (Implicit) | Dependent Variable (Explicit) |
|---|---|
| FTV Biases | CAMI scores |
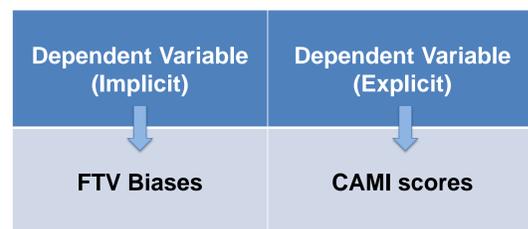
**Participants** were students recruited from Queen's University undergraduate psychology subject pool ($N = 41$, 34 women, 7 men, age: $M \pm SD = 18.85 \pm 1$ years).

## Methods (Continued)

**Task:** All stick-figure walkers (SFWs) were displayed rotating counterclockwise but participants could perceive them rotating in either direction. Participant's task was to report perceived rotation direction.
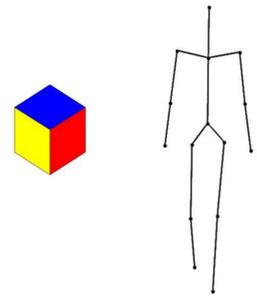
**Figure 1:** Solid cube (left) used as control. Stick figure walker (right) can be seen as either facing towards or facing away, but people display FTV bias.[3,4]

## Results

### Implicit Measures (FTV Biases)

➢ No main effect of either Label or Symptom

➢ **Significant interaction**, $F(1, 36) = 5.81$, $p = .021$, $\eta^2_{partial} = .14$ (see Figure 2)

### Explicit Measures (CAMI Scores)

➢ No main effect of either Label or Symptom

➢ **Significant interaction**, $F(1, 36) = 4.45$, $p = .042$, $\eta^2_{partial} = .11$ (see Figure 3)
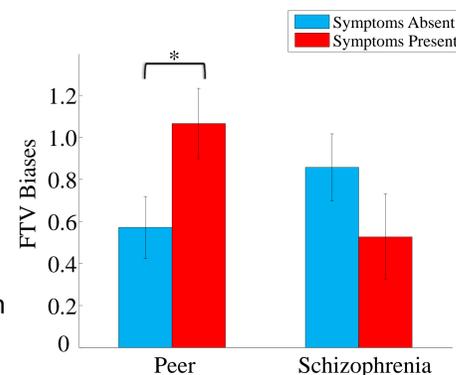
**Figure 2:** Mean facing-the-viewer (FTV) biases (after correcting for FTV biases at baseline) after conversing with confederate. Error bars = +/- 1 SEM. * represents significant at the $p < .05$ level.
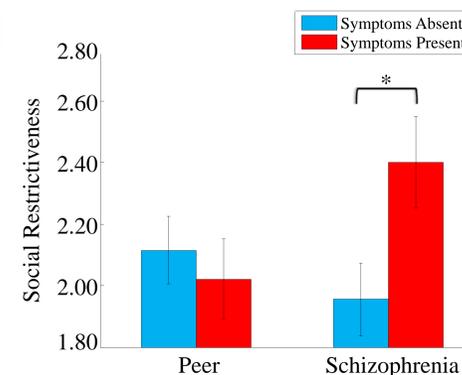
**Figure 3**: Mean social restrictiveness scores (from CAMI) after conversing with confederate. Error bars = +/- 1 SEM. * represents significant at the $p < .05$ level.

**Conversation Ratings**: Participants rated their own conversation performance significantly better when they thought they had been conversing with someone diagnosed with schizophrenia (regardless of symptoms).

## Discussion

➢ We **hypothesized** that FTV biases would be greater in conditions thought to evoke stigma and found partial support for this.

➢ Our findings **partially support our hypotheses**, as we found that participants' FTV biases were greater after conversing with a peer who displayed symptoms.

➢ People rated their own conversation ability better when they thought that they were conversing with someone with schizophrenia.

➢ Participants in the schizophrenia label/symptoms present group were more likely to believe that people with schizophrenia should face social restrictions.

## Conclusions

➢ Diagnostic labels and observed symptoms affect how threatened people feel when they interact with individuals with schizophrenia.

➢ Implicit and explicit measures of stigma can differ significantly.

➢ Therefore, it is essential to include implicit measures of stigma in order to control for potential response bias (i.e., people are hesitant to admit stigmatized beliefs about others).

## References

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4. Schouten, B., Troje, N.F., Brooks, A., Van Der Zwan, R., Verfaillie, K., 2010. The Facing Bias in Biological Motion Perception: Effects of Stimulus Gender and Observer Sex. Attention, Perception, Psychophys. 72, 1256–1260.