**Methods & Analysis**

**Participants:**
- Visual SL Paradigm:
  - Auditory SL Paradigm:
    - Participants passively listened to and observed auditory and visual sequences that followed a statistical pattern with embedded statistical regularities unknown to them.
    - SL has been shown to be impaired in ASD and may therefore contribute to the language and social communication difficulties observed in this population.
    - One outstanding question in the field is how the known difficulties with SL in ASD impacts their ability to process language and other communicative signals.

**Response:** Participants were instructed to click the corresponding key on the keyboard.

**Accuracy Scores:** The percentage of correct responses on auditory and visual SL tasks.

**Bivariate correlations were conducted to determine potential relationships between measures of statistical learning, language abilities, social competency, and autistic traits.**

Follow up mediation analyses were conducted for instances where three variables were intercorrelated.

**Results**

- **Receptive language abilities significantly mediated the relationship between visual SL abilities and autistic-related social knowledge.**

**Discussion**

1. **Reduced auditory SL abilities were significantly related to increased autistic traits.**
2. **Better visual SL abilities were related to better receptive language abilities.**
3. **Visual SL abilities were significantly related to autism-related social knowledge.**
4. **Receptive language ability significantly mediated the relationship between visual SL and autism-related social knowledge.**

**References**

1. Hudry et al., (2010), International Journal of Language and Communication Disorders
2. Saffran et al., (1996), Science
3. Frith (1970a), Journal of Abnormal Psychology

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