

## Introduction

- Autistic (AUT) individuals produce **fewer co-speech gestures** compared to neurotypical (NT) peers <sup>(1)</sup>
  - Gestures: **less clear** in meaning and **less certain** to be a gesture <sup>(2)</sup>
- “Loss of Autism Diagnosis” (LAD): individuals who met criteria for ASD before age 5, but do not have symptoms at adolescence <sup>(3)</sup>

## Methodology

- $n = 33$  AUT, 30 LAD, and 35 NT participants ages 12-29 years
- Participants did not differ in age or NVIQ
- Watched and then narrated a cartoon (Canary Row)
- Completed CAT-Q and ADOS-2
- Gesture rate: gestures per minute of speaking time
- Raters (naïve to group status) coded gesture *presence* and *meaning* on 1-5 scale:
  - **1** (not confident) to **3** (confident) to **5** (totally certain)

## Aim

**Test associations among raters' confidence, self-reported camouflaging, and clinician ratings of gestures (ADOS Item 9 scores) across the three groups**

## Results

- Gesture presence ratings: AUT < LAD/NT (M: AUT = 3.97, LAD = 4.17, NT = 4.30)
- Gesture meanings ratings: AUT < NT (M: AUT = 3.79, LAD = 3.89, NT = 4.12)
- CAT-Q Total, Compensation: *negatively* correlated with gesture presence in NT group
- CAT-Q Masking: *positively* correlated with gesture presence in AUT group
- ADOS Item 9 scores predicted gesture presence across groups – when clinicians noted atypical gestures, those individuals were more likely to have lower gesture presence rating scores

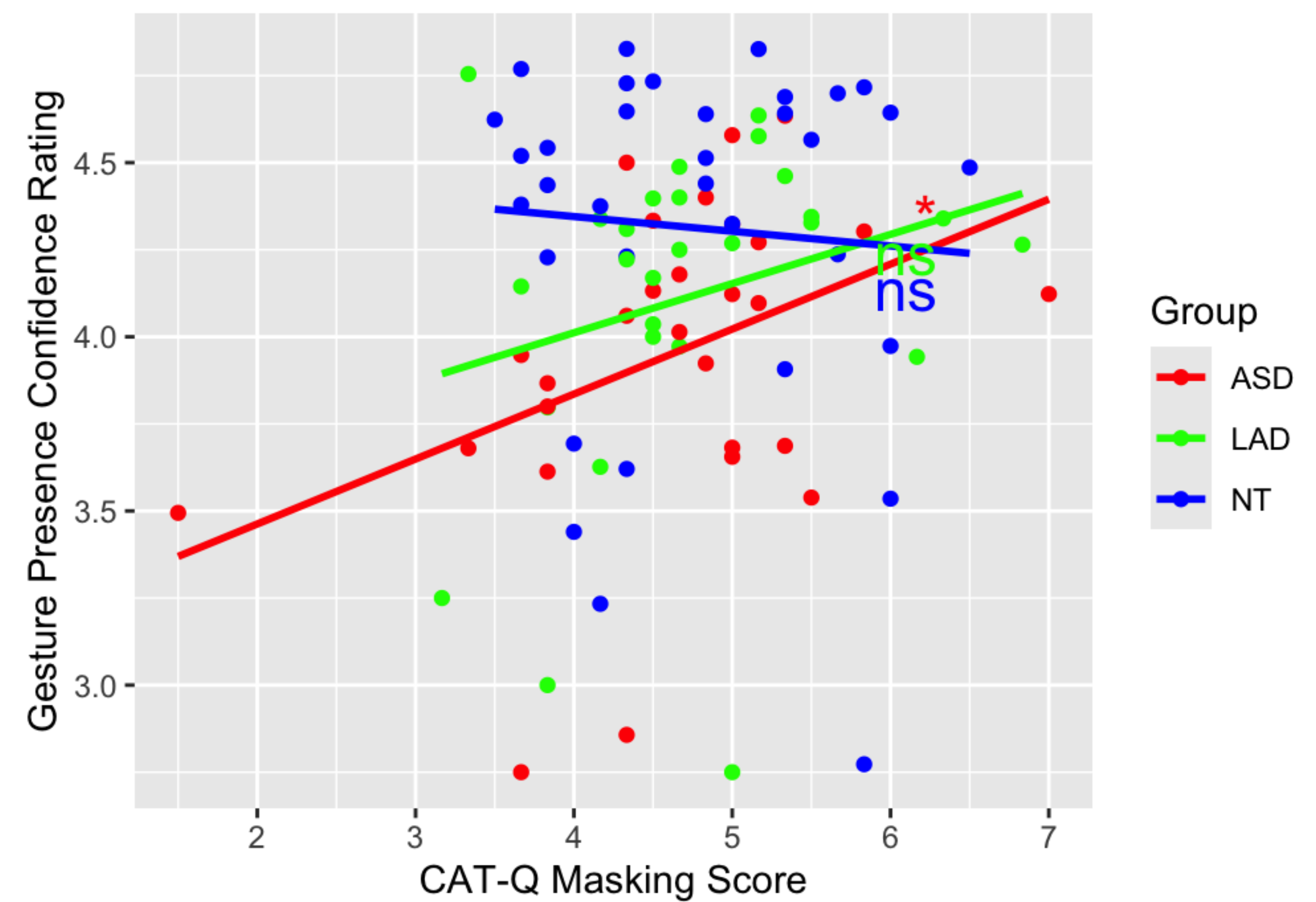
## Conclusions

- No LAD/NT differences in any measures
- Trained gesture coders and clinicians concurred re: atypicality of spontaneous gesture production
- Camouflaging by AUT participants associated with *more typical* gesture production
- Camouflaging by NT participants associated with *less typical* gesture production
- Understanding gesture production in autism can help to inform intervention, which rarely addresses gesture production in adolescence

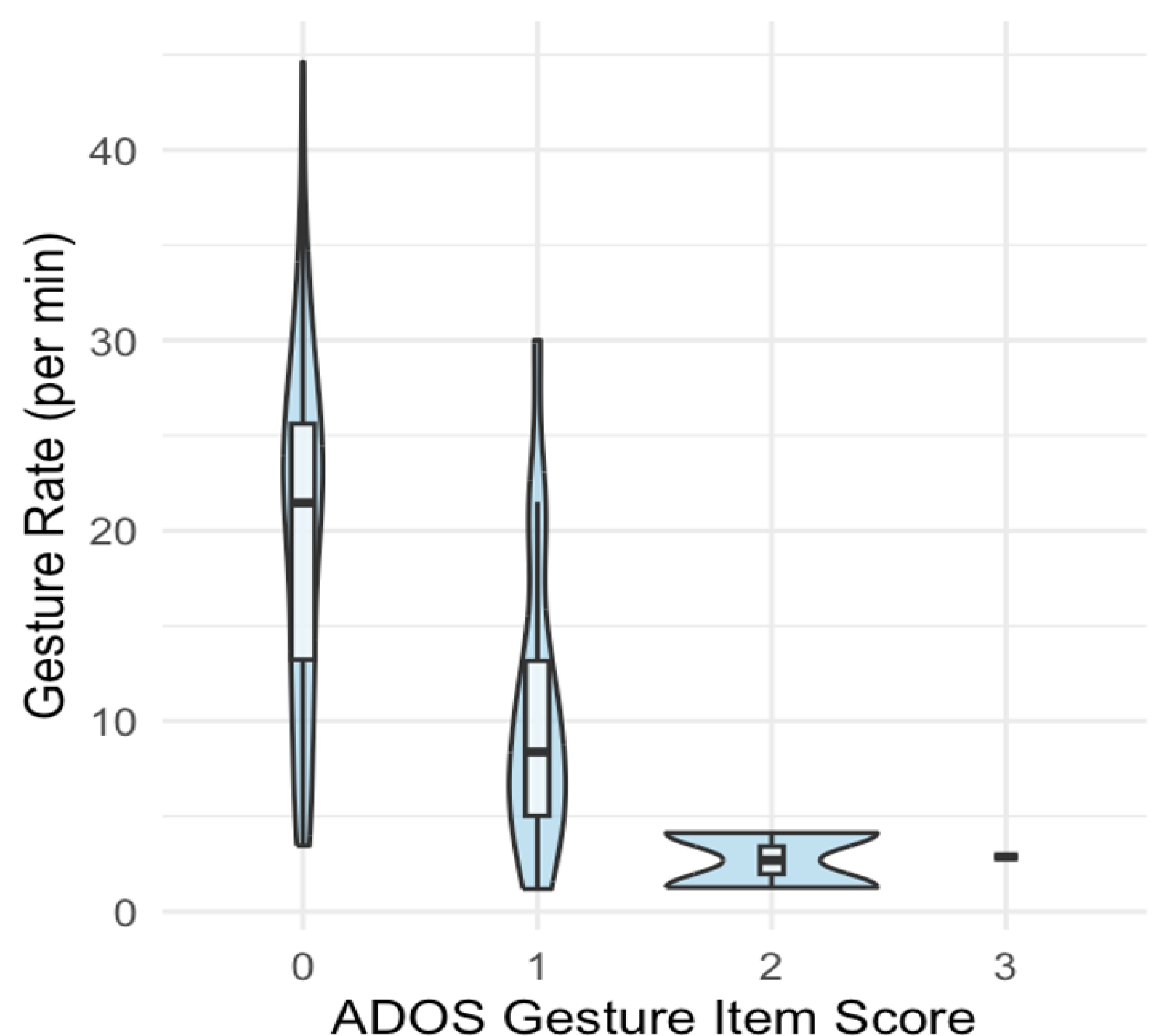
## References

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- Silverman, L. B., Eigsti, I. M., & Bennetto, L. (2017). I tawt i taw a puddy tat: Gestures in canary row narrations by high-functioning youth with autism spectrum disorder. *Autism Research*, 10(8), 1353–1363. <https://doi.org/10.1002/aur.1785>

## CAT-Q Masking score and gesture presence confidence rating



## Gesture rate X ADOS gesture score (Item 9)



Scan for poster!