Autism Spectrum Disorder (ASD) is a complex developmental disorder that is characterized by persistent challenges in social, emotional, and communication functioning.

Previous research has focused on the relationship between others' reports of autism traits (parent or clinician) and self-report of Quality of Life (QoL) for autistic individuals (Mason et al., 2018), and only few reports have used self-report of autism traits and self-report of QoL.

Self-report measures provide direct self-assessment rather than others interpreting a behavior from observation. The use of self-report provides a better understanding of how autistic youth evaluate autism traits and QoL without others' bias.

The aim of this study is to:

- Do a preliminary analysis on:
  - There is a significant difference of QoL in ASD and TD group.
  - There is a relationship between self-report of autism traits and QoL in ASD and TD groups.
  - There are gender differences between the self-report assessment of autism traits and QoL in ASD and TD group.

- We hypothesize that:
  - ASD group will report a lower QoL than TD peers replicating previous findings.
  - There will be a negative strong correlation between SAAT and QoL scores in both groups.
  - Females will report a lower autism traits considering more males are clinically diagnosed with ASD than females.

The methods of this study are as follows:

**Participants:**
Participants (ASD = 37, TD= 51) ages 16-34 years old from a four-site NIH funded study on gender differences in autism were included. All participants met inclusionary criteria on standardized measures and had an IQ>70.

**Measures:**
- Quality of Life (Tweh/NiHSDQ-BREF (Adults)): Participants completed the quality of life measure and answered questions on physical functioning, emotional health, social functioning, and school functioning. Scores were calculated for the subscales; higher scores indicates higher self-reported quality of life. The physical, emotional and social subscales were used in the analysis.
- Self-Report Assessment of Autism Traits (SAAT) (in development Davenport et al), Participants completed a 58 item questionnaire and reported on autism traits. Higher score indicates higher self-reported autism traits. 4 questions regarding community stress were not considered in the analysis as they do not reflect aspect of self assessment traits.

**Results:**

- **Aim 1:** Is there a difference of QoL in ASD and TD groups?
  - A 2 sample independent T-test was run on the subset of Quality of Life Scores in ASD and TD.
  - There was a main effect of group in which TD youths (M = 77.49, SD = 16.14) scored higher on all subscales of QoL than ASD youths (M = 65.81, SD = 19.20):
    - Physical QoL: t(86) = 2.6, p = 0.011
    - Emotional QoL: t(86) = 2.2, p = 0.029
    - Social QoL: t(86) = 2.6, p = 0.016

- **Aim 2:** Is a correlation between self-report of autism traits and QoL scores in ASD and TD groups?
  - A correlation was implemented between self-report of autism traits and QoL subscale scores.
  - There was no main effect of group in which TD youths scored higher on all QoL subscales when compared to ASD youths, suggesting that ASD youths might experience lower QoL potentially from related symptoms from autism and other co-morbidities.
  - However, there was no correlation with any of the QoL scores.
  - Additionally, we didn’t find any gender differences in QoL scores and SAAT scores in either group. We had expected to see lower SAAT scores in females due to the higher diagnosis rate in males. This could potentially be due to the sample size. The SAAT measure is still in development and further follow-up analysis will be conducted after collecting more data and after the questionnaire is finalized.

- **Aim 3:** Are there gender differences between the SAAT and QoL in ASD and TD groups?
  - A 2 Way ANOVA was conducted between the Dependent Variable - Physical, Emotional, Social QoL, SAAT Score.
  - There is no interaction effect between the Group and Gender.

**Discussion:**
- Our preliminary results show that TD youths scored higher on all QoL subscales when compared to ASD youths, suggesting that ASD youths might experience lower QoL potentially from related symptoms from autism and other co-morbidities.
- However, there was no correlation with self-assessment of autism traits and QoL scores.
- Additionally, we didn’t find any gender differences in QoL scores and SAAT scores in either group. We had expected to see lower SAAT scores in females due to the higher diagnosis rate in males. This could potentially be due to the sample size. The SAAT measure is still in development and further follow-up analysis will be conducted after collecting more data and after the questionnaire is finalized.
- There could also be other factors that may have contributed to these results such as whether having a sibling without ASD would impact ASD group.
- Future research may conduct thorough data analysis with the completed SAAT measure to provide insight whether the importance of timely recognition of QoL challenges in youths with autism so supports can be developed and provided.

**Acknowledgement & References**

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