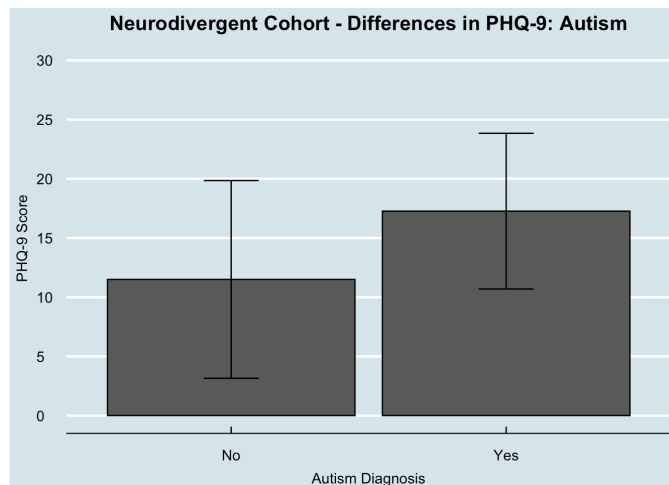




DEPRESSIVE SYMPTOMS AMONG INDIVIDUALS WITH AUTISM



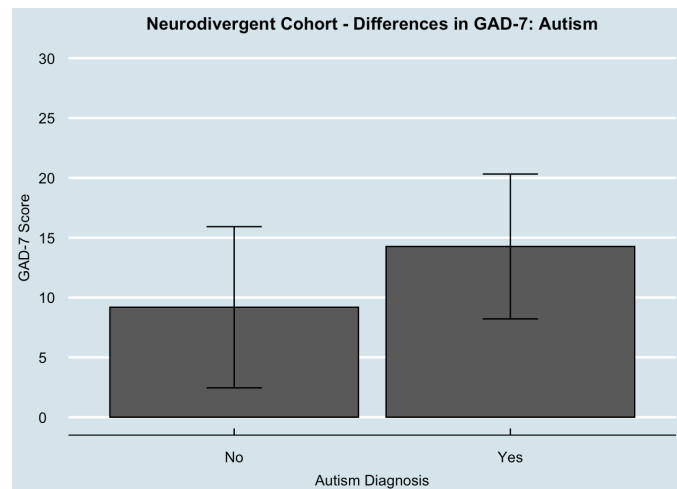
As part of my analysis process, I had R perform several Independent Samples T-Tests including the analyzing the difference of depression severity between individuals with or without an official Autism diagnosis.

- This test compares the averages of a certain number between two groups. In this case, I compared the average PHQ-9 scores between individuals with or without an autism diagnosis (please note that individuals in the autism group can be with or without an ADHD diagnosis).
- We found that individuals with an Autism diagnosis had significantly higher average PHQ-9 score than individuals without an autism diagnosis, the p value was under .05, in other words, that there is less than a 5% chance that the results could have occurred by chance.
- The average PHQ-9 score for individuals was a little over 17 and the

average PHQ-9 score for the autism group was a little over 11.

- It's important to note that PHQ-9 scores between 15-19 are considered to correspond with moderate/severe depressive symptoms, anything over 20 is severe. Moderate symptoms correspond with scores between 10—14
- Also, given the large variance in the scores, as represented by the standard deviation error bars, we should be cautious in making inferences about the data. However, as the samples grows larger, and we get more data, we'll be able to have a greater confidence in interpreting the data

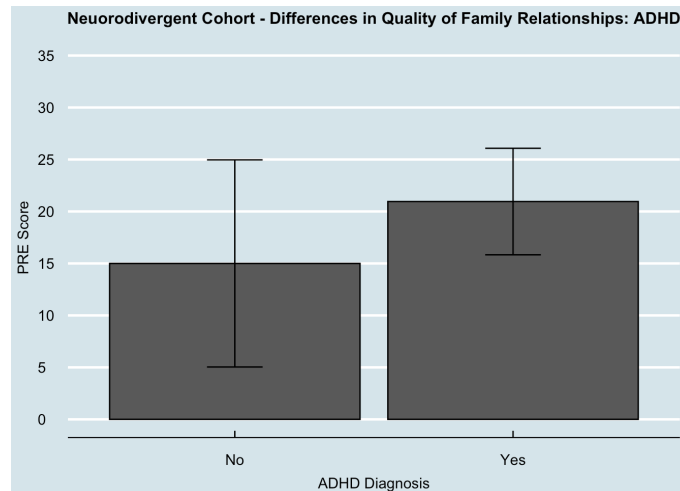
ANXIETY SYMPTOMS AMONG INDIVIDUALS WITH AUTISM



Similarly, individuals with an Autism diagnosis (with or without ADHD) had significantly higher average scores in the GAD-7 a scale that is used to measure the severity of Generalized Anxiety disorders ($p < .05$).

- Scores of 15 or higher indicate severe anxiety
- Scores of between 5 or 9 indicate mild anxiety, and scores between 10 and 14 indicate moderate anxiety
- These last two analyses show that individuals diagnosed with Autism in the current Neurodivergent report having higher symptoms associated with depression and generalized anxiety than individuals without Autism.

QUALITY OF FAMILY RELATIONSHIPS & ADHD DIAGNOSIS

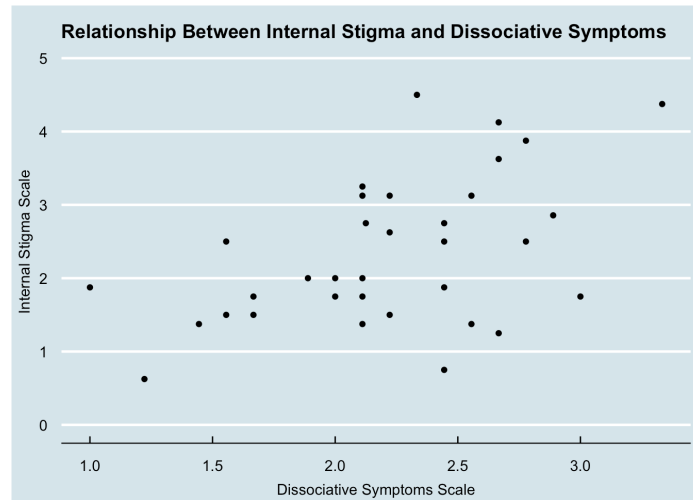


Another important highlight that I would like to cover is the relationship between the quality of family relationships and ADHD diagnosis. Here we see that Individuals with ADHD report a higher perceived quality of family relationships than individuals without an ADHD diagnosis in the present Neurodivergent cohort.

Not shown here is that

- There was a positive correlation found between perceived higher quality family relationships and greater clinical well-being as indicated by the WHO-5 scale among individuals with ADHD that trended toward significance ($p = .0775$).
- And, not surprisingly, lower WHO-5 scores that indicate clinically poor well-being correspond with greater severity of depressive symptoms.

RELATIONSHIP BETWEEN INTERNAL STIGMA AND DISSOCIATIVE SYMPTOMS



Lastly, I ran several correlations with the data and one association I'd like to review is the positive relationship between internal stigma and dissociative symptoms. ($p < .05$)

Individuals with higher internal stigma scores were more likely to report dissociative symptoms across the neurodivergent sample.

- For example, individuals who feel out of place in this world because they are neurodivergent might experience dissociative symptoms such as feeling as though they are looking at the world through a fog so that people and things seem far away and unclear.
- I didn't get a chance to, but I think it would be important to look at correlations between each specific item across both scales to get a better understanding of how internal stigma is associated with dissociative symptoms.

Also, I did want to point out that individuals with an ADHD diagnosis demonstrated a stronger relationship between internal stigma and dissociative symptoms than individuals with Autism.



CLINICAL RECOMMENDATIONS

- Clinical care can focus on alleviating depression & anxiety symptoms for greater clinical outcomes for individuals with Autism (with or without ADHD).
- Building stronger family relationships via group/family therapy may be beneficial in improving depressive symptoms and overall clinical well-being for individuals diagnosed with Autism.
- Treatment focused on lowering internal stigma can potentially improve dissociative symptoms, particularly among individuals who are diagnosed with ADHD.

ADDITIONAL CONSIDERATIONS

- Follow-up surveys indicating change in scale scores (PHQ-9, GAD-7, WHO-5, PRE).
- Length of time individuals have been in treatment in the past (before entering Charlie Health treatment).
- Data related to early life trauma/adverse childhood experiences. Such information can be helpful in tailoring clinical care.

Also info related to suicidal thoughts or behaviors

LIMITATIONS

- The small sample size ($n = 37$) limits the confidence of any clinical recommendations that can be made. As the Neurodivergent cohort grows larger, we will be able to make more confident recommendations.

