

IMRF grant Final Report:

Development and Validation of a Diagnostic Tool for Social Communication Disorder

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This is a summary of the tasks completed for the Fall 2019 to Spring 2020 IMRF grant, which was intended aid the efforts associated with the development and validation of a diagnostic tool for Social Communication Disorder (SCD). This year was very productive as we met almost all goals set forth in the grant proposal. What follows is a detailed summary of activities and corresponding months in which they occurred.

Fall 2019

Proposed Tasks:

1. Reviewing existing instruments and map to SCD diagnostic criteria; review literature
2. Construct Items for item review
3. Pilot study with caregivers

The proposed tasks for this semester were completed in a timely manner. The team working on this project conducted a literature search to gain an understanding of the state of literature focused on SCD and Pragmatic Language Disorder. Team members independently reviewed the DSM-5 criteria for SCD and came up with items that best represent the criteria listed. This was a multi-step process that involved team members independently developing items. Team meetings allowed for open discussion on the best wording for each item and whether or not each item accurately represented its corresponding criterion. Team members had initially planned on piloting items from the questionnaire with a small sample of 15 to 30 caregivers. The purpose of this pilot would be to observe caregivers' reactions to the questionnaire and allow them to offer feedback on the appropriateness of the items. Due to the global COVID-19 pandemic we were not able to do so and plan to do so during year 2.

Spring 2020

Proposed Tasks:

1. Gain feedback on items from experts in the field
2. Pilot items with a small group of caregivers; create final scale

After four rounds of item review and discussion, the initial measure was distributed to three experts for their review and feedback. Feedback from the experts was then incorporated into the measure and redistributed to the same experts for a second round of feedback. We then created a final measure for review. Once the measure was developed, team members worked on completing an IRB form for Exploratory Factor Analysis and receiving permission for use of DSM-5 material. The completed measure is attached in Appendix A.

Overview and post grant activity:

Overall, we continued our item review efforts for the diagnostic tool. Members of the team continued to fine review and reflect on the wording of each item to see if it fully captured the criteria listed in the DSM-5. This brought about a few more changes in syntax for several items. We have reached out to Qualtrics to get a quote for recruitment of our sample, and plan to continue our validation efforts for the diagnostic tool through an EFA and CFA. We have almost finalized the IRB.

Appendix A

Please select the answer that **best describes** your child's behavior **over the past six months**.

How often does your child display this behavior?	Never	Rarely	Sometimes	Often
1. Uses communication for <u>social purposes</u> , such as greeting others or chatting with friends.	0	1	2	3
2. <u>Shares information</u> in a way that is appropriate for the social and cultural context.	0	1	2	3
3. Adjusts their communication to match the social and/or cultural context, such as speaking differently <u>when in a library than during recess</u> .	0	1	2	3
4. Changes their communication to match the social and/or cultural needs of the listener, such as speaking differently <u>when talking to a friend rather than a teacher</u> .	0	1	2	3
5. Uses <u>overly formal language</u> .	0	1	2	3
6. Follows the rules for conversation and storytelling, such as <u>taking turns in conversations</u> .	0	1	2	3
7. Follows the rules for conversation and storytelling, such as <u>clarifying when misunderstood</u> .	0	1	2	3
8. Understands how to use <u>verbal and non-verbal cues</u> .	0	1	2	3

9. Understands ideas that are not directly stated, such as inferences. 0 1 2 3

10. Understands nonliteral and ambiguous meanings of language, such as metaphors and/or humor. 0 1 2 3

How much do these behaviors cause problems for this child?	Not Applicable	No Problem	Minor Problem	Moderate Problem	Severe Problem
1. Limitations in <u>effective communication</u>	N/A	0	1	2	3
2. Limitations in <u>social relationships</u>	N/A	0	1	2	3
3. Limitations in <u>academic achievement</u>	N/A	0	1	2	3
4. Limitations in <u>occupational performance</u>	N/A	0	1	2	3