

## **REPORT COVER SHEET**

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Report: All data for the OAR grant-funded research study has been analyzed. The Principal Investigator is in the process of writing the final research paper, which will be a component of her dissertation series. As such, the following narrative is a research summary of the project addressed for OAR's target audience (parents of children on the autism spectrum).

## **Role-Playing Game-Based Social Skills Intervention for Autistic Adolescents: A Pilot Study**

Friendships are important, especially during teenage years. However, challenges with social skills may make it hard for autistic teens to form connections with peers. Therefore, group social skills interventions can be helpful (Gates et al., 2017). Yet, many current social skills interventions have limitations. For example, it might be hard for families to get to an in-person group because of scheduling or transportation challenges (Soares et al., 2021). Another challenge is that teens might not feel motivated to go to a group and learn about social skills. Even when they may learn new skills, teens may have a tough time putting them into practice in real life. Game-based interventions delivered online may be helpful in addressing limitations. There is little research on the potential value of role-playing games (RPGs) in boosting social skills (Fein, 2015; Gallup & Serianni, 2017). We aimed to pilot the Guild Chronicles (GC) intervention with a group of autistic teens. We explored whether participants liked the intervention and if they were able to participate easily. We also looked at whether it could improve social skills, self-esteem, and reduce loneliness in autistic teens.

### **Methods**

Nine autistic teens participated in the intervention. Participants were between the ages of 12 and 17. We divided them into two groups. We based groups on age, interests, and when they could attend. Each group met every week for eight sessions. The sample was not diverse in terms of racial or ethnic identity. All participants were White, non-Hispanic/Latino. But the sample was more varied in gender identity. About one-third identified as non-binary or transgender. Some teens (44.4%) preferred identity-first language (“autistic person”) and the rest said they did not have a preference. Two-thirds (66.7%) of the teens had been diagnosed with a mental health condition.

### **Guild Chronicles Intervention**

Guild Chronicles (GC) is an RPG-based intervention. The intervention has improved over time, with input from autistic teens. Players work on social emotional skills (Harris, 2019). GC is a group activity that involves teamwork. Participants imagine themselves as heroes in a fantasy world. The facilitator, called the Storyteller, guides them as they work together on adventures, fight monsters, finish quests, and overcome challenges.

The intervention lasted eight sessions. Group sessions were 90 minutes each. Each session started with a group check-in. The lead facilitator asked a fantasy-themed question of the day. After that, the Storyteller reminded everyone of the story, and then they all played the game together. At the end, they talked about what went well and what was tough. Facilitators shared what to expect at the next session. Then, participants had time to talk and continue building relationships through shared interests.

Playing the game involved the lead facilitator telling a story using prompts. Players decided what actions to take and rolled dice to see whether their chosen move was successful. These choices impacted the whole group. As they went through the story, participants had various chances to practice social and emotional skills. Skills included turn-taking, asking questions, and teamwork. They received feedback and coaching along the way.

The groups met online using Discord. This is a platform where you can talk through text, voice, video, and share media (Jiang et al., 2019). Discord is popular in gaming and autistic communities. The platform is easy to use. It helps individuals who may have difficulties with

planning and organizing because you can group things into different channels. You can also post essential information, like on a bulletin board. Also, facilitators could send private messages to give social feedback to participants in real time.

## **Measures**

Teens and their caregivers filled out surveys three times: before the intervention, after the intervention, and three months later. Caregivers filled out a demographics survey. They also shared about their teen's social skills. Teens completed surveys about self-esteem and loneliness. Both teens and caregivers also shared their opinions about the intervention. They shared whether they liked it and found it to be effective. There is little research that includes autistic teen voices. We wanted to learn more about their opinions. Therefore, we asked teens to participate in an interview at the end of the intervention. We sent them questions before the interview and used visuals to help during the talk.

## **Findings**

All participants completed the intervention. Most attended all the sessions. Six teens (66.7%) went to every session, and three (33.3%) went to seven sessions. The study showed that overall social skills improved from the start to the three-month follow-up. Certain types of social skills, like working together, speaking up, and getting involved, also got better after the program. These improvements lasted three months later. Loneliness decreased after the program and stayed lower three months later. However, the boosts in self-esteem were not significant.

Overall, feedback showed that most people were happy with the GC intervention. Teens enjoyed it. One caregiver said their teen "looked forward to it every week and seemed to like talking with the group." All teens said they felt accepted by others in the group. They also wanted to stay in touch. Some caregivers added more thoughts. For example, one said, "They felt very accepted by the group and that is a big deal since that does not happen very often." Another caregiver said, "I think she felt seen and understood by her peers."

During interviews, teens said the group was fun, and they looked forward to it every week. ("I was like oh boy, tonight's Guild Chronicles. And I would get goosebumps and see what's today's adventure"). They also thought it helped them get better at talking to others and working together. ("I think it improved how I interact with people...and how to cooperate and talk to each other"). Teens also shared how they were using these skills in school with peers.

Some teens also said they felt more confident. Teens mentioned that the supportive and accepting group environment was helpful. ("It was nice being in an environment where people were super nice and accepting. It helped because it showed I can be my cool self. Even if I'm scared"). They also liked that they could do something they enjoy and meet online where they already spent time (on Discord). For example, a teen said, "Getting to do something that I really loved motivated me, which was pretty awesome."

Discord had helpful features. Teens could send memes, type questions, and get social feedback in private messages. For example, "You can talk and send memes at the same time. This is the digital version of how, in books, people are passing notes to each other in class." Participants also said that they were learning new skills without realizing it because the game was interesting and fun. For example, a teen stated, "You get carried away by all the fun that you don't realize that you actually learned something in the process." Difficulties were issues with technology, and some teens suggested moving more slowly and getting more help with organizing things. Overall, most people thought the timing, length, and how long the program lasted worked well. Some even wanted more sessions.

### **Conclusion**

Overall, virtual interventions based on games may be helpful and well-liked by autistic teens. The study showed early support that GC could work well for improving social skills and decreasing loneliness in autistic teens. Since the sample was small, it is important to do more studies in the future with a larger, more diverse sample and include a control group.

## References

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