CRITICAL GROWTH

HOW CAN TABLETOP ROLEPLAYING GAMES (TTRPGs) PROMOTE SOCIAL GROWTH IN THEIR PLAYERS?

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Abstract

This report explores some of the research surrounding the use of Tabletop Role Playing Games (TTRPGs) to promote social growth in their players. It examines the possibility of using TTRPGs to promote stronger relationships between neurodivergent and neurotypical individuals through promoting a deeper understanding of alternative ways of seeing the world. We explore this through a discussion of the literature in this area and a process inspired by the scoping review approach to analysing academic literature. We undertook a cooperative approach with a diverse research team modelled from the idea of TTRPG playing. This process found a lot of positive research exploring the use of TTRPGs (particularly Dungeons & Dragons) for therapeutic intervention, however we found there was a lack of research into the area of TTRPGs for social growth, and for cross neurotype relationship development. The development of a neurodiverse research team inspired by TTRPG parties was an extremely positive aspect to this process, and we recommend that future work in this area should be undertaken by diverse teams. We found many of the attributes embodied in the design of TTRPGs are elements that work towards promoting positive social growth and suggest further research be undertaken into exploring this area.

Keywords: *Social growth, Dungeons & Dragons, "table top role playing games", TTRPGs*

Introduction

Tabletop Role Playing Games (TTRPGs) are a particular form of tabletop game where players describe the actions of an in-game character through narration. Players often use pen and paper to help keep track of character statistics, motivations, and environments, as TTRPGs are traditionally non-digital in format. With their origins in wargaming, TTRPGs are games of imagination, played in an imaginary world using characters created by players "with their own social systems, economies and backgrounds" (Rivers et al. 2016, p. 287).

Tabletop games have seen a dramatic increase in popularity recently where, in 2019, nearly eleven times the amount of money was pledged to tabletop games over digital games (Hall, 2020). One of the best-known TTRPGs is *Dungeons & Dragons,* (D&D), designed in the mid-1970s by Gary Gygax and Dave Arneson. D&D and other TTRPGs can often be seen represented in pop culture, which both reflects and promotes their popularity. For example, there has been a 600% increase in Google searches seeking advice on how to play D&D since it was recently featured in Netflix's *Stranger Things* (Selcke, 2022). TTRPGs are facilitated by a Game Master (GM) who is responsible for guiding players through the creation of a collaborative story. Traditionally, players engage with pen-and-paper character sheets, use various dice and roleplay their characters. Game narratives can last a single session of a couple of hours, through to ongoing stories lasting years.

Whilst TTRPGs have traditionally been played in person, since the pandemic there has been an increase in facilitating the delivery of TTRPGs online through specifically designed systems such as Roll20, D&D Beyond or The Forge. There has also been a strong uptake of the use of video conferencing systems such as Zoom to deliver TTRPGs, with some research suggesting that facilitating the delivery of TTRPGs may be made

easier for GMs utilising these online technologies (Scriven, 2021). Online delivery has also opened up the opportunity for more people to play, by addressing player challenges such as geographical distance and social anxiety (Scriven, 2021).

D&D has traditionally been seen as a game for geeks and nerds (Lorenz et al., 2022), while at the same time admonished as being "dangerous", "satanic" and "capable of brainwashing" through a sustained moral panic over fantasy roleplaying (BBC News, 2014; Laycock, 2015; Baker et al., 2022; Lorenz et al., 2022). Despite there being no evidence to support this, many people who have never played D&D, still harbour negative perceptions about it. This includes social workers, as evidenced in the study by Ben-Ezra et al, (2018) who found that the less people knew or understood about TTRPGs, the more likely they were to assume deficit thinking about the people who play them, while on the contrary, for the more familiar an individual was with TTRPGs, the more likely they were to see the benefits of role playing games.

Although the key purpose of role playing games is to bring people together to have fun in each other's company, research has shown that TTRPGs like D&D have the potential for use as a tool for teaching areas as diverse as statistics and ethical dilemmas (Lorenz et al, 2022, p. 2), while others have found that playing can be beneficial for people's mental wellbeing (Scriven, 2021). Indeed, human service providers like social workers and psychologists are becoming increasingly interested in drawing on interactive role playing games as an aspect of their work (Abbot et al., 2021), while some service providers have evolved entirely upon the use of games for the purposes of social growth, as an educational tool and to build meaningful connections with others (Davis & Spielmann, 2022). An example is *Game to Grow*, a US-based non-profit organisation that promotes the use of TTRPGs for therapeutic purposes and for developing social skills (Davis & Spielmann, 2022). Along with hosting games, *Game to Grow* also offers training

programs for professionals including therapists and Game Masters to learn intentional and applied uses of TTRPGs in their practice.

Similarly, *Minds at Play* is an Australian organisation offering gaming sessions for children, youth and adults with disabilities and/or who are neurodivergent. They are dedicated to "fostering communication and social interaction through imagination and play" (Minds at Play, n.d.). Although traditional D&D campaigns can last for hours, weeks and sometimes years, *Minds at Play's* most popular program is centred around a refined version of D&D which is played online over 10 x 2-hour sessions. The program aims to provide a safe environment for participants to practise and develop a variety of skills, including social interactions, collaboration, problem-solving and conflict resolution, all areas which work towards promoting social growth.

What is social growth?

Social growth is often discussed broadly, in the context of growing "social capital". Bordieu (1983) argued that capital is not simply material possessions but also consists of the connections we have with others. Amassing social, cultural and symbolic capital through the growth of personal networks by playing cooperative games therefore enables and facilitates the conditions for individuals to create their own social power. However, to achieve social power, people need to be able to interact and collaborate with others socially, something that can be difficult for neurodiverse individuals who often experience ableism in social settings where they are not understood or where there is resistance to accept their distinct ways of being (Radulski, 2022).

Social growth is an outcome of the development of an individual's ability to interact with others and can be achieved by increasing positive social experiences. Importantly, we argue that social growth does not require conformity to mainstream social expectations,

but that social growth should be a two-way arrangement where, rather than the onus being placed upon neurodiverse people to 'fit' into the mainstream, instead, neurotypical people do more to understand and welcome differences as a way to enhance their own social growth.

Using TTRPGs for social growth

Our focus in this review is to determine if the social growth of individuals is achievable through TTRPGs and if and how social growth as an outcome is measured. We do this in response to our critical reading and understanding of some of the language and 'therapies' used on neurodiverse folks which often paints neurodiverse people as being 'lesser than' and therefore needing to conform to neurotypical behaviours, achieved through the interventions of professionals (Hill, 2014, pp. 74-76). While learning through play is an accepted approach in the education of children (see for example Essame, 2020), less attention has been paid to the potential benefits of play (outside of traditional sports) for young adults (Johnston et al. 2022). Through TTRPGs, problem-solving, reciprocity and bond-forming relationships can be leveraged as an intervention to support social growth (Abbott et al, 2022). For example, research by Parks (2021) demonstrated that involvement with TTRPGs led to autistic youth finding meaningful connections beyond the experience of the gameplay itself, including relationships outside of the game and connection with the TTRPG community leading to a sense of belonging (Parks, 2021).

Methods

Just like in many TTRPG campaigns, our research began with our group initially connecting in a digital tavern (or in our case Zoom!) and introducing ourselves to each other. The core rulebook for the most recent full version of D&D 5e *Dungeon Master's*

Guide (Wizards of the Coast, 2014), recommends that players set out in parties with around 3-5 players to result in the best level of in-game balance. Our research team decided to follow this rule, undertaking our research in a group of 5, which we called our "research party". The research party for this project contained a variety of backgrounds and experiences with TTRPGS and academia, including as players and GMs. Our party members also had members who are neurodivergent, from varied socio-economic groups and ages, the LGBTQI+ community and academic areas of game design, social work and STEM. For us, ensuring a diverse research party was one of the most important parts of our research process. As Lead Rules Designer on *Dungeons & Dragons* Jeremy Crawford explains:

> *D&D is about a group of people with wildly different pasts coming together to create an intentional family and overcome adversity. A group of players are stronger because of their differences from each other. You don't want four fighters; you want a fighter, a cleric, a rogue and a wizard. In other words, you want a group that is powerful because of its diversity* (Crawford in Hazel, 2021, para. 3).

Inspired by Arksey and O'Malley's (2005) work on scoping reviews, we understand scoping reviews as a methodological process designed to help researchers explore the current extent of research in a specific area (Levac et al., 2010). We began our research process by exploring the current literature around utilising TTRPGs for social outcomes - such as social growth or for social skills development. In line with Arksey and O'Malley's (2005) Stage 1 of a scoping review, which they describe as *Identifying the Research Question,* we began our research journey by undertaking some broad searches into the area of TTRPGs in the literature from social work, psychology and communications. This

search strategy allowed us to briefly explore the focus of existing research in this area, so we could identify a research question. Each member of our research party undertook broad searches based upon the various methods we use in our respective disciplines. We then connected to discuss the findings of these and to help formulate our research question. Upon meeting back at the virtual tavern (or Zoom as it was for us) we discussed that although we were each able to find some research into TTRPGs being used in therapy settings (particularly D&D), we each found that there was a significant gap in the research exploring the social growth of players engaging with TTRPGs. This was supported by an article in *The Guardian* by Hazel (2021) who found that "while there is no shortage of anecdotes about how D&D has transformed the lives of neurodiverse players and their families, published studies are few and small in scope" (Hazel, 2021). After some debate around our virtual tavern, our party decided to explore the research question: *How can TTRPGs promote social growth in their players?*

With our mission now clarified, we returned to the literature with a specific search focus. Duvnjak et al. (2022), informed by Arksey and O-Malley's approach to creating a scoping review (2005) highlight the importance of maintaining a broad approach to defining concepts and search terms when searching for sources. Following this advice, each member of our research team undertook their own individual search processes using a variety of keywords including tabletop, social, autism, rpgs, autistic, therapy, health, neurodivergence/neurodiverse, conflict resolution, rpgs, ttrpgs, role play, roleplaying. We noted that significant amounts of the literature did not use the term TTRPGs, when referring to the games used, but rather referred to a specific TTRPG system such as D&D (Gygax & Arneson, 1974) or *Call of Cthulhu* (Petersen, 1981) in their writing. Being that D&D made up by far the majority of Tabletop RPG search queries on Google in 2021 (Weinberger, 2021) our research team decided to include some of the most popular TTRPG game names *D&D, DnD, Call of Cthulu, Shadowrun, Starfinder* &

Pathfinder in our search terms. In undertaking these searches, the research team utilised their individual preferred search processes based on their unique backgrounds and disciplinary focuses. This included searches through electronic academic databases such as SpringerLink, Sage and Google Scholar as relevant grey literature. Including grey literature in our exploration aimed to include perspectives and insights from the field, such as organisations like *Minds at Play*, Games Masters or social work professionals that suggested interventions using D&D as a tool resulted in social growth in their players. We acknowledge that through using English search terms in our exploration, we are only including research studies and perspectives that have been published in English in this article.

Findings & Discussion

Research by Adams (2013) suggests that playing TTRPGs can help individuals maintain friendships and strong relationships even outside of the roleplaying time itself. Cassidy & Rodgers (2017) work suggests rising levels of suicide in autistic people and Pelton & Cassidy's (2017) research suggests that when individuals feel a "sense of belonging", suicide risk is dramatically reduced. In their exploration of the way D&D players utilise group communication to fulfil social needs, Adams (2013) found that through working together on a campaign, a sense of group camaraderie developed and as a result, players could experience democratic participation through their membership of a gaming community. As Adams concludes:

> *"RPGs function as remarkable sites for social engagement and cognitive health benefits. Motivations to play are situated in the game's ability to utilize communication as a tool to enact democracy, enhance relationships, participate in spontaneity, and perform morality"* (2013, p. 83).

Just as the pandemic forced many of our activities online, research by Scriven (2021) demonstrated that D&D was not immune to being moved into the online space. Driven to explore if remote play could "mitigate the effects of social isolation" (p.3), Scriven undertook a thematic analysis of Reddit threads of D&D players who transitioned from playing face to face to online due to lockdowns. Findings from Scriven's study found that around 19% of people surveyed preferred playing D&D through online formats rather than in person.

Writing about the online game, *Minecraft*, Zolyomi and Schmalz (2017) suggest that online gaming communities have the potential to bring together neurodivergent and neurotypical people together in collaborative and imaginative ways. As Henrich and Worthington (2021) propose, roleplaying can be particularly positive for adolescent and vulnerable service users, suggesting that D&D may be a useful tool to engage those who might be reluctant to engage in therapies, especially given the potential to facilitate social growth through changes to the ways players learn to interact with others without them necessarily needing to acknowledge the addressed behaviour. This is supported by Abbott et al (2022) who interviewed adults who had participated in playing D&D as an intervention for people experiencing social anxiety and with "a history of trauma, anxiety and depression" (2022, p. 20). Participants told them that playing D&D was a better experience than group therapy as there was not a focus on talking about their feelings. Players reported having increased confidence, that they had learned a little about managing confrontation in that they could do it through their character and experienced being able to move past the fear of making mistakes. There was some evidence that the skills trialled and learned from playing were transferable to the real world.

Whilst spending more time together through play, relationships are likely to become stronger, research also demonstrates that by their very nature, games such as TTRPGs have the ability to promote empathy and respect for perspectives different to those that we experience every day (Hollander, 2021). The ability of games to teach or educate through play has been well researched (Prensky & Berry, 2001; Gee, 2003; Squire, 2003). Seminal games researcher Koster (2013)'s work explored how games have a unique ability to teach players "how aspects of reality work, how to understand yourself, how to understand the actions of others, and how to imagine" (Koster, 2013, pp.34). Ian Bogost's 2008 work used the term procedural rhetoric to describe how the systems, such as the rules and processes contained within a game can help promote specific ideologies in their players.

Earlier in this paper we explored how D&D groups are most powerful when they contain a diverse set of character archetypes. In order to complete a campaign in D&D, a variety of attributes such as charisma, strength and dexterity can be used in different ways to address challenges, and each can be extremely valuable attributes to the broader party. Each character created has a diverse set of these skills and as such, are each important members of a party that offer their own ways to help address such challenges. In this way, a core part of the gameplay of D&D works to create a procedural rhetoric that highlights to players the ideology of how those with different skills and backgrounds may have their own perspectives and may approach solving challenges in a way that differs from those of another.

Research by those including Valorozo-Jones (2021) explores how the activity of role playing is a "core activity" undertaken by those playing TTRPGs like D&D and is also an effective process undertaken in therapy settings to help individuals practice skills in a low-risk environment. Valoronzo-Jones describes how "D&D replicates the social

constructs of the real world" (Valorozo-Jones, 2021, p. 10) and explain how the structured environment facilitated by the rules and processes of D&D can actually benefit individuals who are neurodivergent to "experience positive shifts in self-esteem, and practice transferable self-autonomy skills for potential out-of-game, real life self-advocacy and liberation" (Valoronzo-Jones, 2021, p. 10). Role-playing is an accepted tool of social work and other human service education, where, according to Gómez-Poyato and colleagues, (2020, p. 888), role playing enables "students to discover their abilities and the areas where they may have been less prepared" while providing "a greater sense of responsibility in their learning process…since they are not only the 'actors' but also the observer-participants in the process". Because we can we learn through play, Kostet (2013) proposes that a well designed game using role play provides a rich space for learning ways to engage with new ideas.

Further to this, the opportunity for players to role play characters with unique attributes and backgrounds facilitated by playing TTRPGS provides an exceptional opportunity to facilitate perspective taking. Perspective taking is acknowledged as an important source of human empathy (Batson & Shaw, 1991). Sasson's (2017) research suggests that neurotypical adults tend to judge autistic people as awkward, and as people they are unlikely to develop friendships with. Empathy is an often explored concept in neurodivergent/neurotypical communication and research by Milton (2012) into the disconnection between Autistic and non-autistic people highlighted something called the 'double empathy problem' which suggests that neurotypical people struggle to empathise with Autistic people and vice versa because of the differences in the ways that neurotypical and Autistic people experience the world. For example, in their research, Valorozo-Jones (2021) explored the creation of a homebrew campaign for D&D that worked together with neurodivergent players to create gameplay elements and characters who represented neurodivergence within the game. This work

demonstrates how homebrew campaigns are an accessible way in which GMs can combine the existing rules and processes of D&D together with additions and modifications that utilise the power of procedural rhetoric in their campaigns. By creating both neurotypical and neurodivergent characters, this allows players to gain insight and understanding into alternate perspectives, experiences and points of view. However, such a process should be carried out sensitively and carefully. Valorozo-Jones (2021) explains how through using a variety of TTRPG safety tools, such as Lines & Veils (Edwards, 2003), where lines describe elements that players don't want to be included in a campaign at all and veils describe elements that players are comfortable with including, however they should not be spotlighted on or focused on in the campaign. Other safety tools such as the use of the X Card (Stavropoulos, n.d) which allows a player to place, tap or create an X symbol to have a topic or element of a game avoided, and additional tools suggested by the TTRPG Safety Toolkit (Shaw & Bryant-Monk, n.d). TTRPG safety tools such as these which are not included in many games, including the current version of D&D by default, helped Valoronzo's research group "establish boundaries which establish psychological safety that is not typically available to neurodivergent folks in everyday life" (Valoronzo-Jones, 2021 p10). However, even when safety tools are used, they caution that creating neurodivergent homebrew elements should be created only by those with lived experience, highlighting how "relating to a character and lived experience are different" (Valoronzo-Jones, 2021, p11).

Moving Forward

This report has identified that there is a current gap in the literature regarding the use of TTRPGS to promote social growth in their players, however, what we did find was extremely encouraging in regard to this. There was significant positive research on the

use of TTRPGS in therapeutic and psychological areas as well as some positive research regarding the ability of TTRPGs to promote positive mental health and well-being. Overall, we suggest that there would be significant merit to pursuing further research and investigation into this area and here we make some suggestions regarding this.

In undertaking this review, we noticed that the academic literature in this area generally approached the topic of TTRPGS from the view of therapists engaging in D&D as a way to engage their clients in therapeutic outcomes. There was very little data in regard to players reporting their own experiences. We suggest that further research into this area should be careful to include a focus on player voices as well as that of the facilitator. We also noted that the language used in academic articles discussing neurodivergent groups was generally focused on the medical model, utilising terms such as "with autism" and "asd". Research by Bottema-Beutel et al (2021) notes how the language used to communicate about autism can perpetuate ableist ideologies. Terms such as these may work to further marginalise neurodivergent players and researchers from engaging with research in this area. To result in research that is inclusive of a variety of player types, future investigation and research into this area should ensure that researchers engage with an anti-ableist stance and make intentional choices about the language used (Bottema-Beutel et al., 2021). Such research should also ensure it includes a variety of perspectives including from neurodivergent players and GMs.

In our methodology section we noted that the D&D system (generally the fifth edition of D&D, published in 2014) was overwhelmingly referred to in the academic literature, with very little mention of other TTRPG systems present. Polkinghorne et al (2021) suggest that this may be due to the popularity and availability of D&D, however they highlight that in research exploring therapeutic outcomes, there is a lack of research into the game system itself and what it contributes to these outcomes (Polkinghorne et

al, 2021). In fact, research by those such as Garcia (2017) highlights that D&D has a problematic history regarding gender and race, and even where improvements have been made regarding this, there are still elements present in D&D that could promote ableist perspectives (Garcia, 2017) and as such may prove detrimental to promoting positive social growth. Exploring alternative TTRPG systems and resources such as Fate Core and its associated Fate Accessibility Toolkit (designed by those with lived experience of disability and neurodiversity) may better suit a specific campaign and its circumstances. Where D&D is the preference for use however, there are many who are adapting or modifying the system in order to better suit their goals, such as Game to Grow and Minds at Play.

Moving forward and in order to address some of the considerations outlined here, we suggest further research into this area explores the way in systems such as Minds at Play owns, navigate and fight some of the challenges outlined here. There is much to be learned regarding strengthening social growth from the way that campaigns such as this are created and delivered and only with diverse research parties can these challenges truly be explored.

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