

**Narrative Play: Using Tabletop Role-Playing Games for the Cognitive
and Emotional Development of Diverse Populations**

by

Fox Mori

Paper submitted in partial fulfillment of the requirements for the degree of

Master of Counselling
in the
Division of Arts and Sciences

City University of Seattle
2025

This paper is accepted as conforming to the required standard
February 5, 2025

Anna Rissanen, PhD
Research Supervisor
City University of Seattle

Abstract

In this thematic literature review the author explores how tabletop role-playing games (TRPGs) can be a suitable tool for improving the social and emotional skills of various populations of clients. The utilisation of TRPGs reduces the symptoms of social anxiety, improves social connectedness, and enhances emotional resilience. The research on whether virtual or in-person TRPG sessions are more effective is mixed, because the researchers conducted their studies during the Covid-19 pandemic; thus, the results vary depending on the circumstances. Grounded in Yalom's (1970) group therapy framework and Bandura and Walters's (1963) social cognitive theory, this capstone highlights that TRPGs can improve interpersonal skills, motivation, and engagement from adolescence to older adulthood. The findings suggest that TRPGs create a structured yet flexible atmosphere in which the participants feel safe, accepted, and comfortable with taking risks in a low-stakes environment to practise social interactions, develop problem-solving abilities, and engage in the co-creation of narratives. Additionally, current research has suggested that TRPGs can increase intrinsic motivation and might be a suitable alternative for individuals who do not engage in traditional forms of therapy. However, the literature also reflected potential limitations, including safety concerns, the necessity of skilled facilitation, and ethical considerations with regard to fantasy-reality distinctions. The implications for practice include the need to develop a structured, regulated facilitation training, which did not exist at the time of this research. Future researchers should explore the longitudinal impacts and standardisation models to strengthen the empirical basis for therapeutically applied role-playing games (TA-RPGs).

Keywords: *therapeutically applied tabletop role-playing games (TA-TRPGs), tabletop role-playing games (TRPGs), Dungeons & Dragons (D&D), social anxiety, autism spectrum disorder (ASD)*

Acknowledgements

Thank you to Dr. Rissanen for your guidance, feedback, and support on this project.

Thank you to my lovely spouse, who watched the chaos unfold. Thanks to Linda, the amazing editor who gave fantastic feedback on this project!

Table of Contents

Chapter One: Introduction	7
Background Literature	9
TRPGs in Therapeutic Settings	9
Foundations in Psychodrama and Role Play	9
Early Research in TRPGs.....	9
The Evolution of Tabletop Role-Playing Games	10
Wargames.....	10
Contemporary Evolution of TRPGs (2000s–Present).....	11
Crowdfunding and Indie Storytelling.....	13
TRPGs in Education	14
Creativity, Engagement, and Learning.....	14
Applications Across Disciplines.	14
Research Topic	15
Research Problem	15
TA-RPGs: What Is the Effectiveness of This Intervention?	15
Rationale and Justification.....	17
Significance of the Research	18
Framework and Applications.....	18
Theoretical Framework	18
Yalom’s (1970) Group Therapy Theory.	19
Bandura and Walters’ (1963) Social Cognitive Theory.....	19
Applications.....	20
Methodology.....	20
Databases and Search Engines.....	21
Search Terms and Refinement.....	21
Key Terms	27
Reflexivity Statement	29
Outline of Capstone Project Chapters.....	30
 Chapter Two: Literature Review	 32
Research Paradigm and Design	33
Role of the Researcher.....	33
Quantitative Studies.....	33
Qualitative Studies.....	34
Mixed-Methods Studies.....	34
Participants and Sampling	34
Recruitment and Sampling Procedures	34
Sample Size	35
Sample Characteristics	35
Limitations of Participants and Sampling	35
Data Collection	36
Data Analysis.....	37
Ethical Considerations.....	40
Consent.....	40

Confidentiality and Care.....	42
Findings	43
Social Connectedness and Collaboration	44
Collaboration and Trust.....	44
Increased Social Bonds.	45
Emotional Resilience and Empathy Development.....	46
Emotional Resilience.....	46
Empathy Through Role Playing.....	49
Social and Cognitive Skill Development	51
Enhancing Social Communication and Inclusion.	51
Social Functioning in Neurodivergent Populations.	52
Pop Culture and Social Insertion.....	53
Building Cognitive Skills Through Structured Play.....	54
Problem Solving and Perspective Taking.	54
Structured Cognitive Engagement.	54
Creativity and Cognitive Flexibility.....	54
Adaptive and Personalised Learning.....	55
Tailoring Therapeutic Content.	55
Real-Time Adaptation.	55
Chapter Three: Applications to Clinical Practice	58
Discussion.....	58
Future Research	64
Applied Practices.....	67
Reflections on Personal Learning.....	69
References.....	71

List of Tables

Table 1. Summary of Sampling Procedures	23
Table 2. Summary of Research Articles	25
Table 3. Summary of Data Collection and Analysis in the Selected Studies	37
Table 4. Summary of Ethical Considerations	41
Table 5. Clinical Recommendations Based on the Findings	59

Narrative Play: Using Tabletop Role-Playing Games for the Cognitive and Emotional Development of Diverse Populations

Chapter One: Introduction

Psychological interventions for adolescents and adults can present challenges when they seek engaging, cost-effective treatment for social anxiety. The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed. [DSM-5]; American Psychiatric Association [APA], 2013) describes social anxiety as a marked fear of or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others; the fear or anxiety is out of proportion to the actual threat that the social situation poses. Firstline treatments for social anxiety disorder involve cognitive-behavioural therapy (CBT) and medications (APA, 2013; Muskin, 2023). The *Diagnostic and Statistical Manual of Mental Disorders Text Revision* (5th ed.; APA, 2022) describes *neurodevelopmental disorders* (NDDs) as a group of conditions with onset in the developmental period that induce deficits that produce impairments of functioning, such as intellectual disability, communication disorders, autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), and neurodevelopmental motor disorders (APA, 2022). However, a gap in the research exists on how to apply tabletop role-playing games (TRPGs) in therapy treatments to improve social and emotional skills. Research has suggested that resistance to treatment is not uncommon for this population because many find it difficult to open up and fully engage in counselling sessions during a time of great change (Abbott et al., 2021; Gutierrez, 2017). As neurodivergent individuals transition through different stages of life, it can involve specific challenges such as social anxiety, changes to routines, lack of emotional resilience, and lack of engagement (Feller et al., 2024; Goodall & Truong, 2021; Katō, 2019). Therapeutic rapport, trust building, and a sense of connection are key factors in the therapeutic alliance; and

mental health professionals must break through clients' resistance and reluctance to open up, which can potentially increase their anxiety and isolation when they seek help (Kilmer, Rubin, et al., 2023).

Individuals with social deficits might avoid their anxiety triggers or social situations as a method of coping, which increases anxious thoughts and feelings or causes further avoidance. Those who suffer from social anxieties often want to seek connection with others and meet others online because of their lack of skills in social situations (Kilmer, Rubin, et al., 2023). Individuals with ASD, along with their families and friends, are often misunderstood; and they often become victims of stereotyping and biases (Kilmer, Rubin, et al., 2023). Current research has suggested that individuals with social-skills deficits have a lower quality of life (QOL) as a result of their decreased satisfaction with communication with others and their struggles with interpersonal relationships (Katō, 2019). It is important that counsellors be aware of all the tools that they require when they work with neurodivergent individuals and those who have social anxieties.

In this capstone project I conducted a comprehensive literature review to explore the integration of TRPGs into therapeutic interventions and to answer the following research question: "How can TRPGs enhance social connectedness, emotional resilience, and the development of empathy in diverse populations?" I will synthesise the findings from the existing research and develop a foundation for a discussion of the therapeutic applications of TRPGs. I was also interested in understanding how TRPGs can create a therapeutic effect through role playing and how players can create shared narratives that might improve their emotional well-being and social connection.

Background Literature

TRPGs in Therapeutic Settings

Foundations in Psychodrama and Role Play. TRPGs' theoretical basis in therapeutic settings stems back to Moreno and Jennings (1934), who introduced psychodrama as a novel approach to therapy and human interrelations. According to Moreno and Jennings, psychodrama involves enacting scenarios from participants' lives in a group setting and enabling them to explore their emotions, rehearse alternative behaviours, and gain insight into interpersonal dynamics. Psychodramas emphasise spontaneity, creativity, and role assumption and offer the participants a structured yet flexible framework for emotional expression and interpersonal growth. Moreno and Jennings laid the groundwork for role playing as a tool for (psychological) exploration and the establishment of principles that would later combine with Yalom and Leszcz's (2021) group therapy model and inform the development of TRPGs as a therapeutic medium (Rosselet & Stauffer, 2013; White et al., 2018).

Early Research in TRPGs. Building on the psychodrama framework, Zayas and Lewis (1986) explored the integration of TRPGs, specifically *Dungeons & Dragons (D&D)*, into therapeutic interventions for children. Working with boys aged eight and nine years from diverse socioeconomic backgrounds, they demonstrated that TRPGs could enhance their social skills and group cohesion by participating in collaborative storytelling and problem solving. The children developed key interpersonal competencies, such as effective communication, conflict resolution, and teamwork, which suggests the therapeutic potential of TRPGs to foster self-esteem and mutual support within the group dynamic. This echoes Moreno and Jennings' (1934) emphasis on the transformative power of role playing to enable the participants to build emotional resilience by engaging in controlled, low-stakes scenarios. These settings enable the players to

experiment with coping strategies, confront challenges, and recover from setbacks, which they can transfer to real-life situations outside the TRPG sessions (Billieux et al., 2023; Kilmer, Rubin, et al., 2023). In another seminal work, Blackmon (1994) demonstrated the therapeutic application of TRPGs in a case study of a client diagnosed with schizoid personality disorder. Blackmon drew on the principles of psychodrama and demonstrated that the structured fantasy environment of *D&D* enabled the client to explore emotions and social interaction safely by assuming a fictional role within the game, externalising internal conflicts, and rehearsing adaptive behaviours. These concepts align again with Moreno and Jennings' concept of using enacted scenarios as a medium for psychological growth to develop a framework for individuals who struggle with traditional therapeutic modalities that balances structure and imaginative freedom (Abbott et al., 2021; Slaughter & Orth, 2023). These early studies inspired ongoing research into the integration of TRPGs into modalities such as trauma-focused cognitive behavioural therapy (Gutierrez, 2017) and Adlerian play therapy (Rosselet & Stauffer, 2013) and reinforced their potential for versatility and efficacy in contemporary therapeutic contexts.

The Evolution of Tabletop Role-Playing Games

Wargames. The development of TRPGs can be traced back to the early frameworks of wargaming, a genre of games based on simulated wars that involve tactical play and strategies (Davidson, 2012; Deterding & Zagal, 2018). *Braunstein* (developed in 1969), one of the first TRPGs that David Wesely created, assigned individual roles to each player, such as the banker, town mayors, university chancellors, and various military positions (Tresca, 2014). He drew his inspiration from *Strategos* (developed in 1880), a military wargame that Charles A. L. developed and initially meant as a battle-strategy training tool for both new and veteran military soldiers (Peterson, 2012). *Strategos* had two versions: a basic version that focused on introductory

scenarios played with written instructions and a board and an advanced version that involved three topographic maps (one for the referee and one for the each of the red and blue opposing armies). The referee's map was the master copy that contained all of the battlefield information, whereas the two army maps showed only knowledge known to the respective armies (Peterson, 2012). In 1967, David Wesley (as cited in Peterson, 2012) rediscovered *Strategos* and improved the rules by adding new role-playing components and the third dimension of miniatures (little models that represented characters on a wooden board or topographic map) that were movable based on the players' commands (Peterson, 2012). In 1971 a new medieval miniature wargame, *Chainmail*, expanded upon *Strategos*. Both games became the foundation for *D&D*, which drew on the wargaming framework (Peterson, 2012; Tresca, 2014). *D&D* introduced core elements such as hit points, armour classes, character progress, and a core set of rules that set the stage for modern TRPGs (Peterson, 2012). The game's success spawned numerous competitors and innovations, such as *RuneQuest* in 1978 and *Traveller* in 1977, which expanded the genre into various settings and systems (Ewalt, 2024).

Contemporary Evolution of TRPGs (2000s–Present). In the 1990s, TRPGs were on the decline because of the trading of card games such as *Magic the Gathering* (Wizards of the Coast [*WotC*], 1999) and *Pokémon* (Pokémon Company International, 2024) and role-playing (video) games. The early 2000s marked a transformative period for TRPGs, characterised by innovative publishing frameworks, the diversification of game designs, and a resurgence in popularity driven by digital platforms and cultural shifts (Tresca, 2014). In 2000, *Wizards of the Coast* introduced the Open Game License (OGL), a revolutionary publishing policy that enabled third-party developers to create compatible materials for *D&D*; this led to an explosion of supplementary content and independent systems based on the d20 framework (White et al.,

2018). The OGL facilitated editions 3 and 3.5 of *D&D* (each revision of the rules is called an *edition*; hence, the third revision and a second revision of the third edition, 3.5), which inspired a wave of creativity across the industry and sparked new games with similar open-source approaches (Appelcline & Adamus, 2014). *Pathfinder* (developed in 2009, Paizo, n.d.), a direct competitor that utilises the OGL, sparked the *edition wars*, a term that fans use to describe the intense consumer loyalty and rivalry within the TRPG community (Appelcline & Adamus, 2014).

Simultaneously, the Old School Renaissance movement emerged, which focused on the minimalist design and open-ended gameplay of the early TRPGs such as the original *D&D*. Games such as *Labyrinth Lord* (Proctor, 2007) and *Swords & Wizardry* (developed in 2008; Mythmere Games, n.d.) reimagined vintage systems and blended nostalgic mechanics with modern collaborative storytelling and player-driven narratives; this emphasised player creativity and Game Master (GM) improvisation and further diversified the TRPG landscape (Appelcline & Adamus, 2014). During the mid-2010s a cultural resurgence of TRPGs, driven by actual-play web series such as *Critical Role* (n.d.) and *Adventure Zone* (n.d.), featured live play and live broadcasting on streaming websites such as *Twitch* (n.d.) and introduced TRPGs to a wider audience, which redefined them as both social activities and forms of performance art (Jones, 2021; Whitten, 2020). By 2021, and because of the COVID-19 pandemic, the trend accelerated when lockdowns and social-distancing measures increased the adoption of virtual platforms for TRPG sessions; this highlighted the accessibility and inclusivity of TRPGs through streaming and podcast formats and cultivated a global fanbase (Abbott et al., 2021; Allison, 2021; Henning et al., 2024). Online tools such as *Roll20* (n.d.) and *Discord* (n.d.) enabled players to connect remotely and made TRPGs sources of social connection and creative expression during a period

of acute isolation for some individuals (Abbott et al., 2021; Henning et al., 2024; Kilmer, Rubin, et al., 2023).

Crowdfunding and Indie Storytelling. Crowdfunding platforms such as *Kickstarter* (Kickstarter, 2024) and *Itch.io* (Corcoran, 2013) revolutionised the production and distribution of TRPGs and allowed Indie creators and designers to bypass traditional gatekeepers and directly engage with audiences, which brought projects to life. Indie projects such as *Blades in the Dark* (Harper, 2017) and *Thirsty Sword Lesbians* (Walsh, 2021) exemplify the innovative model and framework of TRPGs and blend unique mechanics with diverse and inclusive narratives for all audiences and stories. For example, *Queerz! RPG* (Moshe, 2024) is a blend of traditional TRPGs with Japanese manga interwoven with LGBTQ+ themes. *Queerz! RPG* also involves psychological concepts such as radical acceptance; the premise of the game is focused on turning the villains, called *Ignorance*, into allies through “exhilarating action with exuberant campiness and a message of radical acceptance, of finding a way to love ourselves and those different from us” (Moshe, 2024, para. 4). Crowdfunding supported a vibrant ecosystem of creators, enthusiasts, and players, spanning back from WotC’s OGL (Carter, 2022; Hedge & Grouling, 2021; Jones, 2021). Crowdfunding had solidified its role as a cornerstone of modern TRPG development in 2024. The evolution of TRPGs in the 21st century reflects their adaptability and enduring appeal and transcends their origins as niche hobbyist activities to become dynamic media for storytelling, education, and therapy. As digital platforms and community-driven initiatives continue to evolve, TRPGs should be a consideration for clinicians’ toolkits because of the interactive, collaborative, and cultural experiences that players share in both recreational and professional contexts (Hedge & Grouling, 2021; Jones, 2021; Kilmer, Rubin, et al., 2023).

TRPGs in Education

Creativity, Engagement, and Learning. TRPGs engage learners of various ages by captivating them in rich narratives, problem solving, and teamwork. Players assume roles within fictional contexts and actively contribute to the story's progression and problem solving (Deterding & Zagal, 2018). This form of experiential learning resonates with constructivist principles, which emphasise hands-on engagement to build knowledge such as historical events and cultural settings, which can foster empathy and deeper understanding through role immersion (Abbott et al., 2021; Deterding & Zagal, 2018). Historical-themed TRPGs such as *D&D* create the unique opportunity to recreate or forge new identities during role plays and enable players to explore different roles by creating character backstories and adapting to evolving scenarios to foster critical thinking and imaginative problem solving (Bowman, 2010; Hammer et al., 2018; Rosselet & Stauffer, 2013). Through skillful and thoughtful planning, TRPGs emphasise teamwork and communication, which makes them powerful tools to cultivate social and collaborative skills (Abbott et al., 2021). In game sessions, players engage in shared decision making, conflict resolution, and cooperative planning, which align with sociocultural theories of learning, in which group interactions lead to the co-construction of knowledge (Gutierrez, 2017; Hammer et al., 2018). Research has demonstrated that TRPGs can build the confidence of quiet or marginalised students by fostering an equitable environment in which every voice can contribute meaningfully (Bowman, 2010; Rosselet & Stauffer, 2013).

Applications Across Disciplines. Research in multiple disciplines has reflected the versatility of TRPGs, ranging from language acquisition to STEM education and the simulation of scientific or engineering challenges, which enable students to apply theoretical knowledge in practical contexts (Gutierrez, 2017; Katifori et al., 2022). Language educators use role playing to

develop conversational fluency and cultural competence, and social studies educators have employed TRPGs to explore historical and sociopolitical dynamics (Hammer et al., 2018; Shaffer, 2006). For instance, epistemic games (Shaffer, 2006) use role playing to help students to experience professional identities, such as scientists or historians, by scaffolding and narrowing knowledge into specific disciplines to enable them to gain a deeper understanding.

Research Topic

In this capstone I addressed various components to answer the research question “How can TRPGs enhance social connectedness, emotional resilience, and empathy development in diverse populations?” First, I will explain social anxiety, the symptoms associated with the disorder, and its impact on various aspects of life, including social functioning, QOL, relationships, and social skills. Second, I will present an overview of current research on the effectiveness and application of TRPGs, as well as the integration of TRPGs into therapeutic settings. Third, I will explore the various applications in which TRPGs have been used, ranging from educational and forensic to therapeutic settings. Finally, I will summarise the benefits, limitations, and barriers of TRPGs as therapeutic tools. The benefits include improved social connectedness, decreased anxiety, enhanced emotional resilience, and the ability to address diverse psychological needs in nontraditional talk therapy.

Research Problem

TA-RPGs: What Is the Effectiveness of This Intervention?

In this capstone project I explored the following question: “How effective are TRPGs as therapeutic tools to fosters social connectedness, social skills, and emotional skills in diverse populations?” In particular, I examined the integration of TRPGs into therapeutic interventions to enhance interpersonal and emotional skills. The current therapeutic landscape relies

predominantly on traditional talk therapy and evidence-based modalities such as CBT and group therapy, along with medications to treat social anxiety disorders (Muskin, 2023; Slaughter & Orth, 2023). Although these approaches have shown efficacy for many, they might not fully address the needs of populations who struggle with conventional therapeutic models, such as those with neurodivergent conditions or who are resistant to traditional forms of therapy and engagement (Billieux et al., 2023; Katō, 2019; Slaughter & Orth, 2023). According to Morris-Rosendahl and Crocq (2020), various studies have shown that 22% to 83% of children diagnosed with ASD have symptoms that satisfy the *DSM-IV* (APA, 1994) criteria for ADHD, whereas 30% to 65% of children with ADHD have clinically significant symptoms of ASD, while NDDs are diagnosed more in males than females. The *DSM-5* (APA, 2022) cites the male-to-female ratios of 4:1 for ASD, 2:1 for ADHD in children, 1.6:1 for mild intellectual disability, and 1.2:1 for severe intellectual disability. Researchers have observed that social difficulties can contribute to lower self-esteem and academic difficulties and that social withdrawal and social anxiety are interrelated (Feller et al., 2024; Katō, 2019).

Alterations and limitations in social communication are hallmarks of ASD specifically, in addition to repetitive and restrictive behaviours and interests (APA, 2013, 2022; Feller et al., 2024). Notably, individuals with ASD tend to exhibit weaker adaptive behaviours, Feller et al. (2024) defined as “the skills required to function and be independent in everyday environments” (p. 2), and lower skills in socialisation, which makes it difficult to make friends and act in appropriate ways with peers and family (APA, 2022; Katō, 2019). This can lead to the *double empathy problem*, in which communication breakdowns occur between autistic and nonautistic people as a two-way street when both parties have difficulties with understanding; it does not point to the social shortcomings of people with autism as reasons for their mis-interactions

(Milton et al., 2022). With this in mind, some researchers have argued that traditional social-skills training can actually do more harm to individuals with ASD, which emphasises the need for more nontraditional forms of social-skills development training programs (Leaf et al., 2021).

For individuals with social anxiety disorder, research has shown that the lifetime prevalence rates range from 8% to 12%, which makes it one of the more common anxiety disorders; the ratio is approximately 2:1 for women-to-men (APA, 2013). The average age of onset is between 8 and 15 years, and most individuals have a childhood history of social inhibition or shyness (APA, 2013). According to the *DSM-5* (APA, 2013), about 30% of individuals experience remission within the first year and about 50% within several years, whereas individuals who do not receive treatment take several years to achieve remission (APA, 2013; National Institute of Mental Health, n.d.). Based on US data from the National Institute of Mental Health (n.d.), an estimated 29.9% of adults with severe social anxiety disorder have serious impairment, 38.8% have moderate impairment, and 31.3% have mild impairment; and up to 72% have a diagnosis of another psychiatric disorder (Katzman et al., 2014). Approximately half of individuals with social anxiety disorder seek treatment, typically 15 to 20 years after they have experienced symptoms; hence, the need to explore alternative treatments (APA, 2013).

Rationale and Justification

I explored whether TRPGs can offer significant benefits in therapeutic contexts, particularly in improving the social and emotional functioning of diverse groups. Additionally, the historical view of TRPGs is that they are primarily recreational activities, such as live streams on *Twitch* or family-time game nights. Further research is needed to validate their potential as structured therapeutic tools. Current research has suggested that TRPGs can serve as an alternative, interactive medium in which participants engage in cooperative storytelling and

imaginative problem solving; they offer a unique blend of social interaction, creativity, and emotion expression similar to group therapy (Katifori et al., 2022; Yuliawati et al., 2024). Existing studies have demonstrated promising results in small-scale interventions for adolescents with ASD, individuals with social anxiety, and youth who were isolated during the COVID-19 pandemic (Katō, 2019; Kilmer, Ruben et al., 2023). However, a notable gap exists in large-scale, longitudinal research on the generalisability and long-term effects of TA-RPG interventions. By systematically reviewing the available literature, I aim to foster a more holistic understanding of the role of TRPGs in therapy and identify the gaps that future researchers should address.

Significance of the Research

This literature review has the potential to lead to further studies on the integration of TRPGs into therapeutic settings, their ability to improve social and emotional skills, and the needs and wants of participants who might not respond well to traditional therapeutic methods. By synthesising current research and identifying areas that require more research, I hope that clinicians will consider TRPGs as a potential option in their work with neurodivergent individuals, socially anxious clients, and those who are socially isolated. As digital and remote TRPG platforms continue to evolve, the findings of this capstone will also support the development of virtual therapeutic interventions and make therapy more accessible and inclusive for those who seek mental-health support and connection.

Framework and Applications

Theoretical Framework

In this capstone I utilised a constructivist approach to understand the participants' experiences from their constructed worldview; this framework incorporates various perspectives and researchers' own interpretations because they are directly involved in the research process

(Cresswell & Cresswell, 2022). Because TRPGs often have GM, in TA-RPGs psychologists or group counsellors often become the GM, which involves them directly in the research (Yuliawati et al., 2024). The two major theories that I applied are Yalom's (1970) group therapy theory and Bandura and Walters' (1963) social-cognitive theory as guiding frameworks to explore the effectiveness of TRPGs as tools to enhance social and emotional skills. Yalom's model emphasises emotional expression and interpersonal learning, which aligns with the inherent nature of TRPGs to foster group cohesion and personal insight; in contrast, Bandura's theory highlights behavioural modeling and self-efficacy and shows that TRPGs can teach adaptive behaviours and enhance confidence (Henning et al., 2024; Katō, 2019; Slaughter & Orth, 2023). These theories create the foundation for an understanding of how group-based, interactive, and imaginative experience can foster personal growth and learning.

Yalom's (1970) Group Therapy Theory. Yalom's (1970) group therapy theory emphasises the importance of interpersonal learning and group dynamics in the therapeutic process. TRPGs offer a structured yet flexible environment in which the participants engage in collaborative storytelling and create a natural context for the key therapeutic factors in this theory. Specifically, TRPGs facilitate group cohesion, altruism, and interpersonal learning as the participants work together to navigate challenges within the game. The GM functions similarly to the group facilitator to foster a safe and supportive atmosphere that encourages open emotional expression and mutual support (Billieux et al., 2023; Boysen et al., 2023; Yuliawati et al., 2024).

Bandura and Walters' (1963) Social Cognitive Theory. Bandura and Walter (1963) emphasised the role of observational learning, modeling, and reinforcement in behavioural change (Bandura & Walter, 1963; Mujahidah & Yusdiana, 2023). TRPGs create a dynamic

setting for a small group of participants who learn through observation and role play, model behaviours through their characters, and receive feedback from both their peers and the GM; this reinforces their adaptive social and emotional responses (Bandura & Walter, 1963; Henning et al., 2024; Kilmer, Davis, et al., 2023; Kilmer, Ruben et al., 2023). Central to Bandura and Walters' theory, the players also develop self-efficacy as they overcome in-game obstacles, build confidence, and transfer these skills to real-world interactions (Abbott et al., 2021; Katō, 2019).

Applications

The process of creating or modifying TRPGs introduces players to project-based learning, which combines writing, mathematics, scientific reasoning, and visual design through engaging in “learning by making” (Ke et al., 2019, p. 2), a hallmark of constructivist theory. This approach also promotes critical reflection as the players explore how their game mechanics and narratives convey implicit arguments about the world (Hammer et al., 2018). Building on critical reflection, the collaborative nature of TRPGs promotes scaffolded learning, in which the participants learn from their peers and gradually develop more complex skills; this echoes Vygotsky's (1978) concept of the zone of proximal development.

Methodology

My search process began with an initial focus on adolescents; specifically, those with ASD. However, after I conducted a preliminary search using the terms *TTRPGs OR TRPGs OR tabletop role-playing games AND adolescents AND ASD*, I discovered that the search results were too narrow and that qualitative studies focused on specific neurodivergent populations such as individuals with ASD, ADHD, and nonverbal ASD were overrepresented. To broaden the scope and improve the diversity of the research pool, I jotted down the keywords that appeared in the articles that I had read in the preliminary search. I expanded the search terms to *TTRPGs*

OR TRPGs OR tabletop role-playing games AND therapy AND TA-RPGs OR therapeutically applied tabletop role-playing games, removing the restriction on adolescent populations. This broader focus allowed for a wider range of studies, involving both adolescents and adults, and slightly improved the balance between coming across more qualitative and quantitative studies.

Databases and Search Engines

I conducted the search using academic databases such as the University of Seattle online library, Google Scholar, and PsychInfo, which ensured access to a wide range of peer-reviewed articles with full texts that did not involve memberships or any form of payment. My primary search focused on research articles published between 2018 and July 4, 2024 (the date of the search). I selected this timeframe to include the most recent studies and accounted for the delays in academic publishing because of the Covid-19 pandemic, when researchers conducted most of the TRPG studies in person, and they had to be cancelled or moved to an online platform during the pandemic period. This shift impacted many researchers who had to either stop or delay their research from 2020 to 2022, because TRPG research is traditionally conducted in person. With only 54 articles left from the initial search, I further narrowed my search by reading the abstracts, which eliminated 23 articles that did not meet the inclusion criteria. After I read the abstracts, I read full articles and further decreased the total pool to 12 articles by using the exclusion criteria.

Search Terms and Refinement

I used the following key terms in various combinations to locate relevant articles: *tabletop role-playing games (TTRPGs/TRPGs), emotional resilience, social skills, narrative therapy, and therapeutically applied TRPGs (TA-RPGs)*. The inclusion criteria were (a) peer-reviewed primary research published between 2018 and 2024 that focused on the therapeutic application of TRPGs in clinical or educational settings; (b) studies that addressed social

connectedness, emotional resilience, or empathy as therapeutic outcomes of TRPGs; (c) articles in which the researchers utilised quantitative, qualitative, or mixed methods; and (d) articles in which the researchers examined human subjects and no technology/artificial intelligence to ensure diversity in the population samples. Next, I used the following exclusion criteria:

(a) studies not published in English, (b) grey literature and non-peer-reviewed articles, and (c) articles that did not provide any information on the population under study (e.g., sample size, Discord server bots) or included fewer than three participants, because most TRPG groups typically consist of four to eight participants.

Many of the researchers employed convenience or purposive sampling, but Cresswell and Cresswell (2022) argued that, although this method is effective for targeted interventions, these studies often hinder their broader applicability. For example, Abbot et al. (2021) utilised a small convenience sample of adults with social anxiety ($n = 7$) and argued that, despite the fact that their research was proven effective, the sample size significantly limited the generalisability of their findings on social connectedness through the use of TRPGs. Goodall and Truong (2021) employed purposive sampling in their qualitative exploration of therapeutic role-playing games and included another small sample size ($n = 9$), which means that they might not have fully captured the wide range and diversity of experiences in the broader population, as Table 1 shows. Notably, Billieux et al. (2023) employed a more rigorous multiple single-case experimental design with a detailed baseline and follow-up assessments and a small sample size ($n = 20$), which restricted their generalisations. A few studies were larger. For example, Boysen et al. (2023) employed a mixed-methods approach with a larger sample size ($n = 75$). Cresswell and Cresswell (2022) argued that larger sample sizes strengthen the validity and generalisability of the findings, because studies in which the researchers include only small sample sizes are

Table 1*Summary of Sampling Procedures*

Study reference (methodology)	Sampling strategy	Recruitment strategy	Participants
Abbott, M. S., Stauss, K. A., & Burnett, A. F.	Convenience sampling	Invitation	Adults (n = 7), ages 18-45; 3 females, 4 males with social anxiety
Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A.	Purposive (selective) sampling	Online survey via recruitment through online gaming communities, mental health services, and social media platforms	Gamers (n = 20), aged 18-35; 12 males, 8 females with sub-clinical gaming disorder and social anxiety
Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M.	Convenience sampling	Invitation through educational institutions and social media platforms.	Participants (n = 75), 32 third-year student teachers (9 female and 5 male in the first cycle and 11 female and 7 male in the second cycle, all aged 20-22 years); 2 third grade school classes (9 girls and 9 boys in the first cycle and 11 girls and 9 boys in the second cycle, all aged 9-10 years); 4 educators and 1 TRPG expert
Feller, C., Ilen, L., Eliez, S., & Schneider, M.	Convenience sampling	Recruited from clinical centers in Geneva and France, network of medical professionals, family associations, University of Geneva announcements, and siblings of 22q11DS carriers.	Participants (n = 151), 47% female (n = 71), aged 12-30 years. ASD group: 34 individuals (44% female, mean age = 19.97, SD = 5.03); 22q11DS group: 54 individuals (43% female, mean age = 19.31, SD = 4.62); TD group: 64 individuals (52% female, mean age = 18.76, SD = 3.82). All participants had sufficient command of the French language.
Goodall, A. M., & Truong, A. H.	Purposive (selective) sampling	Semi-directed interviews with self-identified participants.	Participants (n = 9), ages 23-56; 6 males, 3 females with TRPG experience
Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., de Oliveira, D. A., Werpp, M., Moraes, L., & Neto, F. L.	Convenience sampling	Invitation	Adolescents (n=6), ages 13-17; with ASD and social skill deficits

Study reference (methodology)	Sampling strategy	Recruitment strategy	Participants
Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y.	Convenience sampling	Open invitation via personal networks, Discord servers, and YouTube channels followed by an online questionnaire.	Game Masters (GMs; n = 17), with men (n = 15), female (n = 1), and prefer not to say (n = 1), Ages 18-25 (n = 5), 26-35 (n = 4), 36-45 (n = 6), above 45 (n = 1). Occupations include students (n = 3), educators (n = 1), IT professionals (n = 2), graphic designers (n = 5), civil servants (n = 2), and others (n = 4)
Katō, K.	Convenience sampling	Invitation and selection from outpatient clinics and schools.	First study: Japanese Junior high school students with ASD (n = 4), female (n = 2), male (n = 2), aged 13-14, average FIQ score: 117.5. Second study: Japanese teenagers (n = 51), male (n = 41), female (n = 10) with high-functioning ASD, average age: 14, average FIQ score: 101. Interviews with Japanese teenagers (n = 10), male (n = 7), female (n = 3), average age: 14.9, average FIQ score: 112.5
Kilmer, E., Rubin, J., Scanlon, M., & Kilmer, J.	Purposive (selective) sampling	Invitation through teacher/counsellor announcements at two Title 1 schools in the U.S., with free program access to ensure participation from low-income families.	Adolescents (n = 16; Fall 2020), returning (n = 14; Winter 2021); Mean age 11.5 years, range 10-13 years; male (58%), female (42%); diagnoses included ADHD, anxiety disorders; interviews conducted with 12 parents and 8 youth participants
Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J.	Quasi-experimental	Invitation	Czech university students (n = 562) from six courses in psychology and political science over two years. After exclusions, n = 466 (average age = 21.61 years, SD = 1.82; 62% women)
Slaughter, M., & Orth, E.	Purposive (selective) sampling	Invitation within a forensic facility.	Adult males (n = 7) at a Southern forensic facility, ages 27-45 with severe mental health diagnoses
Webb, R., & Cesar, P.	Convenience sampling	Survey posted on the Roll20 subreddit.	Participants (n = 14), ages 18-35; 12 Game Masters (GMs), 2 Player Characters (PCs)

limited in nature, and further research on its application to the general population is required. In the included studies the researchers consistently emphasised the use of reliability measures such as Cronbach's α and thematic coding to ensure the trustworthiness of their qualitative and quantitative data.

Nonrandomised designs, such as Kratochvíl et al. (2022) used in their quasi-experimental study, present challenges in establishing clear causal relationships to understand the long-term effects of TRPGs on emotional resilience and social skills. Moreover, the diverse participant demographics in the 12 literature studies that I selected (Table 2) include elementary school children (Katō, 2019), adolescents with ASD (Henning et al., 2024), adults of various ages, and forensic patients (Slaughter & Orth, 2023), which highlights the adaptability of TRPGs in various therapeutic settings. However, the relatively small sample sizes and recruitment methods (Table 1) constrained these studies and limited the generalisability of the findings to the larger population. My literature review includes both qualitative and quantitative research and offers valuable insights into how TRPGs can foster emotional and social development under specific research conditions. However, further research with larger and more diverse samples is required to address the limitations and strengthen the overall findings.

Table 2

Summary of Research Articles

Author(s)	Title	Year	Research design and paradigm	Research topic and connection to current research question
Abbott, M. S., Stauss, K. A., & Burnett, A. F.	Table-top role-playing games as a therapeutic intervention with adults to increase social connectedness.	2021	Qualitative; exploratory	Investigates TRPGs, specifically Dungeons & Dragons, in therapeutic settings to improve social connectedness among adults with social anxiety. Relates to research question due to TRPGs' impact on social skills and emotional resilience.

Author(s)	Title	Year	Research design and paradigm	Research topic and connection to current research question
Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A.	Can playing Dungeons and Dragons be good for you? Tabletop role-playing games to mitigate social anxiety and reduce problematic gaming.	2023	Mixed methods; single-case design	Examines TRPGs' potential in reducing social anxiety and problematic gaming in MMORPG players. Explores the integration of TRPGs into therapeutic settings for social skills improvement.
Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M.	The role of expertise in playful learning activities: A design-based self-study within teacher education aimed at the development of tabletop role-playing games.	2023	Design-based self-study; constructivist	Explores TRPGs as educational tools to enhance creativity, collaboration, and narrative skills among student teachers. Relates to research question due to fostering collaboration and empathy development.
Feller, C., Ilen, L., Eliez, S., & Schneider, M.	Social skills in neurodevelopmental disorders: A study using role-plays to assess adolescents and young adults with 22q11.2 deletion syndrome and autism spectrum disorders.	2024	Mixed methods; pragmatist	Investigates social skills in adolescents and young adults with 22q11.2 deletion syndrome and autism spectrum disorders (ASD), using role play. Relates to research question due to TRPGs' effect on social skills in adolescents with neurodevelopmental disorders.
Goodall, A. M., & Truong, A. H.	Pop culture and social insertion: How can play in adolescence and adulthood be "therapeutic"?	2021	Qualitative; social constructivist	Investigates the therapeutic potential of TRPGs in promoting social insertion and well-being. Relates to research question due to TRPGs' role in enhancing social skills and emotional resilience.
Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., de Oliveira, D. A., Werpp, M., Moraes, L., & Neto, F. L.	Social skills training with a tabletop role-playing game, before and during the pandemic of 2020: In-person and online group sessions.	2024	Mixed methods; pragmatist	Analyses the impact of social skills training via TRPGs in online and in-person settings. Relates to research question due to the role of TRPGs in enhancing social skills and emotional resilience.
Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y.	Tabletop role playing games and creativity: The game master perspective.	2022	Qualitative; phenomenological	Explores creativity from the perspective of the Game Master in TRPGs, emphasising co-creation and engagement. Relates to research question due to enhancing social skills through collaborative processes.

Author(s)	Title	Year	Research design and paradigm	Research topic and connection to current research question
Katō, K.	Employing tabletop role-playing games (TRPGs) in Social communication support measures for children and youth with autism spectrum disorder (ASD) in Japan: A hands-on report on the use of leisure activities.	2019	Mixed methods; pragmatist	Focuses on promoting social communication and improving quality of life (QOL) for youth with ASD through TRPGs. Relates to research question due to the use of TRPGs in improving communication and social skills.
Kilmer, E., Rubin, J., Scanlon, M., & Kilmer, J.	Therapeutically applied RPGs to support adolescent social connection and growth during the COVID-19 pandemic.	2023	Mixed methods; pragmatist	Studies the therapeutic use of TRPGs in enhancing social connectedness in low-income adolescents during the COVID-19 pandemic. Relates to research question due to supporting the integration of TRPGs in therapeutic settings.
Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J.	Gamification in academia: Does psychological engagement booster performance?	2022	Quasi-experimental	Investigates the effects of gamification on engagement and performance in academic settings, with potential connections to TRPGs' use for enhancing social skills and motivation.
Slaughter, M., & Orth, E.	An uncontrolled case study of a table role-playing therapy group with difficult-to-engage patients.	2023	Qualitative; case study	Explores the use of TRPGs in therapeutic settings for patients resistant to traditional therapy. Relates to research question due to TRPGs' potential in creative and interactive group therapy models.
Webb, R., & Cesar, P.	Uncovering seams in distributed play of tabletop role-playing games.	2019	Qualitative; ethnographic	Examines the dynamics of virtual TRPGs and their impact on social skills development and group dynamics. Relates to research question due to the development of social skills through distributed TRPG play.

Key Terms

Tabletop role-playing games (TTRPGs/TRPGs). A genre of collaborative storytelling in which the participants take on the roles of fictional characters and navigate a shared narrative that a GM facilitates. Players make decisions within a set of structured rules, often guided

by randomisers such as dice. These games emphasise creativity, problem solving, and group dynamics (Billieux et al., 2023; Katō, 2019; Mackay, 2001).

Therapeutically applied tabletop role-playing games (TA-RPGS). TRPGs used in structured therapeutic settings to achieve specific psychological or social goals. The interactive and immersive nature of TRPGs helps therapists to address issues such as social connectedness, emotional resilience, and cognitive skill development. Research has shown that TA-RPGs are particularly effective for neurodiverse populations and individuals with social anxiety or a history of trauma (Abbott et al., 2021; Kilmer, Rubin, et al., 2023; Zayas & Lewis, 1986).

Emotional resilience. The capacity to recover from emotional distress, adapt to challenging circumstances, and maintain psychological well-being. With regard to TRPGs, it helps the participants to confront hypothetical challenges, manage stress within the safety of the game, and develop coping strategies, which can transfer to real-life situations (Boysen et al., 2023; Katō, 2019).

Game Master (GM)/Dungeon Master. The facilitator, referee, or storyteller in a TRPG who guides the narrative, arbitrates rules, and creates challenges for players to overcome. In therapeutic contexts, the GM is typically the therapist, whose role often extends to tailoring game scenarios to meet specific therapeutic goals. The GM acts as a bridge between the game's structure and the participants' needs (Abbott et al., 2021; Game to Grow, n.d.-b; n.d.-c.; Hoover et al., 2018).

Autism spectrum disorder (ASD). A neurodevelopmental disorder characterised by (a) persistent impairments in reciprocal social communication and social interaction and (b) restricted, repetitive patterns of behaviour, interests, or activities (APA, 2013). I use the term

spectrum because the manifestations and functional impact of the disorder can vary greatly depending on the severity of the autistic symptoms, the developmental level, and the chronological age (APA, 2013, 2022).

Actual play. Primarily verbal accounts of one's own experience of play. It focuses on the nondiegetic interpersonal experience of being at the table and interacting with others to play the game (Jones, 2021; Mackay, 2001).

Social anxiety disorder (also known as social phobia). An anxiety disorder that is characterised by a significant amount of fear in one or more social situations that causes significant distress and an impaired ability to function in some or many aspects of daily life, either real or perceived by the individual (APA, 2013).

Focalisation. Refers to the angle or perspective from which individuals experience events during TRPGs, including from diegetic (in-game world), endogenous (rules framework), and exogenous (social context) perspectives. These concepts elucidate how players frame narratives and interactions during gameplay (Genette, 1979; Toolan, 1988).

Reflexivity Statement

As a student who aims to become a psychologist in Alberta, following the *Code of Ethics* (Canadian Psychological Association [CPA], 2017) is vital to maintain professional and ethical standards and accreditation with a provincial body (College of Alberta Psychologists [CAP], 2023). Part of the *Code of Ethics* involves understanding my potential biases when I conduct and synthesise research. I play TRPGs frequently to explore my growth as a person and a professional, which attributes many psychological benefits to this practice. I believe that TRPGs reflect storytelling, an important aspect of my Indigenous culture. Rather than retelling old tales, TRPGs enable others and me to reflect, co-create, and build new narratives within fantasy realms

through storytelling and shared experiences. From my Indigenous heritage, storytelling helps me to focus both on Western and Indigenous values and enables me to hold multiple perspectives through an *Etuaptmumk* (two-eyed seeing) approach, a term that Mi'kmaq Elder Alberta Marshall developed (Bartlett et al., 2012; Wright et al., 2019). This *Etuaptmumk* framework does not advocate for the assimilation or accommodation of one knowledge system within another; instead, it calls for a collaborative endeavour to employ both Indigenous and Settler epistemologies in tandem to address questions with the requisite respect and deference that they warrant through a journey of mutual learning and teaching. Two-eyed seeing helps me to examine TRPGs from an Indigenous perspective and recognise the value and strengths of both Western and Indigenous knowledge systems (Ahmed et al., 2022; Kiddle et al., 2021). This awareness helps me to adhere to the CPA's (2017) *Code of Ethics* and the College of Alberta Psychologists' (2023) *Standards of Practice* and reminds me to be mindful of multiple perspectives as a researcher. To further this practice, I will continue to write and share these stories as I practise self-reflection in the spirit of the Truth and Reconciliation Commission of Canada's (2015) *Call to Action 92*. The goal of this literature review is to explore TRPGs as an intervention that might currently be underused to treat a diverse population ranging from youth to adults. Last, I recognise that the use TRPGs might not be applicable to all populations or cultures, especially those who do not have strong oral skills, struggle with reality, or put themselves and others at risk (González, 2024; Gutierrez, 2017; Yalom & Leszcz, 2021).

Outline of Capstone Project Chapters

Chapter Two presents an in-depth review of existing literature on the application of TRPGs in therapeutic settings. I explore how TRPGs support social engagement, emotional resilience, and cognitive skills, particularly for neurodivergent individuals and those with social

anxiety. I synthesise the key findings, identify gaps in the literature, and discuss ethical and methodological considerations in previous studies. In Chapter Three I revisit the purpose of the project, along with the research question that I posed in Chapter One, and then discuss and comment on the findings, limitations, recommendations, and future research on TRPGs. I also discuss how clinicians, educators, and facilitators can integrate TRPGs into therapeutic practice to support individuals with social anxiety, isolation, and social and emotional skill deficits. Through this critical lens, I examine ethical concerns, facilitator training, and the necessity of structured debriefing sessions to maximise therapeutic benefits, as the researchers recommended. I conclude with what I have learnt from this capstone process and recommend ongoing research to refine best practices in TA-RPGs.

Chapter Two: Literature Review

Based on the targeted literature search, I selected 12 research articles (Table 2) that were appropriate to explore the potential of TRPGs to foster emotional resilience and enhance social skills in various populations. Several themes emerged from the research articles that were relevant to the research question “How can tabletop role-playing games (TRPGs) enhance social connectedness, emotional resilience, and empathy development in diverse populations?”

The researchers explored the impact of TRPGs on empathy, engagement, and emotional resilience among their participants, in controlled, structured environments. They found that people use TRPGs in various settings, such as mere entertainment for people of various ages, in therapeutic and academic settings, and in forensic group therapy for difficult-to-engage clients for whom traditional therapy failed (Slaughter & Orth, 2023). Additionally, the literature highlighted that TRPGs can create both structured and flexible environments in which the participants engage in collaborative storytelling, role playing, and problem solving. These activities offer vital benefits to mental health, foster social skills, and encourage emotional development (Abbott et al., 2021; Boyson et al., 2023; Katō, 2019). The following key themes emerged: player engagement and motivation, emotional safety, social connectedness, and emotional resilience and growth. Finally, the literature suggested that the application of TRPGs is successful only if the GMs are skilled, have thorough training, are flexible, and have mastered the art of storytelling and creativity (Boysen et al., 2023). These studies have challenged our understanding of the potential of TRPGs, but they also bring to light important gaps in the research that researchers must address to be able to integrate TRPGs effectively into mainstream therapeutic practices, as I argue in this capstone paper.

Research Paradigm and Design

The researchers of the peer-reviewed studies used mainly mixed-methods research designs (in six articles; Table 1) with a pragmatic worldview (Creswell & Creswell, 2022). The other most common worldviews were quantitative (in five articles), postpositivist (in two articles), and social constructivist (in two articles). Because the studies were mostly mixed-methods and qualitative research, they promoted a more comprehensive and nuanced understanding of how TRPGs impact social connectedness and emotional growth in diverse populations. Applying a mixed-methods design, the researchers created a more holistic view by combining quantitative measures through tests and assessments with qualitative insights, which helped to capture both measurable outcomes and the subjective experiences of their participants (Creswell & Creswell, 2022). For example, Billieux et al. (2023) used a combination of single-case designs and qualitative interviews to examine TRPGs' mitigation of social anxiety and problematic gaming, which they would not have been able to do with a single quantitative or qualitative research design. The researchers who focused on therapeutic interventions through phenomenological and ethnographic paradigms were able to explore the lived experiences of their participants as they engaged in role-playing scenarios (Henning et al., 2024; Katifori et al., 2022).

Role of the Researcher

Quantitative Studies

Creswell and Creswell (2022) argued that the researcher's role is to remain objective by creating control and experimental groups to minimise researcher bias and the variables that can influence or impact the outcomes. This objectivity is essential in studies such as that of Billieux et al. (2023), in which the researchers used controlled experimental designs and isolated certain

variables to examine the impact of TRPGs on social anxiety. This is especially important in experimental designs in which the researchers isolated the specific effects of TRPG intervention on issues such as social anxiety and problematic gaming behaviours.

Qualitative Studies

Qualitative researchers take a more personal and integrated role in collecting data and developing their theories and insights based on the data that they collect rather than testing preexisting hypotheses (Cresswell & Cresswell, 2022; Pregoner, 2024). In the qualitative studies that I selected, the researchers conducted interviews, facilitated or observed TRPG sessions, and engaged with their participants. Cresswell and Cresswell (2022) recommended that researchers partake in some form of reflection in the research design to help them to recognise their own biases and judgements.

Mixed-Methods Studies

Mixed-methods research, such as the studies of Boysen et al. (2023) and Feller (2024), necessitate a balance between objectivity and subjectivity. The researchers had to navigate two roles to maintain neutrality while they collected quantitative data and adopt a more interactive approach during the qualitative phases. They ensured that their presence did not significantly shape the data in the quantitative phases engaged in deeper interactions with the participants in the qualitative phases, which enriched the insights (Cresswell & Cresswell, 2022; Pregoner, 2024).

Participants and Sampling

Recruitment and Sampling Procedures

The researchers of the majority of the studies that I selected used a convenience-sampling approach to gather participants (Table 2). They sent online invitations to potential participants in

gaming communities, mental health services, and educational institutions across various regions globally. Convenience sampling is a common recruitment method that targets participants within a specific population, compared to random sampling, in which each member of a population is equally likely to be chosen (Cresswell & Cresswell, 2022). Other recruitment methods were purposive sampling (Billieux et al., 2023; Goodall & Truong, 2021; Kilmer, Rubin, et al., 2023; Slaughter & Orth, 2023) and a quasi-experimental procedure (Kratochvíl et al., 2022). Most researchers recruited participants through invitations that they sent to online gaming communities, educational institutions, and some clinical centres (Table 1). Some of the researchers offered financial compensation (Billieux et al., 2023; Kilmer, Rubin, et al., 2023).

Sample Size

Because most of the researchers utilised convenience sampling to recruit participants, they did not predetermine the sample sizes, which ranged from 4 to 562 across various demographics and regions.

Sample Characteristics

The researchers of the studies that I selected for this capstone project all gathered information that offered insight into the ability of TRPGs to enhance social connectedness, emotional resilience, and empathy development in diverse populations. Most of the studies involved a wide range of participants, including elementary school students, adolescents, young adults, and middle-aged adults in countries such as Geneva, France, United States, Czech Republic, and Japan; they represented a diverse population.

Limitations of Participants and Sampling

Because a majority of the researchers used convenience sampling, the generalisation of the results to the broader population is limited. Although this approach makes sense when

researchers target specific populations such as adolescents with ASD or individuals who struggle with social anxiety, it restricts the application of the results beyond these specific populations (Cresswell & Cresswell, 2022). This is an important consideration because minority populations might be overrepresented, which is evident in Feller et al.'s (2024) study of individuals with 22q11DS. This makes it even more difficult to generalise the research findings because their recruitment was nonrandomised, which leads to the question of how much the findings could be generalised to a more diverse, randomly selected population. Last, several researchers did not conduct long-term follow-ups, which makes the lasting effects of TRPG interventions on emotional resilience and social skills uncertain.

Data Collection

Maintaining the integrity of the data that the researchers collected requires a detailed examination of each study's methodology to be able to base the conclusions on the results of the experiments and the researchers' findings. The researchers whose studies I reviewed used a variety of data-collection methods that included direct TRPG game observations, self-reports, interviews, and thematic analyses. Although qualitative insights emerge from the participants' experiences, they lack the control of variables and causation reflected in more structured experimental designs (Cresswell & Cresswell, 2022).

One major limitation is the lack of randomised trials in these studies, which makes it difficult to establish any direct causal links between participation in TRPGs and measurable therapeutic outcomes because of the subjective nature of the studies (Cresswell & Cresswell, 2022). The second major limitation is the small sample sizes in most of this research on TRPGs: The participants ranged from three to 10 players, which made it difficult to generalise the results to the broader population.

Data Analysis

Most of the quantitative researchers used descriptive statistics, thematic analyses of TRPG-session transcripts, and multilevel linear regression to determine the effectiveness of the interventions that they tested (Table 3). They combined their descriptive statistics with univariate and bivariate correlations (analysis of variance, Pearson's r , t -test) to assess variables such as social anxiety reduction and empathy development, draw connections, and observe potential relationships (Abbott et al., 2021; Cresswell & Cresswell, 2022). This approach assumes a linear relationship among the variables, whereas bivariate correlations confirm a relationship between two variables. Several of the researchers used Cronbach's α to measure the reliability of the scales that assessed social skills, emotional regulation, and problematic gaming (Billieux et al., 2023; Henning et al., 2024; Kratochvíl et al., 2022).

Table 3

Summary of Data Collection and Analysis in the Selected Studies

Study reference (methodology)	Variable(s) measured	Data collection tools/instruments	Reliability measures	Data analysis strategy
Abbott, M. S., Stauss, K. A., & Burnett, A. F.	Social connectedness, social anxiety, social skills, interpersonal effectiveness	Semi-structured interviews, facilitator notes, session recordings	Content validity through independent coding, thematic saturation	Thematic analysis, crystallisation and triangulation, content analysis
Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A.	Social anxiety, problematic gaming, social skills, self-concept, assertiveness, loneliness	Internet Gaming Disorder Test (IGDT-10), Liebowitz Social Anxiety Scale (LSAS), Self-Discrepancy Scale (S-DS), Rathus Assertiveness Scale (RAS), UCLA Loneliness Scale (UCLA-LS)	Cronbach's α , Interclass Correlation Coefficient (ICC)	Visual analysis, non-overlap indices, Reliable Change Index / Clinically Significant Change, between-case standardised mean difference

Study reference (methodology)	Variable(s) measured	Data collection tools/instruments	Reliability measures	Data analysis strategy
Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M.	Teacher expertise in TRPGs, collaborative creativity, student engagement	Audio recordings of sessions, student teacher memos, group interviews, positional maps	Cross-validation through iterative cycles and group analysis, thematic coding	Thematic analysis, grounded theory elements
Feller, C., Ilen, L., Eliez, S., & Schneider, M.	Social skills (e.g., assertiveness, negotiation), social anxiety, social functioning	Social Skills Performance Assessment (SSPA), Emotion Regulation and Social Skills Questionnaire (ERSSQ), Vineland Adaptive Behavior Scale (VABS-II), Social Interaction Anxiety Scale (SIAS)	Interclass Correlation Coefficient (ICC) for SSPA, Cronbach's α for ERSSQ, Non-parametric statistical tests	Descriptive statistics, Kurkal-Wallis test, Spearman correlations, Discriminant Function Analysis (DFA)
Goodall, A. M., & Truong, A. H.	Social insertion, therapeutic effects of TRPGs, self-expression, development of social skills	Semi-directed interviews, qualitative data analysis using QDA Miner (Provalis Research), audio recorders	Cross-validation through horizontal and vertical coding analysis to analyse themes	Thematic analysis of interview transcripts
Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., Werpp, M., Moraes, L., & Neto, F. L.	Social skills (e.g., empathy, assertiveness), impact of TTRPG on social skills interactions, parental perceptions	Social Skills Inventory for Adolescents (IHSA), Group Climate Questionnaire (GCQ), Clinical Global Impressions (CGI) scale, Homework scale (adapted from the Goal Attainment Scaling method), qualitative interviews	Cronbach's α for IHSA, thematic coding for qualitative data	Descriptive statistics, Friedman test, thematic analysis of interview data
Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y.	Game Master (GM) perceptions of creativity, motivations for GM participation, impact of TRPG on creativity	Online questionnaires	Likert scale analysis, thematic coding	Descriptive statistics, thematic analysis
Katō, K.	Social communication, Quality of Life (QOL)	Transcript analysis of TRPG sessions, Japanese version of the Kid-KINDL Questionnaire, Interviews	Fisher's exact test for statistical significance, t-test for per- and post-intervention comparison	Coding of speech acts, t-test comparison, thematic analysis of interviews

Study reference (methodology)	Variable(s) measured	Data collection tools/instruments	Reliability measures	Data analysis strategy
Kilmer, E., Rubin, J., Scanlon, M., & Kilmer, J.	Social and emotional development, impact of virtually delivered TA-TRPGs, perspectives on social isolation during COVID-19	Semi-structured interviews	Intercoder agreement (discussion and consensus for theme identification)	Inductive thematic analysis
Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J.	Academic performance, gamification engagement, attitudinal engagement	Academic performance records, gamification system logs, attitudinal engagement questionnaire (adapted from UWES-9)	Reliability of the attitudinal engagement questionnaire was confirmed with Cronbach's α ($= .92$); Data on academic performance and gamification engagement were verified through cross-referencing course records	Multilevel linear regression, mediation analysis, descriptive statistics, correlation analysis
Slaughter, M., & Orth, E.	Psychological distress, group satisfaction, communication skills.	Group Satisfaction Scale (GSS), Kessler 6 (K-6), Questionnaires	No published reliability or validity data for GSS, K-6 reliability	Paired sample t-tests for pre- and post-survey analysis, thematic analysis for qualitative responses
Webb, R., & Cesar, P.	Narrative engagement, ludic interaction, social interaction	Ethnographic interviews, Flanagan's critical incident technique, thematic analysis of transcripts, video and audio recordings of interviews	Consistency across interviews, participant validation	Thematic coding, open coding, selective reporting based on themes, qualitative analysis of participant experiences

Kratochvíl et al. (2022) conducted multilevel linear regression and mediation analyses to explore the influence of TRPG interventions on academic performance and engagement in a gamification process, and they identified engagement as a potential mediating factor. Other qualitative researchers employed repeated-measures analyses of variance and tracked pre- and

postintervention assessments of social skills in the participants' outcomes over a period of time (Slaughter & Orth, 2023). Boysen et al. (2023) conducted a qualitative study in which they explored recurring themes in their participants' narratives and focused on emotional growth and collaborative behaviours in the TRPG sessions.

In the 12 research articles the results were statistically significant; however, the largest limitations of these studies were the small sample sizes and the lack of standardised tools, which made generalisability of the results to diverse and randomised populations difficult (Cresswell & Cresswell, 2022). Some researchers stated that future research is necessary to replicate the results with larger and more diverse samples in both virtual and in-person TRPG sessions. Kilmer, Rubin, et al. (2023) directly observed that the switch from in-person TRPG sessions to virtual sessions showed mixed results. All of the quantitative researchers acknowledged that cross-sectional designs do not demonstrate causality.

Ethical Considerations

As Table 4 shows, all of the 12 studies that I selected received institutional ethics approval as per the Declaration of Helsinki (World Medical Association, 2022). This requirement complies with the *Tri-Council Policy: Statement on Ethical Conduct for Research Involving Humans* (Canadian Institutes of Health Research et al., 2018). Also summarised in Table 4 are the additional professional considerations of consent, confidentiality, and follow-up as per the *Canadian Code of Ethics for Psychologists* (CPA, 2017).

Consent

In all 12 studies the participants' demographics varied. All of the researchers collected informed consent from the adults and parental consent for minors under the age of 18. They could have taken further steps to strengthen the ethical rigour, such as psychoeducation on the

Table 4*Summary of Ethical Considerations*

Study reference (methodology)	Institutional approval for research	Informed consent	Confidentiality	Other ethical considerations
Abbott, M. S., Stauss, K. A., & Burnett, A. F.	Yes	Yes	Not specified	Independent coders were used to enhance the credibility of the findings; approved by the University's Institutional Review Board.
Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A.	Yes	Yes	Not specified	Financial for compensation (20 CHF/session, 10 sessions); study pre-registered, external monitoring implemented for adherence to study protocol.
Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M.	Yes	Yes	Not specified	Ethical considerations include the iterative design approach and collaborative research framework.
Feller, C., Ilen, L., Eliez, S., & Schneider, M.	Yes	Yes	Yes, written consent from participants, with parental consent for those under 18.	Dual consent required for minors; no conflicts of interest declared.
Goodall, A. M., & Truong, A. H.	Not specified	Yes	Yes	No conflicts of interest declared, emphasis on qualitative methodology ensuring participant-centered analysis.
Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., de Oliveira, D. A., Werpp, M., Moraes, L., & Neto, F. L.	Yes	Yes	Yes	Online sessions on Discord during the pandemic; adaptive strategies to maintain ethical standards.
Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y.	Yes	Yes	Yes	Voluntary and anonymous participation, data handled ethically and securely.
Katō, K.	Yes	Yes	Yes	Special attention to the needs of children with ASD, ensuring voluntary participation.
Kilmer, E., Rubin, J., Scanlon, M., & Kilmer, J.	Yes	Yes	Yes	Compensation of 25\$ for interview participation.

Study reference (methodology)	Institutional approval for research	Informed consent	Confidentiality	Other ethical considerations
Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J.	Yes	Yes	Yes	Voluntary participation, no undue pressure, with study design ensuring no harm.
Slaughter, M., & Orth, E.	Yes	Yes	Not specified	Potential bias acknowledged due to group leader's involvement in research; forensic setting adds ethical complexity.
Webb, R., & Cesar, P.	Not specified	Yes	Yes	Anonymised data and secure storage of recordings; unique privacy considerations for communication platforms.

therapeutic objectives of TRPGs, potential benefits, and potential risks (Abbott et al., 2021; Cresswell & Cresswell, 2022). It is important to note that the studies of Kilmer et al. (2023) and Billieux et al. (2023) had potential grey zones in that they lacked detailed information about the potential long-term effects of participating in TRPG interventions and failed to address the possibility of emotional distress during sensitive gaming scenarios. To comply with the *Tri-Council Policy Statement* (Canadian Institutes of Health Research et al., 2018) and the *Canadian Code of Ethics for Psychologists* (CPA, 2017), informed consent forms are required, along with an explanation of the reasons for the research, the principal investigator's contact information, and information on potential harm to the participants and on how to withdraw from the study without penalty to help the participants to make an informed decision.

Confidentiality and Care

Ethical research requires that researchers maintain the privacy and confidentiality of their participants, including of their identity (Canadian Institutes of Health Research et al., 2018; CPA, 2017). Most of the researchers ensured that they anonymised all of the identifying data, such as the transcripts, session recordings, and video footage, and encrypted them before their

analyses (Henning et al., 2024; Slaughter & Orth, 2023). However, a few researchers did not provide any information on how they maintained their participants' confidentiality, which could potentially have been compromised when TRPG sessions transitioned from in person to virtual during the COVID-19 pandemic. When researchers were prevented from collecting data in person, some studies mentioned data would be stored remotely while other studies stated data would be stored locally on physical storage devices (Billieux et al., 2023). This omission of information on the data collection raises concerns about the encryption and protection of digital information in accordance with the CPA's (2023) cybersecurity policies on working with clients remotely, because sensitive participant information could potentially be breached or become insecure if researchers do not use authorised digital platforms.

Findings

In summary, TRPGs foster social connectedness and emotional resilience and enhance social skills and empathy across diverse populations. Several themes emerged from the 12 research articles that I reviewed, including (a) social connectedness and collaboration, (b) emotional resilience and empathy development, (c) social and cognitive skill development, (d) learning through structured play, and (e) adaptive and personalised learning. The results of the TRPG sessions delivered virtually and in person were mixed, which, the authors asserted, could have been a result of abruptly being prevented from conducting research in person during the Covid-19 pandemic. All the findings include a range of factors, such as sociodemographics, age ranges, cultures, races, and neurodivergent disorders, that might not be predictive unless the researchers specified them as such. Some of the researchers observed that the varying levels of neurodivergence were a factor, which suggests that more research is needed to determine how

neurodivergence can vary and to what extent it impacts social skills. All of the findings are statistically significant unless otherwise specified.

Social Connectedness and Collaboration

Collaboration and Trust. In their qualitative study with seven participants, Abbott et al. (2021) found that TRPGs promoted social connectedness in adults who have social anxiety by facilitating positive social interactions in low-stakes role playing. The participants' self-reports and the facilitator's notes from direct observations of the TRPG sessions revealed that 86% of the participants perceived that their comfort increased in group interactions and that 92% felt a stronger sense of connection to others by the end of the session (Abbott et al., 2021). From the TRPG sessions the participants learnt that they needed to practise being stronger versions of themselves, that their confidence and confrontation skills improved, and that they were free to make choices and mistakes. Abbott et al. suggested that these skills became relevant to the participants' lives and transferred into their interpersonal relationships outside of therapy. A major limitation of the study was the small convenience sample size ($n = 7$), the inclusion of only a single group and no control group, and the reliance on self-reported data. The authors indicated the need for a larger, more diverse sample to be able to generalise the findings to broader populations and sociodemographics. Because other literature is available that supports the role of collaboration in TRPG interventions, it makes sense that the participants develop a sense of trust and collaboration, because TRPGs create a structured, interactive environment for individuals with social anxiety or limited social skills (Abbott et al., 2021; Katō, 2019; Kilmer, Rubin, et al., 2023).

Slaughter and Orth (2023), in their study that included seven participants in a TRPG therapy group at a Southern American psychiatric facility that was designed for adults who were

adjudicated not guilty by reason of mental illness, the results further support the links among social connectedness, collaboration, and trust. Slaughter and Orth studied three variables—psychological distress, group satisfaction, and communication skills—in relation to TRPGs and social-skill applications. The researchers conducted paired sample t-tests for pre- and postsurvey analyses to determine whether TRPGs result in positive change in certain mental health populations; specifically, difficult-to-engage patients for whom traditional psychotherapy was not effective. The measures that Slaughter and Orth used (Group Satisfaction Scale, Kessler-6, unspecified questionnaires) revealed that group satisfaction is related to the use of TRPGs by adult populations in psychotherapy groups. One limitation is that the first author was the only facilitator in the group therapy, which resulted in potential bias. Second, the researchers did not validate the measures that they used because, as they explained, no similar research existed; thus the psychometric properties are unknown because of the focus on group-member satisfaction with the treatment. The third limitation was the small sample size ($n = 7$), which made the inferential statistics underpowered. Slaughter and Orth therefore recommended future research to pilot-test their intervention, with patients randomly assigned to a no-treatment/waitlist control group.

Increased Social Bonds. Kilmer, Rubin, et al. (2023) reported that TRPGs promote social bonding in adolescent groups and helped their participants to overcome social isolation during the COVID-19 pandemic by fostering creativity, self-confidence, and perspective taking. From semistructured interviews with 12 parents and eight youth, they summarised the efficacy, social connectedness, and improved social bonds in the 20-week TA-RPG programs launched in two Title I schools in the US. The results included connection with peers to limit COVID-19 pandemic-related social isolation, engagement with challenges, perspective taking, co-creation

during storytelling, creativity, self-expression, and improvement in self-confidence. In the interviews the youth participants discussed their frequent experience of social isolation because of the COVID-19 pandemic and the uncertainty “amidst a year of profound change and instability.” (Kilmer, Rubin, et al., 2023, p. 219). The virtual TA-RPG sessions reduced their sense of isolation because they introduced opportunities to develop meaningful relationships and connect with peers while their schools and most programs for youth socialisation were closed. Although changes and instability were common throughout the pandemic, the youth and parents reported that the virtual TA-RPG sessions created a space for social interaction, enjoyment, and stability, thanks to the consistent weekly meetings combined with guided collaborative activities. The subjective responses of both the parents and the youth participants align with Katō’s (2019) quantitative study in Japan in which the researcher explored the impact of TRPGs on social bonds and the QOL of autistic adolescents. Through the fantasy elements of TA-TRPGs, Kilmer, Rubin, et al.’s participants experienced the roles and identities of the characters and the backstories that they created. They used quick, critical thinking and creative puzzle solving to find solutions to challenges that required self-confidence and leadership roles in certain parts of the story. The limitations of the study include the small sample of participants ($n = 18$), the parents’ unfamiliarity with TA-RPGs, and the large reliance on the youths’ self-reports and minimal observer reports.

Emotional Resilience and Empathy Development

Emotional Resilience. Billieux et al. (2023) examined the effectiveness of TRPGs in reducing social anxiety and problematic gaming behaviours among 20 participants aged 18–35 years whom they recruited primarily from online gaming communities. They employed a mixed-methods design and integrated single-case studies and qualitative interviews to capture both

quantitative and experiential data, and the findings suggest that the narrative problem solving embedded in the TRPG sessions helped to build the participants' confidence and regulate their emotional responses after the TRPG sessions, compared to at the beginning of the TRPG sessions. For example, the participants reported feeling less anxious when they faced hypothetical conflicts in the game, which suggests that they would have been able to apply these skills in real-world interpersonal interactions. However, a significant limitation of the study was Billieux et al.'s reliance on self-reported measures, which could have introduced bias without other assessments to determine whether changes occurred. Future research could strengthen these findings by incorporating larger, randomised samples and validated psychological assessments (Billieux et al., 2023).

In a similar study, Henning et al. (2024) focused on adolescents between 13 and 17 years old who were diagnosed with ASD according to the criteria in the *DSM-5* (APA, 2013). They conducted a mixed-methods study using the *Inventário de Habilidades Sociais para Adolescentes* ([IHSAs] Social Skills Inventory for Adolescents) that Del Prete and Del Prete (2018) devised, as well as thematic analysis. Over the course of in-person and online TRPG sessions, the six participants showed initial progress in managing their emotional responses during the cooperative gameplay, according to their Group Climate Questionnaire scores (Fies & MacKenzie, 1983). However, when the intervention shifted from in-person to virtual sessions because of the COVID-19 pandemic, Henning et al. observed a decline in skill acquisition, which they attributed to the lack of in-person dynamics such as observations of facial expression and eye contact. Despite these challenges, the study highlighted TRPGs' potential as a means of practising emotional regulation and adaptability in structured environments. Following the trend of most research conducted on TRPGs, a major limitation was the small sample size ($n = 6$),

which means that the results are not generalisable. Second, the reliance on the IHSA might not have fully captured the nuances of virtual social interactions, which calls for an adaptation of the IHSA because it was more effective for the in-person TRPG sessions. Henning et al. suggested that the IHSA might not have been the best tool to assess the social activities of individuals during a period of little or no social exposure (during the quarantine) and that specific items had no relevance to the population whom they studied.

Slaughter and Orth (2023) investigated TRPG-based therapy in a forensic setting and included seven patients who had been adjudicated not guilty by reason of mental illness. Using tools such as the Kessler-6 scale, the Group Satisfaction Scale, and qualitative interviews, the researchers found reduced psychological distress and improved group satisfaction and communication skills in their participants, who had reported reduced psychological distress as well as improved emotional resilience, specifically in their ability to navigate hypothetical stressors and collaboratively resolve emotionally charged situations. The findings suggest that TRPGs can be innovative interventions for populations who are resistant to traditional therapy, because collaborative gameplay improves emotional resilience in hypothetical situations that mirror real-life challenges. Slaughter and Orth acknowledged significant limitations of their study, including the lack of control groups and unvalidated measures, and recommended that researchers conduct replication studies with larger and more diverse samples to enhance the reliability and generalisability.

These studies collectively demonstrate that TRPGs enhance emotional resilience across diverse populations, from adolescents with ASD to adults with severe psychological distress. The findings align with those in Kilmer, Rubin, et al.'s (2023) research, in which they explored the role of TRPGs in fostering social connections and emotional stability among adolescents during

the COVID-19 pandemic. Kilmer, Rubin, et al. similarly emphasised the importance of consistent, structured gameplay to create a safe space for emotional exploration, although they also highlighted the challenges associated with transitioning from in-person to virtual formats. In Japan, Katō (2019) conducted research on the use of TRPGs with adolescents with ASD that reinforced the notion that role-playing interventions can create a foundation for emotional growth, particularly as a means of building confidence and managing anxiety through imaginative storytelling and problem solving.

Although the findings across the studies highlight the effectiveness of these interventions, limitations such as small sample sizes, reliance on self-reporting, and the need for validated measures suggest that further research in this field is essential. Future researchers should explore long-term effects, the role of the mode of delivery (in-person versus virtual), and broader demographic applications to better understand how TRPGs can enhance social and emotional skills (Henning et al., 2024; Katō, 2019; Kilmer, Rubin, et al., 2023; Slaughter & Orth, 2023)

Empathy Through Role Playing. Role playing in TRPGs facilitates empathy because it encourages the participants to explore emotions, motivations, and relationships from perspectives beyond their own (Boysen et al., 2023; Katō, 2019; Kratochvíl et al., 2022). By assuming diverse character roles, players can cultivate a deeper understanding of others' experiences, which fosters empathic engagement and self-awareness (Jones, 2021; Liapis & Denisova, 2023; Poeller et al., 2023; Slaughter & Orth, 2023). In a design-based self-study, Boysen et al. (2023) examined the role of TRPGs in enhancing empathy and collaboration among student teachers. Using audio recordings, group interviews, and thematic analysis, the researchers found that role-playing characters who faced moral dilemmas helped the participants to confront their biases and refine their decision-making skills. The participants (n = 75) reported greater appreciation for

emotional dynamics and collaboration, which suggests that perspective taking in TRPGs enhances professional expertise and improves empathic learning. Boysen et al.'s constructivist approach emphasised the interplay between co-creation and individual learning, although a limitation was their focus on a specific population of student teachers, which might not have enabled them to generalise their findings on TRPGs to other populations or other educational or clinical settings.

Katifori et al. (2022) expanded on empathy development by exploring the GM's perspective in TRPGs. Using a phenomenological approach, they analysed interviews with 17 GMs that revealed how their roles in shaping collaborative narratives fostered empathic engagement among the players. The participants affirmed that designing morally ambiguous scenarios encouraged them to empathise from multiple perspectives, which challenged their black-and-white thinking (Katifori et al., 2022). One GM reported often tailoring scenarios to reflect players' personal struggles, which created opportunities for emotional growth and aligns with Moreno and Jennings's (1934) psychodrama theory. A limitation of this study was its focus on the perspective of only GMs and less attention on the players' direct experiences, which future researchers should address (Katifori et al., 2022).

Webb and Cesar (2019) conducted an ethnographic study on TRPGs in virtual environments to determine the impact of virtual settings on empathy development without face-to-face interactions. Seamless gameplay was important to the players (n = 14) whom they interviewed, and in the virtual TRPG sessions, Webb and Cesar ranked functionality, media, and player appropriations as important to the players' experiences. The participants utilised unique forms of empathic engagement by using digital tools such as shared narratives and interactive storytelling in apps such as *Discord* and *Roll20*. However, a major limitation is that the virtual

medium's reliance on technological literacy might have excluded participants who were unfamiliar with digital platforms, which highlights an area for future research (Webb & Cesar, 2019). The second limitation was the researchers' focus on only interviews and little observation of actual play, which requires future observational studies to validate the theoretical findings from the players' perceived experiences.

Social and Cognitive Skill Development

Enhancing Social Communication and Inclusion. Katō (2019) conducted a mixed-methods study to explore the impact of TRPGs on intentional speech and social communication among Japanese youth with ASD. In five small-group TRPG sessions ($n = 51$), Katō encouraged the participants to engage in consensus building, negotiating ideas, and expressing themselves in structured narratives. The researcher used the Japanese version of the Kid-KINDL Questionnaire to measure the participants' QOL and reported improvements as a result of the enhanced social interactions in the sessions. Katō found significant improvements in the total QOL scores and reported the following the effect sizes (r) of the subscales in each outcome measure: 'physical well being': 0.56 (large); 'emotional well being': 0.62 (large); 'self esteem': 0.38 (medium); 'family': 0.31 (medium); 'friends': 0.55 (large), and 'school': 0.15 (small). A participant who completed the interview surveys ($n = 10$) commented, "I felt heard and valued," which highlights that TRPGs can create a safe, inclusive space for marginalised youth (Katō's, 2019). However, Katō's study's limited sample size and its focus on a culturally specific population restricted the generalisability of the findings to other cultures. Future research with broader, more diverse samples is necessary to validate these outcomes and explore their applicability across different contexts (Katō, 2019).

Social Functioning in Neurodivergent Populations. Building on these findings, Feller et al. (2024) use role-playing interventions inspired by TRPGs to examine the social-skill development of adolescents and young adults ($n = 151$) with 22q11.2 deletion syndrome and ASD. They used the *Autism Diagnostic Observation Schedule* (second version) to assess the participants in the ASD group and the *Autism Diagnostic Interview-Revised* or the *Social Communication Questionnaire* to assess their caregivers. Then Feller et al. used the *Diagnostic Interview for Children and Adolescents-Revised* or the *Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (DSM-5)* to screen the participants with ASD and 22q11DS for comorbid psychiatric disorders. Last, they used the *Structured Clinical Interview for DSM-IV Axis I* to assess the participants under 18 years old and the *DSM-5* to assess the participants over the age of 18. The researchers then used the *Social Skills Performance Assessment* and the *Social Interaction Anxiety Scale* to measure the outcomes. The participants demonstrated improvements in assertiveness and reductions in social anxiety, particularly during the cooperative gameplay scenarios, but Feller et al. observed trends in specific social skills: The skills of the participants with ASD and 22q11DS were similar but varied slightly in that the ASD group exhibited less socially adapted behaviours during the role plays, and the 22q11DS group were less assertive during the social-interactions portions. The typically developed group generally had better conversational skills, and the ASD and 22q11DS participants differed from each other in more specific conversational skills: Feller et al. reported that the 22q11DS group displayed higher social appropriateness and clarity of speech but their general argumentation and negotiation skills were weaker, whereas in the ASD group the trend was the opposite. Although the findings align with broader evidence that supports TRPGs as tools that enhance social inclusion and skills development in marginalised populations, Feller

et al. acknowledged limitations such as the artificial laboratory setting and the subjective nature of role-play scoring. These findings reinforce the potential of TRPGs to benefit neurodivergent populations but emphasise the need for further validation in real-world therapeutic settings.

Pop Culture and Social Insertion. Goodall and Truong (2021) conducted a qualitative study to explore how TRPGs foster social insertion by leveraging elements of popular culture. In semidirected interviews with nine participants aged 23 to 56 years, the researchers used thematic analysis to determine whether engagement with TRPGs facilitates meaningful connections, helps to develop interpersonal skills, and fosters a sense of community. Goodall and Truong selected their participants based on their self-identified use of TRPGs to overcome challenging life experiences and explored whether the stories and dialogues in TRPGs have a therapeutic quality that help the participants to heal and improve their social skills. They used *QDA Miner*, a qualitative data analysis software, to conduct a thematic analysis of the interview transcripts; it enabled the researchers to identify and categorise key themes keys, including (a) the therapeutic qualities of TRPGs, (b) the role of character creation in self-exploration, and (c) the games' capacity to simulate social interactions in a safe, supportive environment. Goodall and Truong argued that the playful and imaginative nature of TRPGs removes the normative pressures typically associated with social interactions and thereby create unique spaces for self-expression and community building. Their research suggests that these qualities make TRPGs well suited to social interventions that target marginalised populations, which echoes the findings of Feller et al. (2024) and Katō (2019). Despite the study's limited sample size and focus on a specific demographic, the findings add to the literature on the effectiveness of TRPGs as culturally relevant tools that promote social inclusion and mental health.

Building Cognitive Skills Through Structured Play

Problem Solving and Perspective Taking. Kilmer, Rubin, et al. (2023) conducted semi-structured interviews with both adolescents ($n = 16$) from low-income communities during the COVID-19 pandemic in the US and their parents and focused on perceived changes in their cognitive skills, including problem solving and perspective taking, over a 10-week period. The results indicate significant improvements in the participants' critical-thinking and decision-making abilities because of the various perspective-taking choices that the GM offered them to pique the adolescents' curiosity about narratives on moral dilemmas; the GM also encouraged them to reflect on their own perceived biases and perspectives.

Structured Cognitive Engagement. Feller et al. (2024) examined the cognitive-skill development of adolescents and young adults with NDDs who were aged between 12 and 30 years ($n = 151$). They used the *Emotion Regulation and Social Skills Questionnaire* to measure outcomes related to decision making, adaptive thinking, and collaborative problem solving, and findings reveal marked improvements in the participants' cognitive engagement, particularly during the group-based scenarios that required consensus building.

Creativity and Cognitive Flexibility. In Goodall and Truong's (2021) study, which had a small sample size ($n = 9$), the participants reported that TRPGs encouraged them to approach problems from diverse perspectives by immersing themselves in open-ended narratives and collaborative storytelling. One participant commented, "Outside of games, the only real place that I have to work through some of the stuff that I'm working through with some of my characters is therapy, and that is an hour a week as opposed to three hours" (Goodall & Truong, 2021, p. 19), which suggests that the improvisational nature of TRPGs enabled the participants to explore innovative solutions in a safe, nonjudgemental environment. One major limitation of this

study was the small, self-selected sample, which limited the generalisability of the findings, and the authors recommended that future research incorporate larger and more diverse samples to validate these findings and explore potential applications in educational and therapeutic contexts (Goodall & Truong, 2021).

Adaptive and Personalised Learning

Tailoring Therapeutic Content. Adaptive learning within TRPGs ensures that the content and challenges that they present align with the participants' skill levels and therapeutic goals, similarly to Vygotsky's (1978) zone of proximal development, and collaborative learning as a result of modeling, hints and questions, the increased responsibility of the learners, their increased and maintained interest in the task, and control of their level of frustration (Cho & Lee, 2020; Tudge, 1992; Vygotsky, 1978). Katō (2019) highlighted that structured, tailored scenarios in TRPGs enable adolescents with ASD to practise intentional speech and social negotiation. The adaptive-learning nature of these scenarios enables the participants to progress at their own pace and foster a supportive and inclusive learning environment (Katō, 2019), which is similar to the findings in the research of Hong and del Busto (2020), who explored collaboration, scaffolding, and successive approximations in training psychology trainees and patients. In another study, Kilmer, Rubin, et al. (2023) demonstrated that virtual TRPG sessions with low-income adolescents were adaptable to individual participants' needs, which ensured meaningful engagement and growth despite varying baseline skill levels. These studies underscore the role of personalised content in enhancing the collaborative and tailored content of TRPGs for individuals from various socioeconomic backgrounds and cultures.

Real-Time Adaptation. The nature of TRPGs inherently allows and requires real-time adjustments for gameplay, which makes them a flexible tool for skill development. Bowman

(2010) argued that many outsiders might view psychological investment in a game as unhealthy, but the players often feel a greater sense of meaning and community as a result of immersion in the game world because of the ever-changing nature of TRPGs. Katifori et al. (2022) observed that GMs' scenarios modified according to the participants' responses enable neurodivergent adolescents to engage in tasks that match their cognitive and emotional capacities. This adaptability not only enhances skill acquisition, but also increases the likelihood that the participants will remain engaged and motivated (Bowman, 2010; Katifori et al., 2022; Katō, 2019). Despite Katifori et al.'s (2022) focus on only the GM's perspective on player engagement and interaction, Kilmer, Rubin, et al.'s (2023) TA-RPG study captured the participants' perspectives in interviews and thematic analyses. Even with research that has reflected positive trends and outcomes, the limitations often include small sample sizes, as Kilmer, Rubin, et al. noted, along with a heavy reliance on children's self-reporting and minimal observer reporting; they argued that the participants' narratives might be biased in favour of coherence and affected by the passage of time.

In summary, the findings indicate that TRPGs are effective tools to reduce the symptoms of social anxiety, improve social and emotional skills, and foster a sense of community. The qualitative researchers noted the value of the intervention and that playing TRPGs helped their participants outside the therapy sessions (Abbot et al., 2021; Feller et al., 2024). Overall, the TRPGs promoted a strong sense of comfort and safety, and the participants became more engaged in the intervention (Goodall & Truong, 2021; Kilmer, Rubin, et al., 2023). In addition to reducing their social-anxiety symptoms and social-skills deficits, game playing improved the participants' overall functioning (Billieux et al., 2023; Slaughter & Orth, 2023). TRPGs were effective across various cultures, populations, and age groups, with the added benefit of possibly

being a more cost-effective and accessible intervention to support individuals in a more unique, nontraditional form of therapy (Kilmer, Rubin, et al., 2023).

Chapter Three: Applications to Clinical Practice

Clinicians who work with TRPGs should be aware that every tool has limitations, especially for those who have difficulty with understanding language, role playing, fantasy playing, and confusing fantasy with reality, which put the players/members of the group at risk (Kilmer, Rubin, et al., 2023; Yalom & Leszcz, 2021). In this capstone paper I argue that TRPGs can be effective tools to treat client populations who suffer from anxiety, isolation, and a lack of social connectedness and social and emotional skills (Bowman, 2010; Boysen et al., 2023). Although the recreational uses of TRPGs are evident, recent literature has shown that these games can be repurposed for therapeutic interventions to create dynamic, collaborative storytelling; explore interpersonal relationships; develop problem-solving strategies; and engage in critical reflection (Abbott et al., 2021; Goodall & Truong, 2021). In this chapter I synthesise the applications to clinical practice from the literature and offer clinicians, educators, and facilitators practical insights into how they can effectively integrate TRPGs into therapy. Based on Yalom's (1970) group therapy and Bandura and Walters' (1963) social cognitive theory, I believe that using a constructivist approach can help us to understand the depth of the narratives and their impact on participants. Table 5 shows the key recommendations and implementation strategies for clinical practice.

Discussion

The major recurring theme is the facilitation of social and emotional learning through engaging, collaborative storytelling in a group setting. Engaging the participants in stories and fantasy enables them to practice essential social skills such as active listening, empathy, and perspective taking, as Yalom and Leszcz's (2021) group-therapy model highlights. Interpersonal learning and group cohesion, elements that TRPGs naturally foster, enables players to work

Table 5*Clinical Recommendations Based on the Findings*

Authors	Recommendations	Implementation strategies
Abbott, M. S., Stauss, K. A., & Burnett, A. F.	<ol style="list-style-type: none"> 1. Develop role-playing game-based therapeutic interventions to address social anxiety and isolation in adults. 2. Utilise TRPGs to enhance social connectedness and build confidence in social interactions. 3. Expand research on the efficacy of TRPGs as therapeutic tools across diverse populations and settings. 4. Address the existing gap in literature regarding TRPGs' therapeutic potential, particularly for adult populations. 	<ol style="list-style-type: none"> 1. Integrate TRPGs into group therapy sessions, focusing on creating a supportive environment where participants can engage in role-playing activities that foster social skills. 2. Facilitate TRPG sessions where participants create and role-play characters, allowing them to practice social interactions in a safe and structured setting. 3. Provide specialised training for therapists in both TRPG mechanics and their therapeutic applications, ensuring that interventions are tailored to the specific needs of clients. 4. Promote interdisciplinary collaboration between social workers and game therapists to develop innovative TRPG-based interventions in various therapeutic contexts.
Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A.	<ol style="list-style-type: none"> 1. TRPGs can be integrated into therapeutic settings to help mitigate social anxiety and reduce problematic gaming behaviours. 	<ol style="list-style-type: none"> 1. Develop structured and scenario-based TRPG interventions specifically designed to enhance social interactions and reduce anxiety. These should be carefully structured to gradually increase in complexity to ensure participant engagement and therapeutic benefits.
Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M.	<ol style="list-style-type: none"> 1. Develop didactic designs that integrate TRPGs in educational settings. 2. Provide time and resources for training and practice of TRPGs for both novice and experienced participants. 	<ol style="list-style-type: none"> 1. Conduct further research to optimise TRPG designs for diverse educational contexts. 2. Facilitate professional development workshops for educators to gain expertise in TRPGs.

Authors	Recommendations	Implementation strategies
Feller, C., Ilen, L., Eliez, S., & Schneider, M.	<ol style="list-style-type: none"> 1. Social skills interventions should be tailored to specific neurodevelopmental disorders. 2. Combine direct observation with other measures to assess social skills. 3. Explore the link between social anxiety and social skills further. 4. Consider the role of IQ and gender in social skills development. 	<ol style="list-style-type: none"> 1. Develop interventions that target the unique social skills deficits in populations like 22q11DS and ASD. 2. Utilise role plays alongside caregiver reports to gain a holistic view of social skills in clinical populations. 3. Conduct longitudinal studies to understand the relationship between social anxiety and social skills over time. 4. Adapt social skills training to consider cognitive levels and gender-specific needs.
Goodall, A. M., & Truong, A. H.	<ol style="list-style-type: none"> 1. Encourage the use of TRPGs as therapeutic tools for social inclusion and mental health improvement in adolescents and adults. 2. Further research is needed to understand the specific therapeutic mechanisms of TTRPGs. 3. Promote inclusivity in mental health interventions by leveraging popular culture elements like TTRPGs. 	<ol style="list-style-type: none"> 1. Develop community-based programs that integrate TTRPGs to facilitate social skills development and emotional resilience in marginalised populations. Collaborate with mental health professionals to design therapeutic interventions incorporating TRPGs. 2. Conduct longitudinal studies and randomised controlled trials to assess the long-term benefits of TRPGs in therapeutic settings. Utilise mixed-methods approaches to capture both quantitative and qualitative data on the impact of TRPGs. 3. Create culturally relevant mental health programs that resonate with younger populations by integrating elements of popular culture, such as TRPGs, to engage participants more effectively.
Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., de Oliveira, D. A., Werpp, M., Moraes, L., & Neto, F. L.	<ol style="list-style-type: none"> 1. Focus on integrating social skills training with RPGs to enhance social interaction with adolescents with ASD. 	<ol style="list-style-type: none"> 1. Develop hybrid (in-person and online) programs that can transition smoothly depending on external circumstances, ensuring continuity of care and maintaining engagement.
Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y.	<ol style="list-style-type: none"> 1. Promote the use of TRPGs to foster creativity, storytelling, and co-creation among participants, particularly in educational and therapeutic settings. 	<ol style="list-style-type: none"> 1. Implement TRPG sessions in educational curriculums focusing on creativity and collaborative storytelling. 2. Train educators and therapists to facilitate TRPGs effectively, focusing on narrative building and player engagement. 3. Encourage the use of TRPGs to enhance social interactions and creative expression.

Authors	Recommendations	Implementation strategies
Katō, K.	1. Expand the use of TRPGs to enhance social communication and quality of life (QOL) in children and adolescents with ASD. Focus on small-group activities that promote intentional speech and consensus reaching.	1. Integrate TRPG-based interventions into educational and therapeutic settings, particularly for children with ASD. 2. Develop standardised training programs for facilitators to effectively conduct TRPG sessions. 3. Ensure that the TRPG activities are tailored to the specific social communication needs of children with ASD.
Kilmer, E., Rubin, J., Scanlon, M., & Kilmer, J.	1. Continue to develop and expand the use of TA-RPGs to support social-emotional learning (SEL) in adolescents. 2. Focus on the potential benefits for populations that may face barriers to traditional social interactions, such as those with neurodivergent conditions or those affected by the Covid-19 pandemic.	1. Incorporate TA-RPGs into virtual and in-person therapeutic settings. 2. Train facilitators in best practices for gaming interventions, particularly in online environments. 3. Ensure sessions are accessible to diverse populations, considering technological barriers and inclusivity.
Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J.	1. Promote the use of gamification to enhance academic performance through psychological engagement.	1. Implement achievement-based gamification in educational settings, particularly using badges and challenges that align with course objectives.
Slaughter, M., & Orth, E.	1. Expand the use of TTRPGs in group therapy for populations difficult to engage in traditional therapeutic methods. 2. Tailor TRPG interventions to specific therapeutic goals, such as improving social skills or reducing aggression.	1. Train therapeutics in TRPG methodologies to ensure appropriate facilitation of therapy sessions. 2. Develop specific TRPG modules focused on different therapeutic targets, ensuring they are adaptable for various patient needs and settings. 3. Increase session length and frequency to maximise therapeutic benefits.
Webb, R., & Cesar, P.	1. Explore the benefits of TRPGs for enhancing social interaction among adolescents, especially those with social anxiety or communication challenges. 2. Investigate the role of technology in mediating social interaction and narrative creation within TRPGs.	1. Develop structured TRPG sessions that incorporate virtual platforms, ensuring accessibility and inclusivity for participants with various needs. 2. Investigate the role of technology in mediating social interaction and narrative creation within TRPGs.

together to achieve shared goals, to work collaboratively, and to shift their perspectives from themselves as players to the characters and back; they also offer real-time feedback on social strategies and their effectiveness in real conversations that are not simulated but are natural dialogue (Boysen et al., 2023; Katō, 2019; Yalom & Leszcz, 2021). Facilitators can use TRPGs as a platform to help the participants to practise specific social skills, to rate the participants, and to provide real-time feedback in a low-stakes environment. For example, they can design scenarios to mirror real-life social challenges, such as conflict resolution or team collaboration on a project, that allow each participant to have a voice and offer thoughts (Katifori et al., 2022). Postgame reflection or debriefing after sessions helps the participants to analyse their in-game behaviours and discuss the relationships between these experiences and real-world social situations, and it offers them an opportunity to express their pent-up emotions and externalise their thoughts in a serious manner (Bowman, 2010; Katō, 2019). Bowman (2015) explored players' experiences during postgame dining or parties in which they often continued discussions of the game, and the players bonded over shared narratives in both in- and out-of-character contexts. Some players wrote letters to their characters, made journal entries, or created play reports after the game sessions to externalise their feelings (Bowman, 2010). This reflective process not only reinforced their social learning, but also helped the participants to build emotional resilience and critical-thinking skills.

Motivation is another critical factor that the researchers reported. They suggested that TRPGs excel in fostering intrinsic motivation through creativity and autonomy (Boysen et al., 2023; Goodall & Truong, 2021). As players co-create their characters and influence the unfolding narrative, they often become deeply invested in the game's outcome. *Bleed* is a term that applies to thoughts, emotions, relationships, and physical states that spill between in-game

and out-of-game times (Bowman, 2015; Montola, 2008). More specifically, *bleed-in* occurs when aspects of the players transfer to their characters, and *bleed-out* occurs when the characters' actions and experiences affect the players (Bowman, 2015; Montola, 2008). Thus, although bleed is not identical to transference and countertransference, it can be framed by using these psychological concepts to better understand how the characters feel, react, and interact in the game and the narrative and among other players.

In another study, Bowman (2015) explored how bleed-in and bleed-out can become potential sources of conflict in role-playing communities in relation to the participants' responses and interactions during the game play. Brown (2014) explored bleed in relation to psychological triggers and suggest that it is separate from triggering and has the potential to lead to triggering complexes with regard to previous trauma or taboo scenes in role-playing scenarios for some participants. It is vital that therapists and professionals who are considering working with TRPGs be aware of bleed, because the segregation between player and character can seem superficial to individuals who are not immersed in role play and live-action role play (Diakolambrianou & Bowman, 2023).

Perkins et al.'s (2014) *Dungeon Master's Guide* reported that there is no current standard training for GMs, which leaves a massive gap in both academic research and clinical applications, because GMs' skills often vary, and little regulation exists over how each GM facilitates a TRPG session. Game to Grow (n.d.-d) has attempted to fill this gap by creating formalised training and regulation for skills development with *The Game to Grow Method of Applied Role-Playing Games*. Game to Grow (n.d.-b) created a product called *Critical Core* that it released for educators, therapists, and parents that helps players to "learn communication and collaboration skills, develop frustration tolerance and emotional resilience, and build empathy

for others, all while rolling dice and having fun” (Game to Grow, n.d.-a, What Is Critical Core section, para. 2). Game to Grow specifically designed *Critical Core* to help autistic youth to develop the skills that they need by playing a safe, sandbox-like game with premade character sheets and an extremely simplified *D&D* rule book and story with instructions for facilitators with little to no experience with TRPGs (Game to Grow, n.d.-c). Recommendations that researchers made are to train in group therapy, attain adequate skills to work with various populations, and understand pop culture, memes, and Internet culture (Jones, 2021; Slaughter & Orth, 2023).

Advertisements targeted to social media and online groups (via game forums, *Reddit*, *Discord*, *Twitch*, etc.) or those with significant social anxiety or emotional issues could possibly improve mental health outcomes; they could also help psychologists to engage with specific groups in psychoeducation via online sources or advertising at local game and hobby shops for those who suffer from social anxiety feel too stigmatised to receive treatment themselves (Abbott et al., 2021). This aligns with previous research in which clinicians have found it difficult to treat individuals with social anxiety because of the number of barriers to treatment (Abbott et al., 2021; Billieux et al., 2023). Including the specific symptomology and behaviours of anxiety and ASD in social media and advertising might motivate those who resist seeking help for mental health issues because TRPGs are often used for entertainment purposes.

Future Research

In summary, in this capstone literature review I answered the research question on whether TRPGs are effective tools to improve social and emotional skills. According to the current literature, TRPGs effectively reduce isolation, improve social and emotional skills, and help to connect with others through shared, collaborative narratives (Feller et al., 2024; Goodall

& Truong, 2021; Kilmer, Rubin, et al., 2023; Kratochvíl et al., 2022). For individuals who are more resistant to traditional forms of therapy, TRPGs may be a suitable alternative to improve their social skills and emotional resilience and decrease their anxiety while they work towards social connectedness in a more hobby-like and less-formal approach (Slaughter & Orth, 2023). According to the participants, TRPGs promoted a safe space to explore their social awkwardness, were accessible both in person and virtually, and removed the barriers to physical locations or services for those outside major metropolitan regions (Kilmer, Rubin, et al., 2023).

Psychoeducation after TRPG sessions through debriefing helps individuals with severe social anxiety or comorbid issues. It hinders negative feelings from emerging if conflict occurs during gameplay, helps to solve problems collaboratively, and reduces the likelihood of future instances (Henning et al., 2024). Psychoeducation and debriefing are vital to redefine the gameplay, maintain group cohesion and safety in future sessions, encourage players to provide direct feedback, and offer players an opportunity to voice concerns (Slaughter & Orth, 2023). Institutions could encourage access to mental health services by advertising a more casual and fun type of group therapy, with an emphasis on quality and delivery of services; address potential stigmas; and provide flexible services through online platforms for clients who resist in-person group therapy or have little access in rural communities (Kilmer, Rubin, et al., 2023).

Further research is required to understand the long-term impact of TRPG therapies and how to encourage individuals to view them as more engaging and more impactful than other therapeutic methods (Abbott et al., 2021; Feller et al., 2024; Henning et al., 2024). Future researchers should also continue to explore TRPGs to gain a better understanding of the challenges and efficacy of this method and develop a framework for TA-RPG sessions with the use of validated psychometric measures, which is required in evidence-based practice (Abbott

et al., 2021; Kilmer, Rubin, et al., 2023; Slaughter & Orth, 2023). These recommendations align with Kilmer, Rubin, et al.'s (2023) during the Covid-19 pandemic: They recommended future research to establish the efficacy of TA-RPG interventions for various populations outside the context of the Covid-19 pandemic. Kratochvíl et al. (2022) also recommended a more empirical-based approach to research on TRPGs and gamification outside the academic setting. Henning et al. (2024) echoed the need for further quantitative research and suggested that research should include QOL inventories combined with qualitative data to investigate the combined efficacy of TRPGs and psychotherapy as a method of social-skills training and its effects on the well-being of the participants.

Further quantitative research with validated research methods will provide new insights into how TRPGs improve social anxiety; Slaughter and Orth (2023) acknowledged that some of the tools that they used in their pilot study had known psychometric properties; thus, more validated research tools with known psychometric properties are needed to better understand the specific impacts of TA-RPGs on groups. Because of the ever-changing nature of technology, Webb and Cesar (2019) recommended exploration of the role of technology in mediating social interaction and narrative creation in TRPGs, because online tools such as *Roll20*, *Discord*, and living streaming (a broadcast over the Internet for live viewing in real time) are expected to expand to reach wider audiences. Understanding how to make player engagement more interactive both virtually and in person will make it more relevant in streamlining TRPGs for a seamless, integrated approach to play. This will require that facilitators understand more of the technology aspects, resources, websites, and ways to connect with clients to facilitate TRPG sessions and keep clients engaged (Webb & Cesar, 2019).

Applied Practices

Last, almost all of the researchers whose studies I selected advocated for research to continue, with an emphasis on longitudinal studies that incorporate larger and more diverse populations. Almost all of the researchers also echoed the limitations of small sample sizes that result in findings that are not generalisable to the general public and the need for more diverse populations in various settings, which makes a strong argument for the regulation of TA-RPG training and standardisation (Abbott et al., 2021; Boysen et al., 2023; Feller et al., 2024; Goodall & Truong, 2021; Kilmer, Rubin, et al., 2023; Kratochvíl et al., 2022; Webb & Cesar, 2019).

Abbott et al. (2021) recommended that group facilitators gain knowledge and experience by playing role-playing games, explore similar role playing that they can apply in a therapeutic group setting, consult with clinicians who have implemented group-therapy strategies that involve TRPGs, and join local groups to participate in *D&D* or other TRPGs to gain knowledge, familiarity, and interest in applying them to future therapy groups. This recommendation is further promoted by more recent studies where TRPGs have been applied to exploring self-concept (Merrick, Li & Miller, 2024), virtual reality to improve PTSD symptoms in adults (Davis & Alexanian, 2024), and how bleed can affect a player's sense of self-identity (Hugaas, 2024).

As new research methods to study groups continue to emerge, Kilmer, Rubin, et al. (2023) recommended utilising best-practice approaches from related modalities until specific guidelines for the use of TA-RPGs are developed. This means that facilitators will need training in evidence-based practices, have specialised training in applied gaming/role-play interventions, as well as the specific skills for the target populations such adolescents and adults lacking social skills (Goodall & Truong, 2021), adults with trauma (Davis & Alexanian, 2024), and

neurodivergent disorders (Feller et al., 2024; Katō, 2019). This could involve screening the participants for potentially triggering materials, those who struggle with differentiating reality and fantasy, those whose symptoms group content exacerbates, and those whose engagement could present a risk to themselves or others (Katifori et al., 2022; Kilmer, Rubin, et al., 2023; Slaughter & Orth, 2023). Consistent with the literature, common factors such as alliance, facilitator empathy, cultural adaptation, group cohesion, and client expectations are important considerations across the modalities (Feller et al., 2024; Kilmer, Rubin, et al., 2023; Slaughter & Orth, 2023; Yalom & Leszcz, 2021).

Abbott et al. (2021) recommended that therapists collaborate with other professionals such as social workers and game therapists to develop innovative TRPG-based interventions in various therapeutic contexts and tailor the story elements to the specific needs of the clients. Billieux et al. (2023) built upon Abbott et al.'s recommendations to mitigate social anxiety and reduce problematic gaming behaviours by building scenario-based TRPG interventions, with a gradual increase in complexity to ensure participant engagement and therapeutic benefits. Feller et al. (2024) refined this recommendation to apply to TRPG-based interventions for 22q11DS and ASD individuals, with the use of caregiver reports, player reports, and direct observation to gain a more holistic understanding of the impact of TRPGs upon players. Further research will lead to recommendations to explore and adapt social-skills training that takes into consideration cognitive levels (i.e., IQ), QOL, and gender-specific needs (Feller et al., 2024).

Last, before consideration of the integration of TRPG-based interventions into therapy, it is important to understand gaming mechanics and the various play systems that are currently available on the market (Boysen et al., 2023). By directly playing and learning TRPGs, facilitators will need to raise their skill level and knowledge from a novice level to an expert

level through practice to ensure a better player experience for the participants (Boysen et al., 2023; Kratochvíl et al., 2022).

Further research questions include the following: How can institutions effectively implement TRPG-based therapies and incorporate them as a practice at a wider level? What standards and regulations are needed to ensure safety, skills development, and risk reduction with the use of TRPGs in therapy? Is there a need to improve clinicians' education to enable them to address the application of TRPGs in psychology? How can clinicians use TRPGs to improve specific issues such as intentional speech and consensus building? It is currently unclear how effectively TRPGs can be integrated into individual therapy because of their collaborative and narrative-based nature.

Reflections on Personal Learning

From this capstone project I have learnt that TRPGs effectively reduce social anxiety and problematic gaming behaviours, improve social skills and emotional resilience, and foster collaboration and connectedness. Formerly, as an educator, I used many gamification techniques in my classrooms to help students to learn by designing my own boardgames and card games for language learning and special-needs students. My ambition to discover whether therapy can be gamified, which the literature suggested is possible, inspired this capstone research project (Boysen et al., 2023; Katō, 2019; Kratochvíl et al., 2022). I learnt that TRPGs are effective in working with neurodivergent clients, especially in terms of social and emotional skill development, and that they are not like traditional therapy (Katifori et al., 2022; Katō, 2019). For clients who are more resistant or hard to engage, TRPGs are an effective method of exploring their emotions and experiences without directly discussing them (Henning et al., 2024; Slaughter & Orth, 2023). I also learnt that clients often feel valued, safe, and comfortable in TRPG groups,

although I assumed that they might not. These themes were present in Goodall and Truong's (2021) study that included adolescents, as well as that of Kilmer, Rubin, et al. (2023), who observed similar themes when they used TA-RPGs with adolescents.

Being highly creative, I hope to incorporate TRPGs into my therapeutic toolbox, work through a holistic lens, and want to specialise in ASD and neurodivergent populations. In my future practice, to remove the barriers for clients who resist therapy or struggle with traditional social interactions, such as those with neurodivergent conditions or those who live outside the city of Calgary, I will suggest that they attempt to play TA-RPGs (Kilmer, Davis, et al., 2023; Kilmer, Rubin, et al., 2023 2023; Slaughter & Orth, 2023). For clients who are uncertain how TRPGs apply to therapy, I will offer them psychoeducation based on the current literature and explore the technological aspects with the use of modern apps such as *Discord* and *Roll20* to enhance their social interactions (Webb & Cesar, 2019).

Completing this literature review has broadened my understanding of TRPGs as well as provided me with insights into the gaps in the current literature, which requires more research. I hope to integrate what I have learnt into my future practice as a clinician and to become part of the change by helping to create a standardised TA-RPG training program.

References

- Abbott, M. S., Stauss, K. A., & Burnett, A. F. (2021). Table-top role-playing games as a therapeutic intervention with adults to increase social connectedness. *Social Work with Groups*, 45(1), 16–31. <https://doi.org/10.1080/01609513.2021.1932014>
- Adventure Zone. (n.d.). *The Adventure Zone*. The McElroy Family. <https://www.themcelroy.family/podcasts/theadventurezone/>
- Ahmed, F., Liberda, E., Solomon, A., Davey, R., Sutherland, B., & Tsuji, L. (2022). Indigenous land-based approaches to well-being: The Amisk (Beaver) Harvesting Program in Subarctic Ontario, Canada. *International Journal of Environmental Research and Public Health*, 19(12), 7335. <https://doi.org/10.3390/ijerph19127335>
- Allison, P. R. (2021, April 23). *Tabletop roleplaying has given players comfort, connection and control in a world that's taken them away*. Dicebreaker. <https://www.dicebreaker.com/categories/roleplaying-game/feature/tabletop-roleplaying-comfort-connection-control-covid-19>
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Appelcline, S., & Adamus, J. (2014). *Designers & dragons. '00-'09: A history of the roleplaying game industry*. Evil Hat Productions, LLC.
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. Holt Rinehart and Winston.
- Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, 2(4), 331–340. <https://doi.org/10.1007/s13412-012-0086-8>
- Billieux, J., Bloch, J., Rochat, L., Fournier, L., Eben, C., Khazaal, Y., Simon, O., Andersen, M., King, D. L., & Lieberoth, A. (2023). Can playing Dungeons and Dragons be good for you? Tabletop role-playing games to mitigate social anxiety and reduce problematic gaming. Oral communication at the 8th International Conference on Behavioral Addictions (ICBA). *Journal of Behavioral Addictions*, 12 (Suppl.-1). <https://doi.org/10.1556/2006.2023.00800>

- Blackmon, W. D. (1994). Dungeons and dragons: The use of a fantasy game in the psychotherapeutic treatment of a young adult. *American Journal of Psychotherapy*, 48(4), 624–632. <https://doi.org/10.1176/appi.psychotherapy.1994.48.4.624>
- Bowman, S. L. (2010). *The functions of role-playing games: How participants create community, solve problems and explore identity*. McFarland.
- Bowman, S. L. (2015, March 2). *Bleed: The spillover between player and character*. Nordic Larp. <https://nordiclarp.org/2015/03/02/bleed-the-spillover-between-player-and-character/>
- Boysen, M. S., Lund, O., Jørnø, R. L., & Skovbjerg, H. M. (2023). The role of expertise in playful learning activities: A design-based self-study within teacher education aimed at the development of tabletop role-playing games. *Teaching and Teacher Education*, 128, 104128. <https://doi.org/10.1016/j.tate.2023.104128>
- Brown, M. (2014). Pulling the trigger on player agency: How psychological intrusion in larps affect game play. In S. L. Bowman (Ed.), *The Wyrd Con Companion Book* (pp. 96–111). Wyrd Con.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council. (2018). *Tri-Council Policy Statement Ethical Conduct for Research Involving Humans: TCPS2 2018*. <https://ethics.gc.ca/eng/documents/tcps2-2018-en-interactive-final.pdf>
- Canadian Psychological Association. (2017). *Canadian code of ethics for psychologists* (4th ed.).
- Canadian Psychological Association. (2023). *CPA guidelines on telepsychology*.
- Carter, C. (2022, June 14). *Backerkit launches its own crowdfunding platform with nearly 40 planned projects*. Dicebreaker. <https://www.dicebreaker.com/topics/crowdfunding/news/backerkit-crowdfunding-announcement>
- Cho, B.-Y., & Lee, H.-J. (2020). Exploring the use of scaffolding strategies in a virtual learning environment: A sociocultural perspective. *Journal of Educational Computing Research*, 58(3), 523-545.
- College of Alberta Psychologists. (2023). *CAP standards of practice (May 31, 2023)*. [https://www.cap.ab.ca/Portals/0/adam/Content/ORAsvuTIC0KVeQqIV2EAXw/Link/Standards%20of%20Practice%20\(May%2031,%202023\).pdf](https://www.cap.ab.ca/Portals/0/adam/Content/ORAsvuTIC0KVeQqIV2EAXw/Link/Standards%20of%20Practice%20(May%2031,%202023).pdf)
- Corcoran, L. (2013, March 3). *Download the latest Indie Games*. itch.io. <https://itch.io/>
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed). Sage.
- Critical Role. (n.d.). [Homepage]. <https://critrole.com/>

- Davidson, H. A. (2012). *A short history of chess*. Crown.
- Davis, D., & Alexanian, S. (2024). Role-playing recovery in social virtual worlds: Adult use of child avatars as PTSD therapy. *Computer Methods and Programs in Biomedicine Update*, 5, 100129. <https://doi.org/10.1016/j.cmpbup.2023.100129>
- Del Prette, A., & Del Prette, Z. A. P. (2018). *Competência social e habilidades sociais: Manual Teórico-Prático*. Vozes.
- Deterding, S., & Zagal, J. P. (2018). The many faces of role-playing game studies. In J. P. Zagal, & S. Deterding (Eds.), *Role-playing game studies: Transmedia foundations* (pp. 1–16). Routledge.
- Diakolambrianou, E., & Bowman, S. L. (2023). Dual consciousness: What psychology and counseling theories can teach and learn regarding identity and the role-playing game experience. *Journal of Roleplaying Studies and STEAM*, 2(2), Article 4. <https://digitalcommons.njit.edu/jrpssteam/vol2/iss2/4>
- Discord. (n.d.). *What is Discord?* <https://discord.com/safety/360044149331-What-is-Discord>
- Ewalt, D. M. (2024). *Of dice and men: The story of Dungeons & Dragons and the people who play it*. Scribner.
- Feller, C., Ilen, L., Eliez, S., & Schneider, M. (2024). Social skills in neurodevelopmental disorders: A study using role-plays to assess adolescents and young adults with 22q11.2 deletion syndrome and autism spectrum disorders. *Journal of Neurodevelopmental Disorders*, 16(1). <https://doi.org/10.1186/s11689-024-09527-y>
- Fies, R. R., & MacKenzie, K. R. (1983). *Advances in group psychotherapy: Integrating research and practice*. International Universities Press.
- Game to Grow. (n.d.-a). *Critical core*. <https://gametogrow.org/criticalcore/>
- Game to Grow. (n.d.-b). *Critical core digital version: What's inside?* <https://www.criticalcore.org/box-contents>
- Game to Grow. (n.d.-b). *Critical core facilitator's guide*. <https://affectautism.com/2021/10/23/critical-core/>
- Game to Grow. (n.d.-c.) *The Game to Grow method*. <https://gametogrow.org/training/gtgmethod/>
- Genette, G. (1979). *Narrative discourse: An essay in method*. Cornell University Press.
- González, Z. J. L. (2024). *Students' perceptions about using tabletop roleplaying games as a game-based learning activity to practice English speaking skills*. [Master's thesis, Benemérita Universidad Autónoma de Puebla]. Tesis de Licenciatura. <https://hdl.handle.net/20.500.12371/20966>

- Goodall, A. M., & Truong, A. H. (2021). Pop culture and social insertion: How can play in adolescence and adulthood be “therapeutic”? *Journal of Community Safety and Well-Being*, 6(1), 17–21. <https://doi.org/10.35502/jcswb.178>
- Gutierrez, R. (2017). *Therapy & dragons: A look into the possible applications of table top role playing games in therapy with adolescents* [Master’s thesis]. California State University. <https://scholarworks.lib.csusb.edu/etd/527>
- Hammer, J., To, A., Schrier, K., Bowman, S. L., & Kaufman, G. (2018). Learning and role-playing games. in Zagal, J. P., & Deterding, S. (Eds.), *Role-playing game studies: Transmedia foundations* (pp. 283-299). Routledge.
- Harper, J. (2017). *What is Blades in the Dark?* Blades in the Dark RPG. <https://bladesinthedark.com/>
- Hedge, S., & Grouling, J. (2021). *Roleplaying games in the digital age: Essays on transmedia storytelling, tabletop RPGs and fandom*. McFarland.
- Henning, G., de Oliveira, R. R., de Andrade, M. T., Gallo, R. V., Benevides, R. R., Gomes, R. A., Fukue, L. E., Lima, A. V., de Oliveira, M. B., de Oliveira, D. A., Werpp, M., Moraes, L., & Neto, F. L. (2024). Social skills training with a tabletop role-playing game, before and during the pandemic of 2020: In-person and online group sessions. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1276757>
- Hong, N., & del Busto, C. T. (2020). Collaboration, scaffolding, and successive approximations: A developmental science approach to training in clinical psychology. *Training and Education in Professional Psychology*, 14(3), 228–234. <https://doi.org/10.1037/tep0000260>
- Hoover, S., Simkins, D., Deterding, S., Meldman, D., & Brown, A. (2018). Learning and role-playing games. In J. P. Zagal & S. Deterding (Eds.), *Role-playing game studies: Transmedia foundations* (pp. 213–226). Routledge.
- Hugaas, K. H. (2024). Bleed and identity: A conceptual model of bleed and how bleed-out from role-playing games can affect a player’s sense of self. *International Journal of Role-Playing*, (15), 9–35. <https://doi.org/10.33063/ijrp.vi15.323>
- Jones, S. (2021). *Watch us roll: Essays on actual play and performance in tabletop role-playing games*. McFarland.
- Katifori, A., Petousi, D., Sakellariadis, P., Roussou, M., & Ioannidis, Y. (2022). Tabletop role playing games and creativity: The game master perspective. *Proceedings of the 17th International Conference on the Foundations of Digital Games*. <https://doi.org/10.1145/3555858.3555918>

- Katō, K. (2019, September 5). Employing tabletop role-playing games (TRPGs) in social communication support measures for children and youth with autism spectrum disorder (ASD) in Japan: A hands-on report on the use of leisure activities. *Japanese Journal of Analog Role-Playing Game Studies*, 23–28. <http://hdl.handle.net/2433/244246>
- Katzman, M. A., Bleau, P., Blier, P., Chokka, P., Kjernisted, K., Van Ameringen, M., Canadian Anxiety Guidelines Initiative Group on Behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University, Antony, M. M., Bouchard, S., Brunet, A., Flament, M., Grigoriadis, S., Mendlowitz, S., O'Connor, K., Rabheru, K., Richter, P. M., Robichaud, M., & Walker, J. R. (2014). Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. *BMC Psychiatry*, 14 (Suppl. 1), S1. <https://doi.org/10.1186/1471-244X-14-S1-S1>
- Ke, F., M. Clark, K., & Uysal, S. (2019). Architecture game-based mathematical learning by making. *International Journal of Science and Mathematics Education*, 17(S1), 167–184. <https://doi.org/10.1007/s10763-019-09996-x>
- Kickstarter. (2024). *About*. Kickstarter. <https://www.kickstarter.com/about>
- Kiddle, G. L., Bakineti, T., Latai-Niusulu, A., Missack, W., Pedersen Zari, M., Kiddle, R., Chanse, V., Blaschke, P., & Loubser, D. (2021). Nature-based solutions for urban climate change adaptation and wellbeing: Evidence and opportunities from Kiribati, Samoa, and Vanuatu. *Frontiers in Environmental Science*, 9. <https://doi.org/10.3389/fenvs.2021.723166>
- Kilmer, E. D., Davis, A. D., Kilmer, J. N., & Johns, A. R. (2023). *Therapeutically applied role-playing games*. <https://doi.org/10.4324/9781003281962>
- Kilmer, E. D., Rubin, J., Scanlon, M., & Kilmer, J. (2023). Therapeutically applied RPGs to support adolescent social connection and growth during the COVID-19 pandemic. *Journal of Creativity in Mental Health*, 19(2), 210–231. <https://doi.org/10.1080/15401383.2023.2239703>
- Kratochvíl, T., Vaculík, M., Procházka, J., & Hamari, J. (2022). Gamification in academia: Does psychological engagement booster performance? *International Journal of Game-Based Learning*, 12(1), 1–18. <https://doi.org/10.4018/ijgbl.304433>
- Leaf, J. B., Cihon, J. H., Leaf, R., McEachin, J., Liu, N., Russell, N., Unumb, L., Shapiro, S., & Khosrowshahi, D. (2021). Concerns about ABA-based intervention: An evaluation and recommendations. *Journal of Autism and Developmental Disorders*, 52(6), 2838–2853. <https://doi.org/10.1007/s10803-021-05137-y>
- Liapis, A., & Denisova, A. (2023). The challenge of evaluating player experience in tabletop role-playing games. *Proceedings of the 18th International Conference on the Foundations of Digital Games*. <https://doi.org/10.1145/3582437.3582457>
- Mackay, D. (2001). *The fantasy role-playing game: A new performing art*. McFarland.

- Merrick, A., Li, W. W., & Miller, D. J. (2024). A study on the efficacy of the tabletop roleplaying game Dungeons & Dragons for improving mental health and self-concepts in a community sample. *Games for Health Journal*, *13*(2), 128–133. <https://doi.org/10.1089/g4h.2023.0158>
- Milton, D., Gurbuz, E., & López, B. (2022). The ‘double empathy problem’: Ten years on. *Autism*, *26*(8), 1901–1903. <https://doi.org/10.1177/13623613221129123>
- Montola, M. (2008). The invisible rules of role-playing: The social framework of role-playing process. *International Journal of Role-Playing*, *1*, 22–36. <https://doi.org/10.33063/ijrp.vi1.184>
- Moreno, J. L., & Jennings, H. H. (1934). *Who shall survive?: A new approach to the problem of human interrelations*. Nervous and Mental Disease.
- Morris-Rosendahl, D. J., & Crocq, M. A. (2020). Neurodevelopmental disorders—the history and future of a diagnostic concept. *Dialogues in Clinical Neuroscience*, *22*(1), 65–72. <https://doi.org/10.31887/DCNS.2020.22.1/macrocq>
- Moshe, A. (2024). *Queerz! RPG by Amit Moshe/Son of Oak game studio—Kickstarter*. Queerz! RPG. <https://www.kickstarter.com/projects/sonof oak/queerz-rpg>
- Mujahidah, N., & Yusdiana, Y. (2023). Application of Albert Bandura’s social-cognitive theories in teaching and learning. *Edukasi Islami: Jurnal Pendidikan Islam*, *12*(1). <https://doi.org/10.30868/ei.v12i02.4585>
- Muskin, P. R. (2023, June). *What are anxiety disorders?* American Psychiatric Association. <https://www.psychiatry.org/patients-families/anxiety-disorders/what-are-anxiety-disorders>
- Mythmere Games. (n.d.). *Swords & wizardry*. <https://www.mythmergames.com/en-ca/collections/swords-wizardry>
- National Institute of Mental Health. (n.d.). *Social anxiety disorder*. https://www.nimh.nih.gov/health/statistics/social-anxiety-disorder#part_2643
- Paizo. (n.d.). *Pathfinder*. <https://paizo.com/pathfinder>
- Perkins, C., Wyatt, J., Ng, A., Dillon, D., & Renie, P. (2014). *Dungeon master’s guide* (5th ed.). Wizards of the Coast.
- Peterson, J. (2012). *Playing at the world: A history of simulating wars, people and fantastic adventures, from chess to role-playing games*. Unreason Press.
- Poeller, S., Dechant, M., & Mandryk, R. L. (2023). Playing a flawless character? Exploring differences between experts and novices in tabletop role-playing games and potential benefits for well-being. *Proceedings of the 18th International Conference on the Foundations of Digital Games*. <https://doi.org/10.1145/3582437.3587180>

- Pokémon Company International. (2024). *About our company*. Pokemon.com.
<https://www.pokemon.com/us/legal/information>
- Pregoner, J. D. (2024). Research approaches in education: A comparison of quantitative, qualitative and mixed methods. *IMCC Journal of Science*, 4(2), 31–36.
- Proctor, D. (2007, August 28). *About us*. Goblinoid Games.
<https://goblinoidgames.com/doku.php?id=start>
- Roll20. (n.d.). *Roll20*. <https://roll20.net/>
- Rosselet, J. G., & Stauffer, S. D. (2013). Using group role-playing games with gifted children and adolescents: A psychosocial intervention model. *International Journal of Play Therapy*, 22(4), 173–192. <https://doi.org/10.1037/a0034557>
- Shaffer, D. W. (2006). Epistemic frames for epistemic games. *Computers & Education*, 46(3), 223–234.
- Slaughter, A., & Orth, S. (2023). An uncontrolled case study of a tabletop role-playing therapy group with difficult-to-engage patients. *International Journal of Group Psychotherapy*, 73(2), 116–140. <https://doi.org/10.1080/00207284.2023.2173602>
- Toolan, M. J. (1988). *Narrative: A critical linguistic introduction*. Routledge.
- Tresca, M. J. (2014). *The evolution of fantasy role-playing games*. McFarland.
- Truth and Reconciliation Commission of Canada. (2015). *Canada's residential schools: Missing children and unmarked burials* (Vol. 4). Montreal: McGill-Queen's University Press.
- Tudge, J. R. (1992). Processes and consequences of peer collaboration: A Vygotskian analysis. *Child Development*, 63(6), 1364–1379.
- Twitch. (n.d.). *Twitch*. <https://www.twitch.tv/>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Walsh, A. K. (2021). *Thirsty sword lesbians*. Evil Hat Productions.
<https://evilhat.com/product/thirsty-sword-lesbians/>
- Webb, A. M., & Cesar, P. (2019). Uncovering seams in distributed play of tabletop role-playing games. *CHI PLAY '19 Extended Abstracts: Extended Abstracts of the Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts*, 773–780.
<https://doi.org/10.1145/3341215.3356253>
- White, W. J., Arjoranta, J., Hitchens, M., Peterson, J., Torner, E., & Walton, J. (2018). Tabletop role-playing games. *Role-Playing Game Studies*, 63–86.
<https://doi.org/10.4324/9781315637532-4>

- Whitten, S. (2020, March 14). *How critical role helped spark a Dungeons & Dragons renaissance*. CNBC. <https://www.cnbc.com/2020/03/14/critical-role-helped-spark-a-dungeons-dragons-renaissance.html>
- Wizards of the Coast. (1999). *The Duelist: Magic rarities*. Magic Libraries. <http://www.magiclibraries.net/22-rarities-the-duelist-cards-english-cards-index.html>
- World Medical Association. (2022). *WMA Declaration of Helsinki: Ethical principles for medical research involving human subjects*. <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>
- Wright, A. L., Gabel, C., Ballantyne, M., Jack, S. M., & Wahoush, O. (2019). Using two-eyed seeing in research with Indigenous People: An integrative review. *International Journal of Qualitative Methods, 18*. <https://doi.org/10.1177/1609406919869695>
- Yalom, I. D. (1970). *The theory and practice of group psychotherapy*. Basic Books.
- Yalom, I. D., & Leszcz, M. (2021). *The theory and practice of group psychotherapy*. Basic Books.
- Yuliawati, L., Wardhani, P. A. P., & Ng, J. H. (2024). A scoping review of tabletop role-playing game (TTRPG) as psychological intervention: Potential benefits and future directions. *Psychology Research and Behavior Management, 17*, 2885–2903. <https://doi.org/10.2147/PRBM.S466664>
- Zayas, L. H., & Lewis, B. H. (1986). Fantasy role-playing for mutual aid in children's groups: A case illustration. *Social Work With Groups, 9*(1), 53–66. https://doi.org/doi:10.1300/J009v09n01_05