USING MAGIC TO ‘FIGHT’ MENTAL ILLNESS: THERAPEUTICALLY APPLIED TABLETOP ROLEPLAYING

by

Alex Catlett

A scholarly project submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Nursing Practice

in

Psychiatric Mental Health

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2026

DEDICATION

To Bre. Though you may not share my enthusiasm for nerdy things and fantastical dreams, you have formed the steadfast foundation on which I have found my footing. Your unyielding support, while enduring three years of an education-absorbed partner, has afforded me the confidence and stability to accomplish what I honestly wasn't sure I could finish. I can (almost) promise that I am done with all-encompassing education programs.

TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

GLOSSARY

DnD – Dungeons and Dragons

GM – Game Master

TA-TTRPG – Therapeutically Applied Tabletop Roleplaying Game

TTRPG – Tabletop Roleplaying Game

ABSTRACT

Background: Mental illness accounts for 15% of the global burden of disease for 10-19-year-olds. Low Mental Health Literacy (MHL), impaired intrinsic motivation, and intimidating standard treatments limit care-seeking and perpetuates mental illness into adulthood.

Local Problem: A psychiatric inpatient unit in Montana serving adolescents ages 12-18 wanted to increase group attendance.

Methods: A 6-week education and implementation quality improvement (QI) initiative was developed using therapeutically applied tabletop role-playing games (TA-TTRPG) as part of unit programming to increase extrinsic motivation and increase group attendance.

Intervention: Training to educate staff on administration of TA-TTRPGs. Development of pre-implementation training, group tracking documentation, and satisfaction surveys.

Results: Of the 102 possible attendance occurrences, 74 attendances (73%) occurred across 12 TA-TTRPG groups, falling short of both the attendance goal of 80% and group administration goal of 18. Two of the four (50%) staff members felt adequately prepared to administer TA-TTRPG groups.

Conclusion: TA-TTRPGs showed an attendance increase of 28% over talk-based groups, 11.7% over non-TA-TTRPG game groups, 27.3% over art groups, and 41.2% over media groups. This QI project demonstrates the feasibility of utilizing TA-TTRPGs as a motivating tool in an inpatient psychiatric setting.

CHAPTER ONE

REVIEW OF THE LITERATURE

Introduction

Mental illness accounts for 12% of the global disease burden, with 10-20% of children and adolescents struggling with mental illness (Nobre et. al., 2021). When left under- or untreated, it can result in myriad adverse health outcomes, including pervasive psychiatric and social distress into adulthood (Lee et. al., 2020; Nobre et. al., 2021; Zare et. al., 2022). Addressing mental illness is a complicated task. Recent research has identified low rates of mental health literacy (MHL) as a contributing factor to the rising rates of mental illness (CDC, 2023; Lee et. al., 2020; Nobre et. al., 2021). In particular, children and adolescents have low MHL, which predicts low help-seeking behavior (Nobre et. al., 2021). Furthermore, people who struggle with mental illness, particularly depression, have decreased intrinsic motivation, further limiting help-seeking behavior (Grahek et. al., 2019; Nobre et. al., 2021).

Traditional means of mental health treatment include psychopharmacology and psychotherapy. While these interventions often offer positive results, there sometimes exists a lingering tension between these modalities and patients. In particular, traditional psychotherapies can be seen as confronting or intimidating (Versitano et. al., 2023).

Background

One in six people is aged 10-19, accounting for nearly 17% of the global population (WHO, 2025). One in seven, or 14.3% of those aged 10-19, experience one or more mental health conditions (WHO, 2025). Mental illness accounts for 15% of the global burden of disease

for 10-19-year-olds, with depression, anxiety, and behavioral disorders representing a leading share of illness and disability (WHO, 2025). When narrowing the scope of research from the global population to the United States, the rates of mental illness increase. Nearly one in five children and adolescents ages 3-17 have been diagnosed with a mental illness in the United States (CDC, 2025; Sappenfield et. al., 2023). Sappenfield et. al. (2023) report anxiety (16.1%), depression (8.4%), and behavioral problems (6.3%) as the most common mental illnesses in children ages 12-17. The CDC (2025) reports anxiety (11%), depression (4%), and behavioral problems (8%) a the most common mental illnesses in children ages 3-17.

One method by which to address adolescent mental illness is to increase MHL. MHL, at its most basic, is having knowledge of and an understanding of mental health (CDC, 2023). MHL can be further defined by identifying the key components. MHL can be divided into six components: ability to recognize mental illness and related symptoms, understanding the causes of mental illness, knowledge and beliefs about self-directed management, knowledge and beliefs about professional-directed management, recognizing stigma surrounding mental illness, and how to access care (Lee et. al., 2020; Nobre et. al., 2021).

In general, adolescents have a low level of MHL (Nobre et. al., 2021). To further exacerbate the decreased help-seeking behavior that results from low MHL, adolescents with depression have impaired intrinsic motivation (Grahek et. al., 2019). Motivation can be subdivided into intrinsic and extrinsic motivation. Intrinsic motivation is the internal ability of the individual to work towards a specific task or goal. Intrinsic motivation is self-driven and comes from within. Extrinsic motivation is the ability of an individual to work towards a task or goal that is externally driven. External factors may include a physical reward, praise, or

avoidance of a negative consequence (Connell, 2023; Wijsman et. al., 2018). Motivation is a delicate judgment made by the individual that balances reward anticipation, effort, and estimates of the individual's ability to control the environment (Grahek et. al., 2019). Although stemming from internal reward structures, intrinsic motivation is considered the most influential (Connell, 2023).

The combination of impaired intrinsic motivation that manifests from depression and the treatment avoidance associated with low MHL poses a unique challenge. To overcome this confluence of exacerbating factors, externalizing the reward through utilizing extrinsic motivation may be effective; "The presence of extrinsic incentives boosted the link between intrinsic motivation and performance" (Wijsman et. al., 2018). To further complicate the already existent motivation and help-seeking impairment, the tools available to mental health professionals can themselves be a limiting factor.

Versitano et. al. explain that services and clinicians often find themselves struggling to engage young people in verbal psychotherapies (2023). Even still, verbal psychotherapy is the method of choice for many services. These talk and lecture-style psychotherapeutic groups can be perceived as intimidating and unhelpful to children and adolescents; "Young people consistently gave negative feedback regarding groups which were primarily verbal, expressing they were 'boring', 'unhelpful', or 'confronting'" (Versitano et. al., 2023). As an alternative to traditional talk therapies, including dialectical behavior therapy (DBT) and cognitive behavioral therapy (CBT), groups with creative elements can increase engagement, particularly when participation is voluntary (Munson et al., 2020; Versitano et al., 2023). Patterson et. al. found that music therapy provided a significant boost to intrinsic motivation, with >90% of patients

reporting they “would participate by choice and use music therapeutically in the future” (2015). Creative groups can inspire an opportunity for play, which, even in adolescence, is an integral part of growth and well-being. “Social, peer-based play in later childhood/adolescence contributes to the development of autonomy, creative and critical problem-solving skills, and healthy executive and meta-cognitive function” (McKerracher, 2024). Furthermore, adolescents who are offered and engage in more play are posited to develop more accessible distress tolerance and critical thinking skills that are associated with higher well-being (McKerracher, 2024).

Group therapy provides a setting in which participants can engage in play. Play can be structured through conversation or through games. Though group therapies are not traditionally structured to facilitate games, there is a throughline that connects these group participations and play. Traditional group therapies can struggle to promote the benefits of play when the setting is too rigid or structured, as it is important that the environment or activity not feel forced (Connell, 2023). When structured correctly, play-based and well-formatted group therapies can simultaneously serve as a stage for complex emotional expression and therapeutic change, while leaving participants with a positive perception and a sense of enjoyment (Connell, 2023).

Group therapy that incorporates play in a low-rigidity, game-based format can promote positive perceptions for participants. Understanding that traditional verbal group therapies can be intimidating, the following scoping literature review aims to determine the efficacy of tabletop roleplaying games (TTRPGs) as a means of therapeutic intervention.

Methods

Overview of Studies

In September of 2025, this scoping review appraised evidence-based, peer-reviewed articles focused on the therapeutic application of tabletop roleplaying games (TTRPGs). The articles were identified through a systematic search of the Web of Science and PsycINFO databases, available through Montana State University Library. A consultation with a Montana State University Librarian was completed. Literature quality was assessed using the Johns Hopkins Evidence-Based Practice Model for Hierarchy of Evidence. The initial search resulted in 55 articles, which were assessed for inclusion criteria. The final literature review included 11 articles: three quasi-experimental Studies, five qualitative studies, one manuscript, one scoping literature review, and one rapid evidence assessment.

Search Strategy

Utilizing the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines and PRISMA study extraction diagram, a literature appraisal was conducted searching the Web of Science and PsycInfo databases (Appendix A) (Page et. al., 2021). Initially, there was no limit on the age of the article. However, after further review, articles were excluded if published before 2015. As such, the effective search dates ranged from January 2015 to September 2025. Initial keywords included “child*” OR “adolesc*” OR “youth”. However, the inclusion of these keywords reduced yield, leading to the exclusion of consideration of study participants’ ages. As such, the adjusted keywords used included "tabletop roleplaying games" OR "TTRPG" OR "tabletop role playing games" OR "dungeons and dragons" AND ("Mental health" OR "Therapeutic" OR "Therapy" OR "Psych*").

Eligibility

Inclusion criteria included the therapeutic application of TTRPGs, published in English from 2015 until September 2025. Exclusion criteria included articles reviewing the use of TTRPGs non-therapeutically, comparing TTRPGs to massive multiplayer online roleplaying games (MMORPGs), and articles exploring therapeutic applications of partially implemented TTRPGs.

Study Selection

Initially, 55 articles were identified through database searching. After removing 11 articles published before 2015 and one article not published in English, 43 remained. One book was removed. Following screening the remaining records for the inclusion criteria, duplicates were removed, and bias and conflict of interest were assessed. The remaining 31 full-text reports were assessed for eligibility, which excluded 20, leaving 11 eligible records.

Results

Literature Search and Characteristics

This scoping review sought to evaluate the efficacy of the therapeutic application of TTRPGs. The search criteria yielded 11 articles, of which three were quasi-experimental studies, 5 were qualitative studies, 1 was a doctoral thesis, 1 was a scoping literature review, and 1 was a rapid evidence assessment.

Synthesis of the Literature

The resulting literature details the potential therapeutic effects of TTRPGs when applied both in clinical and non-clinical settings. An overarching theme of baseline equivalency and, frequently, an improvement over treatment-as-usual (TAU) psychotherapeutic groups can be identified with this scoping review. The most addressed factors for the application of therapeutically applied TTRPGs (TA-TTRPGs) include socialization, anxiety, motivation, depression, stress, and self-esteem. While many of these factors are inextricably linked, TA-TTRPGs provide a unique opportunity to focus on individual progress goals and emphasize particular topics.

Socialization. The literature most commonly shows a connection between TA-TTRPG use and participants' social skills and connectedness. The prosocial theory is among the theoretical underpinnings that support the efficacy of TA-TTRPGs (Abbott et. al., 2022). Prosocial behavior is observed when an individual acts for the benefit of another. TTRPGs require collaboration that strengthens one's ability to empathize, and that empathy improves social connectedness and fosters group cohesion (Abbott et al., 2022). In doing so, TTRPGs help to build communication skills and strengthen socialization in individuals with a variety of social impairments, including social anxiety and Autism Spectrum Disorder (ASD) (Abbott et. al., 2022; Atherton et. al., 2025; Chun, 2025; Hartwig et. al., 2025; Henrich & Worthington, 2023; Lees, 2023; Merrick et. al., 2024; Slaughter & Orth, 2023; Sousinha & de Almeida, 2019; Varrette et. al., 2023; Yuliawati et. al., 2024). The improvements in social skills resulting from engagement with TTRPGs can help to bolster quality of life, particularly in children and adolescents with ASD (Merrick et. al., 2023).

Anxiety. TTRPGs can provide a less intimidating framework for socialization. In particular, when clinicians utilize a well-known TTRPG, individuals suffering from social anxiety or isolation are more prone to engage in treatment (Abbott et. al., 2022; Hartwig et. al., 2025). Lowering the anxiety surrounding the treatment itself decreases the barrier to accessing treatment. When accessed, TA-TTRPGs have been shown to significantly reduce anxiety and stress in players (Merrick et. al., 2023). Beyond reductions in depression and anxiety symptoms, participants identified learning specific tools and coping skills in-game that were transferable to real-world applications, including managing anxiety and failure (Abbot et. al., 2022; Chun, 2025). In addition to directly managing anxiety, the social skill development and repeated positive reinforcement with group socialization reduce players' social anxiety (Abbott et. al., 2022; Atherton et. al., 2025; Chun, 2025; Lees, 2023; Merrick et. al., 2024; Slaughter & Orth, 2023; Varrette et. al., 2023; Yuliawati et. al., 2024).

Motivation. “The format is inherently motivating” (Slaughter & Orth, 2023). A TTRPG’s innate emphasis on interaction and collaboration may help increase group engagement and prevent dropouts (Slaughter & Orth, 2023; Yuliawati et. al., 2024). TTRPGs can serve as a significant catalyst for players to proactively communicate with one another, leveraging rewards and time-sensitive in-game conflicts (Yuliawati et al., 2024). TTRPGs can inspire motivation to return to group therapy, even when motivation is naturally impaired, as with youth and people with depression (Lees, 2023; Sousinha & de Almeida, 2019). The concept of self-efficacy is the belief that one can achieve a goal despite a difficult task. Merrick argues that TTRPGs can enhance one’s sense of self-efficacy (2023).

Depression. Group therapy can be an effective tool in depression management. Chun (2025) offers that brief group therapy can be effective at reducing symptoms of a variety of mental illnesses, including depression. TA-TTRPGs can be used for long-term or brief group therapy. Participants in TA-TTRPGs were found to have significant reductions in depression, anxiety, and stress (Merrick et. al., 2023; Yuliawati et. al., 2024). Merrick et. al. (2023) found that these improvements exist beyond the active intervention and were maintained at a 1-month follow-up interview.

Self-Esteem. The Prosocial Theory suggests that individuals can form and maintain a positive self-image through reciprocity of expression with peers (Abbot et. al., 2022). TTRPGs inherently validate group cohesion, group problem-solving, and enhanced self-esteem in multiple ways. The format rewards collaboration and social dynamism, while providing moments in which individual decision-making is highlighted (Abbot et. al., 2022). Support from group members and structured in-game consequences, both positive and negative, promote a rehearsal of group and individual thinking and decision-making (Abbot et. al., 2022). Furthermore, TTRPGs allow for players to practice mastery and control (Merrick et. al., 2023). During play, players must overcome traps, obstacles, puzzles, combat encounters, and social encounters. The game master (GM, sometimes referred to as an action i.e., GMing) assists in reinforcing that a player's ideas and feelings matter, leading to each member developing the insight that they are valuable both in-game and out of game (Hartwig et. al., 2025). The repetition of overcoming challenges and of feelings of belonging and value leads to a significant increase in self-efficacy and overall self-esteem for players (Hartwig et al., 2025; Merrick et al., 2023).

Discussion and Conclusion

MHL is a measure of one's understanding of mental illness (CDC, 2023). The 11 articles in this scoping literature review document the positive implications on multiple facets of mental wellbeing when participating in TA-TTRPGs. Developing social competence, enhancing motivation and self-efficacy, and decreasing social anxiety can all lead to increased self-esteem, quality of life, and decreased depressive symptoms. TTRPGs provide an entertaining and engaging platform that is unique in its ability to adapt to the needs of the group and/or the individual to address a host of issues across a broad spectrum of social, cognitive, and mental abilities and needs. The skills developed, rehearsed, and honed in-game are transferable to out-of-game life, allowing players to develop skills in a lower-stakes environment. Though the stakes of a game are low compared to "real life", the stakes serve to motivate players to act. This action can be used to therapeutically facilitate rewards and consequences for actions, teaching self-worth and social skills. Through the review and evaluation of the literature, it is apparent that TTRPGS may positively impact the care of adolescents through the engaging and adaptable structure TTRPGSs provides.

CHAPTER TWO

QUALITY IMPROVEMENT PROPOSAL

Introduction

The burden of mental illness can be felt across the world and through many diverse communities. For example, depression and anxiety plague Montana's youth and contribute to a nearly double the national average rate of suicide (CDC, 2025). One proposed method to address the growing issue of child and adolescent mental illness is increased screening. The United States Preventative Services Task Force (USPSTF) recommends screening adolescents aged 12-18 for depression and 8-18 for anxiety (USPSTF, 2022). Increased screening can lead to earlier identification of symptoms and illness and to a better overall prognosis (USPSTF, 2022). While increased screening may serve to identify individuals with anxiety or depression who are accessing primary care, screening alone does not empower the individual to navigate mental health challenges throughout life.

Though screening is an important first-line method by which to identify mental illness, once identified, the implementation of evidence-based interventions to address the underlying issues causing the perpetuation of mental health issues is warranted. Understanding that low mental health literacy (MHL) results in decreased help-seeking behaviors; targeting low MHL can instill understanding of when and why to access care. By increasing these help-seeking behaviors and treatment access, we can combat the adverse health outcomes of under- or untreated mental illness, including long-term dysfunction, economic loss, and suicide (Lee et. al., 2020; Nobre et. al., 2021; Zare et. al., 2022).

Decreased MHL can indicate reduced knowledge and understanding of how to access appropriate care (Nobre et al., 2021). Low MHL is associated with decreased help-seeking behavior among adolescents. Many mental health problems present in adolescence and young adulthood, and when left untreated can persist into adulthood and predict more severe manifestations of these illnesses (Lee et. al., 2020; Nobre et. al., 2021; USPSTF, 2022; WHO, 2025; Zare et. al., 2022).

In an effort to address the compounding effects of low MHL in adolescents with mental illness and the potentially intimidating nature of traditional psychotherapies, this quality-improvement project submits Tabletop Roleplaying Games (TTRPGs) as a developmentally engaging and equally efficacious vehicle for the administration of group psychotherapy.

In the United States (US) between 2016 and 2019, only 10% of children and adolescents aged 3-17 received care from a mental health professional, with nearly 51% of caregivers reporting that obtaining mental health services for their children was somewhat difficult, very difficult, or impossible (Mahmood et. al., 2024). This barrier to care, whether physical or perceived, can lead to a myriad of negative consequences, including long-term dysfunction, economic loss, and suicide (Lee et. al., 2020; USPSTF, 2022; WHO, 2025; Zare et. al., 2022).

Group Therapy and Play

Group therapy is an established form of intervention that is utilized in the treatment of mental illness. “Does group therapy help clients? Indeed, it does” (Yalom & Leszcz, 2020, p. 9). According to Yalom and Leszcz (2020), 11 primary factors divide the therapeutic experience and facilitate change in group therapy:

1. Instillation of Hope

2. Universality
3. Imparting Information
4. Altruism
5. The Corrective Recapitulation of the Primary Family group
6. Development of Socializing Techniques
7. Imitative Behavior
8. Interpersonal Learning
9. Group Cohesiveness
10. Catharsis
11. Existential Factors

While each of these subdivisions represents important components of group therapy, Yalom and Leszcz (2020) offer that interpersonal learning and group cohesiveness are among the most important. Play in group therapies can provide opportunities for participants to develop secure attachment to both peers and group facilitators and can result in positive experiences that "counteract their negative internal schemas" (Marmarosh, 2024, page number). These positive feelings can increase connection with others and foster a desire for closeness, fun, trust, and cohesion (Marmarosh, 2024).

Problem and Aim Statement

This project aims to increase staff knowledge of TTRPGs, provide education for how to apply TTRPGs therapeutically, and increase the implementation of TTRPGs as therapeutic interventions over an 8-week period.

Organizational Microsystem Assessment

This evidence-based QI project will be implemented in a Montana adolescent psychiatric inpatient unit. This unit has a maximum capacity of 12 patients and offers between 9 and 12 therapeutic groups throughout the day. Presently, no incentive structure exists to encourage patients to attend groups, though isolative behaviors are factored into the evaluation of patient safety when considering discharge.

Consultation with stakeholders reveals a push to increase group attendance without interrupting daily workflows. In this setting, a lack of understanding to seek care, impaired intrinsic motivation, and unenticing or intimidating verbal and lecture-style psychotherapy may all play a role in low group attendance rates. Pending approval from the institutional review board data will be collected to evaluate the current group attendance rate. Although no quantifiable attendance measure is available, maintaining 100% group attendance could improve downstream mental health outcomes. The evidence supports the use of more engaging therapeutic groups to improve attendance, increase MHL, and combat the downstream negative effects of low MHL (CDC, 2023; Connell, 2023; Lee et. al., 2020; Grahek et. al., 2019; Munson et. al., 2020; Nobre et. al., 2021; Versitano et. al., 2023; Wijsman et. al., 2018)

Quality Improvement Framework

The conceptual framework used in this QI project is the Institute for Healthcare Improvement (IHI) Model for Improvement. The IHI offers a model for improvement that includes three questions to guide the process, followed by the Plan-Do-Study-Act (PDSA) cycle(s) to design and test changes on a small scale: “What are we trying to accomplish?”, “How will we know that a change is an improvement?”, and “What change can we make that will result

in improvement?" (Ogrinc et. al., 2022). Following this framework the aim, measures, and desired quality improvement goals can be created. Then, the PDSA format allows for methodical yet adaptable implementation, with subsequent PDSA cycles able to adjust to emergent barriers and complications. The quick adaptability of PDSA cycles allows for the implementation of shorter-duration projects. Therefore, given the time constraints in this QI project, the PDSA design is prudent.

Plan-Do-Study-Act

(P)lan: The planning phase of the PDSA cycle provides stakeholders the opportunity to develop the metrics by which implementation will be judged, develop tracking paperwork, and identify knowledge gaps to include in training. Furthermore, the roles and responsibilities of each member of the implementation team are defined during this phase. Briefly, a nurse or Mental Health Specialist (MHS), depending on the day's workflow, will track each patient's attendance at each group (See Appendix A). A nurse or MHS, depending on group scheduling, will facilitate implementation of the TTRPG.

Following stakeholder meetings, the chosen game system is Monster of the Week. This decision was made based on its growing popularity, simplicity, and stakeholder familiarity. The game systems in consideration were: Kids on Bike, Monster of the Week, or Dungeons & Dragons (DnD). Each choice has pros and cons. For example, DnD is the most well-known and popular TTRPG and can be easily adapted for therapeutic use (Connel, 2022; Hand, 2022; Hazlett et al., 2024; Kilmer et al., 2023; Merrick et al., 2024; Yuliawati et al., 2024). An additional boon for participants would be having the knowledge of the most popular TTRPG, allowing participants to more easily join groups in the future. Of the three systems, DnD is the

most complicated with the largest learning curve. Fortunately, the therapeutic application of TTRPGs is not exclusive to DnD. Kids on Bikes and Monster of the Week are simpler and have a smaller learning curve. Additionally, Kids on Bikes and Monster of the Week are growing in popularity, with Monster of the Week operating on a system used across multiple TTRPGs.

During stakeholder meetings, a recurring concern was that of time and workflow changes. To alleviate initial planning-phase pressure, this project's scoping literature review serves as evidence of the efficacy of therapeutic role-playing games. Additional resources have been accessed to guide implementation methods.

The DNP student as project lead (PL) has the following responsibilities:

- Develop the tracking paperwork to document the number of patients in each group, the type of group, and the duration of each patient's attendance in that group.
- Create a short training session to provide guidance on appropriately tracking group attendance.
- Develop a short post-group satisfaction survey (Table 1). The Likert scale can be used, or the question can be verbalized, as part of check-out.
- Following IRB approval in November 2025, the PL will work with the unit MHSs to develop relevant role-playing game group frameworks.

Table 1: Post-group satisfaction survey

Post-group Satisfaction Survey		
Question 1	On a scale from 1 – 7: how would you rate your level of enjoyment of today's group?	1 2 3 4 5 6 7
Question 2	On a scale from 1 – 7: how likely are you to participate in another group like this?	1 2 3 4 5 6 7
Question 3	Comments/Suggestions:	

(D)o: Following IRB approval in November 2025, the PL will provide access to the tracking paperwork. Additionally, the PL will attend unit staff meetings to provide a brief in-person training for tracking documentation use. The PL will offer in-person or videoconference TTRPG administration training to the implementation team. These trainings will prepare the attendees to apply the chosen game system and modules in a therapeutic setting. Additionally, training will be offered on integrating accessory pieces of the game system into existing groups. For example, each TTRPG has a character creation process. One such integration might be to offer time for the patients to draw/paint their characters during art expression group. During this initial "do" phase, a dataset of baseline group attendance will be collected. This preliminary, quantitative understanding of group attendance will allow the team to compare to the SMARTIE goals.

(S)tudy: The study phase of the PDSA cycle begins following the first 2 weeks of implementation. The PL will analyze the relevant data and compare to the SMARTIE goals. This

analysis, paired with weekly satisfaction surveys will inform the adoption of this QI project. If the SMARTIE goals are not met, the satisfaction surveys will provide clues as to the shortcomings of the project. Then, the PL and stakeholders can return to a brief "plan" phase, then enact a second "do" phase for another 2 weeks. Following this second "do" phase, a second "study" phase will be conducted. The cycle repeats 2 more times until the completion of the 8-week project.

(A)ct: During the act phase, the team has the opportunity to enact changes to better implement subsequent PDSA cycles. The PL will assess for progress towards SMARTIE goals and disseminate the results to stakeholders via email and verbally. If changes are warranted, the PL will develop adjustments to present to the stakeholders for approval.

The expected outcome of the first PDSA cycle is progress towards the SMARTIE goals. The intervention is based on a robust body of literature suggesting that therapeutic roleplaying games are effective for cultivating engagement and participant buy-in. Though this project begins with extensive education, the resulting change to workflow is minimal. In fact, the nature of the intervention allows for staff with limited buy-in to opt out if they find the intervention burdensome. Furthermore, analysis of the resulting data will be conducted and delivered to management by the PL, limiting the addition of responsibilities for staff. Finally, the intervention requires a small budget to initiate, with the only operational cost coming from printing supplies.

Methods:

Intervention and Implementation

Implementation Summary. For eight weeks, this QI project aims to increase group attendance by creating a TTRPG group that can be administered to adolescents ages 12-18 on an

adolescent inpatient psychiatric unit. Interventions include staff education and tracking and documentation of patient group attendance. Four PDSA cycles will facilitate and assess the implementation. Each PDSA will cover two weeks, with the option to extend the final PDSA cycle to four weeks if no additional improvements are needed.

Intervention and Implementation. The current schedule at the intervention site offers 22 group timeslots that could be utilized for a TTRPG group, each week. Monday, Tuesday, Thursday, and Friday each have three usable group times. Wednesday offers two possible group times. Saturday and Sunday each have four possible group times. This provides ample flexibility to incorporate a TTRPG group in the way that is most effective for the staff. During the first PDSA cycle, a rigid schedule will not be prescribed to the staff. Instead, staff will have the opportunity to implement TTRPG groups as a helpful way to achieve the SMARTIE goals. This will allow for a more natural inclusion, hopefully maintaining staff buy-in. The staff's use of the intervention will be evaluated during the subsequent PDSA cycles. If implementation is not meeting SMARTIE goal 2, scheduled groups can be considered.

The TTRPG group can be administered in any of the three group rooms, with location preference left to the group facilitator and participants. Distinct advantages of each room exist. The group room is the most flexible space, offering ample table space and seating. For larger groups, the group room may be most useful. The education room is a smaller space with a large conference room table that could host a small group, possibly up to seven people. This room has a door that can be closed, offering protection from unit distractions. Finally, the Zen Den features a more relaxed environment and a closable door. However, there is no table in the Zen Den. For sessions that do not involve game pieces, the Zen Den could be a good option.

Following the structure proposed by Kilmer et. al. (2023), each group will begin with a short, 5-minute recap of the previous session. An additional 5 minutes can be used to brief new players, ask check-in questions, or review safety tools, as needed. 5 to 10 minutes can be utilized at the end of each session to pose checkout questions and administer the short satisfaction survey. Forty-five minutes will be enough time to complete check-in tasks, conduct the TTPRG, and complete check-out tasks. Included in the 22 potential group opportunities are intermittent hour-long time slots that will allow for extended play sessions. Checkout questions include the players' highlights, challenges, and predictions to be explored in the follow-up session (Connel, 2022; Hand, 2022; Kilmer et al., 2023). During the first session of play each week, the group leader will utilize the first half of the group to review game rules, establish expectations and safety tools, and assist players in picking or creating new characters. This first session, colloquially known as a "session 0," provides the foundation on which a healthy administration of a therapeutic TTRPG is built (Connel, 2022). The second half of these sessions 0 groups will allow for a shorter play time.

Timeline and Budget

Upon IRB approval, training will begin in December 2025. Implementation will take place during January and February of 2026. Game to Grow, an organization that offers training to apply TTRPGs therapeutically, allocates 6 hours to train people without prior experience playing or GMing TTRPGs (Kilmer et. al., 2023). Following this model, six hours will be allocated for training. Considering three members of the facilitation team are experienced GMs and therapeutic group leaders, the allotted 6 hours should provide ample time for training. To manage

scheduling with these four stakeholders, training will be held for 2 hours on 3 consecutive Wednesdays in December.

The majority of this QI project's cost comes from education hours. Paying a nurse $40 and three MHSs $26 for 6 hours results in a cost of $708. The unit has an education budget, from which staff can access up to four hours per week, assuming no overtime. Beyond education costs, the budget needed to facilitate a TTRPG is minimal. The rulebooks for the TTRPGs under consideration can be accessed for free online, or physical copies can be purchased for $10-$40. A set of polyhedral dice is needed, costing as little as $5. The unit has paper and pencils for gameplay. The unit has a supplies fund that can be used to purchase rulebooks and dice as needed. The cost breakdown is shown in Table 2. The PL will donate 270 hours to this project. Maintaining the exact nursing wage estimate, the PL's implementation of this project will save the unit $10,800.

Table 2: Cost breakdown

Cost Breakdown		
Item	Cost	Funding Source
Dice	$5	Unit supplies fund
Guidebooks	$0-40	Donation or unit supplies fund
Paper, Pencils	$0	Already supplied by the unit for groups
Art Supplies	$0	Already supplied by the unit for groups
Staff Training	6 hours of education-based pay: Nursing = 6*$40/hour = $240 MHS 1 = 6*26/hour = $156 MHS 2 = 6*26/hour = $156 MHS 3 = 6*26/hour = $156 Total = $708	The unit has a fund to allow for additional hours in service of education. Must not qualify for overtime pay.

Education

To implement a TA-TTRPG, one must be trained to facilitate therapeutic groups. The nurses and MHSs all have relevant training and experience facilitating therapeutic groups. Furthermore, a foundational comprehension of the rules of the selected TTRPG system is necessary. Four staff members have engaged in the planning phase as stakeholders: One nurse and three MHSs. Of these four staff members, two have extensive experience serving as GMs.

The GM's role in a TTRPG is effectively the same as a group facilitator. However, the GM should be familiar with the game's rules and setting. Though prior experience will assist stakeholders in more quickly preparing to implement TA-TTRPGs, it is not strictly necessary, as the associated education will provide training in the selected TTPRG. Following the model from Kilmer et. al. (2023), six hours will give ample time to prepare the implementation team to administer therapeutic TTRPGs. At the regularly scheduled staff meetings, brief education will be provided on how to document patient group attendance.

Challenges

While rooted in evidence, there are still potential challenges for this QI project. The use of TA-TTRPGs is efficacious and may prove engaging to many patients in the target population. However, many TTRPGs are designed for a high-fantasy, medieval setting, featuring characters such as dwarves, elves, dragons, and wizards. This setting may not be approachable for some patients. As such, it is prudent to adjust the game's theme to match the participating patients. This highlights the importance of weekly sessions 0 and satisfaction surveys to gauge participant interest.

Additionally, Kilmer et. al. (2023) suggests screening all participants to ensure the appropriateness of the intervention. Unfortunately, excluding "inappropriate" patients would limit the intervention's applicability. Therefore, the reliance on the innate flexibility of TTRPGs is paramount. The game system's ability to adapt to players helps make implementation more universal. Another challenge is balancing the fluidity of the inpatient setting. A traditional TTRPG follows a set group of players through multiple sessions. Therefore, the weekly reset with a session 0 allows for the accommodation of new players.

Evaluation and Analysis

The outcomes of this QI project will be evaluated against short-, medium-, and long-term SMARTIE Goals. Each PDSA cycle will feature a quick evaluation of SMARTIE goals. Additionally, the PL will evaluate progress at least weekly.

Table 3: SMARTIE goal #1 (Long-term, quantitative)

<table>
<tr><th colspan="3">SMARTIE Goal #1</th></tr>
<tr><td colspan="3">Greater than 80% of patients will attend the TA-TTRPG group when averaged over the eight weeks of implementation.

This goal is set at greater than 80% as it is understood that, due to specific circumstances, a patient may choose to take a break from groups.</td></tr>
<tr><td colspan="3">Description of strategies to be utilized to accomplish the goal, including any needed resources.

• A team of stakeholders, including a site representative, nursing, MHSs, and project lead, will find available time slots for TA-TTRPG group inclusion.
• Project lead will work with MHSs to incorporate aspects of TA-TTRPG groups into standard programming, including mindful art/art expression group.
• Project lead, with the support of MHSs, will develop usable group structures to align with the unit’s theme-of-the-day.
• Project lead will develop tracking paperwork to identify: number of patients, type of group, and duration of group attendance.
• Funding for paper and printing services for patient educational handouts is in the current operational budget. No additional funds are necessary.</td></tr>
<tr><td>Data to be collected</td><td>Method of Collection and who is responsible</td><td>Planned data analysis</td></tr>
<tr><td>• Number of patients attending groups.
• Type of groups being attended.
• Duration of Group Attendance</td><td>• The active group leader will document</td><td>Daily group information will be presented as a run chart. Progress toward goal and unexpected results will be evaluated at the end of each week to determine if adjustments in the workflow needs to be considered.</td></tr>
</table>

Table 4: SMARTIE goal #2 (Short-term/long-term, quantitative)

SMARTIE Goal #2		
TTRPG groups will be utilized at least three times a week during the project implementation. This goal is set at three or more implementations per week to minimize interruptions to staff workflow. If adoption of the intervention is unintrusive, staff may choose to utilize it more frequently.		
Description of strategies to be utilized to accomplish the goal, including any needed resources. • Project lead will work with MHSs to incorporate aspects of TA-TTRPG groups into standard programming, including mindful art/art expression group. • Project lead, with the support of MHSs, will develop usable group structures to align with the unit's theme-of-the-day. • Project lead will develop tracking paperwork to identify: number of patients, type of group, and duration of group attendance. • Funding for paper and printing services for patient educational handouts is in the current operational budget. No additional funds are necessary.		
Data to be collected	**Method of Collection and who is responsible**	**Planned data analysis**
Number of TTRPG groups implemented on a weekly basis	• Group lead will document	Weekly group variance will be presented as a run chart. Progress toward goal and unexpected results will be evaluated at the end of each week to determine if adjustments in the workflow needs to be considered.

Table 5: SMARTIE goal #3 (Short-term, quantitative)

SMARTIE Goal #3		
All 4 staff stakeholders will be trained to administer TTRPGs therapeutically by January. This goal is set to include the current staff stakeholders and ensure readiness for implementation in January.		
Description of strategies to be utilized to accomplish the goal, including any needed resources. • Project lead will work with staff stakeholders to provide education about the rules of the game system chosen. • Stakeholders and project lead will practice scenarios following the themes-of-the-day to establish ready to use roleplaying encounters.		
Data to be collected	**Method of Collection and who is responsible**	**Planned data analysis**
If staff attend the training	PL will track.	Number of stakeholders that attend a training by January.

Safety and Confidentiality

This QI project will be conducted following the approval of the Montana State University (MSU) IRB. Additionally, this site is a part of the Providence Healthcare organization that requires approval from the Nursing Research Council and the Providence IRB. The review by these three entities will assess whether this project is applied ethically. Furthermore, all stakeholders undergo HIPAA compliance training and will be held to national standards of patient privacy and site-specific confidentiality procedures.

Consistent with unit standards, participation in this project will be voluntary. All patient information will be de-identified. Protected health information (PHI) is not required for data collection in this project. Therefore, no PHI will be collected. When necessary, room numbers can be used to identify patients for tracking group attendance. There are no identifiable risks to patients beyond those associated with the current standard of care.

CHAPTER THREE

QUALITY IMPROVEMENT MANUSCRIPT

Contribution of Authors and Co-Authors

Manuscript(s) in Chapter(s) 1, 2, 3, & 4

Author: Alex Catlett, BSN, RN, TGM, DNP-PMHNP Candidate

Contributions: The author assessed the clinical problem, conducted the literature review, planned and implemented the intervention, collected and analyzed all data, and wrote the manuscript.

Co-Author: Dr. Marcy Hanson, PhD, MN, RN

Contributions: Dr. Hanson was integral in the successful completion of the manuscript. She provided guidance and motivation for timely organization of the individual components of each chapter, offering critical feedback. She helped to correct mistakes and stylistic inconsistencies across the author's writing.

Co-Author: Dr. Rebecca Hoover, PhD, MMB, BSN, RN, OCN

Contributions: Dr. Hoover completed extensive editorial reviews of the manuscript drafts, offering grammatical critiques, voicing corrections, and recommendations to maintain topical consistencies.

Abstract

Background: Mental illness accounts for 15% of the global burden of disease for 10-19-year-olds. Low Mental Health Literacy (MHL), impaired intrinsic motivation, and intimidating standard treatments limit care-seeking and perpetuates mental illness into adulthood.

Local Problem: A psychiatric inpatient unit in Montana serving adolescents ages 12-18 wanted to increase group attendance.

Methods: A 6-week education and implementation quality improvement (QI) initiative was developed using therapeutically applied tabletop role-playing games (TA-TTRPG) as part of unit programming to increase extrinsic motivation and increase group attendance.

Intervention: Training to educate staff on the administration of TA-TTRPGs. Development of pre-implementation training, group tracking documentation, and satisfaction surveys.

Results: Of the 102 possible attendance occurrences, 74 attendances (73%) occurred across 12 TA-TTRPG groups, falling short of both the attendance goal of 80% and the group administration goal of 18. Two of the four (50%) staff members felt adequately prepared to administer TA-TTRPG groups.

Conclusion: TA-TTRPGs showed an attendance increase of 28% over talk-based groups, 11.7% over non-TA-TTRPG game groups, 27.3% over art groups, and 41.2% over media groups. This QI project demonstrates the feasibility of utilizing TA-TTRPGs as a motivating tool in an inpatient psychiatric setting.

Introduction

Among youth ages 10-19 years old, mental illness accounts for 15% of the global disease burden (WHO, 2025). Depression, anxiety, and behavioral disorders represent the majority of illness and disability in this age group (WHO, 2025). When left under- or untreated, mental illness can persist into adulthood, becoming more pervasive and psychologically distressing (Lee et. al., 2020; Nobre et. al., 2021; USPSTF, 2022; WHO, 2025; Zare et. al., 2022). Early intervention and access to care are immediate and manageable ways to alter the path of untreated or undertreated mental illness. Unfortunately, even when resources and care are available, many individuals do not know how, when, where, or why to access care.

There is a growing body of evidence that describes the lack of mental health knowledge as low mental health literacy (MHL). Additionally, this research identifies low MHL as a core contributing factor to the rising rates of mental illness (CDC, 2023; Lee et. al., 2020; Nobre et. al., 2021). MHL is learned, rather than inherently known. Given their age, many adolescents have not had the experience needed to develop an understanding of resources and medical systems, resulting in low MHL. Understandably, low MHL predicts low help-seeking behavior (Nobre et. al., 2021). In addition, people who struggle with mental illness, particularly depression, have decreased intrinsic motivation, further negating help-seeking behavior (Grahek et. al., 2019; Nobre et. al., 2021). Within the adolescent population, this impairment to intrinsic motivation may further decrease help-seeking behavior.

Montana's youth have nearly double the national average rate of suicide, 26.65 deaths by suicide per 100,000 people in Montana versus 14.1 per 100,000 people when averaged nationally (CDC, 2025). In rural and underserved populations, access to care can be limited. Even when

afforded the opportunity to access care, impaired intrinsic motivation may still hinder individuals from seeking help. Unfortunately, the standards of care preferred by mental health professionals, including verbal therapeutic groups, can be an additional barrier to help-seeking behavior. This is the final piece of what this project names “The Trifecta of Impairment”.

Clinical Problem

This project utilizes the term Trifecta of Impairment to describe the uniquely heightened barriers that children and adolescents with mental illness face. It includes naturally low MHL, impaired intrinsic motivation, and access to intimidating services. In many instances, the services preferred by clinicians are viewed by children and adolescents as intimidating and unhelpful (Versitano et. al., 2023). There are multiple methods for addressing the Trifecta of Impairment. The focus of this quality improvement (QI) project is to utilize play-based therapies and therapeutic gaming to augment the often intimidating and confronting verbal and talk psychotherapies. When structured correctly, play-based and well-formatted group therapies can simultaneously serve as a stage for complex emotional expression and therapeutic change, while leaving participants with a positive perception and a sense of enjoyment (Connell, 2023). Thus, this QI project utilized Tabletop Roleplaying Games (TTRPGs) as a developmentally engaging and efficacious method for the administration of group psychotherapy.

Review of the Literature

A scoping review evaluated the efficacy of therapeutic applications of TTRPGs. The resulting literature detailed the benefits of therapeutically applied TTRPGs in both clinical and non-clinical settings. A consistent theme emerged, demonstrating equivalent efficacy and improvement relative to treatment-as-usual (TAU) psychotherapeutic groups. The primary

factors supporting the application of TA-TTRPGs included socialization, anxiety, motivation, depression, stress, and self-esteem. While many of these factors are inextricably linked, TA-TTRPGs provide a unique opportunity to focus on individual progress goals and target specific therapeutic interventions. TA-TTRPGs require collaboration that helps build empathy, communication skills, and strengthen appropriate socialization, bolstering quality of life (Abbott et. al., 2022; Atherton et. al., 2025; Chun, 2025; Hartwig et. al., 2025; Henrich & Worthington, 2023; Lees, 2023; Merrick et. al., 2024; Slaughter & Orth, 2023; Sousinha & de Almeida, 2019; Varrette et. al., 2023; Yuliawati et. al., 2024). This less intimidating therapeutic intervention can relieve anxiety surrounding accessing care, providing increased opportunity to develop transferable tools and coping skills with repetitive in-game and social positive reinforcements that decrease generalized and social anxieties (Abbott et. al., 2022; Atherton et. al., 2025; Chun, 2025; Lees, 2023; Merrick et. al., 2024; Slaughter & Orth, 2023; Varrette et. al., 2023; Yuliawati et. al., 2024). Not only are TA-TTRPGs less intimidating, but they can also enhance one's sense of self-efficacy and inspire motivation to return to group therapy (Lees, 2023; Merrick et. al., 2024; Sousinha & de Almeida, 2019). TA-TTRPG interventions have been shown to have significant reductions in depression, anxiety, and stress, which may be sustained up to one month post-intervention (Merrick et. al., 2023; Yuliawati et. al., 2024). TTRPGs inherently validate collaboration, social dynamism, and individual decision-making. TTRPGs provide a less consequential play environment with game-based and social rewards and consequences, rather than real-world impacts (Abbot et al., 2022; Merrick et al., 2023). This repetition of overcoming challenges, feelings of belonging, and a sense of value leads to a significant increase in self-efficacy and overall self-esteem among players (Hartwig et al., 2025; Merrick et al., 2023).

Conceptual Framework

The conceptual framework used in this QI project was the Institute for Healthcare Improvement (IHI) Model for Improvement. The IHI's model for improvement includes three questions to guide the process, followed by the Plan-Do-Study-Act (PDSA) cycle(s) to design and test changes on a small scale: "What are we trying to accomplish?" "How will we know that a change is an improvement?", and "What change can we make that will result in improvement?" (Ogrinc et. al., 2022). Following this framework, the aim, measures, and desired quality improvement were created. Then, the PDSA format enabled methodical yet adaptable implementation, with subsequent PDSA cycles used to address emergent barriers and complications. The quick adaptability of PDSA cycles allows for the implementation of shorter-duration projects, such as this QI project.

Aims and Purpose

The aim of this QI project was to increase staff comfort and education surrounding TA-TTRPGs to consistently implement TA-TTRPGs into therapeutic programming on an inpatient adolescent psychiatric unit.

Methods

Context

For six weeks, this project aimed to increase staff knowledge of TTRPGs, provide education for how to apply TTRPGs therapeutically, and increase the implementation of TA-TTRPGs. The schedule at the intervention site offered 22 group time slots for implementing TA-

TTRPG groups each week. This provided flexibility to incorporate a TA-TTRPG group with minimal interference to the daily workflow.

Intervention

The intervention phase of this QI project began with a six hour training of unit staff based upon Kilmer et al. (2023) training model in order to implement TA-TTRPGs as the game master (GM or GMing when used as an action). The GM operates as the group facilitator, serving to forward the story, answer questions, and respond to player actions. The training content included character creation, game rules, storytelling, note-taking, role-playing, therapeutic redirection, and the use of non-player characters (NPCs) and story elements to provide in-game consequences for players' actions. Given their pre-existing training, extensive play, GMing, and experience facilitating therapeutic groups, two staff members required three and a half hours of training rather than the standard six. The remaining staff participated in the additional two and a half hours of training focused on the TTRPG content. Additional education was provided, as needed to ensure staff comfort.

Interventions included implementation team education and brief education on tracking and documenting patient group attendance. Three two-week PDSA cycles were utilized to facilitate and assess the implementation.

The GM education proposed by Kilmer et. al. (2023) included a recommended TA-TTRPG group structure. Following this structure, each TA-TTRPG group began with a short, five-minute recap of the previous session. An additional five minutes were usable to brief new players, ask check-in questions, or review safety tools, as needed. Five to 10 minutes were utilized at the end of each session to pose checkout questions and administer the short

satisfaction survey. The available group times allowed for 30-minute to hour-long groups, with the longer time slots better accommodating check-in tasks, the TTPRG session, and check-out tasks.

Checkout questions, though not formally required or recorded, may have included the players' highlights, challenges, and predictions to be explored in the follow-up session (Connel, 2022; Hand, 2022; Kilmer et al., 2023). The first half of the first session of play each week was allocated to reviewing game rules, establishing expectations and safety tools, and assisting players in picking or creating new characters. This session was meant to take the place of what is colloquially known as a "session 0" and provides the foundation on which a healthy administration of a therapeutic TTRPG is built (Connel, 2022).

Measures

The outcomes of this QI project were evaluated against short-, medium-, and long-term SMARTIE Goals. Each PDSA cycle included a brief evaluation of SMARTIE goals, with weekly progress reviews by the project lead (PL).

The short-term SMARTIE goal was to train the four staff stakeholders to implement TA-TTRPGs by January 2026. The measurement of this goal was based on whether all four members were trained and felt prepared to run groups. The medium-term SMARTIE goal was to utilize TA-TTRPG groups at least three times per week. The long-term SMARTIE goal was to maintain greater than 80% attendance in the TA-TTRPG group, averaged over the six-week implementation period. The long-term goal was adjusted to fit the six-week implementation period. Both the medium and long-term goals were measured utilizing the group tracking documentation (Appendix B). Group-tracking documentation was collected by group leaders

throughout the day and placed in a folder at the locked nursing station. The group tracking documentation recorded the number of patients on the unit, the number of patients who attended, did not attend, or partially attended, and the type of group administered: talk, game, art, or media.

Analysis

Weekly data collection was completed by the PL using the group tracking document. The data were de-identified and translated into a master tracking document in Excel. Group satisfaction surveys were reviewed weekly. After each PDSA cycle, data about group administration frequency were electronically disseminated to project stakeholders to support progress. Stakeholder meetings were held at irregular intervals throughout the project due to scheduling interference. These meetings allowed for the collection of qualitative feedback from the implementation team. The collected data were analyzed with descriptive statistics using Excel.

Results

Of the four staff stakeholders, all (100%) received TA-TTRPG implementation training by January. However, of the trained staff members, only two felt prepared to run groups unassisted. Therefore, the short-term SMARTIE goal was not met. Over the three PDSA Cycles, weekly results were compared with the established SMARIE goals (figure or appendix) using descriptive statistics (Figures 1-4).

PDSA Cycle I: The first two weeks of implementation yielded two TA-TTRPG groups. Week one of implementation yielded two TA-TTRPG groups administered and zero groups

tracked. The second week yielded two TA-TTRPG groups with five out of five patients (100%) attending the first group. One out of five patients (20%) attended, and one out of five (20%) patients partially attended the second group. This averages to 60% full attendance or 70% attendance when accounting for partial group attendance. The number of groups and patient group attendance both fell short of the goal.

PDSA Cycle II: The following two weeks of implementation yielded nine TA-TTRPG groups administered. Week three of implementation hosted two TA-TTRPG groups with eight out of 10 patients (80%) attending and one out of 10 patients (10%) partially attending for both groups. When accounting for partial attendance, this equals 90% attendance rate across both groups, exceeding the goal of 80% group attendance. Week four of implementation hosted seven TA-TTRPG groups. Unit census ranged from eight to nine patients during this time. There were six attendees of the nine patients across five groups. There were six attendees of eight patients across two groups. Counting each attendance as a separate occurrence, there were 42 occurrences of attendance out of 61 possible. When averaged across all seven groups, attendance was approximately 69%, with no partial attendees.

PDSA Cycle III: The final two weeks of implementation yielded one TA-TTRPG group in week five of implementation, well below the goal of three TA-TTRPG groups per week. During this group, 10 of 11 patients (91%) attended, exceeding the 80% attendance goal. No TA-TTRPG groups were run in week six.

Over the six-week implementation period, there were 102 possible attendance occurrences across 12 TA-TTRPG groups. Of the 102 possible attendance occurrences, 74 full

attendances (73%) occurred. An additional three partial attendances occurred, resulting in a 75% attendance rate when partial attendance is accounted for.

Over the six weeks of implementation and five weeks of group document tracking, 186 groups were tracked, 86 were categorized, and, because each group could fit into multiple categories, 113 categories were selected. The frequency of groups was 50 talk (44%), 15 non-TA-TTRPG game (24%), 17 art (15%), 7 media (6%), and 12 TA-TTRPG (11%). Attendance to each group was 57% talk, 65% game, 57% art, and 52% media. With TA-TTRPGs averaging 73% full attendance. This is an increase in attendance over all other types of groups; 28% over talk groups, 11.7% over game groups, 27.3% over art groups, and 41.2% over media groups.

Finally, satisfaction surveys were collected at the end of five of the twelve TA-TTRPG groups (Appendix C). The questions included “On a scale from 1 – 7: how would you rate your level of enjoyment of today’s group?” and “On a scale from 1 – 7: how likely are you to participate in another group like this?”, with a space for comments. The response rate was 43% with 31 responses across the 12 groups. The average responses for the groups were 6.17 (88% indicated a high level of enjoyment; question 1) and 6.48 (93% were likely to participate in another TTRPG group; question 2) (Figure 5).

Figure 1: TA-TTRPG Groups Administered by PDSA Cycle

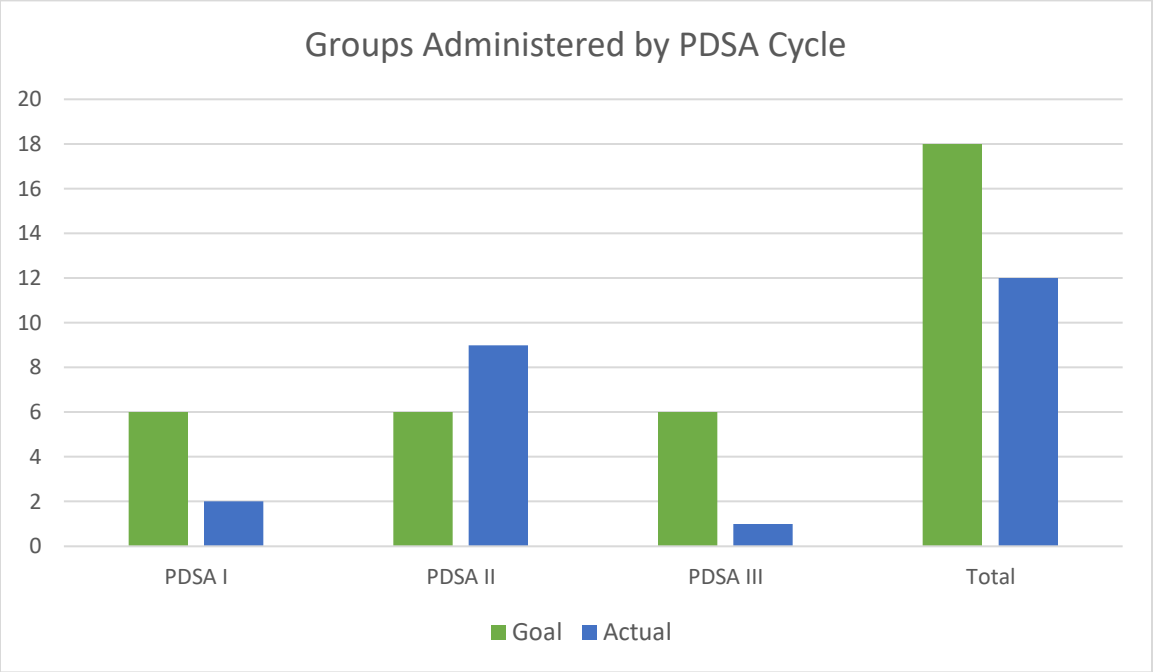


Figure 2: TA-TTRPG Group Attendance by PDSA Cycle

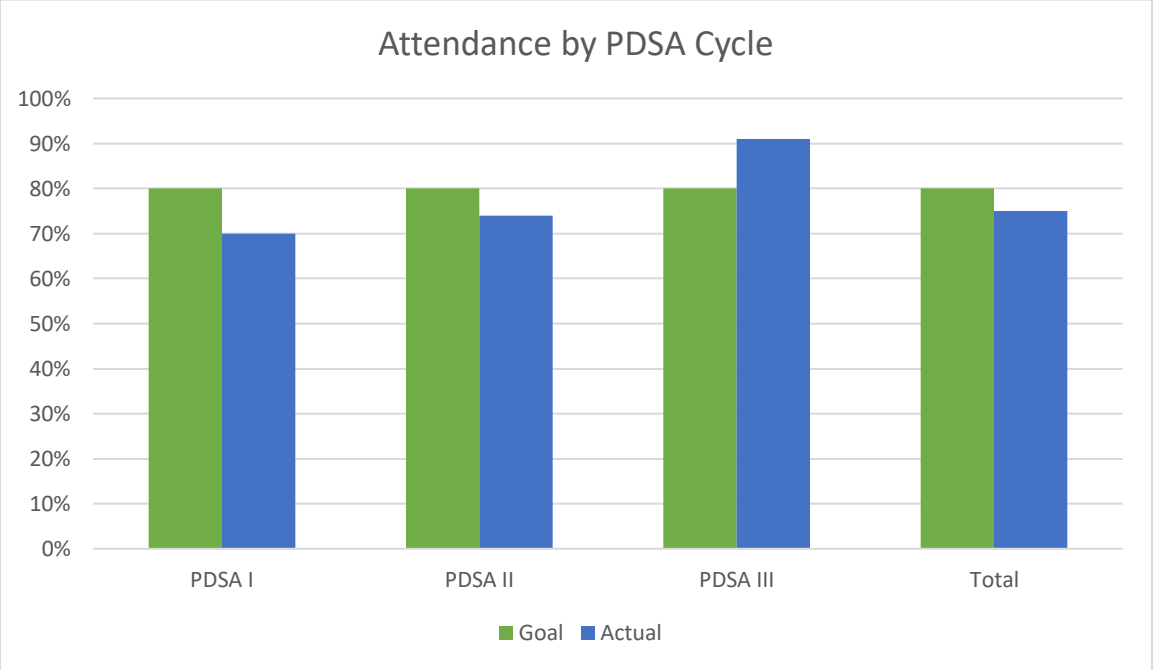


Figure 3: TA-TTRPG Groups Administered by Week

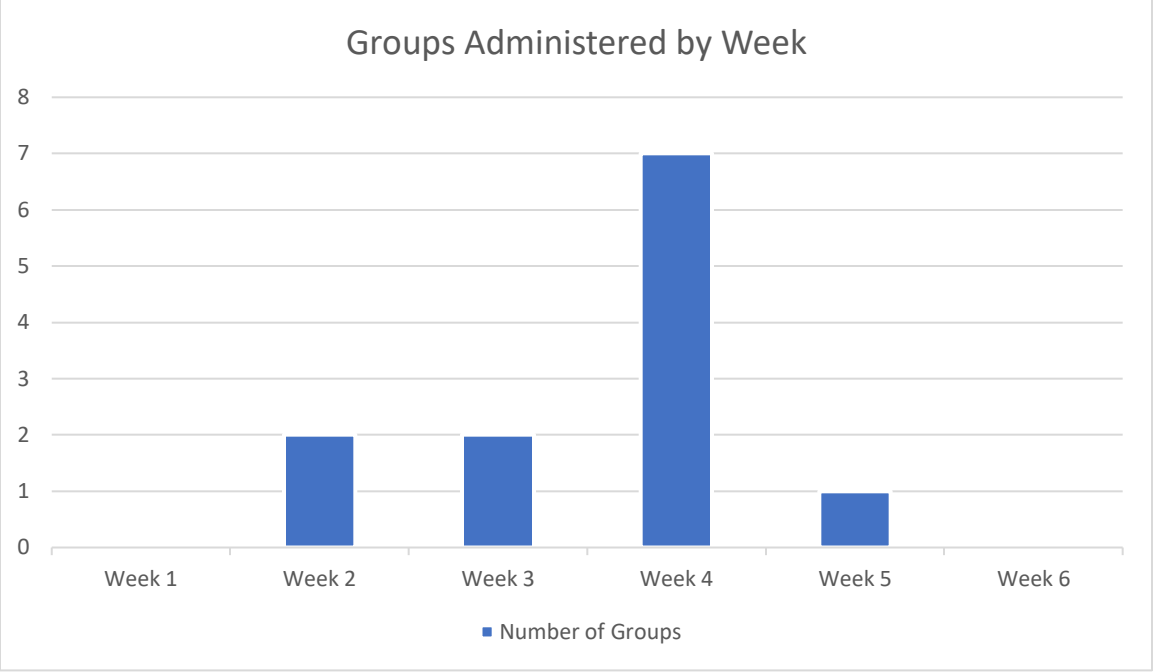


Figure 4: TA-TTRPG Group Attendance by Group

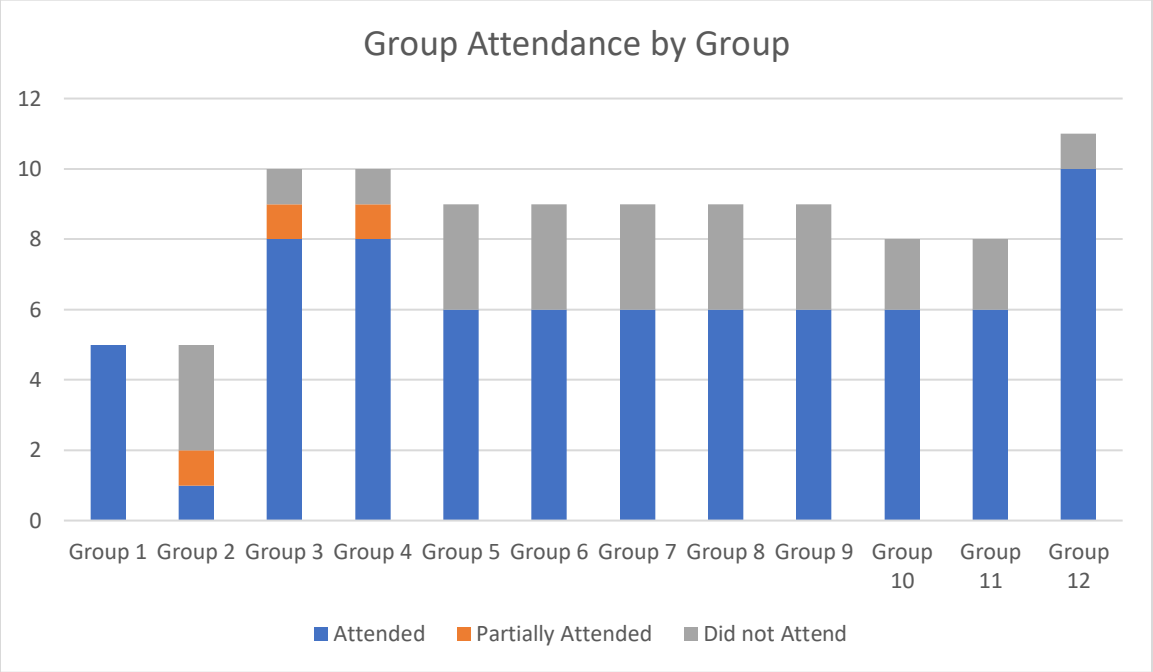
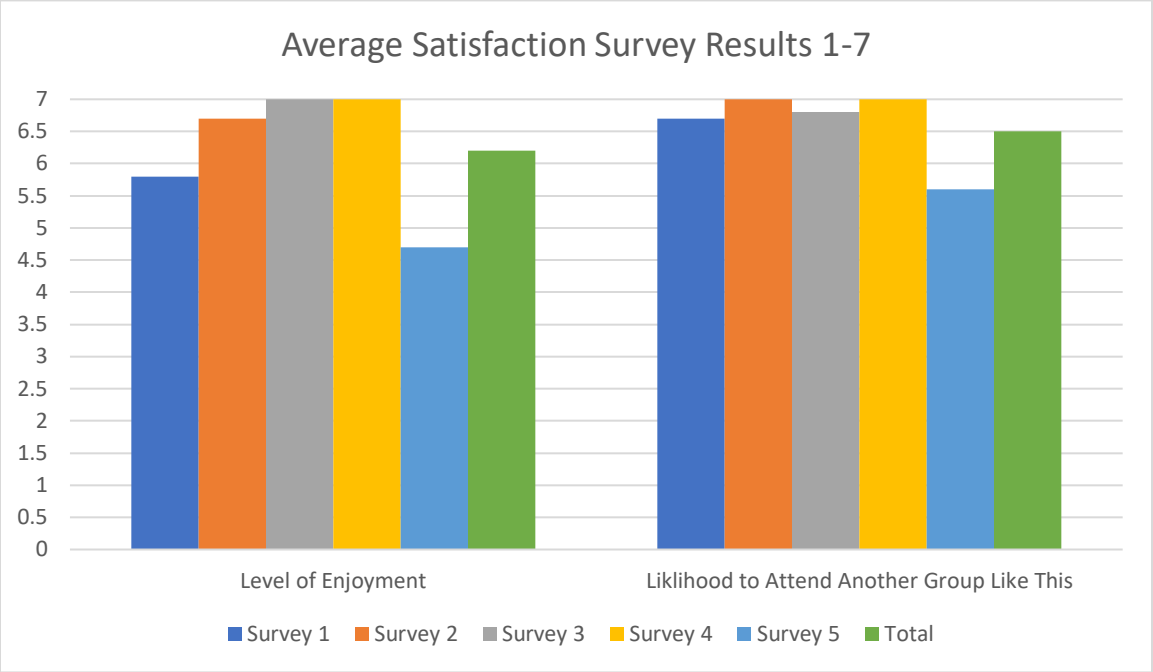


Figure 5: Average Post-Group Satisfaction Survey Results



Discussion

This QI project aimed to increase staff knowledge of TTRPGs, provide education for how to apply TTRPGs therapeutically, and increase the implementation of TA-TTRPGs. To measure the usefulness of this intervention, a goal was established to administer at least three TA-TTRPG groups each week of the six-week implementation period. A secondary goal of 80% group attendance among inpatient adolescents was set to assess the intervention's applicability.

First, the staff needed to be trained to GM these TTRPGs, with an understanding of how to use game features to navigate interactions therapeutically. The proposed model allowed for six hours of training to accommodate stakeholders with TTRPG experience ranging from never played to years of GMing. For those with previous GMing experience, six hours was unnecessary. For those without TTRPG experience, six hours is insufficient. The initial training goal was not met, as only two staff members felt adequately prepared to administer groups by the

end of January 2026. After additional training, two staff members still felt unprepared for implementation.

Once group implementation began, an interesting pattern arose. Figures 1 and 3 show the concentration of the number of groups administered. Nine of the 12 groups were administered in PDSA II, with seven of those held during week 4 (Figure 1; Figure 3). In an acute inpatient setting, patient turnover is higher than in outpatient settings. This turnover increases the need to repeat start-up processes, including character creation and other session 0 activities. The literature suggests TTRPGs are effective modalities for motivating group attendance (Versitano et. al., 2023; Wijsman et. al., 2018). This is evident in the consistency of attendance across the groups administered in week 4. Groups 5-11 were the seven groups held during week 4 (Figure 4). A consistent six patients attended each of these seven groups. Though not explicitly tracked, it was reported to the PL that these six participants were the same across all seven groups. This denotes the consistency of adolescent engagement is dependent upon successful completion of the startup process

Additionally, participation is influenced by staff engagement, as evidenced by game initiation. During week 4, the seven administered groups followed a running story, with six characters played by the same six patients. This continuation of the story suggests that game initiation may be inhibited by session 0 and additional start-up activities. Thus, it may be inferred that the ease in facilitating games may impact overall game administration and, thus, patient participation.

Notably, of the 12 groups administered, three were requested by group participants to be held during their scheduled afternoon free time. During free time, patients have many options for

activities, including watching movies, playing video games or board games, making art, listening to music, returning to their rooms, and socializing with peers. Patients' requests to use their free time to engage in a therapeutic group are a remarkable endorsement of the potential appeal of TA-TTRPGs.

Satisfaction surveys were collected at the end of five of the twelve TA-TTRPG groups. The average Likert scale ratings were relatively consistent across the surveyed groups, with the exception of the fifth survey collected from Group 12 (Figure 5). The surveys resulted in averages for question one of 5.8, 6.7, 7, 7, and 4.7, respectively (Figure 5). Question two yielded averages of 6.7, 7, 6.8, 7, and 5.6, respectively (Figure 5). Group 12 had the largest number of participants, which appears to have resulted in the lowest levels of satisfaction and likelihood of engaging with these types of groups in the future.

Limitations

The results of the QI project should be interpreted with the following limitations in mind. First, the intervention site is a limitation, as it was an inpatient psych unit. Much of the available literature is based on research conducted in outpatient settings with longer-term and consistent groups. The dynamism of the unit census, both in the number of patients and the population, complicated efforts to maintain a consistent story and group cohesion at this project's implementation site. Additionally, the start-up investment that both staff and patients incur when beginning a TA-TTRPG group can be a hindrance. As seen across the six weeks of implementation, week 4 was the most consistent in attendance and had the greatest number of groups administered. This is likely due to staff and patients only requiring one character creation session and one session 0. Once these start-up investments were realized, re-engaging with the

group came with minimal barriers for staff and participants. Furthermore, the start-up investment increased with the number of participants, limiting satisfaction, as demonstrated by the lowest satisfaction survey results in group 12, which had 10 participants (Figure 5).

As noted, the training needs of staff members varied based on previous experience. The focus of this QI project is on the education and training piece. An important limitation was the training itself. Difficulties in scheduling time for all members of the implementation team to meet hindered access to additional training. This is exacerbated by the difficulty of delivering education asynchronously. Given the time investment required for education and the scheduling difficulties, this project required extended stakeholder buy-in, which may have decreased its accessibility.

PDSA cycles provided opportunities to make adjustments throughout this project. Unfortunately, the area that needed the most adjustment was staff education and training. The difficulties in schedule-matching for the implementation team proved to be a major limiting factor in this project. Half of the staff members (n=2), never felt confident to lead TA-TTRPG groups. This lack of available group facilitators likely reduced the number of groups implemented. Even among the two staff members who felt prepared to run groups, they expressed nervousness about implementing TA-TTRPGs. The staff members expressed an element of vulnerability that occurs when GMing, which created anxiety about administering TA-TTRPGs.

Recommendations

While the use of TA-TTRPG at this site had greater participation than the other groups: game, art, talk, media, there is a concern about sustainability. The education component for unit

staff who are not comfortable with TTRPGs would need to be expanded to build greater confidence in their ability to lead TTRPG. Co-facilitating groups with varying levels of TTRPG experience may be an effective way for staff to learn to administer them. Further research about training methods should be conducted to create more efficient training programs for interested TA-TTRPG facilitators.

Future projects may seek to administer TA-TTRPG groups in a setting with fewer, more consistent participants. Partial hospitalization programs, intensive outpatient programs, outpatient groups, and school programming, where patient turnover is lower, may all offer more consistent group attendance. Increased consistency will reduce the burden on group facilitators and participants. Maintaining group sizes of six to eight can provide access to participants without hindering individual experiences.

If pursuing the implementation of a similar project in inpatient settings, an extended period of education and training for stakeholders without prior TTRPG experience would be prudent. In particular, the repetition of character creation and gameplay scenarios should be incorporated into training.

Conclusion

This QI project demonstrated that TA-TTRPGs can be effective tools to motivate attendance in adolescent inpatient psychiatric settings. The QI project trained unit staff members to implement TA-TTRPGs as therapeutic interventions. Though the number of groups implemented and the average attendance fell short of the goals, TA-TTRPGs showed a significant increase in group attendance compared with other tracked groups over the six weeks of the project. Adolescents with mental illness have naturally impaired intrinsic motivation with

decreased MHL and limited access to treatments that are not intimidating. Projects such as this, that offer highly satisfying and less intimidating alternatives to care, are necessary to combat the Trifecta of Impairment to mitigate the detrimental downstream consequences that can persist into adulthood when mental illness is left unaddressed.

CHAPTER FOUR

ADVANCED NURSING ESSENTIALS REFLECTION

Introduction

The American Association of Colleges of Nursing (AACN) provides a framework of essentials, called core competencies, that details the standards that nurses across the spectrum of education and practice-level should be held accountable for learning and maintaining (AACN, 2021). The defined ten domains, by which the competencies are categorized, highlight the diverse spectrum of education that nurses experience. The Montana State University Mark and Robin Jones College of Nursing (MSU MRJCON) Doctor of Nursing Practice (DNP) program is constructed to provide plentiful opportunities to meet these ten domains of core competencies. Detailed in chapter four is how my journey through this program allowed me to meet many of these competencies through didactic education, in-situ clinical hours, and the development, implementation, and documentation of this quality improvement (QI) project.

Domain 1: Knowledge for Nursing Practice

Domain 1 serves as the foundation for nursing practice. The AACN contextualizes domain 1 as lens through which nursing is viewed as a scientific discipline, informed by nursing's history, knowledge, and science, emphasizing nursing's unique approach to education and unique method of caring (2021). The MRJCON DNP program begins with heavy emphasis on establishing this foundation through the following courses: Pathophysiology, Pharmacology, Advanced Pharmacology, Ethics, Evidence-Based Practice I and II, Healthcare in Vulnerable Populations, and Health Assessment. The early establishment of evidence-based knowledge

paired with the formation of a deep understanding of how to further discover and assess updates to this knowledge allowed me to progress into patient-facing clinical hours with a pre-established ability to provide safe patient care. In particular, the Ethics and Healthcare in Vulnerable Populations courses has allowed me to integrate theories and evidence-based approaches to care from other disciplines. During the Healthcare in Vulnerable Populations course, we explored scenarios and roleplayed case studies in which we were asked to present how we would approach care for vulnerable populations. In one instance, we were asked to watch a documentary and envision we were in charge of the care of one of the children. The study asked us to work through how we would provide care for the children, particularly in the case in which the children were unable to describe what was wrong. These types of exercises encourage critical thinking and the application of concepts integrated from foundational nursing sciences as well as outside disciplines.

Domain 2: Person-Centered Care

AACN describes person-centered care as "the core purpose of nursing as a discipline" (2021). Person-centered care is the delivery of care that centralizes the person as the focus of care, rather than the disease or symptomology. Person-centered care considers the holistic individual, including their environment, experiences, motivation and accounts for differences in needs across the lifespan and other population metrics (AACN, 2021). Without the foundational courses detailed in domain 1, a caregiver may struggle to deliver person-centered care. Introduction to Advanced Psychiatric Mental Health Nursing and Psychiatric Case Formulation are great examples of courses that build on the foundational courses and allow for students to use assessment skills, diagnose, and develop care plans. Importantly, MRJCON's DNP program

comes with a large clinical hour component. Following foundation-building and practice in didactic work, clinical hours allowed me to practice person-centered care under the direct supervision of preceptors to provide real-time feedback with additional opportunities for observational learning.

Domain 4: Scholarship for the Nursing Discipline

Domain 4 details scholarship in the nursing discipline and its impact in science, policy, and best-practice standards. Nursing scholarship includes generating, synthesizing, translating, applying, and disseminating knowledge to affect health. The Writing for Scholarly Projects and Evidence-Based Practice I and II courses prepared me to implement an evidence-based QI project. The scale of this project can be seen when considering that it spanned nearly a year of collaborating with project site stakeholders to determine a practice problem, conducting an extensive review of the literature, determining an efficacious intervention, building an implementation team, and developing tools and education to facilitate implementation of the intervention. The QI project represents the culmination of the skills learned throughout MSU's DNP program and showcases the depth of knowledge instilled in me as a direct product of my time in the program.

Conclusion

Chapter four details some of the domains in which I have met the associated. However, this is by no means a comprehensive list of the knowledge and skills that this program has afforded me. Through MSU MRJCON's DNP Psychiatric Mental Health Nurse Practitioner (PMHNP) program, I have progressed through intensive didactic education, consistent clinical

hours in populations across the lifespan and myriad biopsychosocial factors and implemented a QI project addressing a practice problem to positively influence the health of vulnerable populations. As a result of my education and experience I have met the core DNP competencies as established by AACN (2021). As I transition into the workforce as a PMHNP, my education does not stop. Rather, I have the necessary education to safely operate as a PMHNP with the ability and imperative to seek further education and updated best practice. Following this program, I am now equipped with the tools to both directly and indirectly affect patient care.

CUMULATIVE REFERENCES CITED

CUMULATIVE REFERENCES CITED

Abbott, M. S., Stauss, K. A., & Burnett, A. F. (2022). Table-top role-playing games as a therapeutic intervention with adults to increase social connectedness. *Social Work with Groups*, *45*(1), 16. https://doi.org/https://doi.org/10.1080/01609513.2021.1932014

American Association of Colleges of Nursing. (2021). The essentials: Core competencies for professional nursing education. https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf

Atherton, G., Hathaway, R., Visuri, I., & Cross, L. (2025). A critical hit: Dungeons and Dragons as a buff for autistic people. *Autism*, *29*(2), 382-394. https://doi.org/10.1177/13623613241275260

Centers for Disease Control and Prevention. (2025a). *Suicide rates by State*. Centers for Disease Control and Prevention. https://www.cdc.gov/suicide/facts/rates-by-state.html

Centers for Disease Control and Prevention. (2025, June 5). *Data and statistics on children's Mental Health*. Centers for Disease Control and Prevention. https://www.cdc.gov/children-mental-health/data-research/index.html

Centers for Disease Control and Prevention. (2023, December 6). *Increase students' mental health literacy*. Centers for Disease Control and Prevention. https://www.cdc.gov/healthyyouth/mental-health-action-guide/increase-students-mental-health-literacy.html

Chun, S. M. (2025). *Dungeons & Dragons & dissertations: A study of therapeutically applied tabletop roleplaying game groups at a university counseling center* (Publication Number AAI31747868) [Ph.D., Brigham Young University]. APA PsycInfo®. https://www.proquest.com/dissertations-theses/dungeons-amp-dragons-dissertations-study/docview/3171857146/se-2?accountid=28148https://libkey.io/libraries/1916/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:APA+PsycInfo%C2%AE&atitle=&title=Dungeons+%26amp%3B+Dragons+%26amp%3B+dissertations%3A+A+study+of+therapeutically+applied+tabletop+roleplaying+game+groups+at+a+university+counseling+center&issn=&date=2025-01-01&volume=&issue=&spage=&au=Chun%2C+Samuel+Mischa&isbn=979-8346782889&jtitle=&btitle=&rft_id=info:eric/2025-77697-001&rft_id=info:doi/

Connell, M. A. (2023). *Tabletop role-playing therapy: A guide for the clinician game master*. W. W. Norton & Company

Grahek, I., Shenhav, A., Musslick, S., Krebs, R. M., & Koster, E. H. W. (2019). Motivation and cognitive control in depression. *Neuroscience and biobehavioral reviews*, *102*, 371–381. https://doi.org/10.1016/j.neubiorev.2019.04.011

Hand, D. (2023). *Role-playing games in psychotherapy: A practitioner's guide*. Springer International Publishing Palgrave Macmillan

Hartwig, E. K., Walker, E., & Stamman, J. (2025). Roll for Initiative: Using Dungeons and Dragons in Play Therapy. *Journal of Creativity in Mental Health*, *20*(1), 113-126. https://doi.org/10.1080/15401383.2024.2322521

Henrich, S., & Worthington, R. (2023). Let Your Clients Fight Dragons: A Rapid Evidence Assessment regarding the Therapeutic Utility of 'Dungeons & Dragons'. *Journal of Creativity in Mental Health*, *18*(3), 383-401. https://doi.org/10.1080/15401383.2021.1987367

Kilmer, E. D., Davis, A. D., Kilmer, J. N., & Johns, A. R. (2023). *Therapeutically applied role-playing games: The game to Grow Method*. Routledge.

Lee, H. Y., Hwang, J., Ball, J. G., Lee, J., & Albright, D. L. (2020). Is health literacy associated with mental health literacy? findings from Mental Health Literacy Scale. *Perspectives in Psychiatric Care*, *56*(2), 393–400. https://doi.org/10.1111/ppc.12447

Lees, O. J. (2023). *Tabletop therapy: An examination of therapeutic factors within tabletop role-playing game groups* (Publication Number AAI29992359) [Ph.D., Indiana University]. APA PsycInfo®. https://www.proquest.com/dissertations-theses/tabletop-therapy-examination-therapeutic-factors/docview/2796448773/se-2?accountid=28148https://libkey.io/libraries/1916/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:APA+PsycInfo%C2%AE&atitle=&title=Tabletop+therapy%3A+An+examination+of+therapeutic+factors+within+tabletop+role-playing+game+groups&issn=&date=2023-01-01&volume=&issue=&spage=&au=Lees%2C+Oliver+James&isbn=979-8357557582&jtitle=&btitle=&rft_id=info:eric/2023-33087-149&rft_id=info:doi/

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

Mahmood, A., Kedia, S., Arshad, H., Mou, X., & Dillon, P. J. (2024). Disparities in access to mental health services among children diagnosed with anxiety and depression in the United States. *Community Mental Health Journal*, *60*(8), 1532–1546. https://doi.org/10.1007/s10597-024-01305-3

Marmarosh, C. (2024). Spirituality, Security, Compassion, and Play: Innovative Ways Group Psychotherapy Addresses Human Suffering. *International Journal of Group Psychotherapy*, *74*(2), 85–97. https://doi.org/10.1080/00207284.2024.2333680

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C., & Ferré-Grau, C. (2021). Promotion of Mental Health Literacy in Adolescents: A Scoping Review. *International journal of environmental research and public health*, *18*(18), 9500.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021, April 12). *The Prisma 2020 statement: An updated guideline for reporting systematic reviews*. Monash University. https://research.monash.edu/en/publications/the-prisma-2020-statement-an-updated-guideline-for-reporting-syst/

Sappenfield, O., Alberto, C., Minnaert, J., Donney, J., Lebrun-Harris, L., & Ghandour, R. (2024, October). *Adolescent mental and behavioral health, 2023*. National Survey of Children's Health Data Briefs [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK608531/

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

Sousinha, A., & de Almeida, A. F. (2019, Jul 01-03 2019). Effects In Self-Perception And Relationships After A Brief Experience Of Role-Playing Game With 7th Grade Students.*Edulearn Proceedings* [Edulearn19: 11th international conference on education and new learning technologies]. 11th International Conference on Education and New Learning Technologies (EDULEARN), Palma, SPAIN.

U.S. National Library of Medicine. (2022, October). *Child and adolescent mental health*. 2022 National Healthcare Quality and Disparities Report [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK587174/

US Preventive Services Taskforce. (2022, October 11). *Anxiety in children and adolescents: Screening*. Recommendation: Anxiety in Children and Adolescents: Screening | United States Preventive Services Taskforce. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-anxiety-children-adolescents

US Preventive Services Taskforce. (2022, October 11). *Depression and suicide risk in children and adolescents: Screening*. Recommendation: Depression and Suicide Risk in Children and Adolescents: Screening | United States Preventive Services Taskforce. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-children-adolescents

Versitano, S., Butler, G., & Perkes, I. (2023). Art and other group therapies with adolescents in inpatient mental health care. *International Journal of Art Therapy*, *29*(2), 80–87. https://doi-org.proxybz.lib.montana.edu/10.1080/17454832.2023.2217891

Wijsman, L. A., Saab, N., Warrens, M. J., van Driel, J. H., & Westenberg, P. M. (2018). Relations of autonomous and controlled motivation with performance in secondary school students' favoured and disfavoured subjects. *Educational Research and Evaluation*, *24*(1–2), 51–67. https://doi.org/10.1080/13803611.2018.1512872

Varrette, M., Berkenstock, J., Greenwood-Ericksen, A., Ortega, A., Michaels, F., Pietrobon, V., & Schodorf, M. (2023). Exploring the efficacy of cognitive behavioral therapy and role-playing games as an intervention for adults with social anxiety. *Social Work with Groups*, *46*(2), 140-156. https://doi.org/10.1080/01609513.2022.2146029

World Health Organization. (2025, September 1). *Mental health of adolescents*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Yalom, I. D., & Leszcz, M. (2020). *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 [Review]. *Psychology Research and Behavior Management*, *17*, 2885-2903. https://doi.org/10.2147/prbm.S466664

Zare, S., Kaveh, M. H., Ghanizadeh, A., Nazari, M., Asadollahi, A., & Zare, R. (2022). Adolescent Mental Health Literacy Questionnaire: Investigating Psychometric Properties in Iranian Female Students. *BioMed research international*, *2022*, 7210221. https://doi.org/10.1155/2022/7210221

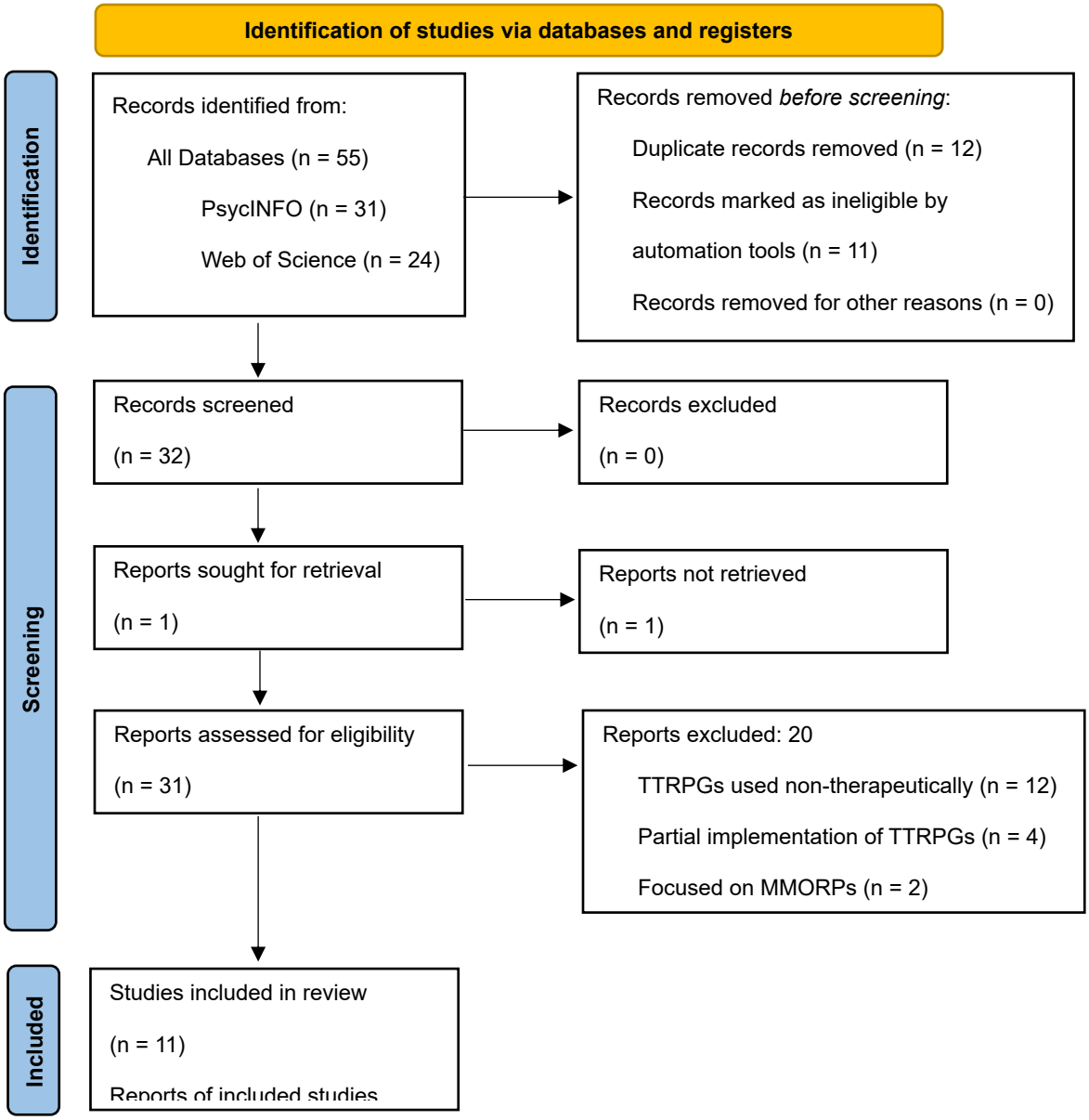
APPENDICES

APPENDIX A

PRISMA Diagram

Appendix A: PRISMA Diagram

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

APPENDIX B

Group Attendance Tracker

Appendix B: Group Attendance Tracker

Day_____ **Date**_____ **Theme of the Day**_____

Group Time	0900 - 0930			0930 - 1030			1030 - 1100			1100 - 1130			1230 - 1300			1300 - 1400			1400 - 1430			1430 - 1530			1600 - 1700			1730 - 1800			1800 - 1830			2045 - 2115		
Group Name																																				
Group Style	Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media			Talk Game Art Media		
	A	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**	**A**	**P**	**D**
460																																				
461																																				
462																																				
463																																				
464																																				
465																																				
466																																				
467																																				
468																																				
469																																				
470																																				
471																																				

Notes

APPENDIX C

Satisfaction Survey

Appendix C: Satisfaction Survey

Post-group Satisfaction Survey		
Question 1	On a scale from 1 – 7: how would you rate your level of enjoyment of today's group?	1 2 3 4 5 6 7
Question 2	On a scale from 1 – 7: how likely are you to participate in another group like this?	1 2 3 4 5 6 7
Question 3	Comments/Suggestions:	

APPENDIX D

Evidence Table

Appendix D: Evidence Table

Citation: (i.e., author(s), date of publication, & title)	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
Abbott, M. S., Stauss, K. A., & Burnett, A. F. (2022). Table-top role-playing games as a therapeutic intervention with adults to increase social connectedness.		Exploratory, qualitative methodology semi-structured, qualitative interviews	n=7 Attrition n=4	IV - Group participation DV - Change in social functioning	IV - group attendance DV - 9-question qualitative interview	3 participants interviewed from original 7	Increased perceptions of social connectedness, increased confidence in social situations, and skills practiced in-game were transferable to real life	Level III - Qualitative Study Strength - intimate, year-long study with marked positive change Weakness - small sample, only one group experience, quotations from interview responses not available.
Atherton, G., Hathaway, R., Visuri, I., & Cross, L. (2025). A critical hit: Dungeons and Dragons as a buff for autistic people		2 gorups - 6 week interventions with semi-structured follow-up interviews	n=8 adults with autism split into two groups, online Dungeons and Dragons campaign, over 6 weeks (4 males, 2 females, 1 nonbinary, 1 gender fluid) with ages ranging between 20 and 34 years ($M = 23.25$, $SD = 4.46$) (4 British, 3 American, 1 Brazilian; 7 White, 1 Latinx) Voluntary response sampling via social media advertisements on D&D and TTRPG Reddit and Discord communities	IV - group participation DV - change in social connectedness	IV - group attendance DV - semi-structured post-intervention interview	individual semi-structured interviews interpretative phenomenological analysis (IPA) 11 open-ended questions, 5 focused on social interactions inside and outside of TTRPG, two discussed general opinions on tabletop games, and three focused on participant feelings about autism and how these feelings related to different areas, such as experiences with TTRPGs	Allows participants to experience 'bleed' or the ability to take on a new character that changes the way they feel about themselves outside of the game.	Level III - Qualitative Study Strength - Focused on a particular niche topic in ASD. However, addressed social skills well. Weakness - Small sample size. Recruitment from people who are active on social media can bias the more extroverted individuals.

Citation: (i.e., author(s), date of publication, & title)	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
Chun, S. M. (2025). *Dungeons & Dragons & dissertations: A study of therapeutically applied tabletop roleplaying game groups at a university counseling center*		Mixed-methods - Quasi-experimental Study Participants non-randomly assigned to groups	n=34 college students at BYU in Utah. Attrition of n=11 with n=23 participants completing study. voluntary response sampling	IV - TTRPG vs TAU gorup DV1 - Treatment outcome measure of client psychological functioning DV2 - Quality of social connection	IV - group attendance DV1 - OQ-45 DV2 -GQ	Qualitative Data - Braun and Clarke's thematic analysis Quantitative Data - linear regressions	No statistically significant difference of psychological functioning over time between groups. Both groups trended towards improvements. TA-TTRPG therapy groups are comparable to unstructured process groups in how they impact psychological functioning and group cohesion as measured by the OQ-45 and the GQ.	Level II - Quasi-experimental Study Strength - Compared 2 sets of control vs treatment groups Weakness - Small sample size showed potential trends without definitive results
Hartwig, E. K., Walker, E., & Stamman, J. (2025). Roll for Initiative: Using Dungeons and Dragons in play therapy.	ADDRESSING model	Manuscript	N/A	N/A	N/A		TTRPGs can be beneficial tools for therapeutic interventions in children and adolescents	Level V - Manuscript (Guidelines?) Strength - Concise. Delivers suggestions for use in professional applications. Weakness - not a study. This manuscript cites outside studies as basis for recommendations.
Henrich, S., & Worthington, R. (2023). Let your clients fight dragons: A rapid evidence assessment regarding the therapeutic utility of 'Dungeons & Dragons'.		Rapid Evidence Assessment with thematic analysis	n=13 studies	IV - D&D used therapeutically DV1 - personality type of D&D players DV2 - stakeholders' attitude about D&D DV3 - coping associated with D&D DV4 - psychological effects of D&D.	Thematic analysis	Thematic analysis	No unified personality type of D&D players, stakeholders' lack of negative attitude about D&D, lack of maladaptive coping associated with D&D, and potential psychological benefits of D&D.	Level V - Rapid Evidence Assessment Strength - Exhaustive review of studies published in English Weakness - Only 1 assessor. Preliminary results only.
Lees, O. J. (2023). *Tabletop therapy: An examination of therapeutic factors*		Qualitative Study	n=180 responses, 18 or older, speaks English, plays TTRPGs	IV - DV - Player's experience of therapeutic	GMHQ	Constant comparative model of qualitative data analysis	Study 1 - 4 major self-reported themes: Interpersonal benefits (40%), Intrapersonal benefits (33.3%), benefits of emotional	Level III - Qualitative Study

Citation: (i.e., author(s), date of publication, & title)	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
within tabletop role-playing game groups			n=50 selected for eligibility for study 1 n=5 selected for study 2 via assessment of study 1 responses voluntary response sampling (convenience sampling?)	factors of TTRPGs	Therapeutic Factors Inventory-9	Study 2 - semi-structured interviews	and self-expression (25%), and negative impacts (1.7%) Both studies - TTRPGs involve therapeutic factors of Interpersonal Learning, Group Cohesiveness, Development of Socialization Techniques, and Instillation of Hope	Strength - Weakness -
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		Repeated-measures design	n=32 n=7 attrition n=25 participants completing study Convenience sampling - recruited via social media, a radio station, and tabletop gaming clubs in the local area	IV - DV1 - Mental Health DV2 - Self-Esteem DV3 - Self-Efficacy	IV - DV1 - 21-item DASS-21 DV2 - 10-item Rosenberg Self-Esteem scale DV3 - 10-item General Self-Efficacy Scale Colleced prior to participation(T1), at 4 weeks(T2), at 8 weeks(T3), then 1 month post-study(T4)	Cronbach's α Pearson's product-moment correlation coefficients for change over time One-way repeated measures ANOVAs comparing scores across T1, T2, and T3 only. Mauchly's test of sphericity Paired-samples t tests comparing outcome variables at T1 and T2, T1 and T3, and T1 and T4	Playing D&D has a positive impact on participants' mental health and self-concepts, with significant reductions in depression, anxiety, and stress, as well as significant increases in self-esteem and self-efficacy Significant omnibus tests were observed for depression ($F(2, 48) = 8.16$, $p < .001$, $\eta p2 = .25$), anxiety ($F(2, 48) = 4.84$, $p = .012$, $\eta p2 = .17$), stress ($F(2, 48) = 9.20$, $p < .001$, $\eta p2 = .28$), self-esteem ($F(1.58, 37.79) = 15.97$, $p = <.001$, $\eta p2 = .40$), and self-efficacy ($F(2, 48) = 6.37$, $p = .004$, $\eta p2 = .21$), indicating significant changes in these variables across T1, T2, and T3. Paired t-test: depression, anxiety, and stress were significantly lower at T3 and T4 relative to pre-intervention. Participants reported greater self-esteem and self-efficacy at T3 and T4 relative to T1. Anxiety and self-efficacy significantly decreased from T1 to T2	Level II - Quasi-experimental Strength - Quantitatively assess D&D's therapeutic effects Weakness - small sample size, community setting not clinical
Slaughter, A., & Orth, S. (2023). An uncontrolled case study of a tabletop role-playing therapy group with difficult-to-engage patients.			n=7 hospitalized adults ages 27-45 with between 2 and 17 years (average of 8) since admission	IV - Group participation DV1 - Group satisfaction DV2 - Psychological distress	IV - Group attendance DV1 - GSS DV2 - Kessler 6 - complete 1 week prior to		Participants reported enjoying and benefitting from the interactive and collaborative aspects. Reported appreciation for the differences between the intervention and the more common group structures.	Level III - Non-experimental Strength - studies the therapeutic

Citation: (i.e., author(s), date of publication, & title)	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
			n=2 White and Native American n=1 Native American and Asian/ Pacific Islander n=2 White n=1 Native American n=1 Asian/Pacific Islander n=3 schizophrenia n=1 delusional disorder n=1 unspecified schizophrenia spectrum disorder n=1 bipolar I disorder n=1 obsessive compulsive disorder		and post-intervention - measures psychological distress over the past 4 weeks Open-ended questions		Participants reported feeling they could contribute to the group and favorably compared the collaborative TTRPG structure to more common lecture formats. Kessler 6 scores trended down (M = 12.17 vs M = 9; p = .28) - not statistically significant (paired sample t = 2.53, p = .052), In post-surveys, participants reported being satisfied with the group content (GSS content subscale M = 28.14) and the group leader (GSS therapy subscale M = 18.14). All participants reported they would recommend the group to others.	application of a TTRPG group with long-term hospitalized patients. Weakness - small sample size (n=7)
Sousinha, A., & de Almeida, A. F. (2019, Jul 01-03 2019). EFFECTS IN SELF-PERCEPTION AND RELATIONSHIPS AFTER A BRIEF EXPERIENCE OF ROLE-PLAYING GAME WITH 7TH GRADE STUDENTS.			n=24 7th graders n=12 girls n=12 boys	IV - DV1 - flow DV2 - self-Competence DV3 - affection towards others	Game User Questionnaire	Min, max, and SD of the results of the Game User Questionnaire	All participants expressed pleasure in participating and availability to continue the experience, noting their improved ability to regulate mood and social behavior. Interest in deepening different themes.	Level III - Qualitative Study Strength - sample size of 24. Measures the participants' engagement and enjoyment of the intervention quantitatively.. Weakness - Minimal description of the analysis of data. Only reports participant self-perceptions.
Varrette, M., Berkenstock, J., Greenwood-Ericksen, A., Ortega, A., Michaels, F., Pietrobon, V., & Schodorf, M. (2023). Exploring the efficacy of cognitive behavioral therapy and role-playing games as an intervention for		Exploratory partial-factorial, between-subject design, with a within-subject follow-on comparison for one of the between-	n=24 participants, ages 19-59, American citizens n=2 attrition n=22 participants completed study 2 randomly assigned independent variables	IV - CBT delivered via TTRPG groups DV1 - social skills DV2 - anxiety symptoms and behaviors DV3 - mental well-being	IV - Group assignment DV1 - SSI DV2 - SPIN-17, GAD-7 DV3 - participant debriefs GRSS		All the groups showed an average decrease in self-reported anxiety (n=19 decrease in GAD-7, n=6 no change in GAD-7 score, and n=5 increase in GAD-7 scores) One therapeutic TTRPG group decreased in self-reported social anxiety, other groups remained the same (n=20 participants saw decrease in SPIN-17 scores, and n=10 saw increase in SPIN-17)	Level II - Quasi-experimental Strength - Quantitative analysis of change in key variables over 12 weeks. Larger sample size. Compared intervention groups to control group.

Citation: (i.e., author(s), date of publication, & title)	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
adults with social anxiety		subject groups 12 week intervention	(group offering and intervention offered) 1 quasi-independent variable (self-identified social anxiety status) 1 control group. G1 - Socially Anxious, therapeutic, TTRPG G2 - Socially Anxious, recreational, TTRPG G3 - Not Socially Anxious, Therapeutic, TTRPG G4a - Socially Anxious, Recreational, Control (not TTRPG) G4b - The G4a group transitioned to Therapeutic, TTRPG following the initial 12-week control intervention				All groups showed improved SSI (G1, G2, G4a, and G4b saw improvements by 6 weeks. G1, G2, G3, and G4b saw improvements by 12 weeks. G1 saw 33% improvement) Participants report being very satisfied with the overall group experience	Weakness - Intervention was administered online. Face-to-face interventions may find variance in results.
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		Scoping Literature Review	n=51 articles n=17 qualitative design, n=18 literature, scoping, or systematic reviews n=12 quantitative design n=4 mixed-method design				TTRPGs can be employed to promote social skills. TTRPGs facilitate cognitive function in problem-solving and creativity. The process of switching between the point of view as players and characters develops the self-reflective skills, enhances the meaning-making process. TTRPGs might minimize the risk of negative psychological outcomes. TTRPGs serve as therapeutic tools for psychological problems such as social anxiety, depression and social isolation. TTRPGs have been found to complement well with drama-therapy and CBT in treating clients with anxiety and depression symptoms. TTRPG usage also benefits clients on the autism spectrum.	Level V - Scoping Literature Review Strength - collates existing data about the therapeutic implications of TTRPGS Weakness - does not limit to therapeutically applied TTRPGs

LEGEND

CBT - Cognitive Behavioral Therapy

DASS-21 - Depression, Anxiety and Stress Scale

D&D/DnD - Dungeons and Dragons

GAD-7 - Generalized Anxiety Disorder survey

GMHQ - Gaming and Mental Health Questionnaire

GQ - The Group Questionnaire

GRSS - Group Relational Satisfaction Scale

GSS - Group Satisfaction Scale

OQ-45 - Outcome Questionnaire-45

SPIN-17 - Social Phobia Inventory

SSI - Social Skills Inventory

TTRPG - Tabletop Roleplaying Game