

A Scoping Review of Tabletop Role-Playing Game (TTRPG) as Psychological Intervention: Potential Benefits and Future Directions

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Purpose: The present study aimed to investigate how prior research of TTRPG revealed the benefits of TTRPG as a psychological intervention and how further studies can overcome the challenges and limitations of TTRPG in those previous studies.

Methods: The study used Scoping Review to explore the potential benefits of TTRPG. Three research questions were identified (1) the extent to which empirical research has been conducted regarding TTRPG as intervention, (2) the potential of TTRPG mentioned, and (3) the suggestions for future research. The study investigated the last 10 years (ie, 2013 to 2023) of research publications with all research methods included. The search focused on key terms of “Tabletop Role-playing Game”, “TTRPG”, “Dungeons and Dragons”, and terms related to intervention. The databases used were in English and Indonesian and resulted in 109 papers but later eliminated due to various reasons until it became 51 papers to be reviewed.

Results: Of the 51 papers included for final analysis, majority are of exploratory approach (n = 35; eg, literature review and qualitative design studies), indicating that research in TTRPG is still at the emerging stage. Quantitative design studies (n = 12) and mixed-method design studies (n = 4) on TTRPG are the minority. Majority papers (n = 30) are published in the United States, only three papers published in the Asian context, indicating that TTRPG research in the Asian context is scarce.

Conclusion: From existing literature, TTRPG provides benefits to promote cognitive and psychosocial skills, to prevent negative effects and stress, as well as to intervene in psychological problems such as social anxiety, depressive symptoms, and autism spectrum disorders. Further studies can explore the use of TTRPG in Asia-representing collectivistic culture, to employ different systems of TTRPG and to examine the effects of TTRPG using experimental design to overcome the limitations of prior studies.

Keywords: tabletop role-playing games, psychological intervention, scoping review

Introduction

Undoubtedly, psychological interventions for adolescents and adults can present significant challenges. Research has shown that resistance towards treatment is not uncommon among this population.^{1,2} Many individuals find it difficult to open up and engage fully in counseling sessions, especially during the initial stages of therapy. Therapeutic rapport, trust-building, and consistent support are vital elements in helping individuals to overcome their resistance³ and gradually working towards better mental health. By addressing these challenges effectively, mental health professionals can enhance the efficacy of psychological interventions and support individuals on their path to improved mental well-being. It is crucial for mental health professionals to adopt a patient and empathetic approach, creating a supportive and non-judgmental environment that encourages clients to gradually open up and explore their emotions and thoughts.⁴ This resistance and reluctance to open up can impede their progress towards improved mental well-being,⁵ leading to heightened anxiety regarding their mental state. Especially in Asian individuals, the stigma of mental health was reported to hinder their help-seeking behavior.⁶

The clients' reluctance to fully engage in therapy may be influenced by various factors, such as fear of judgement surrounding mental health, disbelief with seeking professional help, even the burden of financial problems.⁷ Recent research has indicated that adults are increasingly susceptible to feeling lonely and alienated.⁸ For those who have lost a sense of connectedness and harbour concerns about social interactions, it may become a significant barrier to seeking psychological help.¹ Isolated adults often experience a sense of pressure or discomfort when confronted with the formality of traditional counseling settings.

In response to these challenges, it is imperative to explore alternative approaches that can engage clients in a more comfortable and less formal manner.⁹ Adopting a more flexible, less conventional setting of an intervention can foster a supportive therapeutic environment. Offering clients various options for seeking help, such as by integrating games into treatment, may also be beneficial,² as it allows them to feel less pressure in telling their problems from one session of counseling. Additionally, integrating more interactive and participatory activities into the therapeutic process can help clients feel more engaged and empowered.^{1,10} This could include incorporating group activities that encourage social connections in a non-threatening environment.

Gamification of interventions has emerged as a viable option in the therapeutic world. A prior study has demonstrated the effectiveness of board games in aiding clients with problems such as dementia and anxiety.¹¹ Tabletop Role-Playing Games (TTRPG) have also been recognized as potential gamified interventions.² TTRPG is part of Role-Playing Games (RPG) that serves as a big umbrella for game formats and genres that in some manner center around the development, portrayal, and progression of characters. These characters engage in a fictitious world within a set of predetermined guidelines.¹² These features also appear in TTRPG, which is the focus of the present study. The main characteristics of TTRPG are the use of dice, character sheet, rules, and visual tools; encouraging players to imagine the character and the world game with the GM who leads the story and the dynamics of players' interaction. TTRPG also offers storytelling style, a high degree of players' agency so that the players can develop their characters. Therefore, though TTRPG has been named with different terms, we attempt to carefully distinguish TTRPG from other RPGs based on those main characteristics.

TTRPG is a game system in which players create their own characters, follow a narrative with specific rules, and independently decide their actions within the game.¹³ There are several TTRPG systems that have been published. However, among those various TTRPG systems, there are three key aspects. First, players have the freedom to customize their characters and unique characteristics to reflect themselves. Second, players adhere to a set narrative and rules established by the GM, which can be a fantasy world story or a more common fictional story. Third, players actively engage and participate in shaping the story's outcome and character development by making decisions and facing the consequences. The GM's flexibility in a TTRPG is crucial as it allows for tailoring the story and narrative to suit each player.⁹

Role-playing offers the potential benefits for clients to immerse themselves in a fictional setting, where they can freely express their feelings, make decisions, and solve problems without worrying about real-life consequences.¹⁴ Compared to Role-Play Therapy, TTRPGs are more developed and engaging, even though they share the same foundation.² Notably, TTRPGs are rooted in client-tailored storytelling. TTRPG has been used in clinical settings, for example, Rubin-Budick (2022) utilized a specific TTRPG scenario that enables a better understanding of the perspective of children on the autism spectrum.¹⁵ In a more naturalistic TTRPG narrative, therapists can identify various symptoms in children with autism, and the interactions between therapists and children create a supportive environment that strengthens their future client-therapist relationship. TTRPG has also been employed in non-clinical settings, like Dungeons and Dragons (D&D) was tried to foster group cohesion among adults, while they work together to defeat enemies.¹ Participants in that study reported feeling more connected to one another and gained confidence through confrontational opportunities. It has been demonstrated that adults who engage in TTRPGs, regardless of the scenario, experience personal growth and development.¹⁶ Despite being a form of escapism from the real world, TTRPGs offer a whole new experience of meaning-making, enriching the participants' lives.¹⁷

Regrettably, TTRPG as a viable intervention option is not widely recognized. Several studies have highlighted that limited empirical research and exploration of its potential are the primary obstacles to the development of Therapeutic Applied TTRPG.^{1,2,9,17} Consequently, the true potential of TTRPGs remains unclear and underexplored. However, we see the potential use of TTRPG in the Asian context since some studies proposed that storytelling has been used as a means of supporting socialization among Asian cultures¹⁸ and storytelling can be utilized as the process of meaning making among Asian Americans.¹⁹ Therefore, it is also important to examine how prior studies have explored the use of

TTRPG in the Asian context. Thus, the purpose of this study is to conduct an integrative review of existing TTRPG research to examine its prospective as a psychological intervention for both clinical and non-clinical settings as well as its limitations that can be anticipated in future studies.

Materials and Methods

This study uses scoping review to explore the viability of TTRPG as a psychological intervention and to identify the extent of the literature. The scoping review methodology is a process needed for researchers to understand the stretch of a certain topic in literature.²⁰ Mak and Thomas (2022) defined the process within 5 stages, (1) determine the research question, (2) identifying relevant literature, (3) selection of the studies found, (4) data extraction, and last, (5) reporting the final results.²¹ Each process is presented further below.

Research Question Identification

It is essential to highlight the potential of TTRPG in the context of psychological treatment. Some studies have acknowledged that while TTRPGs hold promise as engaging interventions for adults, the empirical evidence remains limited.^{1,2,22} Some studies were still using TTRPG design with therapeutic intention, rather than tailored to Therapeutically Applied-RPG (TA-RPG). Thus, in the present study, we cover different kinds of research under TTRPG. Therefore, this study aims to answer these questions: (1) to what extent have empirical studies been conducted about the potential of TTRPG as a psychological intervention? (2) what is the potential of TTRPGs as a psychological intervention? and (3) what possible future studies and suggestions need to be undertaken?

Identifying Relevant Literature

This study investigates papers published in both English, that represents Western communities, and Indonesian literature, that represents Asian cultures. To ensure a comprehensive range of literature, both qualitative and quantitative papers are utilized. The research is limited to the last 10 years of publication, given that TTRPG as an intervention has developed significantly within this timeframe and this study aims to include the most recent publications. This study specifically focuses on narrative-based RPGs.^{1,17,22} Consequently, role-playing related to work role training and video game role-play is excluded.

Key terms were selected to find literature aligned with the study's objectives. The search focused on keywords such as ["Tabletop Role-playing Game" OR "Role Play Game" OR "Role Play"]. Additional keywords closely related to TTRPG, such as ["Dungeons and Dragons" OR "Dungeons & Dragons" OR "D&D"], were also included. The second set of keywords pertained to psychological intervention, including ["Intervention" OR "Treatment" OR "Therapy" OR "Therapeutic" OR "Clinical" OR "Therapist"]. Both sets of keywords were combined using the "AND" operator in the database search.

For Indonesian databases, translations were applied where necessary. The searches for papers were conducted across several databases, including Garuda and Indonesia OneSearch for Indonesian databases, and e-journals like Emerald and Gale, as well as Google Scholar and Directory Open Access Journal (DOAJ) for English databases. Additional strategies, such as examining the bibliographic references of the articles and identifying other studies citing the selected articles, were employed to enhance the data search.²³

Papers Selection Process

Upon conducting the initial paper search, this study retrieved numerous papers with similar content. The process of identifying and selecting relevant papers is outlined in Figure 1. Title and abstracts were reviewed to exclude papers that did not meet criteria. The selected papers adhere to specific criteria, encompassing theses, dissertations, and published articles. The focus is exclusively on TTRPG, excluding other types of role-playing games. The abstracts of these papers present findings regarding the benefits and/or disadvantages of TTRPG. Additionally, papers related to library science and literature are not included.

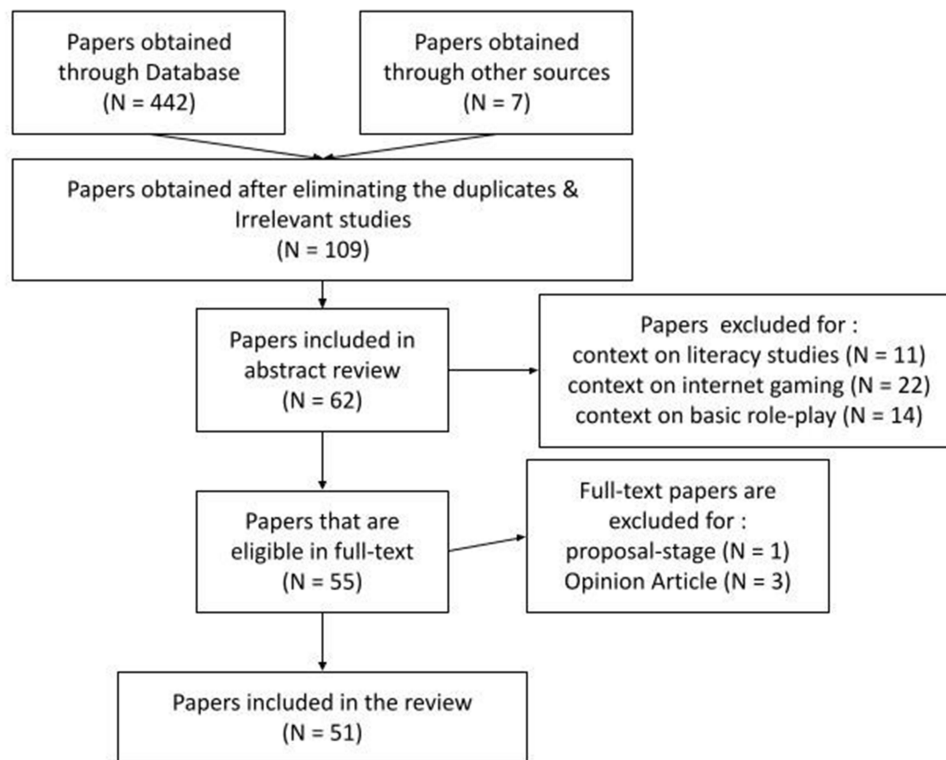


Figure 1 Identification and Selection Process.

Data Extraction

Papers included in the scoping review were noted in terms of type of article, study design, author, year, country, population, familiarity of sample with TTRPG, impact and limitation. The extracted data for each paper include characteristics of the participants, such as their origin and whether they are clinical or non-clinical participants. Additionally, the data encompasses the study's methodology, findings, mentioned benefits, and critical evaluations of any disadvantages discussed in the study. To avoid bias, data extraction was conducted independently by three reviewers. Weekly discussions/meetings were done to ensure objectivity.

Reporting Final Results

Final results were presented in table format and discussion points for answering the stated research questions. Three reviewers worked together to cover all points gathered from the scoping review process.

Results

From 51 papers that we reviewed (ranging from 2013 to 2023; see [Table 1](#)), 17 papers employed qualitative design, 18 papers employed literature or scoping or systematic reviews, 12 papers employed quantitative design, and 4 papers employed mixed-method design. From those 51 papers, there were 8 dissertations and 12 theses in recent years, which means the interest of TTRPG studies is increasing. Majority of the papers ($n = 30$) published in the United States, focusing on TTRPG and D&D players (both clinical and non-clinical), which is not surprising, as D&D and RPG are quite popular among the communities in the United States. We found nine papers published in the European continent, six papers from Canada, and three papers from Australia. We found only two papers from Japan (both papers focused on clinical population) and one paper from Taiwan (focused on non-clinical population). This might indicate that research regarding TTRPG is still scarce in the Asian context.

The qualitative research methodologies employed in these studies encompassed a range of techniques, including interviews, observation, autoethnography, ethnography, case studies, and analysis of secondary sources such as forums

Table 1 Characteristics of Articles Included

Type of Article		Author (Year)	Country	Population	Familiarity
Qualitative Designs	Qualitative Case Study Reports	Rosset and Stauffer (2013) ²⁴	Switzerland	Non-Clinical gifted children (WISC scores > 130) and adolescents (8 to 16 years old), n = 12	Yes, participants are familiar with RPG
	Autoethnographic Investigation:	Hall (2015) ²⁵	United States	Non-Clinical, n = 1 (4 characters = player vs character perspectives) Author self-interview by switching from self with four fictional characters – total 8 interviews	Yes
	Field notes, memo, artifact analysis of students' writings, and interviews (students and teachers)	Cook et al (2016) ²⁶	United States	Non-Clinical 8 th grade students, n = 36 (85% low economic status)	Sessions given to instruct teachers and students about TRPG
	In-person, phone and email interviews	Gutierrez (2017) ²	United States	Non-clinical; mental health practitioners; n = 5	Yes, implemented RPGs on therapeutic practices with adolescents
	Grounded Theory	Coe (2017) ²⁷	United States	Non-clinical; undergraduates; n = 16	Yes, 14 active TRPG players; 2 choose to be non TRPG players
	Semi-structured Interviews	Kaylor (2017) ²⁸	United States	Non-clinical; teenagers, n = 7	Yes, TRPG players.
	Content analysis; group observations; interviews	Lasley (2020) ²⁹	United States	Non-clinical; n = 4	Yes, D&D players
	Narrative inquiry interviews	Causo & Quinlan (2021) ³⁰	Australia	Clinical; n = 13	Yes, D&D players

(Continued)

Table 1 (Continued).

Type of Article	Author (Year)	Country	Population	Familiarity
Semi-structured interviews, ongoing notes on development and implementation of D&D group	Abbott et al (2021) ¹	United States	Non-clinical; n = 3	Yes, D&D players
Autoethnography	Crigger (2021) ³¹	United States	Non-clinical; n = 1 Author self-reflection on healing journey as Dungeon Master and player of different characters	Yes, D&D player
Semi-directed interviews	Goodall & Truong (2021) ³²	Canada	Non-clinical; n = 9	Yes, TRPG players
Thematic analysis on Reddit threads	Scriven (2021) ³³	Switzerland	N/A	Yes, D&D players
In-depth analysis of TTRPGs philosophy to LGBTQIA+ contexts	Glickman (2022) ³⁴	United States	Non-clinical; LGBTQIA+	N/A
Short answer questionnaires and semi-structured interviews	Lees (2022) ³⁵	United States	Non-clinical; diverse players, n = 55	Yes, TRPG players
Ethnography semi-structured interviews	Rubin-Budick (2022) ¹⁵	United States	Clinical – children and adolescents diagnosed with autism spectrum conditions; interview the therapist, n = 4	Yes, TRPG therapists
8-week storytelling workshop feedback analysis and reflection	Lang-Ree (2023) ³⁶	United States	Non-clinical, adolescents; n = 21	N/A
Semi-structured interviews	Kilmer et al (2023) ²²	United States	Both clinical and non-clinical; adolescents with social challenges (eg, ADHD, social anxiety), n = 8; parents of the players, n = 12	Yes, RPGs players

Reviews	Literature review on three TRPG game medium on self-reflexivity	Torner (2016) ³⁷	United States	N/A	N/A
	Literature review on TRPG and individual development	Flournoy (2018) ¹⁶	United States	Both clinical and non-clinical	N/A
	Literature review on three interactive media art forms	Xu (2019) ³⁸	Japan	Clinical	Non-player
	Literature review on RPG as drama-therapy-informed interventions	Mendoza (2020) ³⁹	United States	Both clinical and non-clinical	N/A
	Literature review on problematic designs in TRPG for narrative therapy and community wellbeing	Polkinghorne et al (2020) ⁴⁰	Australia	Clinical	Non-player client therapy
	Literature review on TRPG and digital resistance by the community	Thoren (2020) ⁴¹	Sweden	Non-clinical	Yes, TPRG players
	Literature review on D&D and drama therapy for teenagers with autism	Chaplan-Hoang (2021) ⁴²	Canada	Clinical – Autism Spectrum Disorder	N/A
	Literature review on TRPG as safe environment for sexual and gender minority individuals	Gobble (2021) ⁴³	United States	Both clinical and non-clinical	Yes, players
	Literature review on TRPG as literacy experiences	Campbell & Madsen (2021) ⁴⁴	Canada	Non-clinical, experienced educators	Non-player but tabletop game enthusiast
	Literature review on leadership development using TRPG	Funk (2021) ⁴⁵	United States	Non-clinical	N/A
	Literature review on D&D as moral experimentation and personal-political edification	Hollander (2021) ⁴⁶	United States	N/A	Yes, players of D&D.

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Table 1 (Continued).

Type of Article	Author (Year)	Country	Population	Familiarity
Scoping review on RPG in mental health	Arenas et al (2022) ¹²	United States, Brazil, New Zealand, Japan, Australia, Canada, Ireland, Singapore, Belgium, Chile, France, Liberia, Netherlands, Spain, Switzerland. Articles were written in Portuguese, English or Spanish	Both clinical and non-clinical	N/A
Literature review on RPGs for mental health	Baker et al (2022) ⁴⁷	United Kingdom	Both clinical and non-clinical	N/A
Literature review on TRPG as creative intervention for developing adolescents' social skills	Bautista (2022) ⁴⁸	United States	N/A	N/A
Literature Review on potential applications of drama therapy in TRPG	Ankrom (2023) ⁴⁹	United States	N/A	Yes, TRPG players
Systematic review on therapeutic utility of D&D	Henrich & Worthington (2023) ⁵⁰	United Kingdom	Both clinical and non-clinical	Yes, D&D players
Case writing on using D&D as objective structured clinical examination	Leung et al (2023) ⁵¹	Canada	Non-clinical (players and OSCE writers)	Yes
Literature review on therapeutic function of mythopoesis in TRPG	Watson (2023) ⁵²	United States	Clinical	N/A

Quantitative Designs	Nonequivalent control group pretest-posttest quasi-experimental design	Dyson et al (2015) ⁵³	Taiwan	Non-Clinical Undergraduates, n = 39	Yes, familiar with TRPG story modules
	Cross-sectional survey	Rivers et al (2016) ⁵⁴	United States	Non-Clinical Undergraduates and Graduates, n = 127	Yes, games (both online and tabletop)
	Cross-sectional survey	Gelein & Miltenburg (2019) ⁵⁵	Netherlands	Non-clinical; online reddit; n = 930	Yes, Dungeons and Dragons players
	Experimental multiple single-case design	Billieux et al (2022) ⁵⁶	Switzerland	Clinical, problematic video-game use and social anxiety; n = 20	Yes, gamers.
	Cross-sectional survey	Lorenz et al (2022) ⁵⁷	Germany	Non-clinical; n = 801	Two groups: D&D players vs non-players
	Cross-sectional survey	Ott (2022) ⁵⁸	United States	Non-clinical, undergraduates; n = 184	Yes, familiar with TRPG
	Pre-post intervention study	Babichenko et al (2023) ⁵⁹	United States	Clinical, adolescents with chronic physical and mental conditions, n = 3	Not mentioned
	Cross-sectional survey	Ferguson (2023) ⁶⁰	United States	Non-clinical; n = 308	Yes, 17% of sample are players of D&D
	Cross-sectional survey	Poeller et al (2023) ⁶¹	Canada	Non-clinical; n = 174	Yes, gamers.
	Cross-sectional survey	O'Reilly (2023) ⁶²	United Kingdom	Non-clinical; n = 115	Both players and non-players
	Cross-sectional survey	Ben-Ezra et al (2018) ⁶³	Israel	Non-clinical, social workers, n = 130	Some participants are familiar, some are not.
	Quasi Experiment	Slaughter & Orth (2023) ⁶⁴	United States	Clinical forensic adults (not guilty by reason of mental illness, n = 6	Not mentioned

(Continued)

Table 1 (Continued).

Type of Article		Author (Year)	Country	Population	Familiarity
Mixed Designs	Literature Review, Action Research, Data cross-analysis	Daniau (2016) ⁶⁵	Canada	Non-Clinical (20 to 65 years old)	Yes, TRPG players
	Quasi-experiment, survey, interviews	Spinelli (2018) ⁶⁶	United States	Clinical and non-clinical college students; autistics students; n = 85	Two categories of participants – player vs non-player
	Cross-sectional survey; interviews	Kato (2019) ⁶⁷	Japan	Clinical autistic children (age 13 to 14 years old) n = 55	Yes, all participants took part in TRPG activities
	Quasi-experiment, interviews	Collins & Sabanovic (2021) ⁶⁸	United States	Both clinical and non-clinical university students, n = 16	Not mentioned

and notes. Participants were drawn from diverse backgrounds, including players, non-players, and mental health practitioners. Literature review articles within this body of research centered on comparative analyses, examining TTRPG in relation to other interventions like drama and art therapies, as well as comparing paper-pencil and online TTRPG formats. Additionally, they explored the applications of TTRPG in mental health and education contexts.

Within the realm of experimental studies, TTRPG was utilized as an intervention tool targeting specific clinical cases, such as autism spectrum disorders, as well as non-clinical individuals exhibiting certain psychological symptoms. These investigations have demonstrated the versatility of TTRPG across both clinical and non-clinical populations. Given the nascent nature of research in this area, qualitative methodologies and literature reviews predominated as an exploratory approach, reflecting the ongoing emergence of TTRPG as a research tool in diverse contexts.

Discussion

TTRPG Definition and Systems

Given D&D stands out as the most widely embraced form of TTRPG, and it is unsurprising that approximately 14 studies have honed in on D&D specifically. Its widespread popularity facilitates access to D&D players and communities, facilitating study and learning opportunities. Research findings have underscored the positive psychological impacts of D&D play, including enhancements in self-reflection abilities,^{50,69} adeptness in handling moral dilemmas, and fostering personal growth,⁴⁶ as well as promoting enjoyment and achievement.⁷⁰ However, the class-based structure of D&D has also sparked concerns regarding issues of racial hierarchy, incentives for portraying evil characters, and its strong American cultural context,⁴⁶ which may not resonate sensitively across diverse cultural backgrounds. TTRPG systems vary widely in their approaches to character customization, with some prioritizing skills-based systems over class-based ones, and featuring distinct rules and thematic elements. To date, only two researchers have ventured into investigating TTRPGs, namely Fantasy Spoils⁷¹ and Fiasco.⁴⁴ However, it is plausible that other TTRPG variants exist beyond those explored in existing research, thereby presenting opportunities for tailored game design to address specific needs or objectives.

Role-Playing Games (RPG) emerged as a prevalent term across 13 papers, encompassing not only TTRPG but also live-action RPGs, computer RPGs, multiplayer online RPGs, and massively multiplayer online RPGs, each boasting distinct characteristics from TTRPGs.¹² Notably, we found that one study conflated TTRPGs and RPGs into a single category, with Dungeons and Dragons (D&D) serving as the exemplar, when exploring social workers' perceptions of RPGs and psychopathology.⁶³ In contrast, another research introduced Therapeutic Applied Role-Playing Games (TA-RPGs), defined as TTRPGs utilising D&D with therapeutic intent to enhance socioemotional skills.²² Another research also proposed another term, namely Transformative Role-Playing Games (TF-RPGs), integrating TTRPGs with debriefing sessions to elucidate players' personal belief systems, encompassing attitudes, beliefs, and emotional responses.⁶⁵ Across these studies, it becomes apparent that maintaining clear definitions and distinct characteristics to differentiate TTRPGs from RPGs is essential to prevent confusion and facilitate more rigorous investigation. While TTRPGs serve diverse purposes such as education and therapy, prompting heightened interest in TTRPG implementation, ensuring clear nomenclature and categorization remains imperative.

Theories Behind TTRPG and Its Impact on Mental Health

Numerous psychological theories have surfaced in the realm of TTRPG studies, with particular attention given to narrative identity across various reviewed papers. Originating from the work of McAdams, narrative identity concerns individuals' capacity to forge a sense of self by integrating their life experiences into an evolving personal narrative, fostering a sense of coherence and purpose.⁷² Within TTRPG sessions, participants typically assume specific character roles, highlighting the relevance of narrative identity to mental health. In a longitudinal study involving individuals undergoing psychotherapy, enhancements in mental well-being were significantly linked to heightened themes of agency within personal narratives over the course of treatment.⁷³ TTRPGs afford participants a sense of agency, permitting them perceived control over character selection, imaginative exploration, and decision-making with considerably fewer real-life repercussions.

According to reader-response theory, individuals interpret texts and stories based on their own set of assumptions.¹⁶ In TTRPGs, players have the freedom to create characters that either mirror their real identities or diverge from them. As they engage with the narrative, TTRPG players can reshape the meaning of their identities and engage in internal dialogues between their own identity and the character they portray.⁷⁴ These processes play a role in how individuals reflect on their emotions, life narratives, and personal challenges. When faced with new experiences, individuals must decide whether to adjust their narrative identity to accommodate these incidents or integrate them into their existing self-story, often resulting in an unfavorable narrative shift.⁷³ In the process of constructing meaning, narratives that highlight past events leading to a sense of purpose or a transformative worldview, or those infused with positive emotions, tend to contribute to better overall well-being.⁷⁵

Another theory commonly applied to explore the therapeutic benefits of TTRPG for mental health is Yalom's therapeutic factors, which encompasses eleven distinct factors.⁷⁶ Lees (2022) suggests that TTRPG shares certain parallels with the group therapy process.³⁵ For instance, the instillation of hope, which involves fostering positive expectations about therapy, is also experienced by TTRPG players. They view TTRPG as a safe environment where they can cultivate a positive self-image, thereby fostering a sense of hope. As TTRPG can be played both individually and in group settings, it mirrors real-life situations where individuals not only hone their social skills through interaction with other players but also explore and express their desired selves through their characters.² This corresponds to the interpersonal learning process and the development of socialization techniques, key components of Yalom's therapeutic factors for group therapy. In Therapeutically Applied RPG, catharsis, self-discovery, identification with the character, and a sense of control during the game facilitate learning, healing, and personal growth.⁷⁷

The theory of perspective taking has also been explored within the context of TTRPG.⁷⁸ This theory involves the process of understanding or interpreting a subject from a different viewpoint, such as that of another individual.⁷⁹ Consequently, perspective taking is closely linked to empathy, which arises when one considers the actions and emotions of another person within their own context.⁸⁰ Additionally, perspective taking plays a significant role in fostering creativity.⁸¹ TTRPG players engage in empathy and creativity when they assume the roles of different characters, including their own original selves. In comparison to non-players, TTRPG participants have been shown to exhibit higher levels of empathy.⁵⁴ Furthermore, it was found that individuals who engage in TTRPG tend to display greater creativity than those who do not.⁶⁶

Benefits and Strengths of TTRPG as Psychological Intervention

Cognitive Performance Enhancement

In the reviewed literature, several strengths of TTRPGs as a psychological intervention are highlighted. Various studies demonstrate the beneficial impact of TTRPGs on cognitive performance, specifically in enhancing creativity,^{22,35,44,53,65,66} problem-solving skills,^{22,26,30,65} and perspective switching.^{22,24,25,27,54,55}

To be more specific, Dyson et al reported a significant positive impact of TTRPG on creativity potential through divergent thinking,⁵³ while Spinelli found that TTRPG players exhibited significantly higher creativity than non-players.⁶⁶ Both creativity and problem solving skills necessary to engage in the collaborative storytelling characteristic of TTRPGs. The essence of TTRPG is where participants collaboratively navigate scenarios toward shared conclusions. Players perform collaborative problem-solving to overcome in-game obstacles and advance the story.³⁵ The development of creativity and problem-solving skills extends beyond the individual level, encompassing group creativity in collaborative problem-solving and co-authorship within a collaborative scenario making.⁴⁰

Perspective switching is characterized as the capacity to seamlessly transition between different viewpoints without conflating them. Players can maintain a proper distance and adopt the perspective of both sides: as characters that actively act in the scenario and as a player that observes all of the progress simultaneously during the session.²⁴ The dynamic environment of TTRPG challenges players to swiftly shift perspectives, thereby enhancing their situational awareness.²⁵ Players may immerse themselves in the emotions and thoughts of their characters²⁶ and gain insights into how these characters perceive the world.^{27,53,58} This perspective taking can also take place between players and occur towards Non-Player Character (NPC), a character played by the Game Master (GM). Perspective taking is closely linked to empathy, which arises when one considers the actions and emotions of another person within their own context.^{54,80,81}

Development of Social Skills

It is noteworthy that the majority of study outcomes highlight an improvement in social skills through TTRPG sessions. The collaborative storytelling nature of TTRPGs creates opportunities for players to engage in communication and collectively construct narratives within fictional settings.^{16,25,39,71} These advancements in social skills encompass various specific areas. Firstly, players' empathy skills are cultivated through two ways: empathy towards other players^{36,39,47,54,65} and empathy towards the fictional characters they create.^{16,54} Developing social skills such as empathy and creativity holds particular importance in collectivistic cultures, where individuals are expected to consider not only their own perspectives but also those of their peers and society at large. Higher levels of empathy are typically observed in collectivistic societies.⁸²

TTRPG offers players the opportunity for distanced empathy, enabling them to vicariously experience the emotions of the characters they have constructed while maintaining a distinction between player and character emotions.^{16,39} Meanwhile, empathy towards other players is manifested in group interactions. The failure of a participant in a scenario is often well received by other players, reflecting an atmosphere of acceptance and sympathy.²⁹ The sessions fostered a supportive group dynamic, resulting in strong interpersonal connections among players.^{1,39}

The next advantage involves motivating individuals to actively engage and interact with other players in TTRPG settings. TTRPG serves as a significant catalyst for children to proactively communicate with others.³⁸ A similar outcome was noted in another study illustrating that youths intentionally initiate conversations and interactions with fellow players.⁶⁷ Notably, from that study, these advantages were particularly shown in children and adolescents with autism spectrum disorder (ASD), with no mention of such intentionality in communication among non-clinical participants.

Impact on Identity Formation Through Self Reflection

Another highlighted benefit of engaging in TTRPG lies in its impact on identity formation, both at the group level²⁷ and the personal level.^{16,31,32,34,35,39,44} Crafting characters within a fantasy setting allows players to explore facets of their inner identity that may not have been recognized before.^{32,43} Furthermore, players can create characters aligned with their ideal selves³¹ or even represent aspects of their inner selves that might be marginalized in society, as seen in LGBTQIA+ players.³⁴ TTRPG is acknowledged as a safe space due to its fantasy setting, providing individuals the freedom to reflect without constraints.² From a pedagogical view, TTRPG assists students in developing their identity.⁴⁴

Intriguingly, this interchange between the real self and characters fosters self-reflection^{37,39} and enhances the individual's meaning-making process.^{16,31} The self-reflection in TTRPG is manifested through the meta-gaming process. The meta-gaming process refers to factors external to the world constructed within the scenario but influences the player's decisions as characters. Ideally, players avoid mixing their understanding as a player with that of their character. However, the significance of this process was emphasized as part of self-reflexivity.³⁷ It affords players the opportunity to address disparities between themselves and their characters in a debriefing session.

Pre-Counseling Tools for Counselor

It is widely acknowledged that TTRPGs can serve as therapeutic sessions for players, like one might experience in the counseling or psychotherapy session. However, only a small portion of the literature discusses this impact from the perspective of counselors or therapists. The gaming experience assists individuals in eliciting and understanding their emotions, facilitating follow-up discussions with therapists.²⁹ Acting as a cathartic tool by spotlighting personal narratives within a group scenario, TTRPG enables players to reinforce emotional experiences, fostering awareness and acceptance.³⁹ The fantasy setting provides an inclusive space for players to express their emotions without fear of consequences.³² This process may facilitate players in expressing themselves more openly to counselors, eliminating potential psychological barriers following a TTRPG session. Not only does the counselor benefit from the catharsis of emotions but TTRPG also serves as a platform for counselors to observe patterns of behavior and trains of thought among players. This allows counselors to identify areas where players may have mistaken goals and work toward addressing these issues after the session.²⁴

Weaknesses of TTRPG as Psychological Intervention

Limitations of Suitability

Before considering TTRPG as a therapeutic tool, it is important to acknowledge that this approach may not be suitable for everyone. The psychological benefits of TTRPG are likely to be experienced only by individuals who genuinely enjoy the gaming process¹⁶ and possess a sufficient level of engagement with the fantasy setting,⁵⁴ since the process of gaming that is beyond reality is limited only by the imagination of the participants.⁸³ This could become the hindrance for adult participants. They might be less inclined to deviate from real-life norms even during the game session,⁵³ limiting the possibility of imaginary choice and decision-making.

Limitation of the Game System

There is a problematic tension between the TTRPG system and the goals of therapeutic intervention, shown by the oversimplification of characters' traits.⁴⁰ The D&D system is the most frequently mentioned in studies related to therapeutic intervention. However, the D&D system gives a certain determinism regarding the physical features and strengths that players' characters possess based on their chosen race and class.⁸³ Simplifying, for instance, communication skills into numerical representations like a character's charisma, can lead to discomfort among neurodiverse players, such as autistic children.

The Caveat of Fantasy

While the fantasy setting provides a platform for unrestricted self-expression, it is not without risk for certain participants. The findings emphasize the importance of recognizing that certain players, particularly those who are currently experiencing psychosis or have other safety concerns, may not be suitable candidates for playing TTRPG. Immersion in a fantasy setting may distort players' perceptions of the real world.¹⁶ There is also a risk of derealization, where players may struggle to distinguish between events in the game and those in real life,² especially if they are dealing with pre-existing mental health issues. Additionally, to non-clinical participants, it has the potential to bleed out and reinforce negative attitudes toward certain morals, beliefs, and individuals in their everyday lives who may be associated with certain characters and scenarios played. It is raising concerns about negative spiritual and mental health outcomes.⁴⁶ Some papers may view the aspects of TTRPG, such as moral ambiguity or violence, as desensitizing players to real-world ethical concerns or behaviors with prolonged exposure.

Limitations of Cultural Alignment

In terms of geographic distribution, only four studies were conducted in non-Western contexts. However, these studies did not delve into cultural variances or explore how TTRPGs are uniquely perceived in collectivistic societies. Collectivistic cultures prioritize collaboration over individual achievements and strategies, particularly evident in multi-player online gaming contexts.⁸⁴ In a study on social network games, which are games integrated into platforms like Facebook, researchers found that both individualistic and collectivistic cultural values influenced players' spending behaviors within the game.⁸⁵ While cross-cultural investigations specific to TTRPGs remain scarce, insights from studies on other gaming genres suggest that cultural distinctions could influence TTRPG participants' reactions to themes, rules, and characters. TTRPGs, with their emphasis on group cohesion, collaborative gameplay, and storytelling, align well with collectivistic cultural norms.²⁵ Consequently, it is emphasized that the TTRPG system should be conceptualized and adjusted to align with cultural and therapeutic goals.³⁸ The previously mentioned D&D system tends to shove stereotypes within cultural identities.⁸³ Therefore, researchers should have the flexibility to choose an appropriate TTRPG system, build dialogue, and explore opportunities to diversify role-playing gaming for specific participants.

Some studies documented the differences between Western and Eastern societies in understanding story and developing narrative themes. Western stories emphasize the journey of the single protagonist character with a self-centered approach in conquering the world through change and disruption, while Eastern stories focus on collaboration, acknowledge the emotion, and maintaining harmony as the ending.⁸⁶ In understanding fairy tales, East Asians tend to employ self-restrained attitudes toward story construction, socially conscious interpretation techniques for character assessment, and symbolic time and space-imaging.⁸⁷ Regarding these unique characteristics in the non-Western cultures, TTRPG for Asians is encouraged to facilitate cooperation among characters and symbolic approach in the story as well as to allow participants to be driven by their emotions.

The Challenge of Adjustment as Psychological Intervention

TTRPG, by design, lacks a debriefing process after a gaming session. As a result, players often perceive the benefits solely from the recreational aspect of TTRPG or view it merely as a stress reliever.^{27,47} It was mentioned that TTRPG is seen merely as a game according to players.⁵⁵ This perception may hinder TTRPG from being recognized as a therapeutic tool. The debriefing process is crucial to enable providers to guide players in applying the gained insights to daily life.²⁶ The debriefing process serves as a bridge for players to transfer skills acquired in the game to real-life situations.⁴² However, the process of skill transfer to real life takes time, so re-evaluation from moment to moment is important.²⁴ It cannot be denied that the long-term participation in TTRPG is essential to enhance the impact.²⁸

Conclusion

The present study aims to investigate existing literature on TTRPG as a psychological intervention. To our knowledge, this is the first scoping review to explore the benefits and the challenges of TTRPG as a psychological approach to help people as well as to seek how TTRPG can be applied in the collectivistic culture. We found that the benefits of TTRPG come from the nature of interactions with the characters, interactions with the players, and the fantasy setting in TTRPG. First, TTRPG can be employed to promote social skills, such as facilitating better communication skills among the players/participants in a safe environment, developing healthy identities and showing empathy for others, for non-clinical settings. As for clinical settings, caution needs to be taken, especially the element of fantasy in TTRPG.

Second, TTRPG facilitates cognitive function in problem solving and creativity, since players learn to immerse themselves into the story, the rules, and collaborate to develop the scenario based on multiple decision-making processes. The process of switching between the point of view as players and characters develops the self-reflective skills and, later, enhances the meaning-making process, mainly in non-clinical settings.

Third, in non-clinical settings, TTRPG might be helpful to minimize the risk of several negative psychological outcomes with its cathartic nature, like providing opportunities to express negative emotions and bringing them into awareness. The nature of the fantasy world allows players to choose characters that represent their ideal self, future self, past self, and even the dark side of their real self, without any judgement or label from others. This allows the players to release their stress, to enjoy being what they really want with less risk compared to if they express those characters in society. This is also beneficial for the counsellors to have a pre-counseling session within the gaming process.

Lastly, TTRPG serves as therapeutic tools for psychological problems such as social anxiety, depression and social isolation, in both clinical and non-clinical settings. TTRPG has been found to complement well with drama-therapy and cognitive-behavioural-therapy in treating clients with anxiety and depression symptoms. TTRPG usage also benefits clients in the autism spectrum in terms of sensorimotor needs and social skills.

Despite those benefits of TTRPG, some limitations of TTRPG have also been mentioned in previous studies. The system of TTRPG limits the potential to be adjusted to different (sub-populations) participants, moreover the culture. It also relies heavily on the participants' skill to engage in an imaginary world, which may be suitable for adolescence but becomes hindrance in adult participants. Therefore, it takes time for a TTRPG session to be actually in use to enhance real-life skills.

The limitation of our study is related to the nature of scoping review that presents a broad description of the existing evidence for TTRPG. Compared to experimental design, we are limited in measuring the effectiveness of TTRPG as psychological intervention. Though we have attempted to carefully identify TTRPG from various terms that have been used by the researchers, it is possible that there might be some other systems of TTRPG that have been studied, but we did not include in the scoping review, due to the studies are using local language or perhaps those studies used new system of TTRPG that are not familiar to the researchers. We also did not separate TTRPG for therapeutic purposes and TTRPG for non-therapeutic ones. We acknowledge that the research on TTRPG is increasing. However, since prior studies still mainly use D&D and are mostly being conducted in Western societies, as well as interchangeable terms between TTRPG and RPG in the definition, we encourage further studies to give attention to overcome those limitations. The use of TTRPG as psychological intervention in collectivistic societies is highly recommended with emphasis on how TTRPG can be relevant to different cultures.

Previous studies also use D&D as the main system of TTRPG, yet this lacks flexibility with the character creations because of some restrictions regarding the class and race system of the game. Future studies can use a different system of TTRPG such as Call of Cthulhu (CoC) that uses a different system in character making and provides broader possibilities of creation ideas. It is also suggested to integrate TTRPG with expressive art therapy, to enhance the benefit from its cathartic nature.

Future studies can also employ experimental studies to provide convincing evidence about the effectiveness of TTRPG as promotive, preventive, and therapeutic tools. It can also provide causal evidence regarding the benefits of TTRPG as psychological interventions in the Asian context.

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Disclosure

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