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## Perceptions of Interpersonal and Intrapersonal Gains Following a Therapeutically Applied Tabletop Role Play Game Group

Tyler Giatroudakis

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PERCEPTIONS OF INTERPERSONAL AND INTRAPERSONAL GAINS  
FOLLOWING A THERAPEUTICALLY APPLIED TABLETOP ROLE PLAY GAME  
GROUP

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
in  
Clinical/Counseling Psychology

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by  
Tyler Giatroudakis  
August 2023

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Approved by:

Christina Hassija, Committee Chair, Psychology

Michael Lewin, Committee Member

David Chavez, Committee Member

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## ABSTRACT

Tabletop role-playing games (TTRPGs) are group-based games which involve character creation and collaborative storytelling in an imagined setting, allowing participants to engage in problem-solving, creativity, and social interaction. While TTRPGs have recently been gaining traction, few have assessed the tandem of benefits that participants may gain simultaneously. This study examined the range of benefits for youth involved in therapeutically applied role-playing games (TARPGs), a novel intervention combining therapeutic concepts with TTRPGs. Participants were recruited from a nonprofit organization offering TARPG skill groups. A Qualtrics survey was used to assess participants' perceived gains from involvement. It was hypothesized that youth and young adult participants in a six-week TARPG group would report high satisfaction means in domains of confidence, self-esteem, self-expression, quality of life, empathy, feelings of support, and ability to talk and connect with peers. Results from the study indicate average perceived benefits between the two highest (1-2) answer options occurred in all domains except quality of life and self-expression, with these categories still demonstrating positive outcomes. Notably, benefits were still more pronounced in these domains among LGBTQ+ and gender nonconforming participants. Qualitative feedback from participants helped to support the rationale for these benefits and provided insight for areas of further improvement.

## ACKNOWLEDGEMENTS

I would like to acknowledge the many people in my life that helped make this endeavor possible. I would like to thank my significant other, Shaina, who has continued to see a fuller potential in me and helped me to discover how creative I can truly be. You have given me the courage to pursue and be open about my passions and encouraged me to feel comfortable as myself. I would also like to thank my brother, Adam, who has always accompanied me on any journey I take and helped give me the strength to finish what I start. I wish to also acknowledge the tireless and sometimes thankless work put in by my additional family, Jon and Tanya, who work extremely hard to support the diverse goals and dreams of an entire household. Lastly, I would like to thank my various mentors past and present, who have taught me the lessons necessary to becoming a more kind, patient, and compassionate person capable of helping others as much as they have helped me.

## DEDICATION

For anyone who has ever entered a fictional world and come back  
changed for the better.

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## CHAPTER ONE

### INTRODUCTION

#### Background and Current State of Research

Tabletop role play games (TTRPG) have been a favorite pastime and hobby of many individuals since its modern inception in the 1970s. At its core, TTRPGs are fun activities that involve a collective group narrative influenced by player decisions representative of created characters in an imagined space (Davis, 2016). In this way, players have entire freedom of action and response in the imagined space, typically only limited by the character's determined abilities and decisive dice rolls. Players typically also have a variety of strengths and weaknesses that they are able to progressively improve upon over time, gaining new skills, items, and increasing in-game attributes called stats (Gygax, 2005). Additional influence comes from a designated rule-keeper and guide to the settings, obstacles, and interactions characters face known as the dungeon master (DM) or game master (GM). Due to the input from multiple players acting freely game narratives may differ, however, participants in these groups are often faced with complex decisions, problem solving, playing and interacting with others, freedom of choice, heroic moments, and fantasized representation. Due to the ability for adaptable, more relevant narratives alongside these dynamics, tabletop role play games are increasingly being evaluated for valuable therapeutic qualities (White, 2017). A TTRPG with an underlying focus on psychological growth and social skills development is known as a therapeutically

applied role play game (TARPG). A typical way of conducting this form of therapy involves additional individual counseling that occurs concurrently to the play of the game. Throughout the course of a TARPG, clients may express issues, such as those that are explored during counseling, or they may express and play out unconscious struggles, such as during standard play therapy (Enfield, 2007). In this capacity, the therapist can prepare a series of obstacles and interactions driven through an overall narrative that may be relevant or applicable to a client's presenting problems. While group member determinants are not currently standardized, TARPG groups will typically form around shared common factors such as age, presenting problems, and/or behavior in order to allow shared challenges to benefit multiple people. This planned intervention focus might look like creating a story that models and encourages the practice of assertiveness or I-statements during role-played dialogue interactions as characters. For example, a therapist might observe or discuss in a processing session with a client that they have had difficulty in healthy assertiveness. To address this, the therapist acting as a game master might create a scenario in which the player is faced with another character who may try to push a player's boundaries. The therapist and player create a scene where they can practice appropriate assertive application. Alongside this dynamic is the group itself which offers alternative opportunities to practice communication. The ongoing nature of the game additionally emphasizes continued practice and improvement overtime. Overlap and variations in player-character similarities add to the ability for players to either

identify desirable traits in a character different from themselves or learn to grow alongside a character similar to themselves. Overall, TARPgs have the capacity to offer many diverse therapeutic intervention points.

Partially suffering and recovering from a negative stigma (Henrich & Worthington, 2021), TTRPGs have been researched for therapeutic outcomes relatively few times thus far. Not far from their inception in the 80s. TTRPG faced scrutiny during a panic that likened the games to witchcraft and promotion of suicide (Henrich & Worthington, 2021). This was a major hit to the industry which took great effort by its proponents to reinvigorate many years later. Since this, TTRPGs have steadily risen back to popularity through media portrayals such as *Stranger Things* and live-recorded gameplay featuring voice actors such as in *Critical Role*. Findings for supportive research on TARPgs are sparse yet promising. Much of the literature on role-playing games has not been conducted explicitly for therapeutic application and thus, will be referred to as TTRPGs. Multiple benefits to game group participation have been observed, including interpersonal and intrapersonal growth (Henrich & Worthington, 2021). In one study by Goodall and Truong (2021), nine participants reported their experience with TTRPGs as feeling therapeutic. These participants were interviewed about the extent that TTRPGs have impacted their lives. The author reports that players were able to explore or “test ” different aspects of expressions for themselves, as well as better understand the existing and new forms of expression possible. One additional positive result reported by players came

from the roleplay element of gameplay which led players to practice and develop interpersonal skills. Players even reported experiencing therapeutic effects outside of the game in their regular lives, stating that the game helped them with social engagement they were previously reluctant toward. This shows the vast potential for gameplay that may be a successful therapeutic avenue for therapists with clients and those who play the game as a hobby.

As research on the benefits of TTRPGs continue, it is important to establish what the most versatile areas of development are, how the game can facilitate this type of growth in players, and which communities may best be served through this form of engagement. TTRPGs may be useful in helping individuals improve several social-emotional areas such as empathy, interpersonal connectedness, confidence, quality of life, self-expression and identity development.

### Efficacy With Youth and Young Adults

Though TTRPG studies have examined effectiveness with multiple populations, they have had a mixed focus on populations that may benefit from a treatment inclusive of this modality. While there have been positive results in adult populations (Abbott et al., 2021; Blackmon, 1994; Goodall & Truong, 2021; Wright, 2020), most of the research has been with children and adolescents (Asrowi et al., 2019; Bagés et al., 2020; Chung, 2013; Kato, 2019; Rivers et al., 2016; Rosselet & Stauffer, 2013; Wright et al., 2020; Zayas & Lewis, 1986). This

child and adolescent focus in research are important as youth are in a crucial period of social, emotional, and behavioral growth. Multiple ongoing problems being experienced by youth are currently undergoing research, including social skills, meaningful learning, emotion regulation, and identity affirming care (Austin, 2007; Durlak et al., 2010; Fenning et al., 2011). Recently, researchers in child development have focused on accounting for social deficits and searching for new ways to assist youth in the development of healthy social skills, attempting to understand how to best serve youth experiencing problems in their personal social contexts (Durlak et al., 2010). In a meta-analysis assessing after school programs for children and adolescents, opportunity for active forms of learning, practicing of new behaviors, and cycle of rehearsal and feedback are cited as crucially important to the development of personal and social skills (Durlak et al., 2010). Additionally, promotion of these skills is best accomplished through hands-on forms of learning, utilizing role-playing and other behavioral rehearsal strategies (Durlak et al., 2010; Durlak, 1997).

TARPGs, as a natural extension of role-playing, offer the opportunity to fulfill desired skills interventions that encourage growth of personal and social skills in children who need them, especially in ADHD and neurodivergent youth (Enfield, 2007; Kato, 2019). Also of concern is untangling methods for building and understanding appropriate emotional development and self-regulation in contemporary research with children (Fenning et al., 2011). Complementary to research examining these outcomes, one study with gifted children has found

success in utilizing TARPGs as a therapeutic approach, significantly building social and emotional self-regulation skills in youth (Rosselet & Stauffer, 2013). Research studying desired learning for children, specifically middle schoolers, found that student participants reported wanting, “instructional activities that are meaningful, varied, interesting, and that involve group learning.” (Ares & Gorrell, 2009, p. 274). This desired learning environment may be able to be fulfilled through TARPGs, which provide a fun and varied context to learn skills as a group through a narrative (Bean et al., 2020). Lastly, TARPGs are an especially relevant avenue for adolescents that are gender nonconforming, and/or identify with a sexual minority group as they provide opportunities that are affirming towards identity exploration and freedom of expression (Shepherd, 2021). Compounding evidence on the application of TARPGs and the therapeutic multiplicity of benefits that children may experience indicates a promising area of future research with youth populations.

### Empathy

Empathy is defined as a person’s ability to identify and understand another person’s emotions (Jolliffe & Farrington, 2006). Increased empathy in player participants may be explained through the collaborative nature of the game which showcases how others in the group approach decisions differently. In any given situation in a game, all players have the capacity to react or respond differently. This produces instances during the game in which participants can

see why others make the decisions they do. This leads players to constantly experience forms of perspective-taking, an important component of empathy (Bagès et al., 2021). One study highlighting this importance found that RPGs helped in reducing rates of school bullying (Bagès et al., 2021). In this study, researchers assessed for improvements in empathy and reduction in school bullying with 86 6th-graders, randomly assigned to either the TTRPG group or to the control group. These effects were measured using The Empathy Scale, The Aggression Scale, and the Illinois Bullying Scale. Improvements in empathy and reduction in school bullying were found at posttest for the TTRPG group but not replicated in the control group. Another medium for empathy may come from a player's created backstory for their character, which affects the resonance players have with the character and even the individuals playing them (Rivers et al., 2016). A backstory, consisting of a summary of experiences by a character that leads to the present moment, may be as expansive as a real person's life history or very limited; however, a player is always able to see how different backgrounds, histories, attitudes and responses in situations may have different results in-game such as having connections to others and gaining additional skills. Overall, TTRPGs can allow players to engage in understanding different backgrounds of characters created by the DM and by other players, facilitating improved perspective-taking alongside absorption to create increased empathy. Empathy may also be influenced by the sometimes-complex moral dilemmas within the storytelling, subsequently enhanced by the interjection of a player's



character into the situation and their personalized response (Wright et al., 2020). By acting through a character, players also have the opportunity to change their character's response style to a given situation. One might act more or less lawfully, righteously, or morally depending on their character's determined alignment. This creates greater opportunity to think through the lens of another through imagined situations, which in turn could be the antecedent to increased empathy. According to a study conducted on college-aged students, TTRPGs, specifically *Dungeon & Dragons*, were observed to act as a moral training ground for participants, showcasing significant moral development in youth (Wright et al., 2020). In this study, twelve college students were measured against a non-play control group for improvements in moral development using the Defining Issues Test and the Self-Understanding Interview. Upon comparison, the control group was not shown to improve in the study's measure dimensions of participation in a moral dilemma, moral reasoning, and value orientation whereas the game group showed significant improvements. These findings suggest a potential for promoting moral development through gameplay.

Additional research on TTRPGs have shown improvements related to empathy as a benefit to this form of play. One study found that TTRPG players report experiencing higher levels of empathic involvement with others, which was found to be significantly higher when comparing players to a control group using an empathy scale (Rivers et al, 2016). This study also found high rates of absorption for player participants, helping to build rationale for the high rate of

transferability of social skills gained and applied to player's real lives. (Rivers et al., 2016). Using the Davis Interpersonal Reactivity Index and the Tellegen Absorption Scale, the hypothesis of experiencing higher levels of empathic involvement with others was confirmed with 127 fantasy role-players. Another study by Zayas and Louis (2008) supports this claim through a detailed case study which highlighted many themes and therapeutic points of intervention during a game group involving young boys including delineation of roles and functions, appreciation of individual uniqueness, and interdependence between group members. This study established a perceivable benefit in the amount of mutual aid provided in interpersonal contexts within the game for latency-aged participants. The combined benefits from these factors support the notion that TTRPGs may foster empathic connection with others through facilitating an intimate group space with narratives that allow for recognition and value of difference, promotion of mutual aid, and moral development. Though TTRPG studies have examined effectiveness with multiple populations, they have had a mixed focus on populations that may benefit from a treatment inclusive of this modality. While there have been positive results in adult populations (Abbott et al., 2021; Blackmon, 1994; Goodall & Truong, 2021; Wright, 2020), a majority of research has been with children and adolescents (Asrowi et al., 2019; Bagés et al., 2020; Chung, 2013; Kato, 2019; Rivers et al., 2016; Rosselet & Stauffer, 2013; Wright et al., 2020; Zayas & Lewis, 1986). This child and adolescent focus in research are important as youth are in a crucial period of social, emotional,

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### Friendships and Social Connectedness

Additional potential positive benefits that may emerge from the use of TTRPGs include building friendships, collaboration, and maintaining social connectedness with others (Daniau, 2016). Variations in gameplay exist that create greater opportunities for friendship-building such as through games lasting multiple sessions, also known as a campaign. With time spans only limited by the desires of the DM and the players, one can expect to gain familiarity and closeness with the group (Zagal & Deterding, 2018). Despite some differences

across game group methods, players may consistently find exposure to new walks of life through meeting and engaging with other players that share a mutual interest. Surveys have shown that facilitating TTRPGs results in gains for participants such as increased strategy, imagination development, creation and maintenance of friendships, and expression of alter egos (Wilson, 2007). Positive gains such as these help to suggest the wide variety of engagement related to communication and the beneficial effects to connectedness that may follow.

As a fun activity involving multiple people creating a shared story together, it is not surprising to discover that research of TTRPGs has found great success observing the building and maintaining of friendships between players. TTRPGs have been shown to encourage and foster team building, collaboration, and social connectedness with participants. (Abbott, 2021; Daniau, 2016). Of particular note is the social functioning benefits that have been observed for autistic children players as well as individuals with social anxiety, increasing quality and quantity of communication in both populations (Abbott, 2021; Kato, 2019). In-depth analysis of communication gains is important, as they inform the specific areas of benefit which enable better friendships and social connectedness. Research has shown benefits for children with autism spectrum disorder: “the rate of ‘intentional speech directed at other children’ was 36.7% in the 1st session and 52.4% in the 14th session” (Kato, 2019, p. 25). Additional analysis found communicative changes in consensus-making (i.e., arriving at a decision in-game as a group) also significantly increased, noting zero instances

in the 1st session, compared to five instances in the 14th and final session (Kato, 2019). These gains are especially beneficial depending on the communicative area of concern, such as isolative behaviors or arguing. Indeed, TTRPGs allow for the fostering of a stable space for connecting with others, and the countless therapeutic social benefits that come from role play may also be observed in the context of the game as in-depth character role play is only one of the many features of the activity.

### Self-Confidence

Additional benefits to the use of TTRPGs come in the form of players' improved self-confidence. More specifically, participants can fully and freely experience the results of different positive interactions with other characters in-game. TTRPGs can increase feelings of self-confidence through role play, shown to help in gaining a personal sense of meaning, and unique usefulness as it contributes to the structure of the party (Zayas & Lewis, 1986). This is supported through additional research on young students in Indonesia; after participating in role play to combat learning difficulties, researchers found improvements in their self-confidence and motivation (Asrowi et al., 2019). In addition, one of the key pieces of rationale for increases in self-confidence is the dispersal of complementary skills to each player to form an overall well-rounded team with a balanced role fulfillment and feelings of usefulness across participants (Wright, 2021; Zayas & Lewis, 1986). TTRPGs also have the benefit of application to real-

life and lasting self-confidence. In a study by Abbott and colleagues (2021), researchers found that a group of players experienced increases in confidence after gameplay, specifically in generalized social situations. Players were also able to successfully integrate social skills fostered and developed through the game into their real-life contexts such as in the creation of better boundaries with friends and loved ones, as well in comfortability and decatastrophizing making mistakes. This results from the game's capacity to allow players the space to make mistakes and search for alternatives rather than cementing feelings of failure. Results to this study are especially important regarding the reduction of rumination in players that experience high levels of anxiety. Self-confidence is of particular importance as a benefit to TTRPGs as it establishes more concrete and observable skills that have some of the most efficacy for real-life application and social benefit to player participants.

### Self-Esteem

The structure of a TTRPG will typically begin for the players with their character creation. This is done alongside discussion of the setting and basic starting plot during what is known as a session zero. Players have the opportunity to create characters with in-depth details of physical features, characteristics, backgrounds, and personalities. These factors may vary from extremely similar to themselves in real life or vastly different depending on their choice. Players can experiment with new identities in a safe environment that

helps them practice and even role play with the alternate identity (Bowman, 2010; Rogers, 2020).

This phenomenon of identity-exploration is especially relevant to players who may be homing in on their desired expression of gender identity or identification of sexual orientation. For LGBTQ+ individuals specifically, TTRPGs have been and continue to be a valuable safe space to explore identity. Games have the capacity to be very inclusive, creative safe spaces for identity exploration amongst friends, families, colleagues, or even strangers (Sihvonen & Stenros, 2019). Additionally, TTRPGs are able to actively queer nearly all systems within the game. By creating narratives as well as race, gender, background, and solution options outside of a binary or heteronormative structure, queer players have vast freedom in their ability to express themselves and explore alternatives (Rogers 2020; Shepherd, 2021).

### Quality of Life

TTRPGs may improve quality of life due to multilayered connection with friends, family, and others. Through a TTRPG, participants meet on a recurring basis and reconnect with an established group of friends or family. This stable and constant reconnection with others may be attributable to reports of high motivation in players, and ultimately greater quality of life (Asrowi et al., 2019). Studies assessing quality of life improvements following a TTRPG are very sparse yet there is some evidence towards a potential benefit in this area. One



such study has been conducted in Japan for children with autism spectrum disorder. In the study, results on the Quality of Life Scale were found to significantly increase following a TTRPG campaign (Kato, 2019). Additional qualitative interview questions with the participants yielded very informative responses such as, “After experiencing TRPG, I have enjoyed talking more than before” and “I think TRPGs have more options for what we can do than in everyday life” (Kato, 2019, p. 5). These narrative accounts from the participants indicate an overall positive result of utilizing TTRPGs to increase quality of life.

In addition, TTRPGs allow for possible improvements in depressive and isolative personal issues. For instance, therapeutic orientations such as interpersonal psychotherapy often conceptualize client depressive symptoms as being treatable through reconnection with old relationships and formation of new relationships (Robertson et al., 2008). In a case study utilizing a modified version of Dungeons & Dragons with an adolescent boy with schizoid and suicidal depression, the author reports using the game material to address displaced reality through waking fantasy (Blackmon, 1994). TTRPGs were used to help the patient learn to express their inner self in a safe and guided way. The author also notes that, “the patient ultimately matured and developed healthier object relations and a better life.” (Blackmon, 1994, p. 631). The amalgamation of these research studies showcases the great potential of TTRPGs to functionally improve quality of life, as well as for neurodivergent and severely diagnosed individuals.

## Present Study

As a method of producing therapeutic outcomes, literature on TTRPGs has been shown as promising at showcasing the benefits that players may expect to experience from gameplay. These benefits seem especially relevant for youth as they appear more readily able to learn from the gameplay and be more open to the imaginative and creative qualities of TTRPGs. It seems that while there are ongoing and repeatable benefits for participants of the game, few studies have an understanding of how many simultaneous benefits are actively being gained by players. For this reason, the present study seeks to understand how often growth in multiple areas is observable by youth participants and what might have made the experience the most optimal for them.

The goal of this study is to assess for participants perceived improvements in empathic and social connections with others, self-confidence, quality of life, and comfortability in expressing gender and sexual identities, all of which have been previously highlighted as potential benefits to TARPGs. Understanding these benefits and the strength attributed to the change is key in establishing which factors have the best potential for gaining empirical evidence in future research. Therefore, it is hypothesized that youth and young adult participants in a six-week TARPG group will report improvements across intrapersonal dimensions of confidence, self-esteem, expression, and quality of life. Additionally, it is hypothesized that there will be reported improvements interpersonally in factors of empathy, feelings of support, and an ability to talk

and connect with peers. The findings will make important contributions to the largely understudied field of TARPg's as an efficacious and emerging therapeutic treatment modality.

## CHAPTER TWO

### METHODS

#### Participants

Participants were conveniently sampled from recent participants of a 6 week therapeutically applied role play game group through a nonprofit organization, each seeking social skills improvement and/or therapeutic benefits from a game group. The nonprofit organization advertise through newsletter, media appearances and talks. The group offers youth and adult groups as well as groups formed by additional demographic such as all women, nonbinary, ADHD, autism, and depression groups. We reached out to a pool of 100 participants and received 23 responses, four of which were incomplete and removed, yielding a final sample of 19. Participant demographic information of age, ethnicity, sexual orientation, and gender was gathered for this study. Initial group placement was not gathered. Age ranged from 9-33 with a mean of 15. Additional frequency demographics for participants included ethnicity (Black or African American = 1 (5.30%); White or Caucasian = 15 (78.90%); Multiple or mixed = 1 (5.30%); Prefer not to answer = 1 (5.30%); Other = 1 (5.30%), gender (Male = 7 (41.20%); Female = 6 (35.30%); Nonbinary = 4 (23.5%), and sexual orientation (Bisexual = 1 (5.30%); Gay/Lesbian = 1 (5.30%); Queer = 5 (26.30%); Straight/heterosexual = 7 (36.80%); Prefer not to say = 3 (15.80%). An incentive was offered of an entrance to a drawing for a \$10.00 Amazon upon their completion of the survey. Recruitment emails and the drawing were handled

through the nonprofit. All participants were treated according to the ethical principles of psychologists and code of conduct (American Psychological Association, 2002).

## Materials

### Demographic Questionnaire

A brief measure was created to collect demographic information from participants. The measure consisted of four items and asked participants to report their age, ethnicity, gender identity, and sexual orientation.

### Participant Satisfaction Question Items

Participants were asked to complete a survey consisting of 16 questions, 12 of which were Likert style responses and four were qualitative short answer responses, to assess their satisfaction with the group. Of the 12 Likert style response questions, 10 began with a question prompt of, “To what extent do you believe your participation in the group...” followed by questions:

1. *improved your ability to understand other people’s emotions? (empathy)*
2. *made you feel better about yourself? (self-esteem)*
3. *improved your overall quality of life? (quality of life)*
4. *improved the problems you had when you began the group? (targets of therapy treatment)*
5. *improved your confidence in yourself or your abilities? (self-confidence)*
6. *increased your feelings of support from others? (social support)*

7. *improved your ability to talk to and connect with your peers? (social connectedness)*
8. *improved your ability to express yourself? (expression)*
9. *improved your comfort with expressing your gender? (expression)*
10. *improved your comfort with expressing your sexual orientation? (expression)*

Likert responses for these questions consisted of six potential answers ranging from *'quite a lot'*, *'a great deal'*, *'a moderate amount'*, *'somewhat'*, *'a little bit'* and *'not at all'* respectively. Two additional Likert style response questions assessed for participant satisfaction with the group:

1. *How would you describe your level of satisfaction with the group?*
2. *How likely would you be to recommend the group to someone else?*

Likert responses for these questions consisted of five potential answers ranging from *'very unsatisfied'* to *'very satisfied.'* as well as, *'not at all likely'* to *'very likely.'* Qualitative questions in the survey had a short answer response style where participants were prompted to write in their responses to questions:

1. *What are 2 things about the group you found most helpful?*
2. *What are 2 things about the group you found the least helpful?*
3. *What is one thing you would change to make your experience of the group better?*

4. *Do you have any other feedback to share about your experience participating in the group?*

### Procedure

First, participants were asked for their involvement in this study via email. The emails of participants or their legal guardians were collected via the nonprofit organization from their pool of recent participants. A recruitment email was sent directly to participants that were age 18 and above, or to their guardians if they were below age 18. The email contained a recruitment request (see Appendix A), a copy of the survey item questions, and an anonymous link to the Qualtrics survey. The copy of the survey item questions were an exact replication of the questions, Likert response, and short answer response as they appeared on the online survey. Guardians or adult participants could then read the email which contained an informed consent and information about the study. If the guardian approved, they would be able to allow their child to take the survey, or to assist them if necessary. Consenting (and assenting) participants were directed to an online Qualtrics survey through an anonymous link to access the study survey. Upon opening the Qualtrics link, an informed consent was first used to inform participants about the study and gather consent. In the under age 18 participants, initial consent from both adult and participant is collected before leading to demographic questions assessing age, ethnicity, sexuality, and gender. Next participants can move to the primary Likert-scale questions followed by the short

answer response sections respectively. At the end of the survey, participants were thanked and directed to another survey owned by the organization which collected participant emails to enter a drawing for the \$10 gift card.

### Design

This study examined perceptions of intrapersonal and interpersonal gains of youth/young adults after participation in a six-week TARPG group. This data was examined by the researcher through SPSS using descriptive data analysis. There was one independent variable of a six-week TARPG social skills group. The dependent variables measured were perceptions of gains made in empathy, self-esteem, self-confidence, social support, social connectedness, targets of treatment, and comfort in gender and sexuality identity expression. The main study hypotheses were that participants would report greater levels of gains and satisfaction on all Likert questions. The second hypothesis predicted that qualitative questions would result in reported themes of enjoying greater freedom and connection with others. Descriptive data analysis and qualitative short answer assessment were used to test the hypotheses.



## CHAPTER THREE

### RESULTS

#### Quantitative Results

Out of twelve survey questions, eight response averages fell between the top two answer options '*a great deal*' (2.00) to '*quite a lot*' (1.00). The items positively endorsed in this range consist of: ability to understand others emotions ( $M=1.84$ ,  $SD=.90$ ), feeling better about oneself ( $M=1.68$ ,  $SD=.75$ ), resolution of initial problems ( $M=1.84$ ,  $SD=1.21$ ), level of satisfaction ( $M=1.58$ ,  $SD=.51$ ), likelihood of recommendation ( $M=1.95$ ,  $SD=1.03$ ), confidence in self or abilities ( $M=1.79$ ,  $SD=.98$ ), feelings of support from others ( $M=1.95$ ,  $SD=.97$ ), and ability to talk and connect with peers ( $M=1.89$ ,  $SD=1.05$ ). Two additional questions resulted in mean responses between '*a moderate amount*' (3.00) to '*a great deal*' (2.00) related to improvements in quality of life ( $M=2.05$ ,  $SD=1.18$ ) and ability to express oneself ( $M=2.16$ ,  $SD=1.35$ ). The final two questions averaged between '*somewhat*' (4.00) and '*a moderate amount*' (3.00) in question topics assessing increase in comfort expressing their gender ( $M=3.35$ ,  $SD=2.06$ ) and sexual orientation ( $M=3.35$ ,  $SD=2.35$ ). See *Table 1* for percentage distributions of improvement range within each question item. When comparing only those who identified as LGBTQ+ or gender nonconformity (GN), all mean responses improved from the group as a whole. Increases were observed in the four lower scoring domains of quality of life (LGBTQ;  $M=1.71$ ,  $SD=.95$ ) (GN;  $M=1.25$ ,  $SD=.50$ ), ability to express oneself (LGBTQ;  $M=1.43$ ,  $SD=.54$ ) (GN;  $M=1.25$ ,

$SD=.50$ ), confidence in expressing gender (LGBQ;  $M=1.57$ ,  $SD=.98$ ) (GN;  $M=1.00$ ,  $SD=.00$ ), and comfort in expressing sexual orientation (LGBQ;  $M=1.14$ ,  $SD=.38$ ) (GN;  $M=1.00$ ,  $SD=.00$ ). (See *Figure 1*).

### Qualitative Results

Four qualitative questions were asked of participants, pertaining to aspects of the group that were helpful, unhelpful, what they would want changed, and additional feedback. In response to the question regarding what they found helpful, participants cited: "Checkin [sic] questions and support from the DM," "Game structure and fun story," "processing," "Flexible character creation and inclusion," "checkout questions," "It's fun playing Dungeons and Dragons regularly. The DM and the other kids are fun and seem to get me. I like knowing there's an adult there who will keep things nice," "the story was cool and simple to follow," "Affirming moderators and fun gameplay," "Cool balanced group and lots of fun," "It's very fun to play D&D, and I like getting to meet new people while playing D&D," "creating characters was fun and people were nice," "1. Very supportive. 2. They are nice people," "Cool group and patient." In regard to what they found unhelpful, participants reported: "Pacing could've been better but that's it," "better story summaries would be cool," "I dislike the variability between different groups and DMs," "sessions were a little long and people talked over each other [sic]," "i [sic] made friends and could talk to them easier," "Chaotic sometimes but that's it." Aspects that participants reported wanting changed consisted of "more player interactions and NPC interactions," "longer session

lengths,” “more opportunity for decisions,” “more time to create characters,” “more processing of sessions,” “larger group sizes,” and “more participant consistency,” and “more serious themed campaigns.” Lastly, answers for additional feedback provided by participants were expressing that the group “was fun,” and someone expressed “I have Selective Mutism. I have been able to start talking a little bit in my group.”

## CHAPTER FOUR

### DISCUSSION

#### Reiteration of Study and Findings

Positive and insightful results were uncovered in this study. It was hypothesized that participants of a six-week D&D social skills group run by a nonprofit organization would report high levels of perceived benefits across multiple domains in a quality assurance post-treatment survey. The domains assessed in the survey were empathy, self-esteem, quality of life, initial targets of treatment, satisfaction, likelihood of recommendation, self-confidence, social support, social connectedness, self-expression, gender expression, and sexual orientation expression. To test hypothesis one, we employed a methodical approach of gathering the means from each survey question's six-option Likert-scale responses, ranging from 'Not at all' to 'Quite a lot'. These means provided a quantitative measurement representing the average degree of perceived benefit in each domain. Additionally, it was hypothesized that a qualitative thematic assessment of short-answer responses, examining aspects participants found helpful, unhelpful, and aspects they desired changed, would highlight a trend towards increased freedom and connection with others, a key objective of this form of social skills groups. To complete this analysis, qualitative data was gathered and analyzed by the authors then categorized appropriately or stated directly.

The results of the study yielded outcomes partially consistent with study hypotheses. Participants were predominantly shown to self-report high degrees of perceived improvement across most domains. Feedback through twelve questions revealed eight of twelve response means averaged within the top two improvement options of the scale. Questions endorsed with the strongest means were related to satisfaction, self-esteem, self-confidence, empathy, initial treatment targets, social connectedness, feelings of support, and likelihood of recommendation respectively. Means for domains of self-expression and quality of life fell within the second and third Likert categories while means for gender and sexual orientation expression were less robust and fell between the third and fourth categories. These results indicate a preponderance of positive perceptions of benefits by participants across a wide variety of potential targets for future groups and treatments.

Results of qualitative data hold additional interesting value for the study as well. Short answer responses were used to indicate helpful, unhelpful, and desired change for the game group. Helpful traits were reported as check-in and check-out questions, DM and other participants being nice, supportive, affirming, and understanding, the game story being fun, simple, balanced, and easy to follow, meeting new people, making new friends, talking to friends easier, session frequency, structure, inclusion, and flexible character creation. Unhelpful aspects were listed as chaos, talking over one another, pacing, story summaries, and variability between groups and DMs. Areas of desired change for the

participants include more player and NPC interactions, serious campaigns, more opportunity for decisions, increased participant consistency, larger group size, longer sessions, and longer character creation time. These short answer responses help to provide a backdrop of player experiences during gameplay that may help in illuminating the degree of improvement in several domains related to the traits of the game group that were stated.

#### Perceptions of LGBTQ+ and Gender Nonconforming Participants

Despite not all quantitative responses being in this highest possible range, when weighing gender nonconformity and LGBTQ+ status within the group, the four remaining domains all averaged between the top two answer options as well. This is interesting but not entirely surprising as three of the four domains were all related to increased comfort for general self-expression, gender expression, and sexual orientation expression. It is possible that improvement in these domains were observed due to participant gender nonconformity and LGBTQ+ status playing a role in how the game group may become intentionally utilized by participants to increase exploration in these areas and share their unique identities. It may be that players actively engage with the increased representation and freedom to express and test out new diverse characteristics through their game characters. From these results, we surmise that participants who identify as LGBTQ+ or gender nonconforming experience more average

perceived benefits than the group as whole on self-expression due to an interplay of affirmation, group belonging, support, and positive peer interaction.

Results of increased comfort in expression for LGBTQ+ game group members make sense within the current literature available on the topics of games and self-representations. In one study regarding observations of gender and sexual orientation within a key D&D rulebook and in sessions, researchers stated “As noted in the Player’s Handbook, “you can play a male or female character without gaining any special benefits or hindrances. Likewise, the game intentionally explains that players are not “confined to binary notions of sex and gender and that a character’s sexual orientation is for you to decide” (Garcia, 2021, p. 121). This guidance presents a clear image of D&D as an open, inclusive system for all players—language that is reflected throughout the game. (Garcia, 2021). Contrasting this idea with another point, Garcia reflects on how gender is also flattened in the grander system of play in D&D, “The entirety of the handbook’s discussion of these topics is relegated to two paragraphs of a more than 300-page book, and the character sheets at the back of the book do not offer a specific place to even note a character’s gender (or sexual orientation). This brevity in the Player’s Handbook and this exclusion from the character record sheets make clear how obfuscated gender is within the game. And yet, gender always felt present in the sessions I observed.” These observations of the integration of gender and sexual orientation in the game system do not paint a clear picture of why LGBTQ+ and gender nonconforming participants found the

game group to be helpful in increasing self-expression. In fact, they shed light on how benefits from standard D&D play can be ambiguous at times due to the wide variety in how players engage with the existing game system. However, lack of dedicated systems coupled with freedom of choice in the game system, and qualitative reports of the group as inclusive and affirming, help to inform the role of the nonprofit itself as being a potential source of increases in comfort expressing sexuality and gender.

### Approaches to Therapeutic Practices

Integration of therapeutic practices may set the group recruited for this research up for being the source of benefit that pushes the utility of D&D into feasibility as a tool for increasing self-expression. As addressed in a book by Kilmer et al. 2023, which speaks on a particular method of therapeutically applied role-playing games specifically, “In addition to considering the known or assumed identities of group participants, facilitators should spend time reflecting on how their own identity and lived experiences may influence the group, game, and mechanics. It is important for facilitators to consider the areas in which they hold privilege, especially when other group members are assumed to not hold such privileges.” (Kilmer et al., 2023, p. 97). This prevalent consideration of diverse identities is additionally enacted through the common therapeutic acronym ADDRESSING which encourages considering age, developmental and acquired disabilities, religion, ethnicity, socioeconomic status, sexual orientation,



Indigenous heritage, national origin, and gender when working with clients (Kilmer et al., 2023). Due to sensitivity to unique identities, affirming and inclusive attitudes, therapeutic integrations in game, and encouraging use of existing game systems to explore identity, facilitators are one of the most likely candidates for why LGBTQ+ and gender nonconforming participants report increased comfort from the game group.

Additionally, affirming and inclusive elements in the gameplay setting may also be the contributing factor for why LGBTQ+ and gender nonconforming game group members also reported higher average improvement in quality of life within the group surveyed as a whole. As stated by researchers in a study assessing the impact of support and affirmation from family and peers for LGBTQ+ youth, “Youth who reported high levels of acceptance from any adult had nearly 40% lower odds of a past-year suicide attempt compared with LGBTQ peers with little to no acceptance. Youth with high levels of acceptance from any peer also had significantly lower odds of reporting a past-year suicide attempt.” (Green et al., 2021, p. 2). These findings connect to overall improvements in quality of life and point to the potential role that the nonprofit organization may have in facilitating perceptions of improved quality of life for LGBTQ+ game members by providing an inclusive play space with affirming and supportive facilitators, peers, and in-game acknowledgments.

## Social Skills Improvement

Perceptions of benefit from the original sample also included domains linked to one of the main goals for the group, social skills improvement. The two domains related to social skills were improvement in feelings of being socially supported and one's ability to talk and connect with their peers. Positive results in addition to these domains partially corroborate current research suggesting that TTRPGs influence the creation and maintenance of friendship (Wilson, 2007), as well as social connectedness (Abbott, 2021). Analysis of short-answer responses show there is still much room to grow as participants report desiring more player interactions and better player consistency, however, responses also include enjoyment of meeting new people, making friends, and talking to them easier.

## Intrapersonal Benefit

Intrapersonal benefits were additionally reported by participants, suggesting perceptions of improvement in self-esteem and self-confidence. Previous research with TTRPGs such as Asrowi et al. in 2019, which reported increases in confidence following roleplay, are supported by the present results. The mechanisms by which these benefits may occur have also been highlighted by the game group, citing character creation, decision agency, immediate feedback and consequences, and intentional reward and encouragement to participants who engage in the challenges they face in their real lives as being pivotal toward the goals of increasing confidence as well as self-esteem (Kilmer

et al., 2023). Features of the game that fully explain the results of increases in confidence are difficult to conclude, however, combinations of intentional support in completing challenging in-game tasks, nuanced success and failure, and agency in decision making all likely play into the experiences reported by participants.

### Empathy and Initial Treatment Targets

In the last of the benefits, excluding satisfaction and likelihood of recommendation, empathy and initial treatment targets were reported highly improved by the game group as well. Empathy increases, as additionally supported in 2020 by Bages, may be best explained by direct in-game features that encourage this form of growth. Through role play, game play, and character creation, players have a unique opportunity to engage with active perspective-taking, emotional engagement, and cooperative gameplay. Perspective-taking may occur through embodying diverse personas, which could cause players to develop a deeper understanding of different viewpoints, fostering empathy towards fictional characters and potentially transferring these skills to real life situations. Emotional engagement may also be an additional factor, as players navigate complex narratives and make decisions, they may develop a heightened sensitivity to the emotional states of others, fostering empathy and compassion. Finally, cooperative gameplay encourages communication, teamwork, and mutual support among players. Through shared experiences and

the need to understand and respond to the actions and needs of fellow players, participants may develop a greater appreciation for the perspectives, feelings, and struggles of others, leading to increased empathy.

Unfortunately, initial treatment targets vary widely from person to person and specific rationale for why a participant experienced improvements in the problems they initially came to the group with cannot be provided. As stated in the qualitative results, most participants tended to report helpful elements surrounding social skills such as meeting others, making friendships, and talking to others easier. These reports help establish the possibility that many of the treatment targets of participants were related to individual social skills goals. This suggests that, especially for game groups targeting social skill improvement, client progress toward initial treatment targets may occur. While this specific game group demographic may have pooled participants effectively for targeting social skills, narratives between each game group can differ extensively due to direct integration of specific client issues into the game. For example, one group might have a member that initially expresses a problem of people-pleasing and being unable to say no to others. Receiving this, a game facilitator is encouraged to integrate chances to address this within the game. To accomplish this, a facilitator might insert interactions with an NPC that are pressured and have negative consequences such as being blatantly overcharged for an item by a shopkeeper. The player is given the opportunity to choose to negotiate the price and practice assertive interactions through role play. While this is just one

example, there are countless other potential initial problems that players may have come to the game for, and found solutions organically, from personalized integration by the facilitators, or from another aspect of the group.

### Addressing Unhelpful Elements

Consideration of qualitative feedback is crucial, as direct changes to the gameplay that address these concerns could prove valuable additions to providing better services. Based on qualitative responses of what was helpful about the game group, check-in and check-out questions proved to be extremely valuable to the group. According to Kilmer et al. 2023, “(check-in questions are) designed to provide a structured opportunity for each participant to share something about themselves with the group, experience being witnessed and honored in their sharing, and provide the same honor to their group members.” (Kilmer et al., 2023, p. 163). In this way, they are simple periods before game sessions for reflection that are meant to deepen participant rapport with each other, the DM, and their understanding of their characters. Check-in questions will progressively deepen over time, for example, starting with asking about a favorite hobby and later evolving to asking about a piece of advice they would give to their character. Check-out questions, on the other hand, provide opportunities of reflection, support, and integrating insight from experiences in the game session, asking about spotlights for someone else (something another player did that enhanced the game experience), something that was challenging

or learned, and something predicted or looking forward to for the next time.

Positive feedback related to check-in and check-out questions show the utility of the exercises and support continued use in the future.

Many additional helpful elements of the game group were also reported. Of these, one inclusion was the appreciation of supportive, affirming, and understanding DMs and players. This indicates that interaction between group members and facilitators was positively experienced and encourages similar models for interacting as a group to be used by organizations in the future. Additionally, feedback reported meeting new people, new friends, and talking to them easier, as being helpful. Therefore, TARPG providers should also seek to provide a space that supports interactions between new people and assists in providing them skills and opportunity to talk to each other. Alongside these reports, flexible character creation, inclusion, structure and session frequency, and game story as fun, simple, balanced, and easy to follow were also endorsed as helpful. Suggestions can be made from these answers to further enhance the group experience by expanding character creation options, ensuring the inclusion of diverse identities, maintaining a clear and engaging game story, and optimizing the structure and frequency of sessions. Incorporating or maintaining these suggestions can contribute to creating a TARPG experience that is positively experienced by players.

In response to participants' feedback highlighting chaotic environments, talking over one another, pacing issues, story summaries, and variability between

groups and DMs as unhelpful aspects, it is important to consider strategies to address these concerns and create a more positive experience. Implementing or enforcing clear communication guidelines, such as taking turns speaking and actively listening to others, could help mitigate chaotic interactions and promote respectful dialogue within the TARPg sessions. However, increased group sessions and repeated group attendance could also help to resolve these conflicts as part of standard treatment targets over time. Additionally, setting pacing expectations and providing regular story summaries can assist in maintaining a cohesive narrative and ensuring that all participants are on the same page. While difficult due to the individualized nature of collaborative storytelling, addressing variability between groups and DMs may involve establishing standardized story points or tonal consistency to ensure consistency in facilitation style. By addressing these unhelpful aspects, TARPg interventions can provide a more structured and consistent experience, allowing participants to fully engage and benefit from the therapeutic potential of the game group.

### Desired Changes and Further Enhancements

Lastly, participants' feedback indicating a desired change of increased participant consistency, larger group sizes, longer sessions and character creation time, more opportunities for decisions, more player and NPC interactions, and serious campaigns presents valuable insights for further enhancing TARPg groups. To address the need for increased participant

consistency, implementing ideas such as increased incentive for attendance could help to foster a more stable and cohesive group dynamic. Accommodating larger group sizes can be difficult to achieve and potentially come at the cost of losing more intimate player interactions, however, by coordinating multiple DMs or dividing participants into smaller subgroups that collaborate within a shared game world, this change could be accomplished. As suggested, extending session and character creation time could allow for more in-depth storytelling, character development, and exploration of thematic elements. Further, providing increased opportunities for player agency can enhance engagement and investment in the game, especially when the opportunities help to highlight various strengths that a character possesses. Incorporating more player and NPC interactions, including meaningful character interactions and dynamic encounters that address real-world difficulties, can deepen immersion and social connection within the game world. Finally, implementing serious campaigns is an interesting suggestion that could also prove valuable. While not a new idea, TTRPGs that explore complex topics, themes, and challenges can provide deeper personal connection, higher stakes and excitement, and knowledge about specific topics. Within TTRPGs, serious campaigns through storylines or different games entirely, may offer more direct and mature therapeutic exploration. Through asking and integrating these desired changes, TTRPG interventions can meet more participants' expectations and create a more enriching and fulfilling experience for those involved.



The findings of this study support the hypothesis that participants of a D&D social skills group would perceive high levels of benefits across multiple domains. The quantitative and qualitative results indicate positive perceptions of improvement and enjoyment among participants. These findings and the rationalization thereafter contribute to the understanding of how this particular approach and the game itself can facilitate increased multiple benefits. Further research in this area can continue to explore the potential therapeutic benefits of role-playing games for diverse populations and inform the development of effective interventions in the future.

## CHAPTER FIVE

### LIMITATIONS AND CONCLUSION

#### Limitations

Several limitations exist for the current study. These limitations, while not exhaustive, are important to acknowledge in order to interpret the findings within their appropriate context. First, the study relied on self-report measures to assess the perceived benefits of TARPg participation. Although self-report measures are commonly used and provide valuable insights into participants' subjective experiences, they are subject to potential biases such as retrospective recall inaccuracies and confirmation bias. Future research could consider incorporating additional objective measures or observations to complement self-report data. Second, the study did not directly observe the game narratives or interactions during TARPg sessions. While the qualitative feedback provided valuable information, direct observation of gameplay dynamics and narrative progression could offer a more comprehensive understanding of how TARPgs facilitate therapeutic outcomes. Incorporating methods such as video recording or in-person observations could provide richer insights into the actual gameplay experiences.

Another limitation is the limited generalizability of the findings. The study focused on participants recruited from a specific nonprofit organization and may not fully represent the diverse population of individuals engaging in TARPg interventions. While the participant pool was surprisingly diverse in LGBTQ+ and

gender nonconforming individuals, the overall group composition has limited generalizability to the broader public but may represent populations more likely to engage in and seek out these forms of therapeutic intervention. Additionally, the game group appears to be under a well-established TARP organization and other less developed programs may not yield similar results. Future research should aim to include a broader range of participants from different backgrounds, and cultural contexts to ensure the generalizability of the findings to a more diverse population.

Additionally, the degree of “testing” or “bleed” individuals engage in within the TARP sessions was not observed. Testing is a phenomenon related to the degree that a person will test out new identities, labels, expressions, and personality traits within a game context in order to practice integration into their real lives. Bleed is the degree to which a person’s existing characteristics, background, and identity are present in their game character. Observation of testing and bleed would provide valuable insight about self-expression benefits in the game.

Lastly, the study design did not include pre-post data nor a control group or specific item scales. Utilizing pre-test and post-test measurements could have allowed for a more robust analysis of changes in participant outcomes over time. Lack of a control or comparison group could lead to determination of benefits being due to the passage of time, or standard benefits of TTRPGs instead of TARPGs, and not the result of the group directly. While the role of the nonprofit

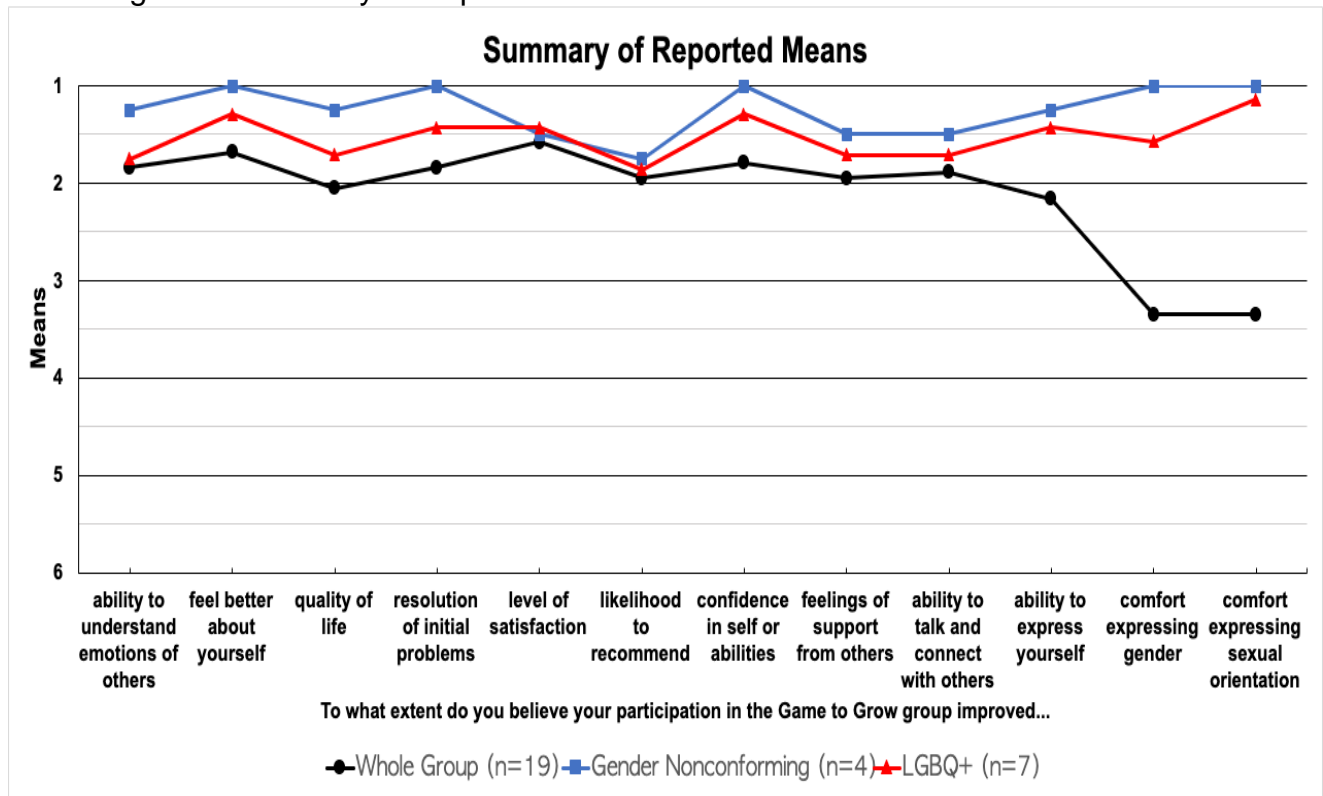
organization in the degree of perceived improvement was worded with each question item, a definitive causation cannot be concluded. Additionally, the use of specific item scales or standardized measures could have provided more precise and quantifiable data for assessing the perceived benefits in different domains.

### Conclusion

The degree of correlation for therapeutic benefits as a direct result of the group cannot presently be drawn from this study. Use of a therapeutically applied role play game group was partially supported based upon the many positive participant perceptions of social and personal benefits in a sample of 19 youth and young adult participants. Perceived benefits included empathy, self-esteem, quality of life, initial targets of treatment, satisfaction, likelihood of recommendation, self-confidence, social support, social connectedness, self-expression, gender expression, and sexual orientation expression. Analysis of qualitative feedback provided support for rationale related to benefits and further guided suggestions for areas of improvement. Future research should seek to further validate these gains as well as measure the degree of engagement and intention during participant play.

APPENDIX A:  
FIGURE 1. SUMMARY OF REPORTED MEANS

Figure 1. Summary of Reported Means



*Note: 1.0 = Quite a lot, 2.0 = A great deal, 3.0 = A moderate amount, 4.0 = Somewhat, 5.0 = A little bit, 6.0 = Not at all.*

APPENDIX B:

TABLE 1. MEANS, SD, AND REPORTED IMPROVEMENT FREQUENCY

Table 1. Means, SD, and Reported Improvement Range Frequencies

<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Quite a Lot - A Great Deal</b>	<b>A Moderate Amount - Somewhat</b>	<b>A Little Bit - None at All</b>
<i>ability to understand emotions of others</i>	1.84	.90	78.90%	21.10%	0%
<i>feel better about yourself</i>	1.68	.75	84.20%	15.80%	0%
<i>quality of life</i>	2.05	1.21	68.40%	26.40%	5.30%
<i>resolution of initial problems</i>	1.84	.51	73.70%	21.10%	5.30%
<i>level of satisfaction</i>	1.58	1.03	100%	0%	0%
<i>likelihood to recommend</i>	1.95	.98	78.90%	15.80%	5.30%
<i>confidence in self or abilities</i>	1.79	.97	73.70%	26.30%	0%
<i>feelings of support from others</i>	1.95	1.05	68.40%	31.60%	0%
<i>ability to talk and connect with others</i>	1.89	1.18	73.70%	26.30%	0%
<i>ability to express yourself</i>	2.16	1.35	73.70%	21%	5.30%
<i>comfort expressing gender</i>	3.35	2.06	35.30%	29.40%	35.30%
<i>comfort expressing sexual orientation</i>	3.35	2.35	52.90%	5.90%	41.20%



APPENDIX C:

TABLE 2. QUALITATIVE REPORTS FOR AREAS OF IMPROVEMENT

Table 2. Qualitative Reports for Areas of Improvement

Helpful	Unhelpful	Change Desired
<p><i>"Checkin [sic] questions and support from the DM"</i></p> <p><i>"Game structure and fun story"</i></p> <p><i>"processing"</i></p> <p><i>"Flexible character creation and inclusion"</i></p> <p><i>"checkout questions"</i></p> <p><i>"It's fun playing Dungeons and Dragons regularly. The DM and the other kids are fun and seem to get me. I like knowing there's an adult there who will keep things nice"</i></p> <p><i>"the story was cool and simple to follow"</i></p> <p><i>"Affirming moderators and fun gameplay"</i></p> <p><i>"Cool balanced group and lots of fun"</i></p> <p><i>"It's very fun to play D&amp;D, and I like getting to meet new people while playing D&amp;D"</i></p> <p><i>"creating characters was fun and people were nice"</i></p> <p><i>"1. Very supportive. 2. They are nice people"</i></p> <p><i>"Cool group and patient"</i></p>	<p><i>"Pacing could've been better but that's it"</i></p> <p><i>"better story summaries would be cool"</i></p> <p><i>"I dislike the variability between different groups and DMs"</i></p> <p><i>"sessions were a little long and people talked over each other [sic]"</i></p> <p><i>"i [sic] made friends and could talk to them easier"</i></p> <p><i>"Chaotic sometimes but that's it."</i></p>	<p><i>"more player interactions and NPC interactions"</i></p> <p><i>"longer session lengths"</i></p> <p><i>"more opportunity for decisions"</i></p> <p><i>"more processing of sessions"</i></p> <p><i>"more time to create characters"</i></p> <p><i>"larger group sizes"</i></p> <p><i>"more participant consistency"</i></p> <p><i>"More serious campaigns"</i></p>

APPENDIX D:  
RECRUITMENT EMAIL

## Recruitment Email

### E-mail message to parent or guardian for participants ages 8-10

Dear parent or guardian,

Thank you for you and your child's recent participation in the [withheld] social skills group. My name is Tyler Giatroudakis. I am trying to learn about your experience and any potential benefits of participating in a [withheld] group.

I would like to invite your child to participate in a study examining the effectiveness of their [withheld] social skills groups. If you allow your child to participate in my study, they will be asked to answer 16 questions about their experience. They should be able to answer all questions in around 10 minutes.

Your child's participation will be completely anonymous and no identifying information will be collected. Attached to this email is a copy of the questions your child will be asked to complete in case you want to review them beforehand. If you allow your child to participate, they can be entered into a drawing to win a \$10 Amazon gift card after they finish the survey.

If you would like to your child to participate in the survey, please click the link below:

E-mail message to parent or guardian for participants ages 11-17

Dear parent or guardian,

Thank you for you and your child's recent participation in the [withheld] social skills group. My name is Tyler Giatroudakis. I am trying to learn about your experience and any potential benefits of participating in a [withheld] group.

I would like to invite your child to participate in a study examining the effectiveness of their [withheld] social skills groups. If you allow your child to participate in my study, they will be asked to answer 16 questions about their experience. They should be able to answer all questions in around 10 minutes.

Your child's participation will be completely anonymous and no identifying information will be collected. Attached to this email is a copy of the questions your child will be asked to complete in case you want to review them beforehand. If you allow your child to participate, they can be entered into a drawing to win a \$10 Amazon gift card after they finish the survey.

If you would like to your child to participate in the survey, please click the link below:

E-mail message to participants over 18

Dear recent participant,

Thank you for your involvement in the recent [withheld] social skills group. My name is Tyler Giatroudakis. I am trying to learn about the experience and benefits of being in a game group.

I would like to invite you to participate in a study examining the effectiveness of [withheld] social skills groups. If you decide you want to participate in my study, you will be asked 16 questions about your experience. You should be able to answer all questions within around 10 minutes. After you finish the survey, you will have the option to be entered into drawing to win a \$10 Amazon gift card.

Your participation is completely anonymous and no identifying information will be collected. If you would like to participate, please click the link below:

APPENDIX E:  
INFORMED CONSENT AND CHILD ASSENT FORMS

## **Parental Consent**

FOR PARENTS

PROJECT TITLE: Youth/Young Adult Interpersonal Skills, Personal Development, and Quality of Life Following a Therapeutically Applied Tabletop Role Play Game Group

INVESTIGATOR(S): Tyler Giatroudakis- Department of Psychology, California State University  
Christina Hassija- Department of Psychology, California State University, San Bernardino

APPROVAL STATEMENT: This study has been approved by the Institutional Review Board of California State University, San Bernardino. The University requires that you give your consent before participating in this study.

DESCRIPTION: The purpose of this study was to examine participants' experiences and satisfaction with [withheld] groups. In this manner, it may be possible better understand the value of therapeutic social skills groups. Participation in this study will require no more than 30 minutes. Your child will be asked to complete surveys about their experience and satisfaction with [withheld]



groups. Please note that there is no deception in this study, and we could not make this statement if there were any deception.

**RISKS AND BENEFITS:** The benefits of participation include assisting in research which might have implications for the development of therapeutic social skills groups. Upon completion of the survey, you may choose to enter a drawing to receive a \$10 Amazon gift card. Minimal risks are possible with participation in this study and include the possibility of short-term emotional distress resulting from recalling and completing surveys about personal characteristics and mood. It is very unlikely that any psychological harm will result from participation in this study. However, if you would like to discuss any distress you have experienced, do not hesitate to contact [withheld] at [phone number withheld] or the National Crisis Hotline at 1-800-273-TALK (1-800-273-8255)

**VOLUNTARY PARTICIPATION:** Your child's participation in this study is entirely voluntary. You are free to withdraw participation at any time during the study, or refuse to answer any specific question, without penalty or withdrawal of benefit to which you are otherwise entitled.

**CONFIDENTIALITY STATEMENT:** As no identifying information will be collected, your child's name cannot be connected with your responses and hence your data will remain completely anonymous. All information gained from this

research will be kept confidential. The results from this study will be submitted for professional research presentations and/or publication to a scientific journal.

When the study results are presented or published, they will be in the form of group averages as opposed to individual responses so again, your responses will not be identifiable. Results from this study will be available after May 2022. Your anonymous data will be sent to the researcher in an electronic data file and stored for a period of 5 years on a password protected computer in a locked office and may only be accessed by researchers associated with this project.

**RIGHT TO WITHDRAW:** You are free to refuse to participate in this study or to withdraw at any time. Your decision to withdraw will not result in any penalty or loss of benefits to which you are entitled. You may withdraw your participation by simply clicking the appropriate button to exit the study. If you choose to withdraw from the study, you will still receive credit for your participation. Alternatively, you may also choose to leave objectionable items or inventories blank.

**QUESTIONS OR CONCERNS:** If you have any questions or concerns regarding this study, please feel free to contact the Human Subjects office at California State University, San Bernardino (909) 537-7588 if you have any further questions or concerns about this study. I acknowledge that I have been informed of and understand the true nature and purpose of this study, and I freely

consent to participate. I acknowledge that I am at least 18 years of age. Please indicate your consent for your child's participation in the current study by placing a checkmark on the box below.

### Youth Assent

#### FOR CHILD

My name is Tyler. I am trying to learn about the benefits to being in a game group in order to see if others would benefit too. If you would like, you can be in my study.

If you decide you want to be in my study, you will answer 16 questions about your experience.

For participation there are minimal risks. Thinking about questions could be upsetting if you've had a bad time. Benefits include being entered to win a chance at a \$10 Amazon gift card. Other people will not know if you are in my study.

I will put things I learn about you together with things I learn about others, so no one can tell what things came from you. When I tell other people about my research, I will not use your name, so no one can tell who I am talking about.

Your parents or guardian have to say it's OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don't want to be in the study, no one will be mad at you.

If you want to be in the study now and change your mind later, that's OK. You can stop at any time. My telephone number is . You can call me if you have questions about the study or if you decide you don't want to be in the study anymore. I will give you a copy of this form in case you want to ask questions later.

Please indicate if you want to be in the current study by placing a checkmark on the box below.

#### Adult Informed Consent

PROJECT TITLE: Youth/Young Adult Interpersonal Skills, Personal Development, and Quality of Life Following a Therapeutically Applied Tabletop Role Play Game Group

INVESTIGATOR(S): Tyler Giatroudakis- Department of Psychology,  
California State University, San Bernardino,  
Christina Hassija- Department of Psychology, California State University, San Bernardino,

**APPROVAL STATEMENT:** This study has been approved by the Institutional Review Board of California State University, San Bernardino. The University requires that you give your consent before participating in this study.

**DESCRIPTION:** The purpose of this study was to examine participants' experiences and satisfaction with [withheld] groups. In this manner, it may be possible better understand the value of therapeutic social skills groups. Participation in this study will require no more than 30 minutes. You will be asked to complete surveys about your experience and satisfaction with [withheld] groups. Please note that there is no deception in this study, and we could not make this statement if there were any deception.

**RISKS AND BENEFITS:** The benefits of participation include assisting in research which might have implications for the development of therapeutic social skills groups. Upon completion of the survey, you may choose to enter a drawing to receive a \$10 Amazon gift card. Minimal risks are possible with your participation in this study and include the possibility of short-term emotional distress resulting from recalling and completing surveys about personal characteristics and mood. It is very unlikely that any psychological harm will result from participation in this study. However, if you would like to discuss any distress you have experienced, do not hesitate to contact [withheld] at [phone

number withheld] or the National Crisis Hotline at 1-800-273-TALK (1-800-273-8255)

**VOLUNTARY PARTICIPATION:** Your participation in this study is entirely voluntary. You are free to withdraw your participation at any time during the study, or refuse to answer any specific question, without penalty or withdrawal of benefit to which you are otherwise entitled.

**CONFIDENTIALITY STATEMENT:** As no identifying information will be collected, your name cannot be connected with your responses and hence your data will remain completely anonymous. All information gained from this research will be kept confidential. The results from this study will be submitted for professional research presentations and/or publication to a scientific journal. When the study results are presented or published, they will be in the form of group averages as opposed to individual responses so again, your responses will not be identifiable. Results from this study will be available after May 2022. Your anonymous data will be sent to the researcher in an electronic data file and stored for a period of 5 years on a password protected computer in a locked office and may only be accessed by researchers associated with this project.

**RIGHT TO WITHDRAW:** You are free to refuse to participate in this study or to withdraw at any time. Your decision to withdraw will not result in any

penalty or loss of benefits to which you are entitled. You may withdraw your participation by simply clicking the appropriate button to exit the study. If you choose to withdraw from the study, you will still receive credit for your participation. Alternatively, you may also choose to leave objectionable items or inventories blank.

**QUESTIONS OR CONCERNS:** If you have any questions or concerns regarding this study, please feel free to contact the Human Subjects office at California State University, San Bernardino (909) 537-7588 if you have any further questions or concerns about this study. I acknowledge that I have been informed of and understand the true nature and purpose of this study, and I freely consent to participate. I acknowledge that I am at least 18 years of age. Please indicate your desire to participate by placing a checkmark on the box below.

APPENDIX F:  
DEMOGRAPHIC QUESTIONNAIRE



## Demographic Questionnaire

1. What is your age?

2. Which of the following describes you?

Asian or Pacific Islander, Black or African American, Hispanic or Latine, Native American or Alaska Native, White or Caucasian, Prefer not to answer, Multiple/Mixed, Other\_\_\_\_\_

3. How would you describe your gender?

Male, Female, Nonbinary, Questioning or Unsure, Transgender, Prefer not to say, Other\_\_\_\_\_

4. How would you describe your sexual orientation?

Asexual, Bisexual, Gay/lesbian, Queer, Questioning/unsure, Straight/heterosexual, Prefer not to say, Other\_\_\_\_\_

APPENDIX G:  
PARTICIPANT SATISFACTION QUESTION ITEMS

### **Participant Satisfaction Question Items**

To what extent do you believe your participation in the group improved your ability to understand other people's emotions?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

To what extent do you believe your participation in the group made you feel better about yourself?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

To what extent do you believe your participation in the group improved your overall quality of life?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

To what extent do you believe your participation in the group improved the problems you had when you began the group?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

How would you describe your level of satisfaction with the group?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal

6. Quite a lot

How likely would you be to recommend the group to someone else?

1. Not at all

2. A little bit

3. Somewhat

4. A moderate amount

5. A great deal

6. Quite a lot

To what extent do you believe your participation in the group improved your confidence in yourself or your abilities?

1. Not at all

2. A little bit

3. Somewhat

4. A moderate amount

5. A great deal

6. Quite a lot

To what extent do you believe your participation in the group increased your feelings of support from others?

1. Not at all

2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

To what extent do you believe your participation in the group improved your ability to talk to and connect with your peers?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal
6. Quite a lot

To what extent do you believe your participation in the group improved your ability to express yourself?

1. Not at all
2. A little bit
3. Somewhat
4. A moderate amount
5. A great deal

6. Quite a lot

To what extent do you believe your participation in the group improved your comfort with expressing your gender?

1. Not applicable

2. A little bit

3. Somewhat

4. A moderate amount

5. A great deal

6. Quite a lot

To what extent do you believe your participation in the group improved your comfort with expressing your sexual orientation?

1. Not applicable

2. A little bit

3. Somewhat

4. A moderate amount

5. A great deal

6. Quite a lot

What are 2 things about the group you found most helpful?

What are 2 things about the group you found the least helpful?

What is one thing you would change to make your experience of the group better?

Do you have any other feedback to share about your experience participating in the group?



APPENDIX H:  
IRB APPROVAL LETTER

## IRB Approval Letter

May 20, 2022

CSUSB INSTITUTIONAL REVIEW BOARD

Full Board Review

IRB-FY2022-169

Status: Approved

Prof. Christina Hassija and Tyler Giatroudaki

CSBS - Psychology

California State University, San Bernardino

5500 University Parkway

San Bernardino, California 92407

Dear Prof. Christina Hassija and Tyler Giatroudakis:

Your application to use human subjects, titled "Youth/Young Adult Interpersonal Skills, Personal Development, and Quality of Life Following a Therapeutically Applied Tabletop Role Play Game Group" has been reviewed and approved by the Institutional Review Board (IRB) of CSU, San Bernardino. The CSUSB IRB has weighed the risk and benefits of the study to ensure the protection of human participants.

The study is approved from May 20, 2022 through May 20, 2023 and requires IRB annual continuing review and approval. The Cayuse system is automated and will send you email reminders 90, 60, and 30 days before the study comes due for renewal or annual administrative check-in.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research-related activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's COVID-19 Prevention Plan for more information regarding campus requirements.

If your study is closed to enrollment, the data has been de-identified, and you're only analyzing the data - you may close the study by submitting the Closure Application Form through the Cayuse Human Ethics (IRB) system. The Cayuse system automatically reminds you at 90, 60, and 30 days before the study is due for renewal or submission of your annual report (administrative check-in). The modification, renewal, study closure, and unanticipated/adverse event forms

are located in the Cayuse system with instructions provided on the IRB Applications, Forms, and Submission Webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. Please note a lapse in your approval may result in your not being able to use the data collected during the lapse in the application's approval period.

Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.

Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.

Submit a study closure through the Cayuse IRB submission system once your study has ended.

Failure to notify the IRB of the above requirements can result in disciplinary action. You are required to keep copies of the IRB approval letter, informed consent forms, and maintain the data for at least three years. The stored data should be stripped of all personal identifiers to ensure the protection and security of all participant information.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. If you have any questions regarding the IRB decision, please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at [mgillesp@csusb.edu](mailto:mgillesp@csusb.edu). Please include your application approval identification number IRB-FY2022-169 in all correspondence.

Best of luck with your research.

Sincerely,

Nicole Dabbs

Nicole Dabbs, Ph.D., IRB Chair  
CSUSB Institutional Review Board

ND/MG

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