

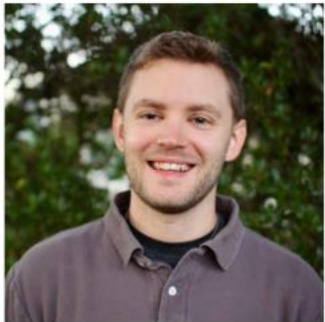
APA
2021
VIRTUAL

AUGUST 12-14
CONVENTION.APA.ORG



Rolling for Recovery

Therapeutic Applications of Tabletop Role-
Playing Games



Jared Kilmer, PhD



Allison Battles, PhD



Thomas Quinlan, PhD



Elizabeth Kilmer, PhD



Adam Davis, MA Ed



Megan Connell, PsyD



Ryan Kelly, PhD

ROLL FOR GROWTH

PROGRAM EVALUATION OF A THERAPEUTICALLY APPLIED ROLE-PLAYING GAME GROUP THERAPY FOR VETERANS

Allison R. Battles, PhD
Psychology Postdoctoral Fellow

Thomas Quinlan, PhD, LP
Psychologist

Minneapolis VA Health Care System



“Play is a free activity standing quite consciously outside ‘ordinary’ life as being ‘not serious,’ but at the same time absorbing the player intensely and utterly.”

- Johan Huizinga, [Homo Ludens](#)



CHARACTERISTICS OF PLAY

Self-chosen and
self-directed

Intrinsically
motivated

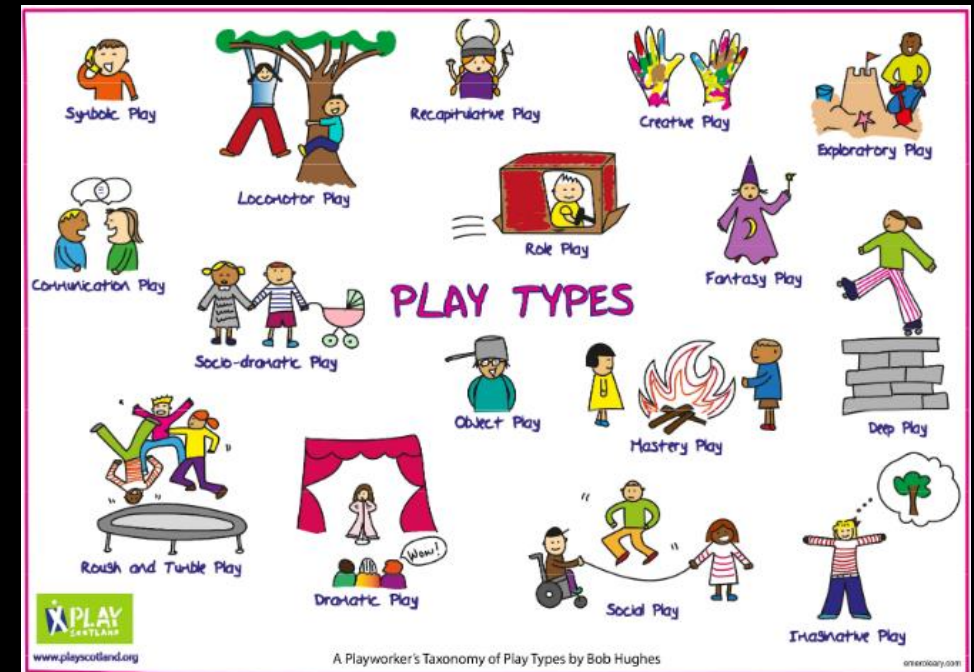
Guided by
mental rules but
the rules leave
room for
creativity

Imaginative

Conducted in an
alert, active, but
relatively non-
stressed frame of
mind.

DEVELOPMENTAL ROLE OF PLAY

- Developmentally allows for:
 - Exploration of social roles and norms
 - Stimulating new learning
 - Facilitating connection and cooperation
- Benefits don't stop after you leave Neverland
 - Cultivates joy and connectedness
 - Experiential practice of agency
 - Relieves stress and anxiety



MYTHS ABOUT GAMING

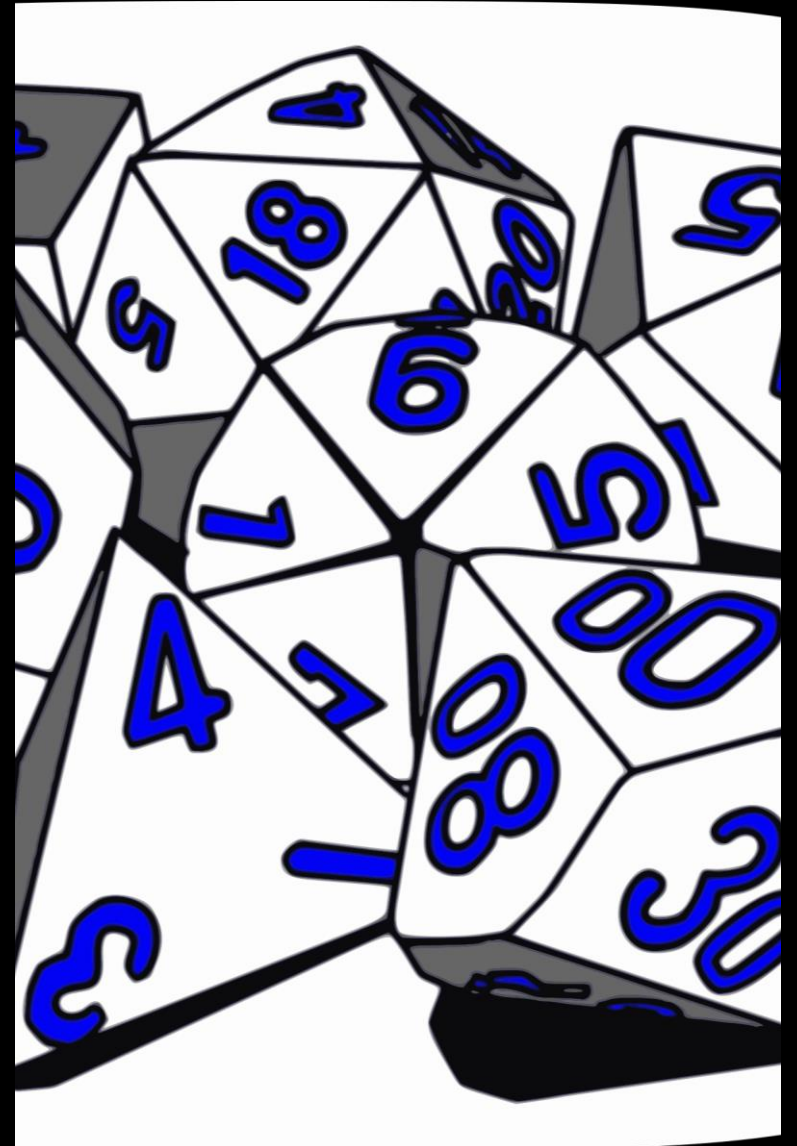
- **Myth:** Games are just for kids.
 - **Facts:** A 2019 Pew survey found that 40% of gamers are ages 18-35.
- **Myth:** Only men play games.
 - **Facts:** Recent surveys show that women now account for 46% of gamers.
- **Myth:** Video games make people anti-social and more violent.
 - **Facts:** Most games have a social component and promote social interactions and social skill utilization. Research findings generally support that video game violence is not related to aggressive or violent behaviors.
- **Myth:** Games are intellectually lazy and sedating.
 - **Facts:** Playing games promotes a wide range of cognitive skills and are shown to improve processing speed, working memory, attention, visuospatial reasoning, retention, recall, and recognition.

ANALOG GAME RESEARCH

- Tabletop role-playing games are associated with improved empathy, cognitive flexibility, experiential engagement, and quality of life.
- Simulative environment allows players to experiment with new interpersonal interaction and to confront socially related fears.
- Explore seen and unseen parts of self.
 - Develop a greater sense of confidence with expressing less visible aspects of self.
 - Gain insight into the perspectives and reactions of others.

ROLL FOR GROWTH

- New group therapy utilizing therapeutically applied Dungeons & Dragons
- 12 weekly 2-hour virtual group sessions
 - 90 min of gameplay
 - 30 min of post-game processing
- Integrative approach utilizing EBPs and established TA-RPG
- Completed program evaluation
 - 3 cohorts of 6 Veterans

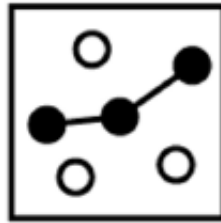




Regulation



Collaboration



Planning



Perspective



Pretend Play

THERAPEUTIC COMPONENTS

MEASURES

- Liebowitz Social Anxiety Scale (Liebowitz, 1987)
- Adult Self-Perception Profile (Messer & Harter, 2012)
- Strengths & Difficulties Questionnaire (Goodman, 2001)
- PHQ-9 (Kroenke et al., 2001)
- GAD-7 (Spitzer et al., 2006)
- SF-12 Health Survey (Ware et al., 1996)
- Adapted Client Satisfaction Questionnaire (Attkisson & Greenfield, 2004)

PARTICIPANTS

- Completed Sample:
 - Cohort 1 $n = 3$
 - Cohort 2 $n = 4$
 - Cohort 3 $n = 4$
- Age: $M = 38.17$, range: 23-57
- Gender:
 - Men: 14
 - Women: 3
 - Nonbinary: 1
- Race/Ethnicity:
 - White: 12
 - Latinx: 1
 - Asian American: 1
 - Native American: 1
 - Multiracial: 3
- Dx per CPRS:
 - PTSD: 4
 - MDD/PDD: 10
 - GAD: 5
 - SMI: 4
 - PD: 2

FEASIBILITY & ACCEPTABILITY

- 61% of enrolled participants successfully completed group
 - Average attendance: 11 sessions
- Client Satisfaction Questionnaire: $M = 57.1$
- Most helpful parts of group:
 - Post-game processing (77.8%)
 - Sense of connection with other group members (77.8%)
 - Feedback from group members and facilitators (66.7%)

PILOT OUTCOMES

- Significant mean reduction in:
 - Total depression sx
 - Large effect size ($d = 0.72$, $CI = [0.48, 0.96]$)
 - Total GAD sx
 - Large effect size ($d = 0.76$, $CI = [0.52, 0.99]$)
 - Anger/aggression
 - Medium effect size ($d = 0.50$, $CI = [0.26, 0.73]$)
 - Social avoidance
 - Small effect size ($d = 0.36$, $CI = [0.13, 0.60]$)
- Significant mean increase in prosocial behaviors
 - Small effect size ($d = 0.37$, $CI = [0.60, 0.13]$)
- Identified areas of benefit:
 - Social skills (77.8%)
 - Personal awareness (77.8%)
 - Trust (66.7%)

REFERENCES

- Bowman, S. L. (2010). *The functions of role-playing games: How participants create community, solve problems and explore identity*. McFarland.
- Brown, S. (2010). *Play: How it shapes the brain, opens the imagination, and invigorates the soul*. Penguin Group.
- Daniau, S. (2016). The Transformative Potential of Role-Playing Games—: From Play Skills to Human Skills. *Simulation & Gaming*, 47(4), 423-444
- Davis, A. & Kilmer, E. (2020). *The game to grow method of therapeutically applied role-playing games [Presentation handout]*. Kirkland, WA.
- Huizinga, J. (1938/1955). *Homo ludens: A study of the play-element in culture*. Beacon.
- Pieper, J. (2009). *Leisure: The basis of culture*. Ignatius Press.
- Peter, G. (2019). Evolutionary functions of play: Practice, resilience, innovation, and cooperation. In P. K. Smith & J. Roopnarine (Eds.), *The Cambridge Handbook of Play: Developmental and Disciplinary Perspectives* (pp 84-102). Cambridge University Press.
- Raybourn, E. M., & Waern, A. (2004, April). Social learning through gaming. In CHI'04 extended abstracts on Human factors in computing systems (pp. 1733-1734).
- Rivers, A., Wickramasekera, I. E., Pekala, R. J., & Rivers, J. A. (2016). Empathic features and absorption in fantasy role-playing. *American Journal of Clinical Hypnosis*, 58(3), 286-294.

The Game to Grow Method of Therapeutically Applied Role-Playing Games

Elizabeth D. Kilmer, Jared N. Kilmer, & Adam D. Davis



The Game to Grow Method

- Gameplay is synthesized with therapeutic techniques to catalyze inherent benefits of TTRPGs.
- Group Types
 - Counseling Groups
 - Therapeutic Social Skills Groups
- Settings
 - Mental health, community, educational
- Age
 - Children, adolescents, and adults



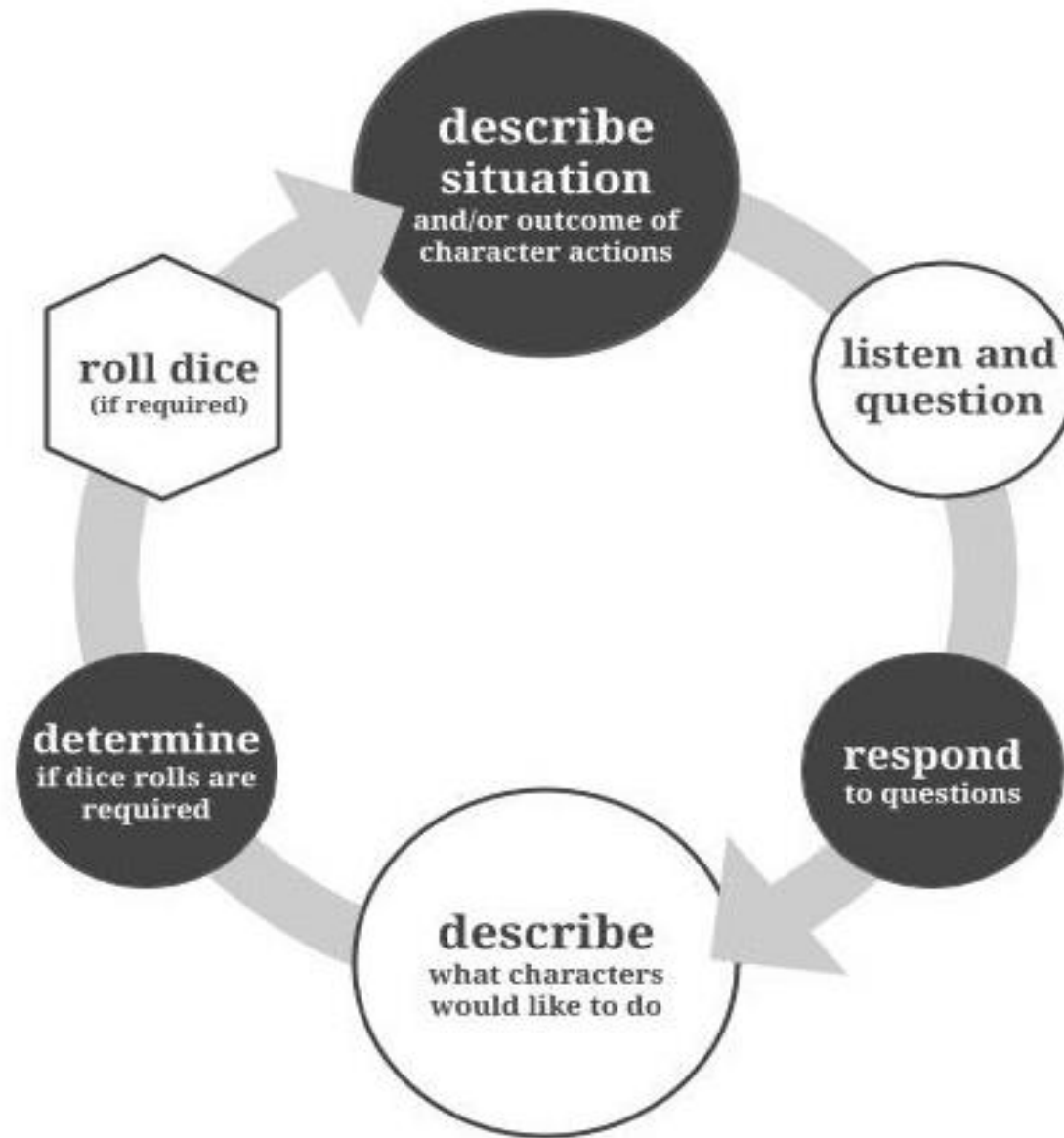
What is a tabletop role-playing game?

Group members collaborate, role-playing characters they create to solve puzzles, uncover treasure, and defeat monsters in a fictional environment, creating a story together using formal rules and participation structures.

Cycle of Play

● Game Master

○ Players



Current Study: Therapeutic Social Skills Group

- Goal of the study was to better understand participant and parent experiences of youth enrolled in therapeutic social skills groups.
- Participants and parents were asked to complete pre and post surveys about their experiences, as well as the Strengths and Difficulties Questionnaire.
- One quarter (9-11 weeks), with weekly 90-minute group sessions
 - Check-in
 - Experiential game play
 - Check-out
- Four participants per group

Study Participants

- Parent/Participant dyads were asked to complete surveys pre- and post- participation in group.
 - 13 participants completed post-surveys
 - Of these, 10 completed pre-surveys
 - 24 parents completed post-surveys
 - Of these, 15 completed pre-surveys
- Participant Demographics
 - Age: 11-17 years old, $M = 13.31$
 - Gender: 11 male, 1 female, 1 transgender
 - More than half of the participants had been enrolled in groups for over a year at the time of this study.

Participant Perceptions (N = 13)

This group helped me work on my social skills.

	N	%
Certainly True	5	39
Somewhat True	8	62

This group helped me feel better about myself.

	N	%
Certainly True	6	46
Somewhat True	7	54

Parent Perceptions (N = 24)

I think this group was helpful for my child.

	N	%
Certainly True	18	75
Somewhat True	6	25

I believe this group helped my child with their social skills.

	N	%
Certainly True	17	71
Somewhat True	7	29

Parent Reported Skills Practiced In-Group

*Parent Perceptions of Skills Practiced In Groups; Most Prevalent Responses
(N = 24)*

	N	%
Social Skills	19	79
Cooperation Skills	16	67
Building Self-Confidence	13	54
Communication	12	50
Dealing with Frustration	11	46
Making Friends	11	46
Dealing with Anger	19	42
Expressing Emotions	10	42
Problem Solving	10	42

Participant Reported Skills Practiced In-Group

Participant Perceptions of Skills Practiced In Groups; Most Prevalent Responses (N = 24)

	N	%
Making Friends	8	62
Cooperation Skills	5	39
Communication	5	39
Problem Solving	5	39
Expressing Emotions	4	31
Dealing with Frustration	4	31
Social Skills	3	23
Dealing with Anger	3	23
Empathy	3	23

Strengths and Difficulties Questionnaire

- The Strengths and Difficulties Questionnaire is a self-report and observer report measure that looks at multiple domains of functioning.
 - Prosocial behavior, peer relationship problems, emotional symptoms, conduct problems, hyperactivity/inattention, total difficulties, and impact of difficulties.
- Significant differences were found in two areas on the child report (N = 10).
 - There was a significant decrease in reported peer relationship problems, $t(9) = 3.07$, $p = .013$, $d = .80$.
 - There was a significant decrease in the reported impact of challenges in domains of functioning in multiple domains (home, school, friendship, and leisure activities), $t(9) = 2.70$, $p = .024$, $d = .48$.
- No significant differences were found in the parent report (N = 15).

Limitations, Conclusions, Future Directions

- Limitations

- This study had a small sample size, with individuals who self-selected to complete surveys.
- More than half the sample had been enrolled in this intervention for over a year prior to participating in this study.

- Conclusions

- TA-RPG groups may reduce overall symptom related distress and improve efficacy in peer interactions for youth.
- Participants and parents report that TA-RPG groups support participant's social skills and self-esteem.

- Future Directions

- More research is needed with larger sample sizes to better understand the effects of TA-RPGs.



If you'd like to learn more about implementing TA-RPGs in your practice, see more information here www.gametogrow.org/training.

Level One Training for Mental Health Professionals
September 18, 2021



Game to Grow is approved by the American Psychological Association to sponsor continuing education for psychologists. Game to Grow maintains responsibility for this program and its content.



References

Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 1337-1345.