

# Integration of Game Design and Theory into Group Psychotherapy with Veterans with Severe/Chronic Mental Illness

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## Abstract

Aspects of game design and theory were incorporated into a traditional psychotherapy group for military veterans with severe/chronic mental illness.

**G**AMES ARE NOT JUST ABOUT HAVING FUN while passing time; they can help us get through difficult times. Today's games are helping pediatric cancer patients improve medication adherence and treatment outcomes,<sup>1</sup> finding solutions to real-world problems such as AIDS,<sup>2</sup> carbon emissions,<sup>3</sup> and oil shortages,<sup>4</sup> developing peaceful solutions for the Middle East,<sup>5</sup> and creatively tackling global problems such as world hunger and access to clean water.<sup>6</sup>

## Incorporating Games into Therapy: Play and Theory

The role of games being used in a therapeutic setting is nothing new. Play therapy was formalized as a treatment modality for children in 1921.<sup>7</sup> Anna Freud believed that observing children engaged in play was analogous to free association in adults and offered a window through which to view a child's unconscious mind.<sup>8</sup> Today, therapists "use the therapeutic powers of play to help clients prevent or resolve psychosocial difficulties and achieve optimal growth and development."<sup>9</sup> Play therapy has been well researched and is an empirically supported treatment for children ( $es=0.80$ ,  $P<0.001$ )<sup>10</sup>; however, the amount of literature on this topic for adults is limited.

It is important to note that there is a difference between engaging in play and engaging in games. The greatest difference is that play is purposeless in that it is done for its own sake,<sup>11</sup> whereas games have rules and goals that govern them. This apparent purposelessness of play may be one reason why adults tend to engage in games-specific play rather than pure play. For example, many adults participate in bowling leagues, play bridge or poker, and engage vicariously in games by cheering on their favorite football team.

Play theorist Dr. Brian Sutton-Smith stated, "The opposite of play... is not a present reality or work... it is depression."<sup>12(p.198)</sup> For most psychologists, this quote will likely

evoke thoughts of behavioral activation, an effective and well-supported behavioral component in the treatment of depression.<sup>13</sup> One of the hallmarks of depression is inactivity, so not only does behavioral activation provide an alteration of inactivity habits that may promote or maintain depression, it also has the ability to physiologically impact areas of the brain and specific neurotransmitters known to be involved in major depression.<sup>14,15</sup> Play is important to our growth and happiness as human beings,<sup>11,16</sup> and if games are an avenue through which we can get adults to play, we should wholeheartedly seize that opportunity.

The challenge in getting adults to play games, especially adults who suffer from mental illness, is that they sometimes see games as a waste of time. When individuals seek out therapy, it is usually because they are struggling or in crisis. When an individual is so far down in the dumps, so to speak, no one wants to play with his or her recovery. This is where game theory integration comes in as a facilitator to play.

Integrating game theory into therapy is something with which therapists may not be familiar. There are four traits that define a game: Goals, rules, feedback, and voluntary participation.<sup>16</sup> Therapy already contains all of these traits. Many clients come to therapy voluntarily and work with a therapist to set personal goals they want to achieve. Both therapist and client set the rules of the game (i.e., payment, boundaries, etc.) and deliver feedback to one another through verbal and nonverbal cues. With the foundation of a game already in place, it is important to consider the players when constructing the framework of therapy.

I currently extern at a Veterans Affairs medical center and conduct group and individual therapy with a diverse group of veterans. Ages range from 23 to 78 years and include many ethnicities such as whites, African Americans, Asians, and Latinos who have served in wars from Vietnam to Operation Iraqi Freedom. To qualify for this particular program,

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veterans must have a severe or persistent mental illness and a general assessment of functioning of 50 or below (where 90–100 is optimal). Although some of the veterans are high-functioning, there are also many who have cognitive and/or physical limitations.

The diversity of my veterans was the greatest challenge I faced when developing my resilience group. I wanted to create a group that fused together psychoeducation and empirically supported treatment interventions with aspects of game design that have been shown to promote motivation and self-efficacy (the belief in one's ability to succeed). In short, I wanted to deliver psychological material in a way that was fun, engaging, and game-like. I had initially wanted to incorporate the use of technology, such as smartphones and Internet resources like Jane McGonigal's "Super Better," as part of the group. However, I quickly realized that most of the veterans did not have reliable access to technology, regarded technology suspiciously or disdainfully, or did not possess the cognitive or physical ability to effectively use technology. After discussing this with my supervisor, Dr. Tracela White, I realized I would have to break the group down into the most basic game components.

I created a very basic leveling, quest, and reward system. The leveling system is a simple chart that allows veterans to track their progress through the group. Recent research suggests the greatest motivator for performance is progress,<sup>17</sup> so enabling veterans to track and view their personal progress was one part of generating motivation.

The quests are, with just a few minor modifications, standard cognitive-behavioral therapy homework assignments. Research supports the utility of homework and indicates that homework compliance is directly correlated with treatment outcomes.<sup>18</sup> In other words, the more homework you complete, the better your treatment outcome. The task of homework was rebranded as a Weekly Challenge. Just like homework, each Weekly Challenge asked veterans to take the skills they had been taught in group and apply them outside of the therapy setting. In addition, each Weekly Challenge is determined by both the facilitator and the veteran. The group facilitator provides broad challenges, such as "do something nice for yourself this week," and it is up to the veteran to provide the more specific details. Research indicates that individuals are more likely to complete goals when they have been set by the individual and not by an external force.<sup>19</sup>

When we focus on achieving our own goals, we are generating a sense of intrinsic motivation. Research has demonstrated that pursuing intrinsically motivated work, such as building on personal strengths and developing interpersonal relationships, leads to greater amounts of happiness, whereas pursuit of extrinsic rewards (i.e., money, fame) does not.<sup>20</sup> Engaging in this autotelic work also generates some of the most positive, satisfying, and meaningful work that humans can do.<sup>16</sup> One of the fantastic things about allowing veterans to choose their own goals is it demonstrates that they already have many of the tools they need in recovery. The veterans have the knowledge and skills to make the slow and steady climb to recovery, but they often do not even realize it. By allowing veterans to set their own goals, they are being set up for success and, consequently, boosting their sense of self-efficacy.

Finally, the reward system encourages veterans to attend the group and to complete the Weekly Challenge. Veterans earn 1 point for their attendance at each group and 1 point for

completing the Weekly Challenge. These points are logged by the veteran on his or her own skill (leveling) sheet. In addition, all points earned by the individual veteran are added into a group pot. Thus, veterans are not only helping themselves in their recovery, but they are also contributing to a greater whole. They are part of something greater than themselves. This is especially important in mental health recovery because contributing to something greater than yourself fosters a sense of meaning,<sup>16</sup> and finding meaning in life is something that many individuals with severe mental illness continually struggle to do.

At the end of the module, veterans are offered an epic reward: A party! Although this reward may not be appropriate for some populations, it is something that the veterans very much enjoy and look forward to. It is a chance for them to socialize with one another, something that they rarely have the opportunity or willingness to do outside of the therapy setting due to symptoms of their illnesses, such as suspicion, distrust, and anxiety. It is also a time to celebrate and recognize their own achievements during the previous weeks. Part of building resilience is recognizing daily epic wins, and for many veterans in the program, just getting to the Veterans Administration is an achievement unto itself. Thus, the party is a celebration of their hard work.

### Building Resilience: Group Specifics

The Building Resilience group contains four modules, which are spread over 24 weeks. Each module contains 4 weeks of planned curriculum, 1 week for a review, and 1 week for a reward. The four modules each focus on one of four areas of resilience: Emotional, cognitive, social, and physical. The sessions begin with a review of the previous week's Weekly Challenge, which takes only a few minutes. Review of the challenge is critical because it emphasizes the importance of applying the psychotherapy tools outside of the group.<sup>19</sup> Next, the day's topic is introduced, typically involving psychoeducation. For example, during the emotional resilience module, veterans were taught about the purpose and utility of emotions and different coping strategies for dealing with specific emotions such as grief or anger. The middle portion of the group is a facilitated discussion where veterans are able to share their thoughts, feelings, and experiences about the topic. At the end of the group, veterans are assigned their Weekly Challenge. Because many veterans struggle with memory-related issues, Weekly Challenge cards are given to each veteran. On one side, veterans write down the weekly challenge and on the other side is an inspirational or motivational quote. Every session is closed by each veteran reading his or her quote. Veterans are encouraged to keep their cards close at hand in case they need a kind word, a positive distracting thought, or just a reminder of the work that they have done.

Although gaming mechanics such as individual leveling, questing (i.e., Weekly Challenge), and working toward group goals are prominent in weeks 1–4, week 5 features literal game play. The fifth week of a module is set aside as a time to review the last 4 weeks of material. When I presented this idea to my supervisors, there was worry that the veterans would struggle with "right" and "wrong" answers. When presented to the veterans, there were complaints and comments such as "I'm not good at tests!" However, presenting

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the review session as an actual game with questions drawing on personal experience rather than semantic memory proved to be quite successful. For example, our first review session was “Emotional Resilience Jeopardy,” which included questions such as “What can you do to calm down when you’re angry?” and “What things can you do to make yourself feel good?” Most recently we completed a game of “Resilience Trivial Pursuit,” where veterans rolled a die and moved around a “Trivial Pursuit” board drawn on a whiteboard. Questions for this game included questions on cognitive resilience (i.e., “How can thoughts effect your mood?”), general trivia, and questions from the previous “Jeopardy” game. By answering questions correctly, veterans earned enough points to bring the group point total up to the designated threshold and thus earn themselves the party reward.

### Results

This group was created as a means to attempt to integrate gaming mechanics and game play into a highly challenging population of veterans with severe mental illness. Because of the ever-changing population of the group, collecting baseline measures was not a practical or available option. However, a very brief and unofficial feedback survey was administered to the group participants requesting their opinions on the progression of the group, group topics, and group format. Seven veterans with 4 or more weeks of attendance completed the survey. Although the group received high marks overall, every veteran rated the Weekly Challenge aspect of the group as 5 out of 5, or “enjoy very much.” This result was unexpected, especially considering many therapists face difficulties with homework compliance.

The least successful game element was the skill (leveling) sheet (4.5 out of 5 ranking). This finding may be due to the minimal incorporation of the skill sheet in the group and could perhaps be improved by placing more emphasis or public display of level status. Other results included enjoyment of presented topics (total, 5 out of 5), enjoyment of working toward a group goal (total, 4.6 out of 5), topics (total, 5 out of 5), and overall impression of the group (total, 4.83 out of 5).

### Intended Benefits

One of the most useful aspects of this group setup is its flexibility. Although the weekly topics do build upon one another, they can also stand independently, an important feature for groups with constantly fluctuating attendance. In addition, the materials I have used for this group are inexpensive (i.e., printable business cards, paper folders, dry erase markers, etc.) and therefore can still be an effective option even in underfunded settings. In addition, with such a diverse range of veterans in groups, it can be very challenging to find and present material in a way that is both helpful and meaningful for individuals with disorders ranging from developmental delays to posttraumatic stress. This group recognizes and respects that everyone’s road to recovery is as unique and actively engages veterans in their own recovery process. The steps are small—do something nice for yourself, try seeing things from someone else’s perspective, try something new today—but they all build upon one another and help bolster a sense of worth, self-efficacy, and self-esteem. They are the tools that allow one to get back up after being knocked down: The very definition of resilience. Groups that teach skills to veterans

(e.g., identifying cognitive distortions, practicing mindfulness, processing reactions to grief and loss, etc.) are crucial, and I do not propose that every group setting would be appropriate for gamification. However, recognizing daily wins and the strengths that reside within the individual but have been forgotten are also important. It provides the hope that things can get better and fosters motivation to use the tools that have been taught. As Jane McGonigal said, games offer the hope of success even in the face of continual failure,<sup>16</sup> and this is the first step toward recovery: Hope that it can happen.

### Future Research

Using games to help adults with mental health conditions is an area of research that could certainly use some more attention. New research is finding that games are helpful to mental health in a variety of ways, such as videogames helping combat soldiers to experience fewer trauma-related nightmares<sup>21</sup> using virtual reality as exposure therapy for posttraumatic stress disorder,<sup>22</sup> and casual games effectively reducing symptoms of depression and anxiety in individuals diagnosed with major depression.<sup>23</sup> However, there is a dearth of information on integrating game theory into group therapy settings. As Brown stated, play is “preconscious and preverbal, it arises out of ancient biological structures that existed before our consciousness or our ability to speak.”<sup>11(p.16)</sup> Playing is a primal activity that precedes memory. The possibility of being able to tap into a place of pleasure that is untouched by trauma and stress, someplace in the core of human existence, would certainly be an advantageous skill for any mental health professional.

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### Author Disclosure Statement

No competing financial interests exist.

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