MYTHOS – Game Design Document

A Role-Play Video Game for Adopted Children and Children with Trauma

Lost in a strange, desolate land, adopted children and children with trauma role-play as a stuffed bear where they use the tools of their choice to find their way home.

Similar to a digital version of Adventure Games or Clue Escape Room and armed with the play therapist's toolbox, children explore their new world to locate magical objects and overcome obstacles, while picking up valuable skills along the way. Over the course of their journey, they will come to realize that home is more than what they think.

Target audience: Adopted children and children with trauma, ages 8-12

Ultimate treatment goal: Termination of self-defeating acting out behaviors and acceptance of self as loved and loveable within a family.



Therapy Goals

- Mirrors experiences often faced by adopted children and children with trauma.
- Used as a tool by play therapists in concert with therapy.
- Flexible so it can accommodate varying treatment goals, based on the situation and child.
- Mimics the environment and flexibility of the playroom, with no timer or rules. In a safe space, children can choose how they progress through the game.
- Key focus on teaching children life skills and strategies, such as identifying their feelings or learning coping skills.
- Can played anywhere by anyone, regardless of age, background, physical/mental status, education, or skill.

Pillars

Role-play: Children participate in the game as a stuffed animal, allowing them to experience their emotions and make the trauma journey using an outside lens.

Player-directed: As a digital board game, with no timer or rules, children utilize the play therapist's toolbox (constructive, sensory, functional, creative, dramatic, and social) to progress through the game. There is no right or wrong way to achieve the goal.

Action adventure: To advance the game, children locate and collect objects, solve puzzles, overcome obstacles and challenges, and pick up a variety of skills, such as identifying their feelings, learning coping skills, understanding loss, and others

No experience required: Due to the neurodiversity of this group, the game should be able to be played by anyone, regardless of age, background, physical/mental status, education, or skill level.

Therapy relationship: Building and maintaining the therapist-child relationship is key. Therapists focus on creating a safe environment, building rapport, and allowing the child to dictate where and how sessions go.

Physical object: Children will be provided with a book and physical stuffed animal that emulates the stuffed bear in the game. The hope is that children will use it to embody and project their feelings, both positive and negative, to help them process their experiences and heal.

Targeted Types of Fun

- **Sensation:** Game as sense-pleasure. Games that evoke emotion in the player, be it through sound, visuals, controller rumble or physical effort.
- Fantasy: Game as make-believe. Game as a means to take the player to another world. Some call it escapism.
- **Challenge:** Game as obstacle course. Games that provide the player(s) with highly competitive value or with increasingly difficult challenges.
- **Expression:** Game as self-discovery. Games that allow for self-expression from the player through gameplay.

Gameplay Summary

Children participate in the game as a stuffed bear. They can customize the bear's name, age, color and choose a superpower. Age determines the difficulty level of the game, as well as the complexity of exercises. Superpowers are based on character traits, such as funny, strong, smart, kind or curious, and evolve over the course of the game.



The game uses the 12-step hero quest to mimic the process often used in recovery programs. The story begins with a tragedy, where their bear finds themselves far from home and lost in the desolate, fantasy-like land of Mythos. Each level represents a different chapter in the story.

As they participate with their bear on the trauma journey, children explore, locate and collect objects, use their imagination to solve puzzles and overcome obstacles, and pick up a variety of skills in order to advance the game.

Game Mechanics

The game follows a digital board game format like Adventure Games or Clue Escape Room. Children can play by themselves or as part of a group.

There will be a total of 12 levels, one for each chapter in the trauma journey. Each level will have its own map and quest, where players explore and solve a puzzle or overcome an obstacle, culminating with a contest with the boss. Each step will unlock a new part of the map, as well as new functionality. Quests build upon each other, each with different treatment goals, leading up to the game's final challenge.



Maintaining Health and Learning Life Skills

Players unlock a variety of life skills (shown as health cards) throughout the game. In the beginning, when their bear is suddenly whisked away from their home and ends up in a cold, desolate land, players are prompted to identify how their bear is feeling (happy, sad, scared, angry) and where they are experiencing those emotions: do they feel sick in their stomach, does their head hurt, is their chest beating hard, are their arms numb?

As they progress, they will unlock more skills. For example, when they hear a strange sound, they are prompted to take a moment to help their bear calm down (give themselves a hug, shake it out, or rock). They will also unlock skills to identify if their bear is hungry, hurt, tired or hot/cold.

As they encounter various elements in the game, they will be prompted to identify their bear's physical and/or mental state and identify and/or find ways to solve those issues. For example, if they determine their bear is hungry, they will need to locate a food source. If their bear is cold, they will need to locate a source of warmth. If they are stressed, they will take a moment to help their bear calm down.



Life skill – Feeling Zones



Life skill – Brain Breaks

Selecting and Using Superpowers

Players select a superpower during onboarding. Superpowers are based on character traits rather than physical traits, such as funny, fast, strong, brave, smart, kind, or curious. Players have ready access to their superpower and can use it on puzzles, obstacles, and enemies. Since one's superpower can vary wildly, superpowers essentially function as a wild card in the game. For example, when players encounter a crocodile, they can tell the crocodile a joke (funny superpower) which saves their life, or they can try to escape (strong superpower) which gets them eaten.

Initial superpowers consist of one action, such as telling a funny joke (Funny). As they gain experience,



Examples of the impact of one's superpower on gameplay

Collecting and Combining Items

In addition to unlocking life skills, players can collect items and view them in their inventory. Each item has a specific purpose, and it is up to the player to determine how to use them. For example, they can collect berries if their bear is hungry, locate a blanket if their bear is cold, or use a magic flower to heal them from a bee sting.

They can also combine items together. For example, if they can't locate a blanket, they can pair a special rock with a pile of sticks to start a fire. They can also craft items, such as an ax to chop down a tree, or combine different flowers to create a special potion that will enable them to breathe underwater.

Players can trade items in their inventory at "stores" to purchase supplies or upgrade equipment.



Examples of different objects players can collect

Non-Player Characters (NPCs)

NPCs serve as key context. The player must interact with other characters to learn information and advance the game. Some present information and important objects, while others can walk along as a partner in the player's quest.



Game Play

Static Paper Prototype

The game board shows one part of the map at a time. Like Adventure Games, Clue Escape Room, and other point-and-click games, players interact with various markers (numbers) to achieve the objective for each location. This unlocks the next location on the map, leading up to the final challenge for that level. Players can navigate between each part of the map or view the entire available map.

The primary mechanic revolves around players pointing and clicking on highlighted markers. These are shown as static numbers for the playtest, but in the digital game, they will show as highlighted or with some sort of animation to indicate they are clickable. Some provide hints to the story, while others allow players to collect items or revolve around a challenge. Some choices advance the game, while others have adverse consequences. To provide maximum flexibility, players can complete them in any order.



Level 1 – Beginning of game



When a player completes all the markers and the primary challenge for that location, a new location is unlocked, and they follow the arrows to the next part of the map.



Digital Prototype

Playtesting using paper prototypes helped to establish and validate game mechanics. Next, I converted static prototypes into an interactive prototype to test these concepts in the digital space. For now, I used Adobe XD, but will utilize different prototyping tools as the design process progresses.

The digital version guides players through the game. The first step functions as a tutorial, where players can move around the space to highlight and collect items, drag and drop objects, and complete puzzles.

The primary mechanic revolves around players pointing and clicking on highlighted markers and objects. Clickable objects show as blue on mouseover or touch, indicating that players can interact with them. Some markers provide clues and provide hints to the story, while others allow players to collect items or revolve around a challenge. Some choices advance the game, while others have adverse consequences. To provide maximum flexibility, players can complete them in any order.



Level Design

For the digital version, I spent a lot of time working on the map and level design. The previous version was too abstract and not detailed enough for players to understand. As a result, I revamped all the artwork and changed the setting from outside to the inside of a dilapidated cabin.



Viewing and Accessing the Map



First step of level

Game play shows one part of the map at a time. The map builds as players proceed through the gap. Players can access the map at any time, by clicking on the Backpack icon.

Like Adventure Games, Clue Escape Room, and other point-and-click games, players interact with various objects to achieve the objective for each location. This unlocks the next location on the map, leading up to the final challenge for that level. Players can navigate between each part of the map or view the entire available map. For now, room layouts emulate a floor plan, but this concept is too abstract for children and will need to be rethought.



Solving Puzzles and Challenges

Mythos isn't a fighting game. Instead, players work to solve puzzles and challenges, which can consist of using an inventory item, harnessing their superpower, employing a stress reaction, or employing the play therapist's toolbox. If a player attempts to complete the challenge before they have collected any required objects or performed any required tasks, they will be redirected.

Challenges that utilize inventory items are generally simpler. For example, when a player isn't able to reach the keyhole, they have to move objects around, and then employ the key.



Another type of challenge revolves around negotiating and working with non-player characters:



For even more complex challenges, like facing the spider at the end of Level One, players use a spinner to determine their next action, which can include their inventory, their superpower, stress reactions, and options from the toolkit.

As they progress through the game, these choices may become more abstract (i.e. pick a method from the toolkit) rather than straight choices. For example, to escape an island, do they build a raft? Do they blow bubbles to breathe underwater? To obtain an eagle's magical feather to fly, do they use their superpower to tell a joke? Or do they use the toolbox to sing a song or do a skit?



Spinner showing choices when players face a spider.

Playtesting

When I first decided to follow a digital board game format, I researched action-adventure games with a narrative. I was particularly drawn to Stuffed Fables, Forgotten Waters or Choose your Own Adventure. Stuffed Fables and Forgotten Waters have beautiful aesthetics and narratives, but I quickly realized these types of games require a long and complicated setup that would make it near impossible for children—especially those with trauma or special needs—to play. Choose your Own Adventure was simpler but its core mechanic, with the psychic meter, wasn't what I was looking for.

I then discovered Adventure Games, a series of escape room type board games that looked fun and engaging. These have static boards that build upon each other, with numbers that players interact with and draw cards to advance the narrative. At the heart of Adventure Games is a large rule book which the narrator reads to guide gameplay. When a player selects a number, the narrator reads the accompanying text and also asks players what they should do.

I have never seen a game like this, so I wanted to see how this actually worked in real life. I went to a variety of stores looking for these types of games, but only succeeded in finding Clue Escape Room. These games are hard to find, can only be ordered online, and can be quite expensive.

Participants

My daughter and her friend participated in the playtest as participants. Both are in fifth grade.

Round One (paper prototype): 12/20/23

Created early prototype that mimicked Clue Escape Room or Adventure Games. These have static boards that build upon each other, with numbers that players interact with and draw cards to advance the narrative.

Top questions:

- 1. Does this type of gameplay make sense to kids?
- 2. Can kids interact with the board and complete gameplay?

Overall feedback:

- First version was not understandable
- Tasks weren't fully playable and had missing gaps in the experience
- Translating to physical cards from digital requires extra steps so they make sense
- Did not understand what they were supposed to do
- Board game format was confusing
- Expected a more traditional type of board game format
- Did not find it fun

Experiment: Playing Clue Escape Room (12/27)

After the first attempt, I wanted to see if my daughter could play Clue Escape Room and observe her behavior.

Top questions:

- 1. Does this type of gameplay make sense to kids?
- 2. Can kids interact with the board and complete gameplay?

Positive feedback:

- Loved concept of Clue Escape Room
- Game took three hours to play
- Had never played anything like it before
- Loved the idea of props (envelopes) to decode clues
- Thought it was fun and engaging
- Was able to interact with the board
- Clicked on the numbers to draw cards
- Was able to connect puzzle cards together
- Collected clues
- Was able to connect clues with characters in the game
- Took an active role to attempt to identify the culprit

Undesired/unexpected feedback:

- Too many cards
- Lost track of where they're at in the game
- Not sure of where to start or where to go as the game progressed
- Not sure of how to play other cards that are not labeled on the board
- Some numbers are linear, others are not.
- Plot and story became disconnected and had to go backwards to connect the dots
- Instructions not detailed enough
- Needed adult assistance to understand and play the game
- Found it difficult to put together all the pieces--but loved it at the same time
- Requires ability to read and understand the story, as well as put the clues together
- Tended to skip ahead instead of following the set narrative order
- Might be difficult for younger kids to play
- Younger kids would need to be guided
- Tended to want to shuffle the cards and play more randomly rather than going through the game more linearly--which messes up the story and plot
- Game can only be played once

Summary: My Clue Escape Room experiment allowed me to answer my top questions. With adult assistance, kids can definitely play a game like this. They can interact with the board, draw cards based on the number, and connect pieces together to advance the game.

Round Two (paper prototype): 12/29/23

Using Clue Escape Room as a guide, I created a more detailed prototype and conducted a second playtest. I cleaned up and split cards into inventory cards, activity cards, and health cards. Some activity cards revolved around collecting items, while others revolved around a challenge with multiple steps.



Top questions:

- 1. Do kids understand the concept of the game?
- 2. Can kids play the game with no experience required?
- 3. Does the game allow kids to use their imagination?
- 4. Is the game fun?

Positive feedback:

- Playing Clue Escape Room gave a better sense of how to play
- Thought it was fun and engaging
- Was able to interact with the board
- Selected the numbers to draw cards
- Understood the concept of collecting objects
- Understood the concept of combining objects to solve a challenge
- Understood the concept of using their superpower
- Understood the concept of health cards
- Loved how interacting with non-playable characters can advance the game
- Enjoyed solving challenges

Undesired/unexpected feedback

- Overwhelmed by even a small number of cards
- Shuffled activity cards instead of going through the numbers on the map
- Did not connect cards to the map
- Maps need to be more defined and interactive so kids can use either the map or cards to navigate through the game
- Clues need to be available from different paths

- Superpowers and objects allow children to use their imagination on how to play
- Making the ways kids use objects and superpowers flexible means challenges are solved differently for each player
- Allowing kids to choose different superpowers can drastically alter how they resolve obstacles (brave vs funny). Being brave and beating up the crocodile can get you killed, while telling a joke will save your life.
- Need options to guide kids who struggle with imaginative play
- Think about how players view NPCs. Some only interact to obtain information while others want them as a partner on their quest
- Identify objectives for each scene, as well as the overall level. Goals can be achieved regardless of how players get there
- Maps for each scene need to connect at a larger level view
- Concept is valid for older kids but more guidance is necessary for younger ages
- How can we guide kids through game play so they can get started on the right foot?
- Allow players to revisit and explore variations, as well as collect items that are necessary to advance raw game
- Provide ways to pause and save play
- Find ways to better incorporate health cards
- The only way to ensure that kids go in the proper sequence is to guide them, create a path. Would kids just go on their own or do they require some incentive, like dice or a spinner? Spin or take a card?
- Don't forget to introduce the toolkit

Summary: My second playtest showed that the cards and linear path make these games difficult, especially for kids. Kids tended to use the cards instead of the map, and also tended to prefer random activities: shuffling cards, choosing numbers out of order, or using dice or a spinner. And as mentioned, game play allows players a lot of flexibility in solving challenges and obstacles, which can alter the narrative and path for the game.

After doing some research, I discovered these are actually called point-and-click board games. Since my game will be digital, I reviewed a variety of point-and-click games in the digital space, such as Roki, Old Man's Journey, and Samorost. Each uses detailed graphical "maps," with some type of haptic or interactivity to indicate tasks (i.e., numbers on a board). When players click on them, a message or clue pops up on screen to help them solve challenges.

Round Three (paper prototype): 1/7/24

For my third iteration, I revised the prototype so the narrative and objectives can be achieved regardless of the order and methods used to advance the game. I also realized I had left out the Play Therapist's Toolkit, so I incorporated a spinner into some of the challenges. This allows players to choose to use their superpower, inventory object, or the toolkit to solve a challenge or obstacle. For example, when players encounter a hungry crocodile, they use a spinner to determine how they should address the situation: sing a song (toolkit), blow bubbles (toolkit), use their superpower, or use a fire stone. Some have adverse consequences, while others get them into the crocodile's good graces. Finally, I gave NPCs a larger role to help players advance the game.

For the playtest itself, I changed the way it's conducted so that the moderator acts as the owner of the cards and distributes them as necessary. I also added directional markers and different graphical treatments to the numbers to better emulate the digital environment.



For this playtest, I tested separately with my daughter, and also one of her friends from school.

Top questions:

- 1. Does replicating the digital experience (where kids select a number and moderator serves up the applicable content) work better than having kids navigate through lots of cards?
- 2. Can kids understand and play the game with no prior experience?
- 3. Can kids play the game regardless of their ability or skill?
- 4. Can kids advance the game regardless of what path they choose?

Positive feedback:

- Acting as moderator of the cards and handing them to the player when necessary worked much better and served as a more accurate representation of the digital experience.
- Now that cards were not a primary mechanic, players navigated using the map.

- Onboarding (via moderator) provided enough background and information to help new players get acquainted with the story.
- New players--with no prior exposure to point-and-click games--were able to quickly pick up and understand how to play the game.
- Liked the addition of a physical stuffed animal to aid them on their journey.
- Liked the idea of the spinner (although not the execution) and having different ways to solve a challenge.
- Liked being able to make Freddy Fox a partner in the game.

Undesirable/unexpected feedback:

- Were confused by different graphical treatments. Instead of realizing the star represented chests, players asked if it symbolized the starting line.
- Map was too abstract to adequately guide users through tasks. Players still relied on cards to walk them through.
- Players continued to select numbers out of order. Players indicated that even if they were guided, they would still engage in this behavior.
- Players often found themselves stuck because they completed tasks out of order, especially during challenges which required them to collect objects or perform certain tasks beforehand.
- Younger players were less engaged. They considered the static board and cards to be "boring" even though they were clearly engaged with the content.
- Younger players were hampered by their reading ability, which may have contributed to their lack of engagement and ability to play.
- Players indicated that for the spinner, they wanted to have more say in what they chose and how they employed that choice

Summary: This version of the game was the most successful. While it was still odd, using a moderator to emulate the digital environment and thus remove cards as a key mechanic made it significantly easier for players to pick up, understand, and play the game. In addition, by testing with someone who was completely unfamiliar with the content and gameplay, I was able to determine that this form of point-and-click game is completely feasible for kids.

At the same time, it was clear that the current iteration is only playable for kids with a certain skill set or education level. In order to make it accessible to everyone, the game needs to relay tasks and information via other methods such as color, narration, or interactivity. There were also issues with making sure kids could advance the game regardless of the order. While this was improved, challenges continued to be a struggle, especially when players had not yet collected required objects or completed certain tasks. Finally, the map and level design need to be more detailed and interactive to properly guide players from task to task and place to place.

Round 4 (Digital prototype) - 1/28/24

For my fourth iteration, I converted the paper prototype into an interactive, digital prototype. For this version, I spent a lot of time working on the map and level design. The previous version was too abstract and not detailed enough for players to understand. As a result, I revamped all the artwork and changed the setting from outside to the inside of a dilapidated cabin. These changes allowed better control for how players proceed through the game. I also added blue highlights on mouseover and touch so players better understand what they can interact with and what they can't.

Top questions:

- 1. Can kids understand and play the game with no prior experience?
- 2. Can kids play the game regardless of their ability or skill?
- 3. Can kids advance the game regardless of what path they choose?

Positive feedback:

- The digital version was more familiar to players than the board game.
- Players were able to play without the need for much instruction.
- Switching the level design to the inside of a dilapidated cabin was much easier for players to navigate and understand.
- Players enjoyed the interactions, the puzzles, and interacting with characters.

Undesirable/unexpected feedback:

- Due to the quick turnaround, the prototype had a variety of problems. Participants were able to easily break the intended interaction and progression.
- Players did not understand drag and drop behavior. They had to be prompted and found it frustrating.
- Players enjoyed the highlight behavior, although at some point they found it to be too much.
- Highlight behavior did not work properly on touch devices, causing confusion and frustration.
- Players did not understand the backpack and heart icons at the top, and did not understand what the change of color meant.
- Players did not understand how to properly use an inventory item.
- Players wanted more interactivity, such as activating the backpack, showing items physically going into the backpack, and the stuffed bear physically walking around with a backpack.

Summary: The digital version of the game tested with players much better than the static paper prototype. Players were better able to understand game play and for the most part, enjoyed their experience.

Next Steps and Recommendations

- Onboarding: Find ways to expand onboarding so it incorporates a tutorial or some type of introduction.
- Interactivity:
 - Explore how to navigate between different views of map
 - o Explore ways to make drag-and-drop more intuitive
- Inventory:
 - Explore ways to view and navigate inventory panel
 - Explore ways to select and use an inventory item on the main screen
- Health meter:
 - Explore ways to make the health meter more obvious
 - Explore how to differentiate between a health meter that's clickable (skills) versus viewonly (such as half full)
- Task order:
 - if tasks are selected out of order, make sure to indicate if Task A is necessary to accomplish Task B.
 - Make sure that players are prompted to return to certain tasks before moving on to the next objective or location.
- *NPCs:* What is the impact of selecting an NPC as a partner? Extra health? Extra power? Extra access to special contacts? What happens if a player says no?
- *Incorporation of toolkit:* The spinner was an intriguing concept but still ambiguous. Continue to research how to better incorporate the toolkit into gameplay.
- Education and skill level:
 - Players' ability to read can be an obstacle (even for 10-year-olds). Make sure players can understand the story and advance game play in different ways (animation, color, narration, etc)
 - Need options to guide kids who struggle with imaginative play. What happens if they don't know what to do in order to use their superpower? Do we give them suggestions?
 - Are there different difficulty levels? Perhaps if a player picks "easy" it gives hints and suggestions. As they increase the difficulty, it's more open-ended.