**Soteria – Teaching Strategies to Overcome Anxiety**

**Abstract:** *Soteria – Dreams as Currency* (*SDC*) is a metaphorical, single-player, 3D adventure game intended to promote players’ readiness to use psychotherapeutically proven yet counter-intuitive strategies to overcome general anxiety disorder. It is based on the research of Anxiety Treatment Center founder Prof. Reid Wilson and serves to communicate principles of anxiety treatment in a way that enables embodied learning and experiential understanding. The design leverages a “recursive learning” approach (Mitgutsch & Weise 2011) that subverts player expectations and promotes the insight that to overcome fear, one must “move towards it”. This presentation is an in-depth analysis of how we harnessed rules, mechanics, narrative, and metaphor to model anxiety behavior, dismantle it as unproductive and then introduce new, productive strategies to respond to fear in order to claim one’s dreams and live a full life. The game can be accessed here: [http://playforchange.cdm.depaul.edu/projects/soteria/](http://playforchange.cdm.depaul.edu/projects/soteria/)

**Introduction**

According to the Anxiety and Depression Association of America, anxiety disorders are the most common mental illness in the US, affecting 40 million adults in the US age 18 or older, or 18% of the population.1 According to Prof. Wilson, founder of the Anxiety Research Center, the key to overcoming anxiety lies in stopping to reject and avoid fear and moving towards it instead. (Reid 2014). For people with anxiety disorder, this requires a huge perspective shift. We believe a game can facilitate this shift through providing an embodied experience (Gee 2003) informed by a recursive learning model: the disappointment of old beliefs through failure followed by a restructuring and reframing of expectations, perceptions and meaning making. Recursive learning is transformational. It goes beyond knowledge acquisition to changing our modes of thinking. (Mitgutsch & Weise 2011). It is this kind of learning that gets us to “change our ways” and can promote anxiety patients’ readiness to adopt new strategies. The safe space of a game provides the ideal “trial ground” to set the learning process in motion. To allow transfer from the game to real life, the design had to forge a meaningful connection between the real-life process of overcoming anxiety disorder and playing the game. One main issue about recursive learning, though, is that people resist it. The more they invested in old beliefs, the harder it is to break them. To counter this resistance, we decided to sneak the message on them. A metaphorical approach should help “get players through the door” and increase their openness towards the game’s theme and ideas. Reid Wilson acted as subject matter expert to the game design, giving feedback to its metaphors, narrative and voice over script until they corresponded with his clinical view of anxiety disorder and met his approval.

**THE GAME, Part I: MODELING ANXIETY**

You play as Ana Carmena, a young woman who sets out to claim her dreams from the evil Shadow entity, Oicys. You find yourself in a mysterious harbor town, a representation of Ana’s inner world. It is swarming with Shadow Creatures (Oicys’ minions, representations of fear) and dedicated to the worship of Soteria, the Goddess of Safety. Oicys lives in the sewers underneath the town, but you are not ready to confront her just yet. You need to obtain three key pieces to unlock the gates to her domain. These key pieces are stored away at special locations in the town’s three districts, heavily guarded by Shadow Creatures, which also roam the districts. The core gameplay uses stealth mechanics: carefully navigating dark alleys, observing the Shadow’s movement patterns, evading and hiding from them, or, when caught, using Soteria’s token to teleport back to the safe town center.

To increase the game’s relatability for a wide range of anxiety patients, each special location represents a general aspect of the disorder: the music store with its bound and silenced instruments represents the “loss of voice” (fear of speaking up). The puppet theatre with its glaring eyeball lamps signifies how the fear of being judged makes you its puppet and leads to “loss of authentic self”. The observatory with its pre-defined, safe pathway represents the anxiety associated with making decisions with uncertain outcomes. Your first attempt at collecting the key pieces from these locations is unsuccessful. Shadows force you to back away and you either get overwhelmed by them and restart at the harbor or teleport out. It seems like the only way forward is to increase the protective measures.

You seek out Soteria’s tailor who offers to make you a Phobos suit: “guaranteed 100% protection
from those nasty Shadows!" You just have to bring him the right cards, which you find in the town’s districts. There are nine cards total. Six represent Ana’s dreams and desires and three represent strategies to avoid discomfort: card of eggshells to walk as silently as a little mouse; card of chameleon to blend in; card of star chart to always stay on known pathways. It’s these three cards that infuse the Phobos suit with its protective powers. Equipped with the suit, you revisit the special locations only to find that your new gear prevents you from doing exactly what you need to do to get the key pieces (e.g. you’d have to leave the path in the observatory to get the key, but the suit doesn’t let you). You are safe. And stuck. Your old perceptions, which informed the game’s rules thus far, have resulted in a dead-end.

One could argue that the lack of choice in the first part of the game is neither fair nor true to real life. Anxiety patients have a choice in how they deal with discomfort and they choose safety. The counter argument is that anxiety disorder sure doesn’t feel like a choice. Fear is perceived as over-whelming or there wouldn’t be a problem. The game thus is true to the perception of anxiety disorder. Modeling, subverting and restructuring these perceptions is what the game is all about. Also, giving players a choice to fight the Shadows from the start would have rendered “facing one’s fears” meaningless. Players tend to approach games as games and regardless of whether they have an anxiety disorder in real life and whether the enemy represents fear, they will try to fight it and not even think twice about it.

THE GAME, PART II: MODELING RECOVERY

As you reach your mid-game impasse and are ready to explore new (scary) options, O’Malley the cat (a “therapist” NPC) introduces you to the concept of “lingering through fear”, represented by repeatedly pressing space bar. This player input is meant to physically reinforce the persistence and will power needed to stand your ground. Overcoming fear is deliberately not represented as a “fighting” mechanic, which would be just another form of resisting it. As you mash spacebar to linger, Ana comes out of her fear-crouching pose and enters a power stance. She stands strong in the face of fear until the Shadow Creature dissipates. Voice over is used throughout the game to convey Ana’s thoughts. Lingering is accompanied by affirmative voice over. Ana is not suddenly fearless, but she is willing to endure discomfort to see what happens next.

Equipped with this new strategy, you revisit the special locations and liberate the key pieces through confronting the Shadows who guard them: make noise in the music store, withstand the scrutiny of the eye-ball lamps in the puppet theatre and leave the known path in the observatory. Assembling the “key to recovery” goes hand in hand with abandoning the Goddess of safety: to fit the key pieces into the inventory, you must remove safety devices: the Soteria token, compass and lamp.

The final step to recovery is to provoke fear. You learn this strategy by “rattle Oicys’ cage” before the final confrontation. From several dialogue options, you pick the most provocative to announce your presence to the foe. If your dialogue lines are too timid, O’Malley will tell you, and you try again. Each provocation of fear is an act of blasphemy towards Soteria and erodes her statue in the town center until only one piece is left. This piece blocks the sewer gate to Oicys’ realm. Before you can use your key to open the gate, you have to choose the right dialogue line to explicitly abandon Soteria, destroying the least piece of the statue. The final showdown with Oicys combines picking the right provocations from dialogue options and lingering through Oicys’ resulting tantrum. The confrontation has three stages. Each stage makes Oicys bigger until she has exhausted herself and deflates, releasing your dreams. Picking the wrong “provoke” forces you to replay the fight from the start. We believe that SDC’s design promotes transformational recursive learning that prepares players to use new strategies to overcome their anxiety in real life.

References