# Games about Mental Health – Designing the Experience of "What It's Like"

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#### **ABSTRACT**

This paper describes the design of four, short games about Obsessive Compulsive Disorder (OCD), Attention Deficit Disorder (ADD), Bipolar Disorder and Eating Disorder. The intent of each game is to make salient aspects of the experience of these mental health issues tangible to players in order to increase understanding, empathy and alleviate stigma and isolation. The games are part of the interactive documentary project "For the Records", focusing on young adults and mental illness, and have been developed at DePaul University by four student teams who have been working in parallel. This work is tying up to my former research on games about the human condition and modeling complex, abstract concepts via metaphors. It is situated within the "games for good" movement and hopes to inspire the development of more experiential games that stimulate productive dialogue and shared understanding of mental health concerns. All four games are works in progress (about 90% done), browser-

All four games are works in progress (about 90% done), browser-based (firefox), playable on PC and MAC and free to download here: http://fortherecords.org.

# **Categories and Subject Descriptors**

H.5.m. [Information Systems]: Information Interfaces and Presentation – *miscellaneous*.

#### **General Terms**

Game Design

## Keywords

Purposeful game design, mental health, empathy, emotional experience, metaphorical game design, phenomenological design

#### 1. INTRODUCTION

The impetus behind the project is that many social problems surrounding mental health issues are founded in insufficient understanding of the fullness of experience (not merely the cognitive understanding of symptoms or physio-psychological mechanisms). Lack of such an experiential understanding contributes to stigma and often burdens relationships between people with mental disorders and those without. This can complicate the already difficult task of constructively dealing with such disorders, leading to feelings of helplessness, frustration and

anger on the side of friends, family and mental health care providers of people struggling with mental illness, and fueling the experience of stigmatization, isolation and disconnectedness on the side of the afflicted. The need for increased understanding of the lived experience of mental illness led to the popularity of books such as Styron's "Darkness Visible" [1] and Kristeva's "Black Sun" [2]. The health sciences have also recognized the importance of studying the phenomenology of mental illness, particularly the puzzling issue of psychosis [3] [4]. While first person accounts of lived experience may provide some insight into "what it is like", health sciences are looking more and more towards technology to help make "unusual experiences" tangible to a broader audience. For example, there has been a surge in hallucination simulators [5]. Using games for the purposes of fostering understanding and fighting stigma seems to be a logical, next step. Games enable embodied (i.e. first hand, lived) experiences and perspective taking (what Gee class "projective identities" [6]. With the help of procedural metaphors, games can model someone's abstract, inner reality (e.g. gameworld = mental landscape) [7], [8], thus making this reality with all its potentials and limitations tangible and accessible for players to explore.

This paper describes the design of four, short, metaphorical games intended to make salient experiences associated with ADD, OCD, eating disorder (anorexia nervosa) and bipolar disorder tangible to players in order to increase understanding and alleviate stigma. The games have been inspired by Belman's and Flanagan's research on empathy. [9]

# 2. MAKING MENTAL HEALTH TANGIBLE TRHOUGH MECHANICS AND METAPHORS

The following games have been developed student teams at DePaul University. To ensure phenomenological authenticity, each project was designed in close collaboration with a person who has lived experience with one of the four issues portrayed in the games.

#### 2.1 Into Darkness

Into Darkness is a game about OCD and focuses on the compulsion to perform annoying rituals in order to fend off anxiety. The player takes the role of a hooded figure who is dropped into a procedurally generated and ever growing maze without exit. The maze is a metaphorical representation of the disorder itself. The player is literally trapped in OCD. As the player aims to find the exit (= leave the disorder behind), darkness encroaches from all sides accompanied by scary music. Performing a ritual — walking in circles several times by pressing the arrow keys left, up, right, down, left, up, right down — staves

off the darkness. This provides temporary relief from anxiety, but at the same time prevents the maze's exit from appearing. This models one of the core conflicts of OCD: the desire to escape the compulsion, but dreading the anxiety that comes with not giving in to it. The game can be won if the player stops performing the ritual and endures the feelings of discomfort evoked by the darkness and scary music. Only then does an exit become available and the maze can be left behind.

#### 2.2 It's for the best

It's for the best explores the psychological addiction to ADD medication. It is modeled after one of the development team member's experiences. When he was diagnosed with ADD at the age of eight, his parents told him he needed medication to keep up with school. This created the feeling of not being "good enough" without medication, which persisted all the way through college. He finally decided to stop taking pills and graduated successfully, regaining a sense of self-worth. The game does not propose that medication per se is bad, but aims to raise awareness for how the need for medication can make you feel. As far as mental health issues go, ADD is usually considered "not a big deal" (at least compared to depression, psychosis or anorexia). This underacknowledges the feelings of self-doubt ADD brings with it. By allowing the player to experience these feelings, the game aims to create empathy and hopes to promote a mindful way of communicating the need for medication to ADD patients. In It's for the best players try to keep up with assignments represented by papers that flutter onto the screen with increasing speed. Clicking on papers makes them disappear. A pill is featured prominently in the middle of the screen. Clicking the pill clears the screen of papers and slows down their onslaught. Using the pill as a power up, however, is far less satisfying than trying to keep up with the papers through clicking them directly (which is impossible and manifests in growing piles of unfinished assignments that clutter up the screen and create paper mountains of growing self-doubt). The game is accompanied by unnerving whispers of "you're not good enough".

#### 2.3 Fluctuation

Fluctuation is based on the experience of bipolar disorder. It consists of a brief intro scene (the onset of manic phase), a platformer game that represents manic phase and which transitions into depressive phase. Depressive phase ends with a transition to an outro cut scene that represents the end of a manicdepressive cycle and return to normality. Each part of the game is timed to decouple it from player skill. The game's main themes are "loss of control" and "alienation from self and others". In manic phase, the player character is catapulted higher and higher up by jumping onto glass platforms that shatter underneath the avatar's feet. The shattering glass represents the damage done due to bad decisions made in mania (e.g. irresponsible relations, overspending etc.). As time progresses in mania, the controls become increasingly less reliable, amplifying every player input. A fractal pattern accompanied by THQ-like sound starts to fill the background of the screen, metaphorically representing the feeling of architecting a divine plan in mania. Depressive phase plunges the player character into a deep, dark ocean where the broken shards from the manic phase platforms conglomerate to block his path to the surface. This represents dealing with the aftermath of mania. The player's agency is restricted to painfully slow up, left and right movement. There are people positioned to the sides of the screen. They send out lights that gravitate towards the player character. These lights stand for well-meant questions such as

"How can I help you?" Encountering a light sends the player character further down into the depth of depression, because the inability to adequately respond to well-meaning loved ones is overwhelming. This leads to an avoidance strategy when navigating depression. A depth meter shoes how far one is from the surface, but it is unreliable and cannot be trusted. There is no way of knowing when depression will be over. The game design is motivated by the wish to communicate incomprehensible behavior of people with bipolar to their friends and families to open up a constructive dialogue about the experience and alleviate alienation from friends and family.

#### 2.4 Perfection

This is a game about the eating disorder anorexia nervosa. It plays with perceptions of beauty and perfection to enable an experiential understanding of why someone would starve themselves. The game's core metaphor is the body as garden. To align the player's perceptions with those of someone struggling with anorexia, the game suggests that the perfect garden is devoid of weeds and ugly creepers (= "imperfect" body parts and unwanted feelings). The game challenges the player to "reach Perfection". The garden is enclosed by four walls and surrounded by a scary looking periphery that represents the fear of being judged, criticized or hurt by others. In the middle of the garden is a heart-shaped plant, representing life. The conflict of the game revolves around garden saturation. Watering the garden (=eating) increases its saturation. The weeds (=unwanted body parts) flourish and the numbers of creepers (= unwanted feelings) rise. Eliminating creepers by moving the mouse over them in a scrubbing motion (=exercising) decreases saturation, as does parching the garden (=starving yourself). In a de-saturated garden, weeds start to die but the heart-shaped plant suffers, too, and slowly loses its leaves. The plant is more robust than the weeds, though, encouraging a de-saturation behavior in the interest of reaching Perfection. The Perfection ending, though, is not the win ending after all, because Perfection cannot be obtained without also sacrificing the heart-plant. To win the game, the player has to keep her garden within an ideal saturation range (not too much and not too little) over a certain period of time (this represents adhering to an eating schedule), and to learn to accept that weeds and creepers are necessary components of a healthy life. The true win ending is "Imperfection" – a garden without protective walls, filled with all sorts of plants and insects.

#### 3. OUTLOOK

Creating these four games was a challenging and interesting experience. Team members without mental health issues learnt a lot about "what it is like" to live with these issues by translating first person accounts of lived experience into metaphors and rule systems. Obviously, the next step is to investigate whether the games achieve their purpose of increasing understanding and alleviating stigma. For that purpose we have planned an in-depth, qualitative user study with 110 participants consisting of people with mental health issues, their friends and family members as well as mental health care practitioners. The study includes qualitative interviews, gameplay observations, playing the games at home over an extended period of time accompanied by online diary entries and a debriefing interview. This study is conducted in collaboration with two licensed and doctorally prepared mental health nurses / researchers from DePaul's School of Nursing, Dr. Mona Shattell and Dr. Barbara Harris.

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