

Title

PEREIRA, A. (2023). やめる - Development of a digital game with an empathic protagonist that suffers from depression and suicidal ideation. Masters dissertation in Digital Game Development. Aveiro: Universidade de Aveiro.

Introduction

This presentation has the purpose to show the earlier steps into an investigation plan of exploratory nature that suggests a solution (a game) that will trigger empathy in the player.

Problematic - The empathy issue

Fast-changing and globalized world have resulted in an empathy deficit (Wulansari & Pirker, 2020);

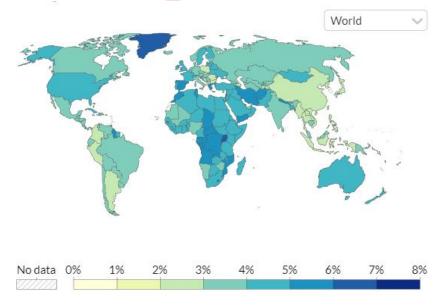
Empathy allows to become happier and can lead to greater personal and professional success (Mc. Donald & Messinger, 2011);

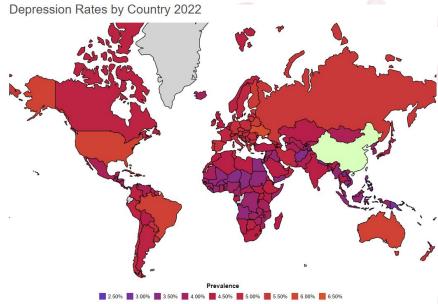
• Only limited research has been conducted into exploring the effect of playing games and the influence this has on empathic ability (Happ, 2013).

Problematic - The depression issue

- Far more than any other type of illness, mental disorders are subject to negative judgements and stigmatization (Rössler, 2016);
- The World Health Organization (WHO) predicts that by the year 2030 depression will be the leading cause of disability worldwide (World Federation for Mental Health, 2012);
- Global mental health may be compromised because of the pandemic and the Ukrainian-Russian war (Barchielli, Cricenti et all, 2022).

Problematic - The depression issue (cont.)





Source: IHME, Global Burden of Disease (2019) OurWorldInData.org/mental-health • CC BY

Source: Depression and Other Common Mental Disorders - Global Health Estimates (2017)

The **Global Health Data Exchange** estimates that 251-310 million people worldwide suffer from **depression** and over 700 thousand people die due to **suicide** every year.

Key-words

- digital games;
- character;
- empathy;
- depression;
- suicide.

Goals

- \bullet 1 Data collection about empathy (theories, neuroscience, empathy in games, ...);
- 2 Data collection about depression and suicide (symptoms, the neuroscience of depression, testimonies about depression and suicide attempts);
- ❖ 3 State of the art analysis of empathic games and games about depression and suicide;
- ❖ 4 Definition of the game genre;
- ◆ 5 Conceptualization of a protagonist based on the collected data;
- 6 Conceptualization of a digital game;
- ❖ 7- Making of a prototype;
- 8 Testing with real people, both suffering from mental health and not.

Aim(s)

- Create a digital game with a character belonging to a weak slice of society (suffering from a mental illness and being stigmatized) and check if the player can feel empathy for them (using a scale created by Davis and Professor Tânia Ribeiro, based on the Interpersonal Reactivity Index Questionnaire);
- Check the most important characteristics of a character to turn them into an empathetic one (basing on literature research and using an analogic game created by Professor Tânia Ribeiro).

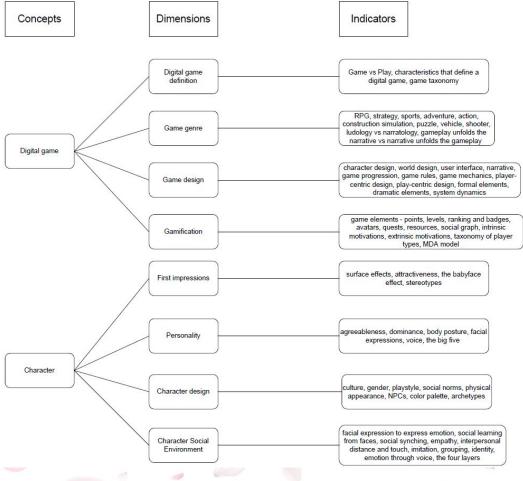
Research question(s)

- How can a character suffering from depression and suicidal ideation communicate empathy to the player of a digital game?
- Which game genre should be considered?

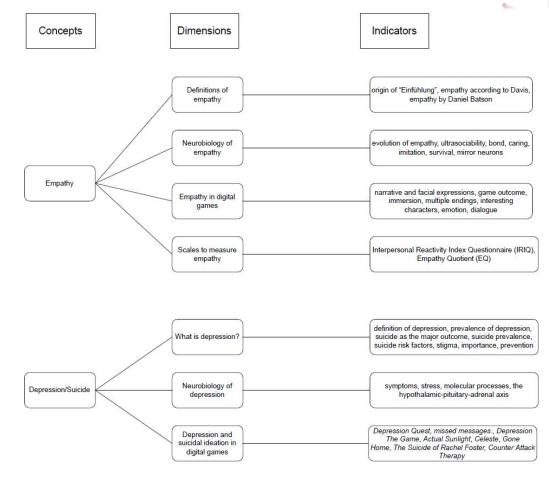
Hypothesis

- A character based on the archetype "Hero", "Everyman", "Anti-villain" or the "Fanatic" are the most empathetic ones;
- The psychological characteristics of a character are more important than the physical ones to make it empathic;
- The most suitable game genre is the adventure one.

Analysis model



Analysis model (cont)



Theoretical background

narrative

empathy

digital game

immersion

depression

game genre

prevalence

suicide

character

game design

scales

neurobiology of depression

Methodology

- \diamond Quantitative approach? NO \rightarrow small sample that does not represent reality;
- \Leftrightarrow Study case? NO \rightarrow focus on the investigator and only has one iteration \rightarrow less contact with testers;
- Design-based research? YES!
 - > to design and develop an intervention as a solution to a complex problem;
 - > this problem is still vague/not much investigation has been done;
 - multiple iterations (it reminds the Agile Methodologies);
 - > focus on the development.

1st Phase - Analysis/Exploration

- Review of literature about digital game, character, empathy, depression and suicide;
- Data collection of testimonies of major depression and suicidal attempts.

2nd Phase - Design/Construction

- State of the art check about empathetic games and games about depression and suicidal ideation;
- Definition of the game genre;
- Conceptualization of the protagonist;
- Definition of the game's core ideas and mechanics;
- First game prototype.

3rd Phase - Evaluation/Reflection

- Testing with real users via a scale that measures the levels of empathy between the player and the protagonist before and after the user tests the game;
- Check if the results are significant (they prove that a character can trigger empathy in the player);
- If not, repeat all the process, starting at the 1st phase.

Schedule





Contingency plan

- Not to make a complete game and focus on small episodes that can awake empathy in the player;
- Do a smaller number of iterations;
- Testing with a smaller amount of people and not after each iteration.

Bibliographic references

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