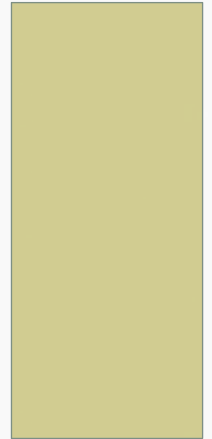


Serious games for e-health care

Voravika Wattanasoontorn,
Ruben Jesus Garcia Hernandez and
Mateu Sbert

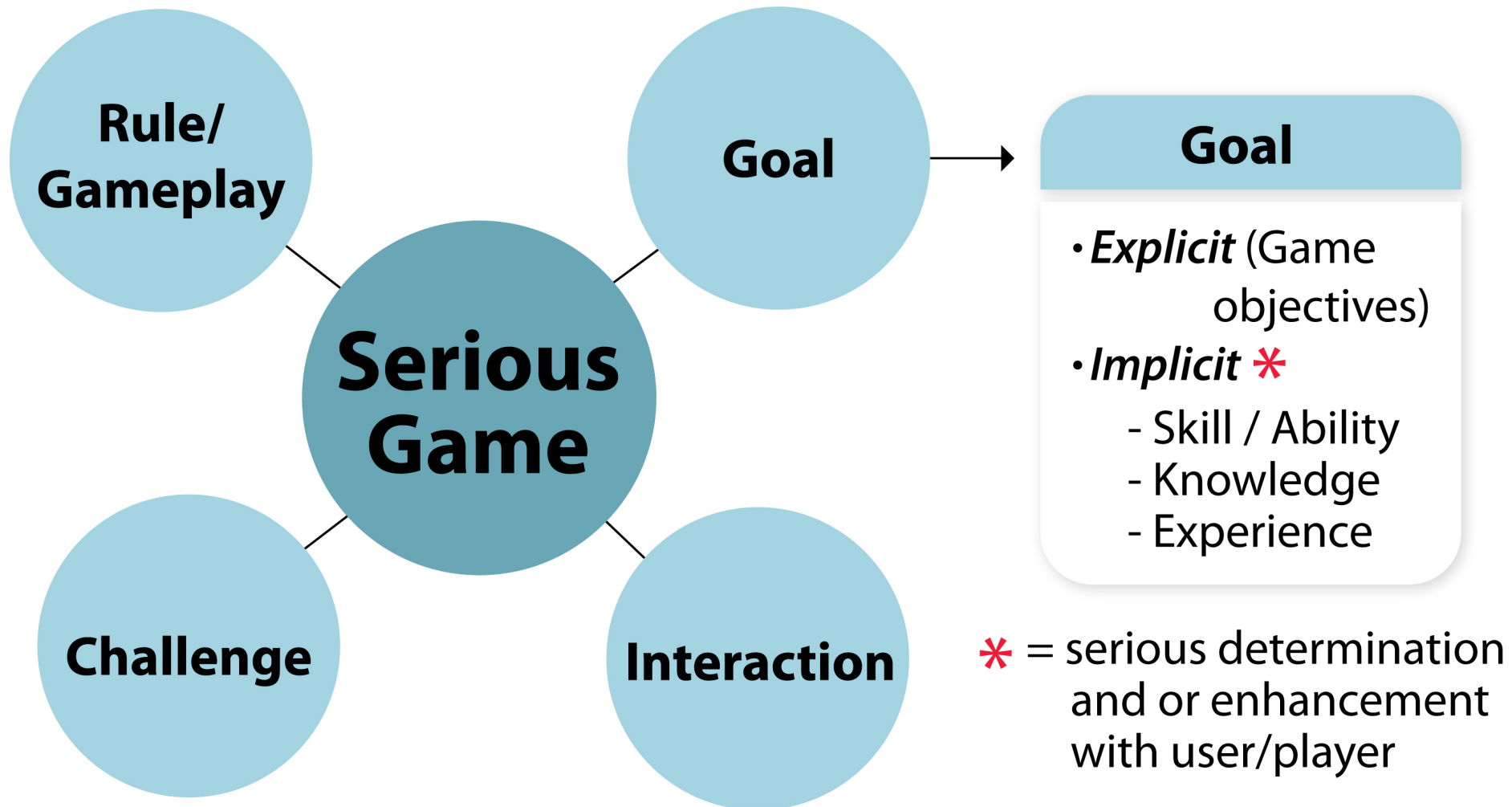
*The Institute of Informatics and Applications,
University of Girona, Spain*



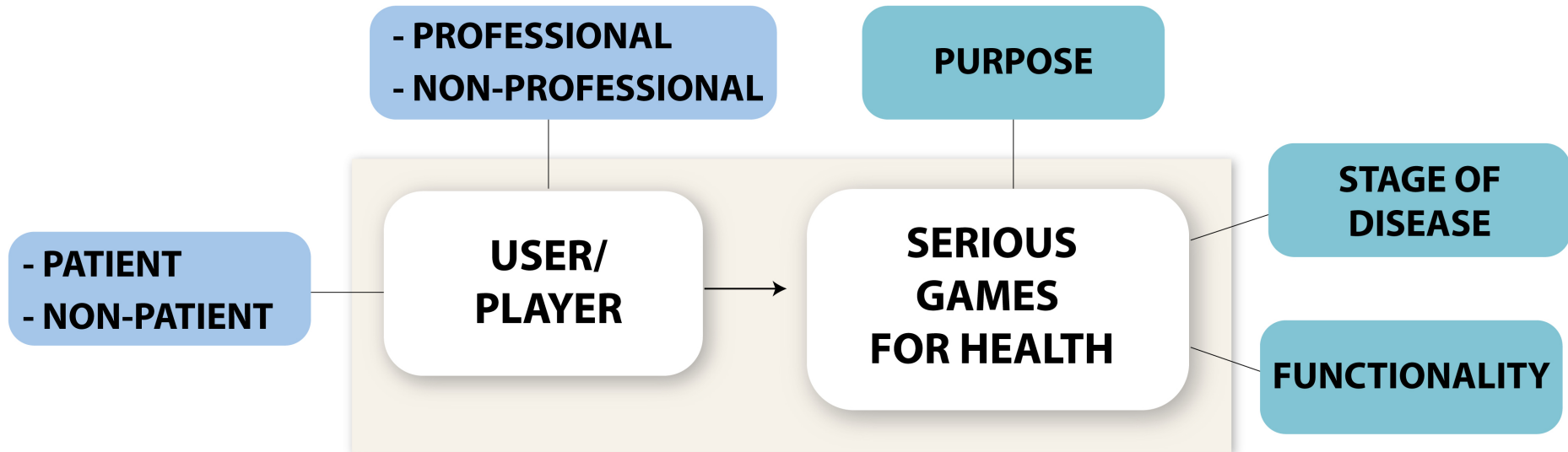
INTRODUCTION

- Serious games
- Importance of health
- The use of serious games to promote health

CHARACTER OF SERIOUS GAMES



CLASSIFICATION OF SURVEYED SERIOUS GAMES FOR HEALTH



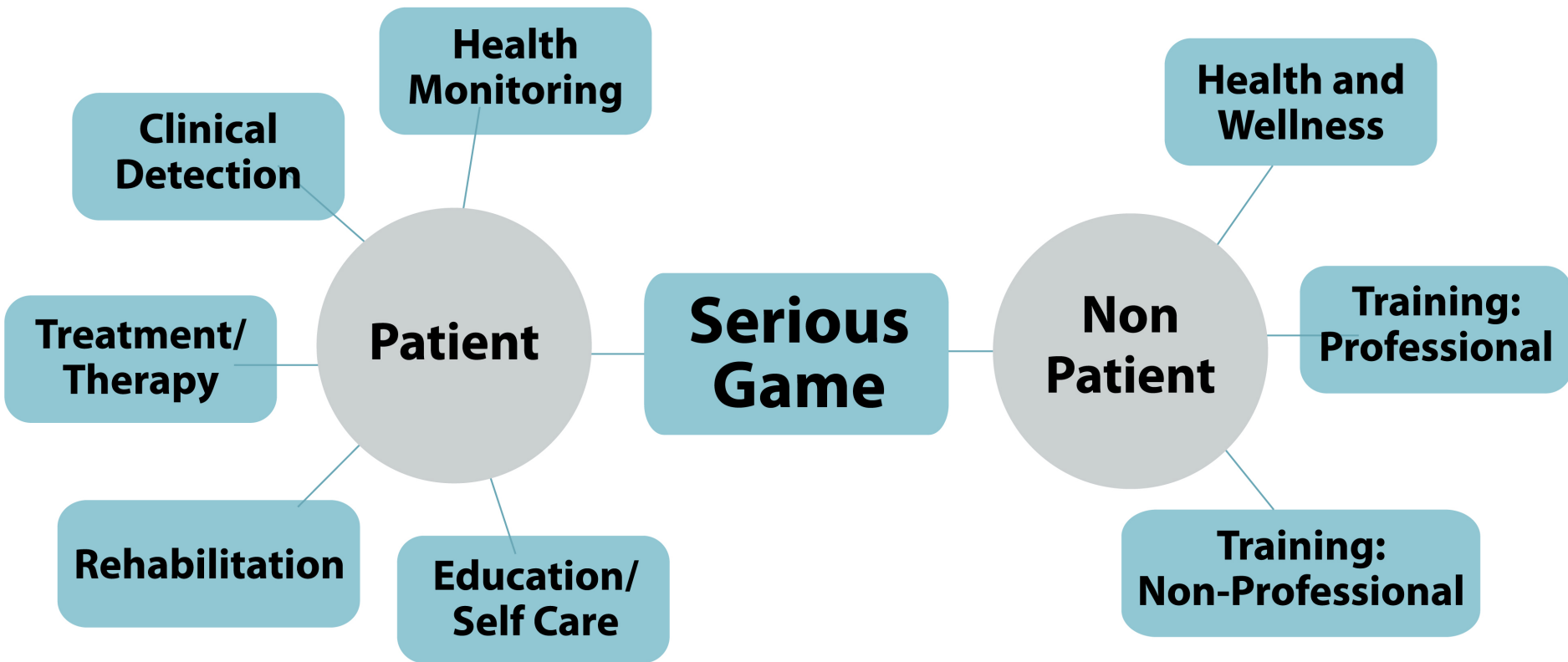
CLASSIFICATION BY MAIN PURPOSE

1. The main purpose is entertainment
2. The main goal is Health
3. Serious use in health and medical purpose

CLASSIFICATION BY STAGE OF DISEASE

Stage of disease	Serious Game purpose
Stage of Susceptibility	Monitor
Presymtomatic Stage	Detect
Stage of clinical disease	Treatment, Therapy
Stage of disability	Rehabilitation, Track and Trace

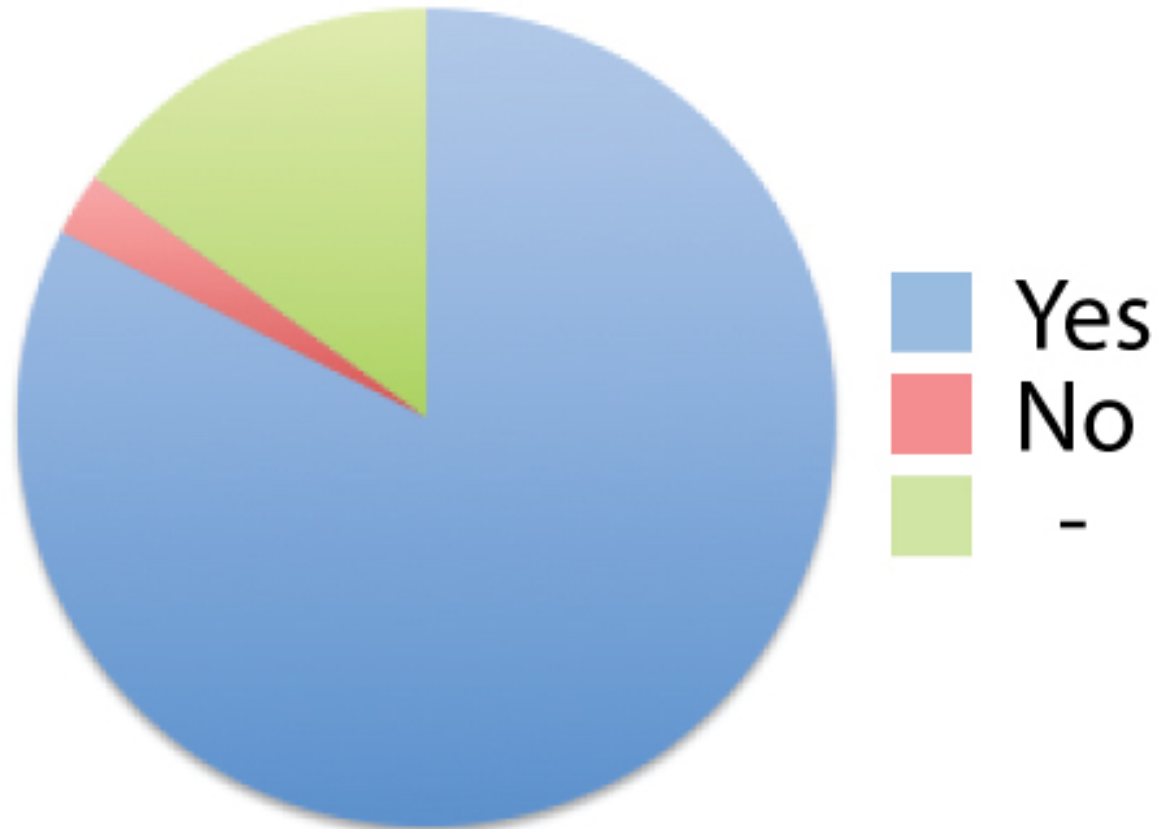
CLASSIFICATION BY PLAYER (PATIENT/NON-PATIENT)



CLASSIFICATION BY FUNCTIONALITY

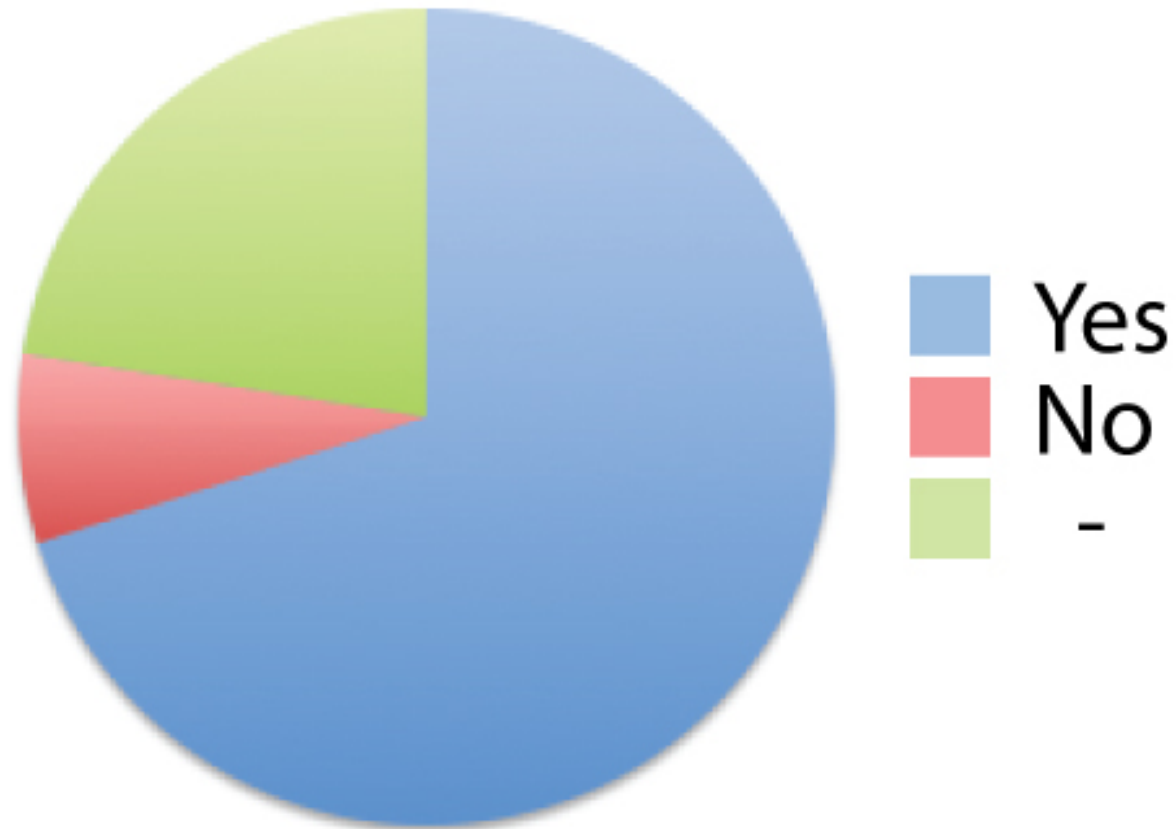
1. Application area
2. Interaction Technology
3. Game Interface
4. Number of Players
5. Game Genre
6. Adaptability
7. Performance Feedback
8. Progress monitoring
9. Game portability
10. Game Engine
11. Platform
12. Health Objective
13. Connectivity

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



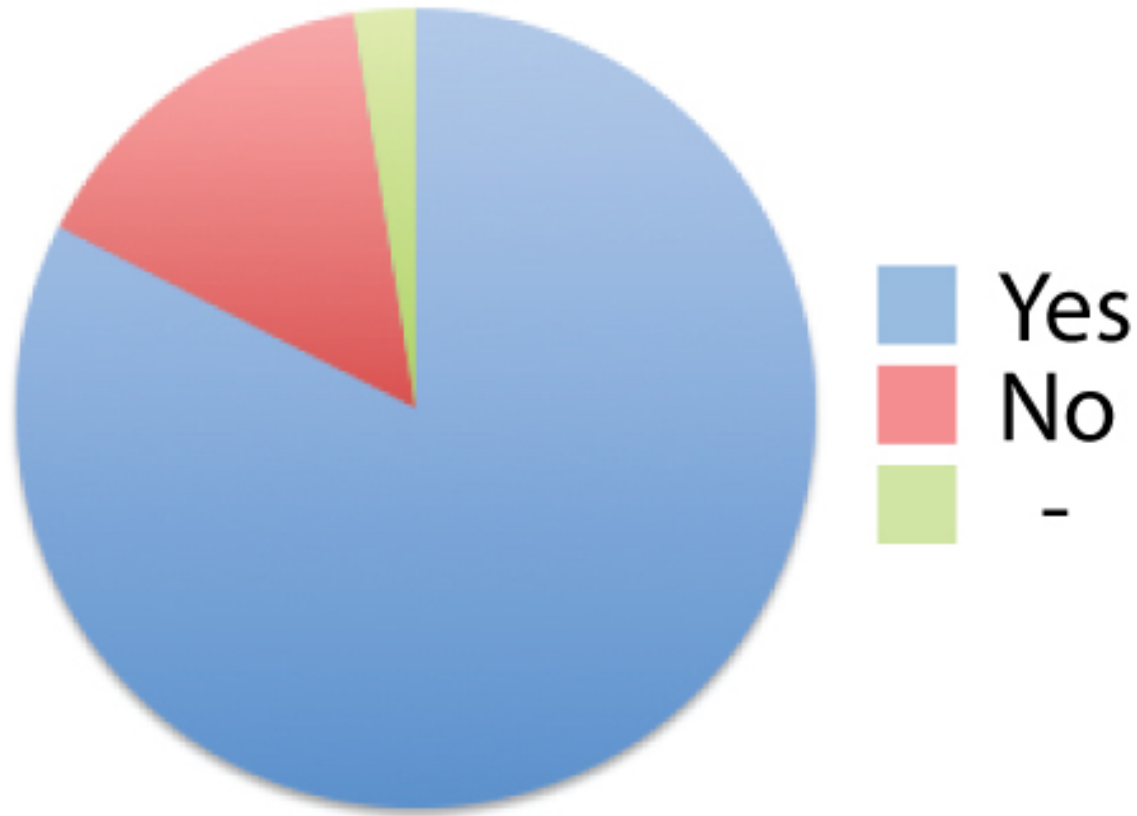
Progress Monitoring

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



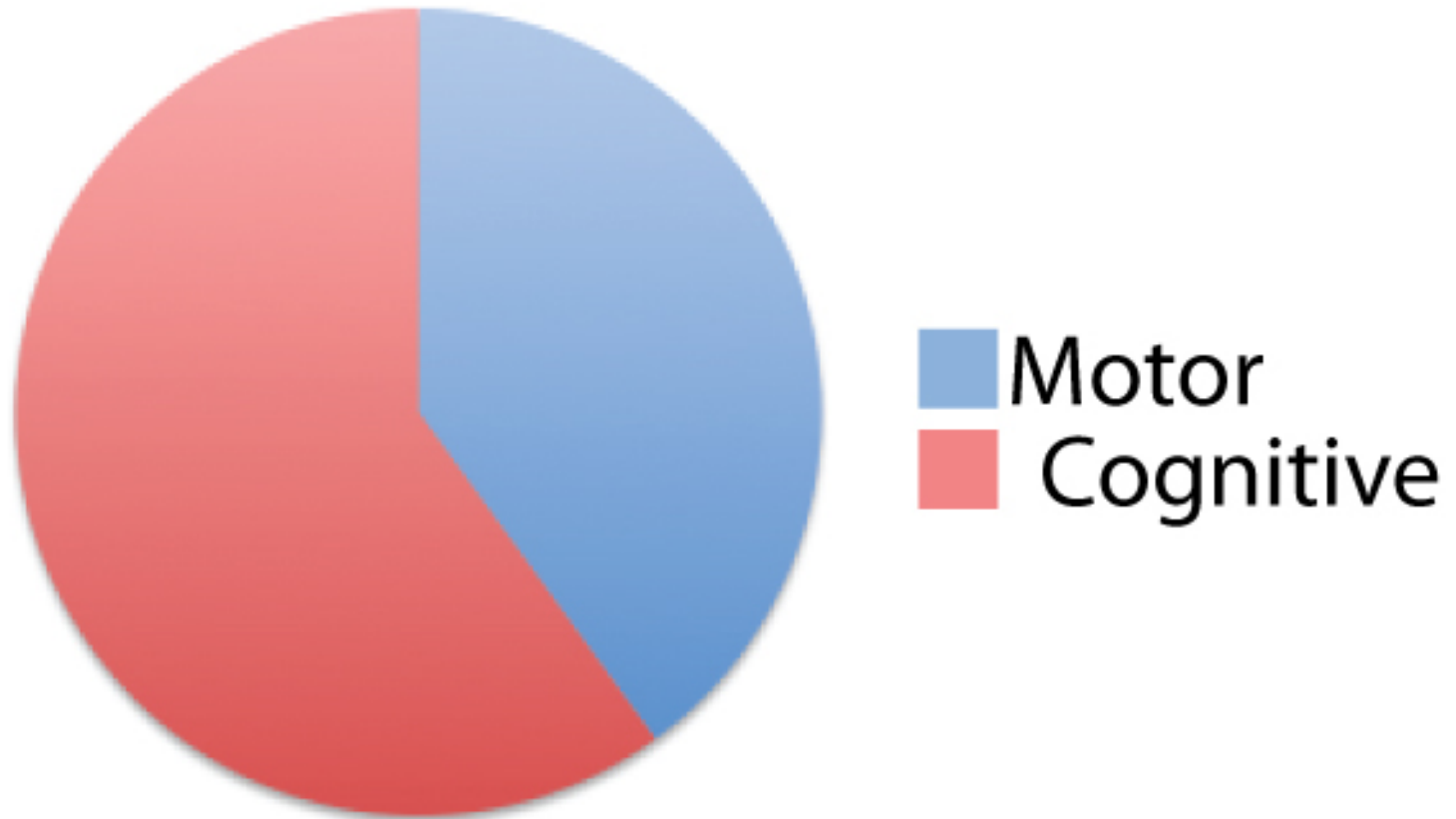
Performance Feedback

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



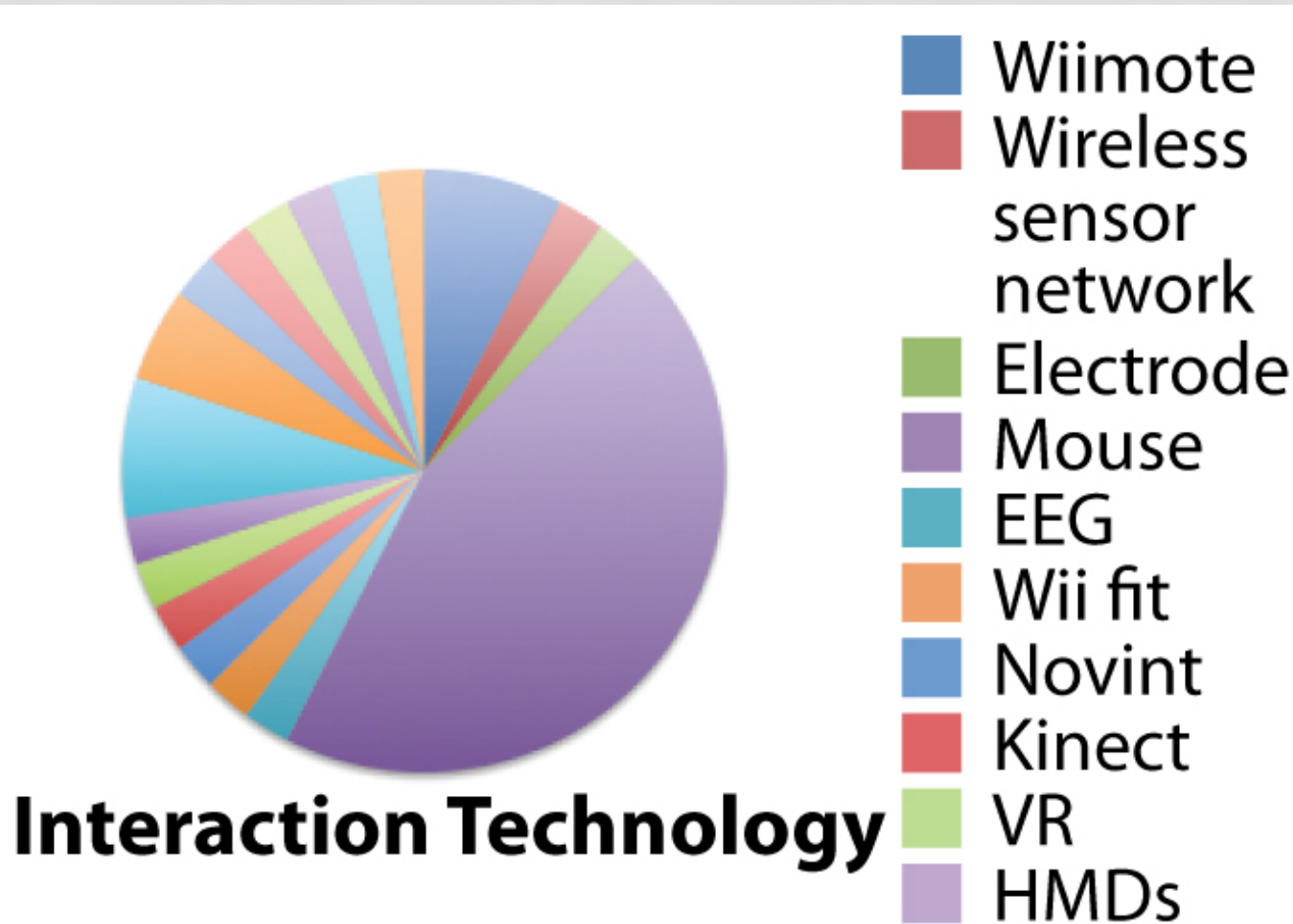
Portability

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH

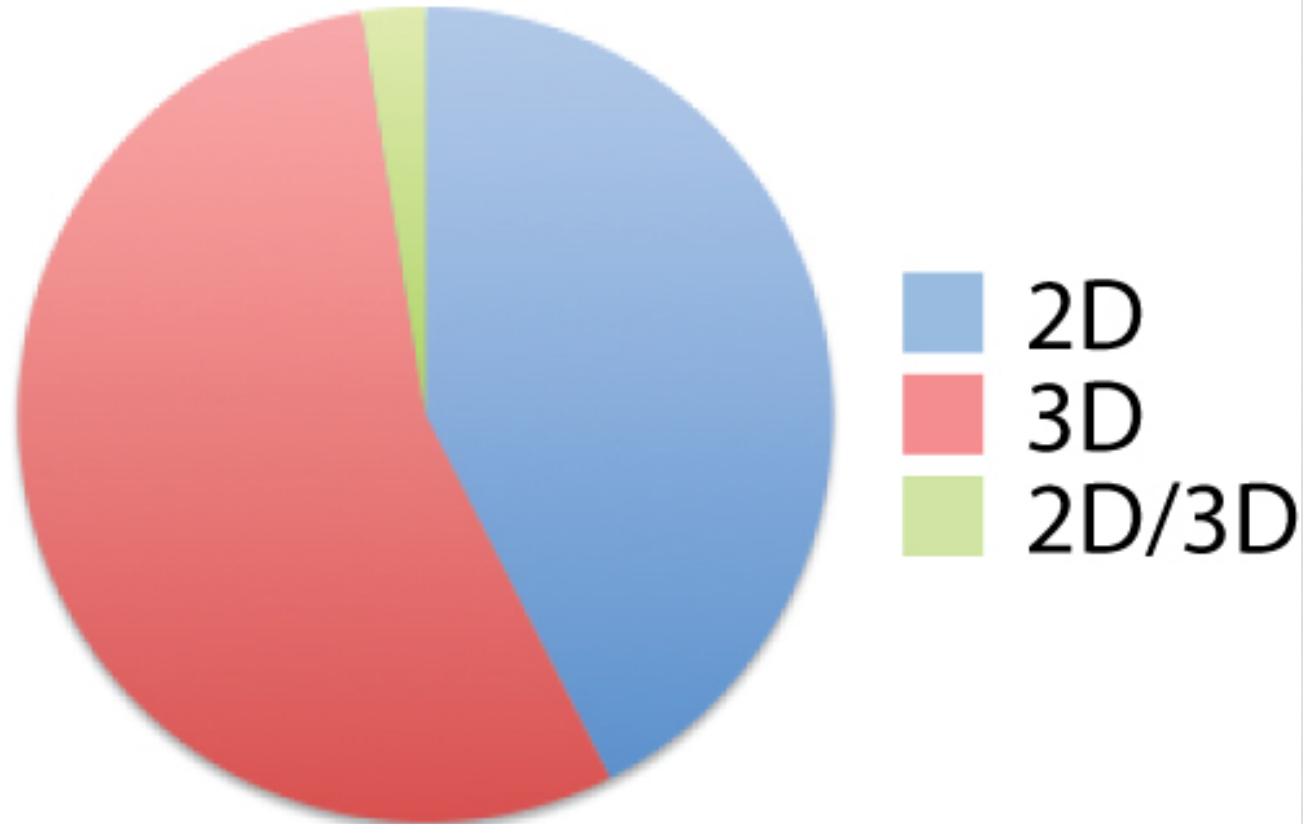


Application Area

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH

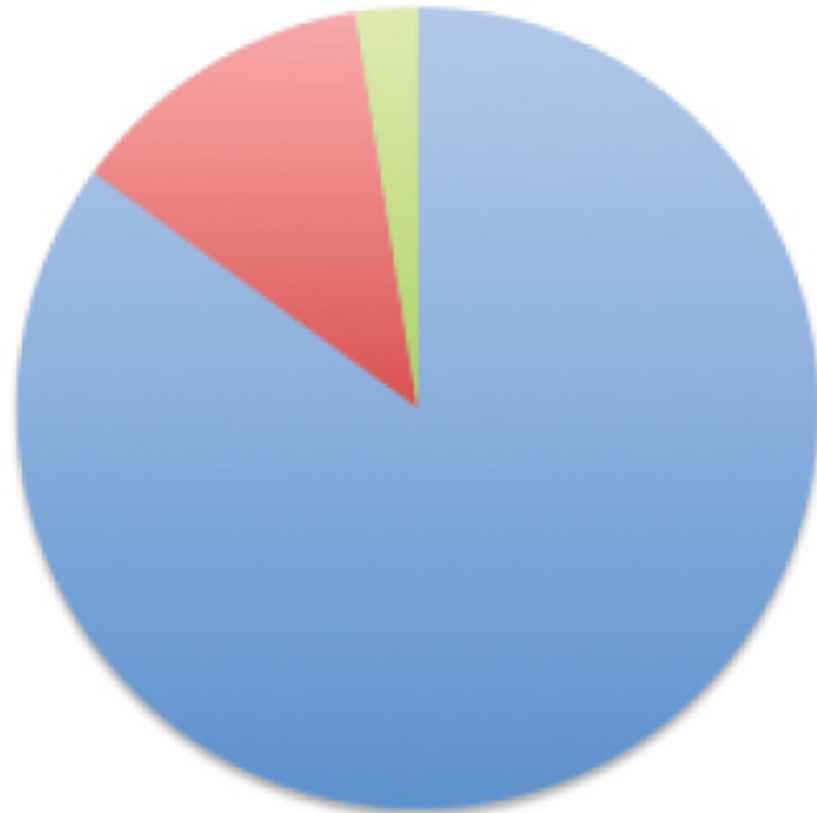


BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



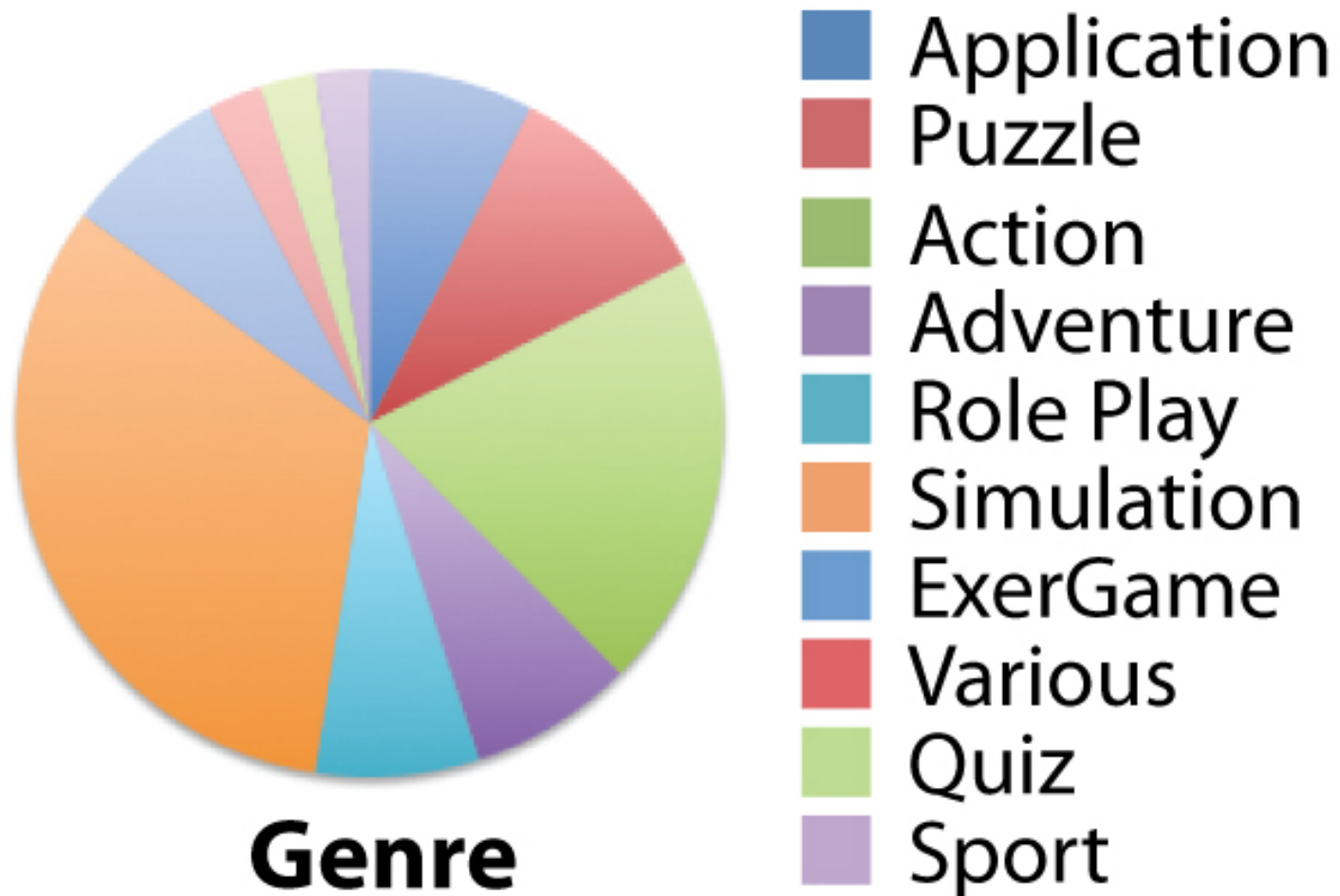
Interface

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH

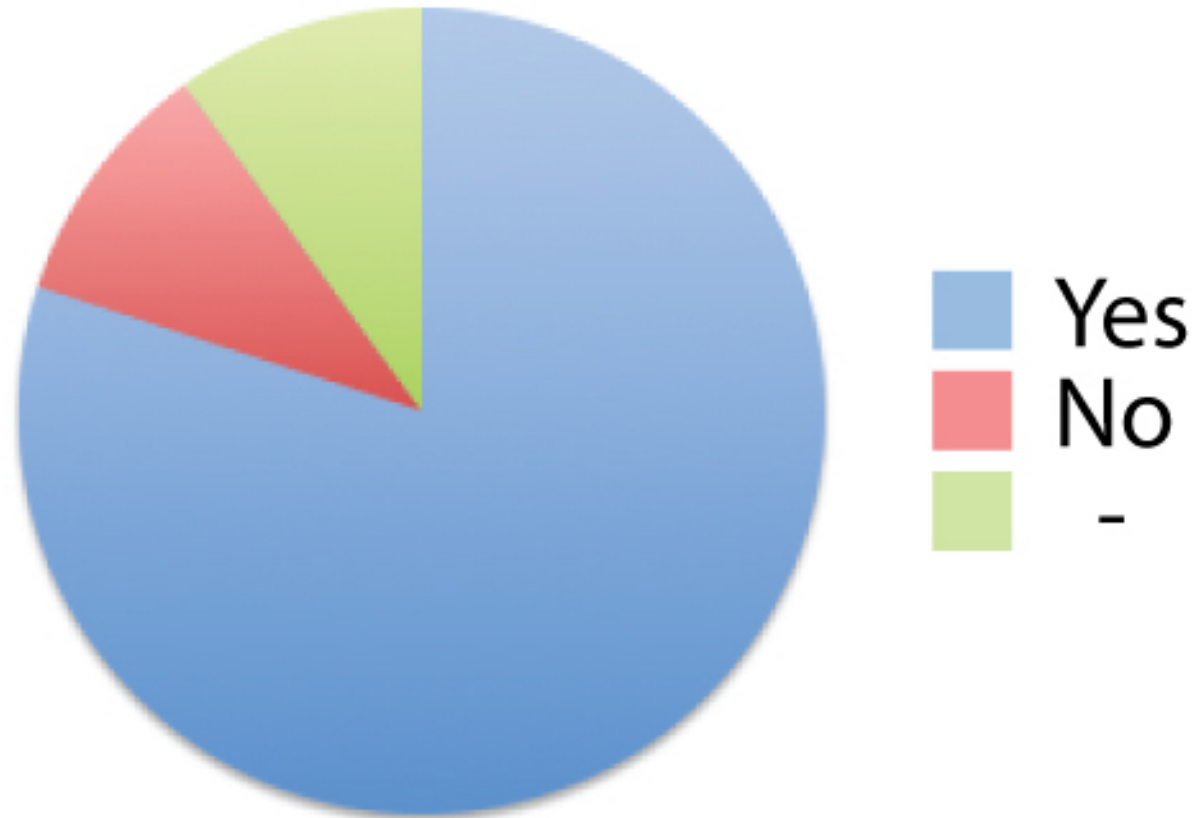


Number of players

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



Adaptability

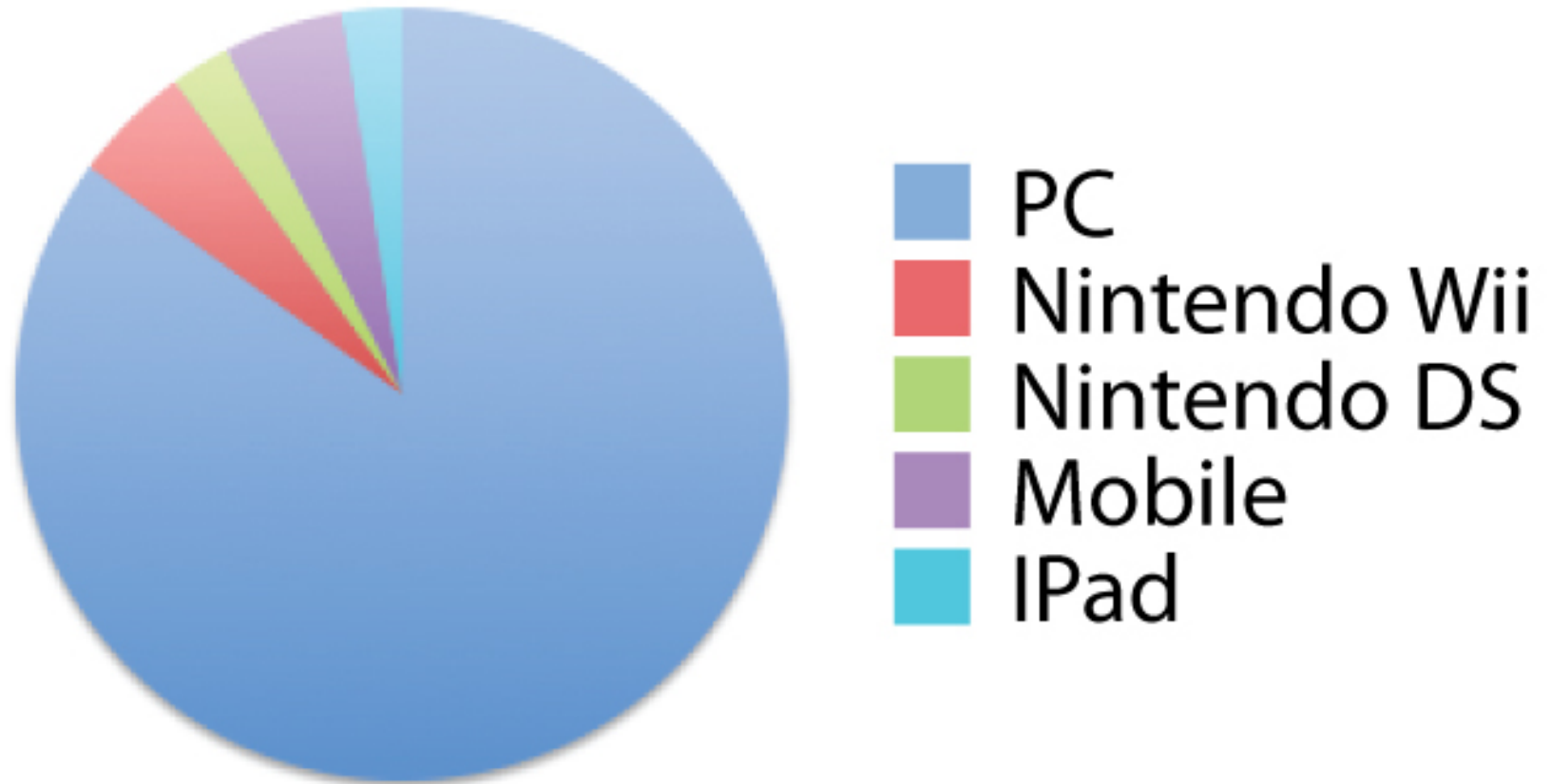
BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



Engine

- | | |
|----------|-------------|
| Flash | Palib |
| SDK | Director |
| Unity3D | Orge |
| XNA | NeoAxis |
| Unreal | BreakAway |
| Torque | Second life |
| In house | smac |
| - | |

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



Platform

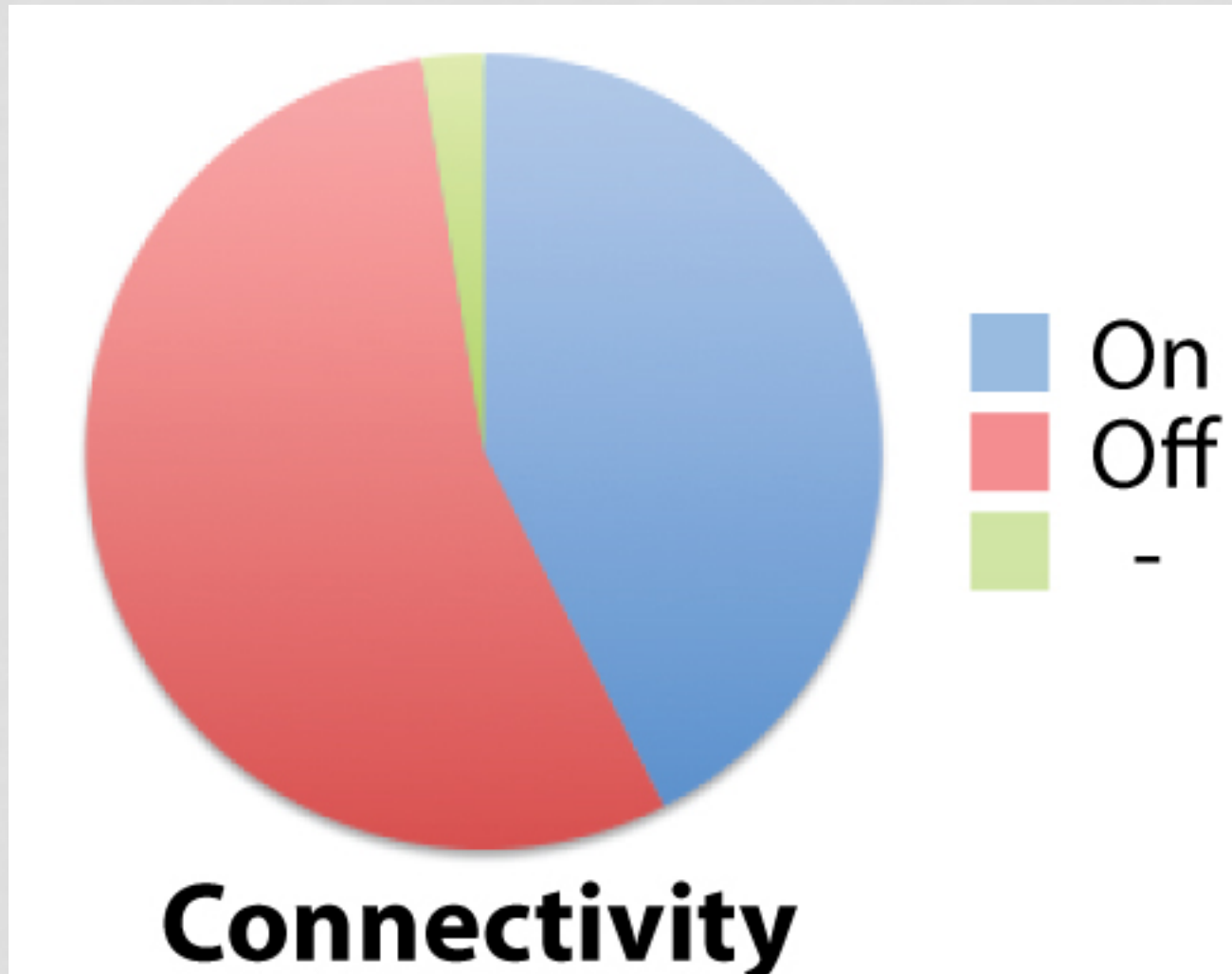
BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



Objective

- Monitoring
- Detection
- Treatment
- Rehabilitation
- Education
- Health and Wellness
- Professionals
- Non-Professional

BREAKDOWN OF THE VALUES OF EACH CHARACTERISTIC OF SERIOUS GAMES FOR HEALTH



CONCLUSION

The typical game can be summarized as a portable PC game programmed in Flash, using mouse interaction and including progress monitoring, performance feedback and adaptability, although the variability of games is quite large in many aspects.

THANK YOU

RUBEN JESUS GARCIA HERNANDEZ