EVALUATION OF THE GAME EXERMON

A STRENGTH EXERGAME INSPIRED BY POKÉMON GO

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Evaluation of the Game Exermon –
a Strength Exergame Inspired by Pokémon Go

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Sedentary lifestyles are a growing health concern, but games like Pokémon Go have shown that digital entertainment can motivate physical activity. Inspired by Pokémon and Tamagotchi, Exermon encourages players to perform strength exercises to evolve a fantasy character, with the game evaluated for its physical, motivational, and social impacts.

AGENDA

- What is Exermon?
- Background
- Game Mechanics
- Research Goals
- Approach to Evaluation
- Results
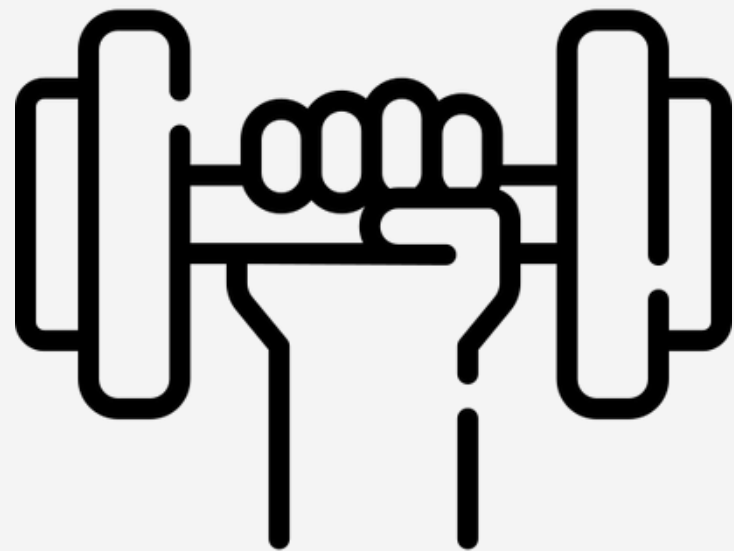- Challenges
- Conclusion

WHAT IS EXERMON?

Exermon is inspired by Pokémon Go and Tamagotchi.

Players perform strength exercises to evolve their monsters (Exermons).

The goal is to motivate players to do strength training through engaging gameplay.

Background

Strength training is important:
Improved posture, reduced injuries

Exergames focus on general physical movement
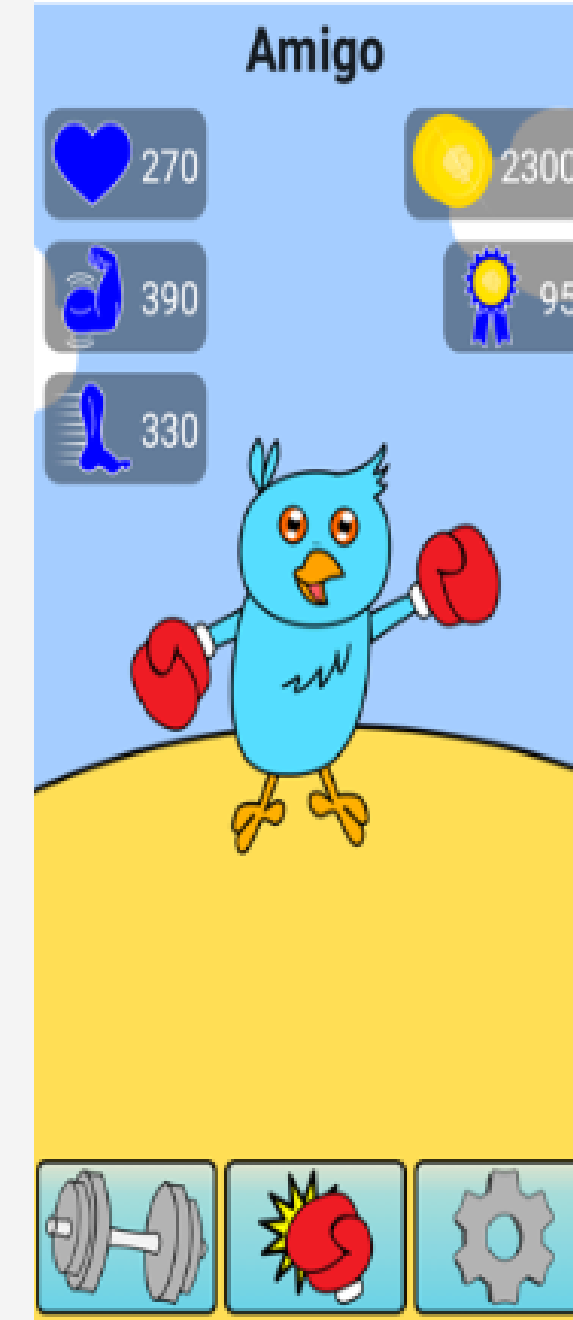Few target strength training specifically

Exermon is built around Challenge, Fantasy, and Curiosity to keep players engaged

GAME MECHANICS

Three main gameplay aspects: Training, Planning, and Fighting

Sensors in smartphones (accelerometer, proximity) track exercises

Exermon evolves and fights based on player performance in strength exercises.

RESEARCH GOALS

1

What are the physical
effects of playing
Exermon?

2

How does the game
affect player
motivation?

3

Is the game enjoyable
for players?

4

What level of
engagement does the
game create?

5

How does the control,
progression and social
interaction affect the
Exermon experience?

Approach to Evaluation

24 test subjects over a 2 week period

Quantitative

- Questionnaire
- Logs of player data

Qualitative

- Observation
- Interviews

Physical Impact of Exermon

40 %
Increased exercise frequency
during the test

38 %
Felt their strength improve

2.7
Average exercise events per
player per day

What Motivates Players?

92 %

Were motivated to play
before each workout session

Motivation came from unlocking exercises, evolving

Exermons, beating previously unbeatable opponents and

comparing with friends.

Did Players Enjoy the Game?

100 %

Enjoyed the game

92 %

Felt they improved as they played more

79 %

Found the game's fantasy world appealing

Observations clearly displayed enjoyment while playing the game

Player Engagement

92 %

Felt engaged in the game

83 %

Were curious about how their Exermon would evolve

25 %

Were so engaged they became less aware of their surroundings

Control, Progression and Social interactions

80 %

Felt in control and that they clearly made progress

70 %

Said the game had an appropriate difficulty level

1.6

Average friend views per player per day

Technical Challenges

Sensor Accuracy in Mobile Devices

Due to the wide range of different Android devices, sensor accuracy varied significantly. This led to difficulty in accurately tracking exercises

Cheating Concerns

Some players found ways to cheat by shaking or moving their phone instead of performing exercises

Threats to Validity

The Exermon evaluation was a quasi-experiment with limited control. Results are specific to the participants. However, the results provide promising insights for future game development.