



Gamifying EMS Training for Disability Support in Thessaloniki, Greece 3/2/2026

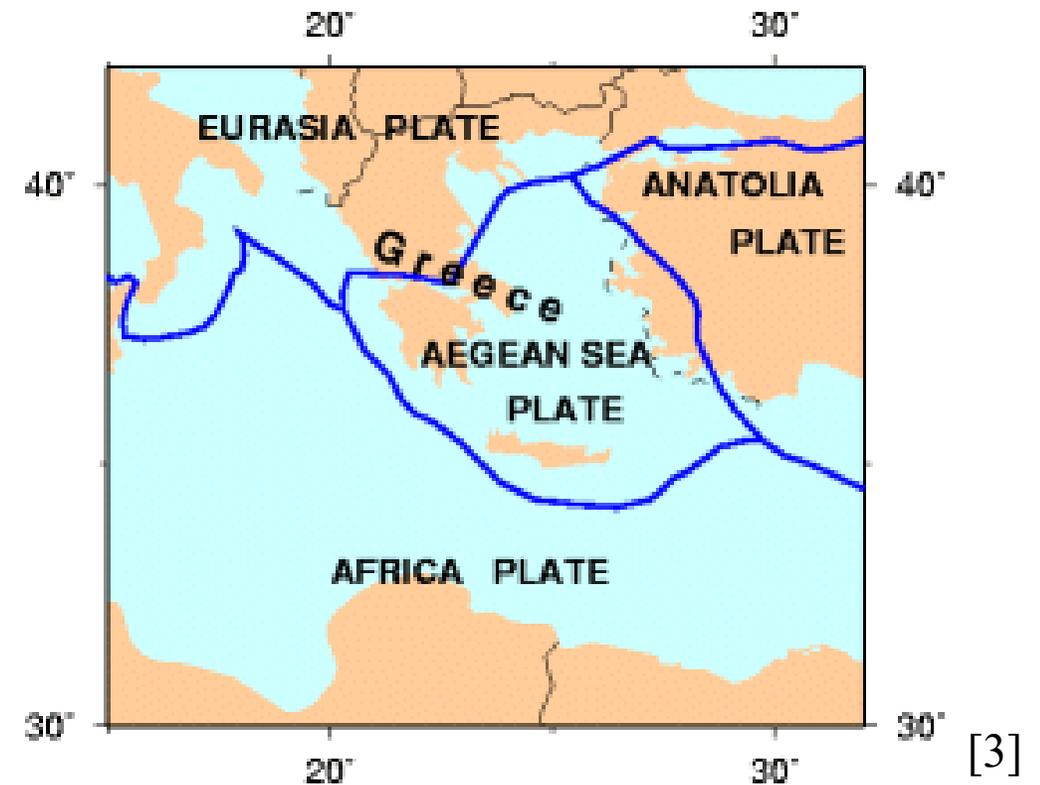
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Natural Disasters in Greece

7.9 Richter Scale Earthquake in Thessaloniki:



Plate Boundaries Driving Earthquakes in Greece:



Disability Demographics

- 15% of the global population
- 18% of the Greek population



2-4%

Higher mortality rate in individuals with disabilities



Increase in Disabled Population



Policy Responses?



[5]

Emergency Response Training: Challenges with Disabilities in EMS

Preparedness Framework Within the Emergency Management Cycle:

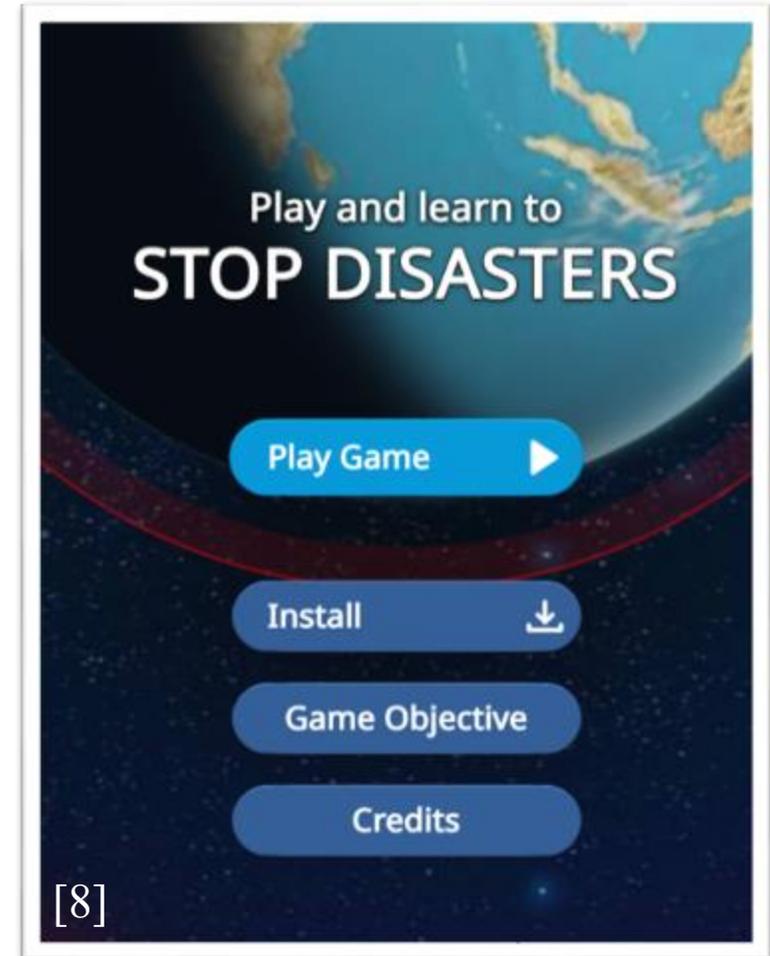
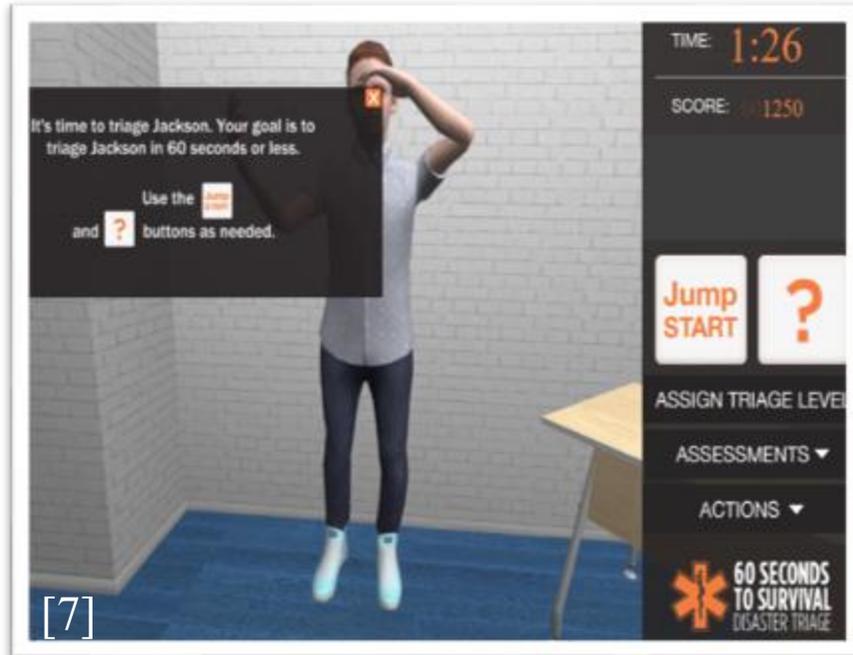


- Current EMS training fails to account for disabilities.
- Past disaster scenarios have shown higher casualty rates for people with disabilities
 - o 2017 Pohang Earthquake (Park et al., 2019)

Gamification

Definition: The use of game elements in non-game contexts:

- Game Features
- Game Design
- Implementation Strategies



Project Goal:

To design a **gamified training** scenario for local **EMS providers** that builds awareness of **disability-inclusive response challenges** and strengthens their capacity to deliver equitable care.



Accessible Limitless Living (ALL)



To promote the sustainable development goals, and more specifically the creation of sustainable cities and communities, the fight against poverty and social exclusion and the reduction of inequalities



[10]

[11]



Objectives:

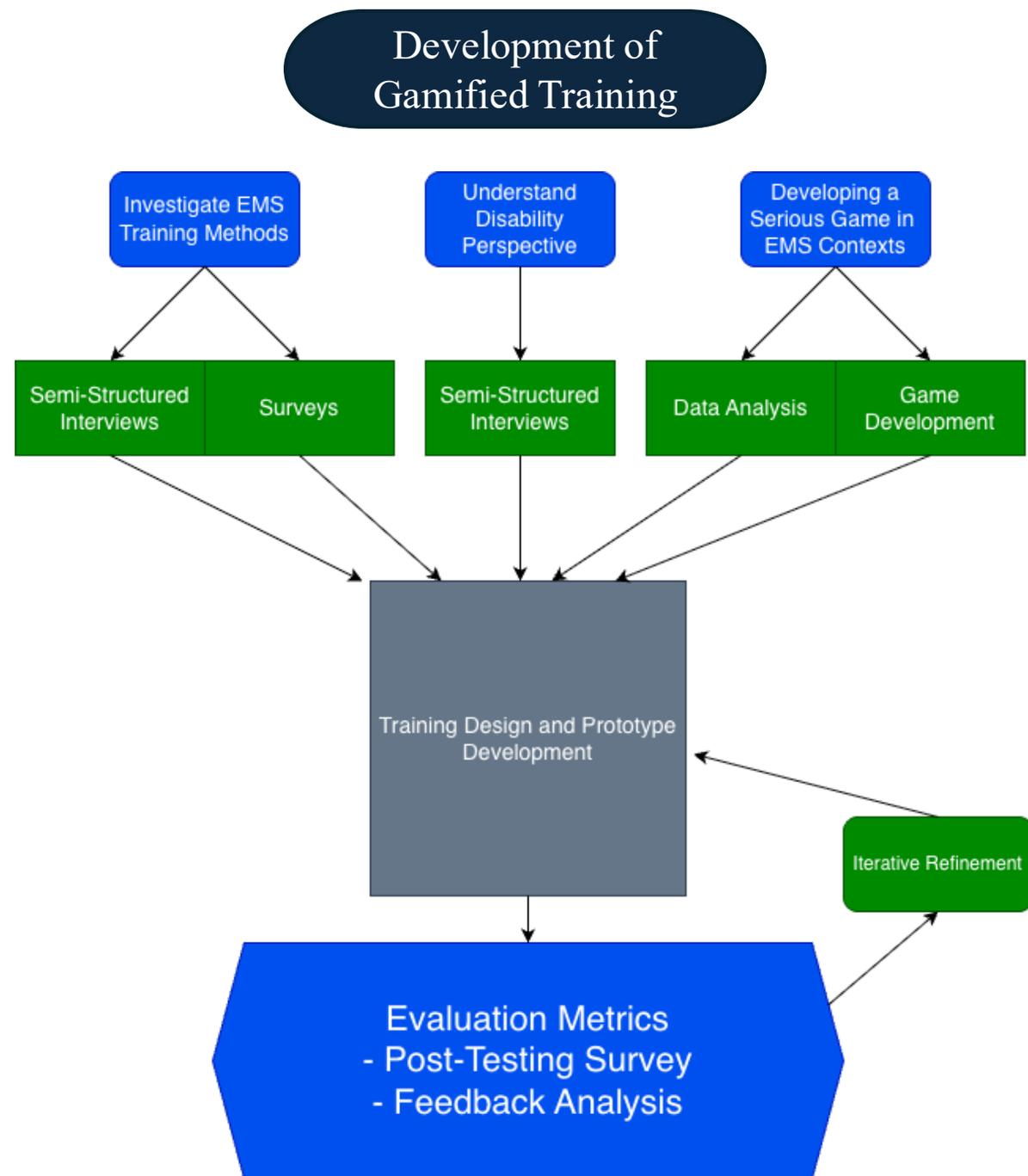
Identifying Current EMS Training Methods

Investigating Disability Perspectives Regarding EMS Personnel

Developing a Serious Game in EMS Contexts

Evaluating the Initial Serious Game Prototype

Methodology Flowchart



Identifying Current EMS Training Methods

EMS Surveys

- Establish a baseline for current training



Semi-Structured Interviews

- Understand personal experiences

Investigating Disability Perspectives Regarding EMS Personnel

Semi-Structured
Interviews

- Descriptive context
- Personal Experiences

Developing A Serious Game in EMS Contexts

Gamification Case Studies

Game Design

- Examples of gamified education, both EMS and not
- Learning what works and common strategies

- Previous research and Gamification Case Studies will inform the game's design

Evaluating the Initial Serious Game Prototype

Post-Testing Survey

Feedback Analysis

- Allows us to easily organize results through a generalized questionnaire

- Gets in-depth with the participants of the game for future iterations

Acknowledgements

- Accessible Limitless Living
- Professor Butler
- Professor Kinicki
- The generous people who have spoken to us thus far and those to come!

Thank you!
Σας ευχαριστώ!

Questions?
Ερωτήσεις?

Image References

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