Serious game development for dementia patients using preferred music, music therapy

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Research proposal for the research project submitted in *partial* fulfillment of the requirements for the degree xxxxxxxx in xxxxxxxxxxx in at the North-West University

Supervisor: …

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RESEARCH PROTOCOL (TOC\_HEADING sTYLE)

# Introduction (HEADING 1 STYLE)

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# Background to study

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# Problem statement

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# Paradigmatic perspective

## Meta-theoretic assumptions (Heading 2 style)

## Theoretic assumptions

## Methodological assumptions

# Research aim and objectives

The aim of this research project is to enhance the well-being of dementia patients through the improvement of music therapy-based interventions. To achieve this, the research will build upon existing studies and incorporate their findings to establish a clear research aim and objectives that prioritize the patient's wellness.

## Research aim

The aim of this research project is to investigate the potential of using preferred music as a serious game in music therapy to enhance cognitive function, mood, behaviour, and overall quality of life for patients with dementia. Through the use of a carefully designed serious game that incorporates music preferred by the patients undergoing therapy, the project seeks to contribute to the development of innovative and effective music therapy interventions for patients with dementia, and ultimately improve their quality of life.

## Research objectives

To achieve this goal, the project has several key objectives. Firstly, a comprehensive study will be conducted on the topics of dementia, music therapy, and preferred music to provide a strong theoretical foundation for the project. Secondly, a serious game and a remote will be designed to facilitate patients' acceptance of the intervention and their understanding of the tasks. Thirdly, a program will be developed that can interpret music uploaded by caregivers to incorporate preferred music into the music therapy-based serious game. Fourthly, an approach will be established to identify a patient's preferred music and provide recommendations to caregivers on how to acquire specific genres of royalty free music. These objectives will be pursued systematically to develop a viable and effective music therapy based serious game intervention for patients with dementia.

## Study design

# Research methodology

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## Study context

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# Rigour / Validity & reliability

# Ethical considerations

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## Permission and informed consent

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## Anonymity

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## Confidentiality

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# Executive Summary

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