

Abstract

This thesis is a feasibility study, carried out by the Center for Virtual Reality Research in Mental Health and Neuroscience in National Institute of Mental Health. It studies the feasibility and potential usability of virtual simulation of the magnetic resonance imaging procedure as a method of lowering the fear of claustrophobic patients of this procedure. The theoretical part of the thesis explores the subject of virtual reality, its technology, concept of presence and the clinical applications of virtual reality. Additionally, it inspects the area of anxiety and claustrophobia in relation to magnetic imaging procedure and possible interventions. Furthermore, it discusses the topic of virtual reality usability as an intervention procedure. The analytic part of the thesis laid out two research goals. First, to evaluate the usability of virtual reality simulation with claustrophobic patients, and second, to assess the potential of this simulation in lowering the fear of real magnetic resonance. The results show the ability of the virtual simulation to effectively produce anxiety in claustrophobic patients and its potential to lower the fear of real magnetic resonance procedure.