

Title of the Paper: Serious games for physical rehabilitation: aesthetic discrepancies between custom-made serious games and commercial titles used for healthcare

Abstract: Serious games are videogames that are used with purposes that go beyond the mere entertainment of the player. Among their many applications, healthcare is one of the most prominent ones, as serious games can have a wide range of applications within this field. One of the core uses of serious games in this area is for physical rehabilitation of patients. For this purpose, both custom-made serious games as well as commercial entertainment titles, such as those for Nintendo Wii, can be used. However, while custom-made serious games appear to be more clinically effective, patients seem to prefer the gaming experience of playing a commercial title. This paper aims to compare the game goals as well as the aesthetics of Wii Sports (a commercial title commonly used in the context of physical rehabilitation) with the visual aesthetic and goals of custom-made serious games that have obtained clinically significant results in upper limb rehabilitation, in order to try and understand what can be done in terms of videogame graphics and aesthetics to bridge the gap between these two approaches.

Keywords: serious games, videogames, game design, game aesthetics, healthcare