Gender Inclusivity in Games: Towards Reliability and Construct Validity of the Gender Inclusivity Rating Scale (GIRS)

Keywords
Game framework, measuring instrument, gender inclusive, gender neutral,

Short Description (22 words)
This paper addresses the development and validation process of a novel instrument aimed at measuring the level of gender inclusiveness in games.

Abstract (405 words)
This paper addresses the problem of how to measure gender-inclusivity in games by incorporating theories in games and gender. Without a structure that describes gender inclusivity in games' dimensions, components and their corresponding relationships, it is difficult to know how 'gender-inclusive' a game is or to know the right degree of gender-inclusivity is needed during a game design process. Alternatively, with a detailed description, it is easy to measure the level of gender-inclusiveness in games by comparing it against the set of definition and behaviour description. Consequently, the aim of this paper is to develop a reliable and valid instrument that can be used to measure the level of gender inclusiveness in games.

The initial Gender Inclusivity Rating Scale (GIRS) instrument consists of 82 candidate items generated based on the synthesized findings from games and gender research. Next, a pilot study was conducted to investigate whether an item is relevant and adequate in addressing the concept being studied, whether an item's wording, response format, instructions, instrument length and layout are appropriate, and finally whether the instrument as a whole is easy to read and understand. Five experts were invited to review the instrument, and the refined instrument consists of 54 items. Following the instrument refinement, a validation study was designed to collect data from a sample of 31 gamers comprising of 15 females and 16 males ranging from 20 to 45 of age. The objectives of this study were to investigate the relationships between each item in a specific component and how they relate to the rating scale as a whole. A representative list of 10 games was selected based on its popularity ranking and/or have won awards for the best game in various categories, including Ratatouille, Mirror's Edge, Wii Resort Sports, Neverwinter's Night, Mario's Kart, Monopoly, Boom Blox: Bash Party, Chocolatier 2: Secret Ingredients, Command & Conquer and Civilization 4: Colonization. Data analysis based on correlation and reliability analysis demonstrated that the GIRS items possess the recommended level of validity and reliability.

The outcome of the GIRS instrument consists of two dimensions, 10 components and a total of 50 items all with acceptable levels of reliability and validity. The GIRS is relevant to both academic researchers, educators and practitioners that hold a particular interest in the study of gender inclusivity in games. The main contribution of this paper was to provide a reliable instrument to measure the level of gender inclusiveness in games.