



KICT NEWSLETTER

ISSUES 1/2023

JANUARY 2023

EDITORIAL BOARD MEMBERS

Advisor:

- Assoc. Prof. Dr. Norsaremah Salleh

Chief Editor:

- Asst. Prof. Dr. Noor Azura Zakaria

Editors:

- Asst. Prof. Ts. Dr. Hafizah Mansor
- Asst. Prof. Ts. Dr. Dini Oktarina Dwi Handayani
- Asst. Prof. Dr. Elin Eliana Abdul Rahim
- Asst. Prof. Dr. Atikah Balqis Basri
- Asst. Prof. Dr. Nor Saadah Md Nor

Designer:

- Sr. Nurlaili Sanadi



TABLE OF CONTENTS

ARTICLE OF THE MONTH	1
KICT EXPERT	6
ACHIEVEMENTS AND RECOGNITIONS	8
ACTIVITY	10
TALK/SEMINAR	11
PUBLICATIONS	17
PATENT	20

Motivational Quote

“ Yesterday I was clever, so I wanted to change the world.
Today I am wise, so I am changing myself. ”

-Jalāl al-Dīn Rūmī -



Suhaila Samsuri

Encouraging Effects of Electronic Games on Mental Health Treatment: A Perspective

Part 1

Electronic Games

Electronic games are potential to be used as an alternative or complementary treatment for mental health has received scarce attention. As games have features that can engage players and attract attention through content and characters, so it could change player behaviour. Various related literatures were examined and analyzed to investigate the benefits or positive effects of electronic games. Some findings show that electronic games have the potential for mental health issues treatment instrument

Playing electronic games is not uncommon during this Covid 19 pandemic. This is an alternative activity to spend time while being locked in the house. For teenagers in particular, this is like a "space" to go between online classrooms to other activities. Electronic Games has been widely associated with adverse mental health implications. While the research-based evidence is scarce, the subject has become the focus of parents' discussions due to the influences observed not only on children, but also on adults and occupational groups. The role of electronic games has been expanded pervasively. It is no longer limited as a hobby or activity to fill leisure time, but electronic games have become a essential alternative that contributes to a major part of people's lives. Electronic games have become a catalyst and an instrument played for human entertainment, education and occupancy in electronic sport. Furthermore, electronic games are used as one of the best treatment methods for several types of health issues such as mental health. A number of research studies have been conducted to examine the development of mental health treatment and intervention using digital games. Related studies have been conducted on children and adult who have mental health problems which include depression, autism and schizophrenia. The findings indicate that some positive effects have been observed in children and adults with depression. The positive effects were observed after the subjects playing selected commercial digital games available in the market. Additionally, some research have embarked to design and develop digital games through collaboration with game developers, psychologist and psychiatrist dedicated for intervention of stress among autistic children.

Defining Electronic Games

Electronic game is a general term to refer to several other terms that have similar concepts, namely digital games, video games and computer games. All of these are interactive games that are operated by computer circuits and variety of appropriate electronic devices. Digital Games are played not limited only using computer, but also mobile, console and stand-alone platforms, like arcade game. There are several types of games available in the market, which are created for wide range of age, for instance: Role Playing Game (RPG), First-Person Shooter (FPS), puzzle, simulator, gamification and many more. Each of the game type offers many choices of genre according to the player preferences, for instance, war or battle, fantasy, love, history and so forth. From time to time, digital games and content designers will analyse and probe into the current trends of the players' interest to invent and create the game's challenges and storylines.

Games Components and Structure

Games is a system made of a set of parts that interrelate to form a complex whole. This system consists of elements such as, players, artificial characters, conflict, rules, and quantifiable outcomes. In designing a good game, a game designer may create a storyline or gameplay with creative combination of important qualities. The qualities are clear game objective, understandable rules, interesting reward system, fascinating characters, challenging obstacles, compelling environment including appropriate weapons or vehicles to be used by the character to achieve a particular mission. In the game environment, the character is a representation of the player who will be engaged and playing the role to complete the gameplay.

Depending on the type of games, not all suggested components are always needed to be included in one game development. For example , in a simulator, the artificial characters are not necessary to be included because it will be replaced by the person who is playing the game. There are examples of simulators such as X-Plane, Madden NFL, Trauma Center, and so on. A similar context is applied in the mechanics of gamification, since it is created for real and specific ends, such as, losing weight program, managing hypertension and diabetic problem or mental health treatment; therefore, it will not require artificial characters, games environment and weapons for fighting. The most important components in these games genre are absolute mission, engaging rules and valuable real reward to ensure the player's commitment and to persuade the player to continue to be in the games.