

ABSTRAK

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Program Studi : Matematika

Judul : Model Matematika Penyebaran Kecanduan Game Online

Game online merupakan gaya hidup baru bagi beberapa orang baik dari kalangan remaja maupun dewasa. Kebanyakan dari mereka yang bermain *game online* adalah remaja. Dimana remaja lebih tertarik bermain *game online* dari pada belajar. Fenomena tersebut perlu diselesaikan dengan menggunakan pendekatan berupa pemodelan matematika. Penelitian ini bertujuan untuk memberikan gambaran atau informasi mengenai bagaimana dinamika penyebaran kecanduan *game online*. Dalam penelitian ini digunakan asumsi asumsi dan pengelompokan kelas, yaitu kelas rentan bermain *game online* (S), kelas coba-coba bermain *game online* (C) dan kelas kecanduan bermain *game online* (K). Dari model tersebut diperoleh titik ekuilibrium bebas kecanduan *game online* $E^0 = (N, 0, 0)$ yang stabil asimtotik lokal saat nilai *Basic Reproductive Number* (R_0) < 1 , dan titik ekuilibrium endemik $E^* = (S^*, C^*, K^*)$ yang stabil asimtotik lokal pada kondisi tertentu.

Kata kunci : *Game online*, Model SCK, Reproduksi Dasar dan Kestabilan Titik Ekuilibrium.

ABSTRACT

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Title : Mathematical model of the spread of online game addiction

Online games are a new lifestyle for some people, both teenagers and adults. Most of those who play online games are teenagers. Where teenagers are more interested in playing online games than studying. This phenomenon needs to be solved by using an approach in the form of mathematical modelling. This study aims to provide an overview or information about how the dynamics of the spread of online game addiction. In this study, assumptions were used and class groupings were used, namely the vulnerable class for playing online games (S), the trial and error class in playing online games (C) and the addicted class for playing online games (K). From this model, the equilibrium point free from online game addiction is $E^0 = (N, 0, 0)$ which is locally asymptotically stable when the value of Basic Reproductive Number (R_0) < 1 , and the endemic equilibrium point is $E^* = (S^*, C^*, K^*)$ which is locally asymptotically stable under certain conditions.

Keywords: Online game, SCK Model, Basic Reproduction, and Equilibrium Point Stability.