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1 Introduction

Population models are used to study the dynamics of a population. In particular, dynamic population models are applied to populations that gain and lose members, unlike a fixed population. A dynamic population is said to be stable if the sizes of all subgroups remain constant. Epidemiological models typically focus on describing the transmission of communicable diseases through individuals. One well-known epidemiological model is the SIR model, which computes the theoretical number of people infected with a contagious disease in a closed population by modeling the flow of people between three states: susceptible (S), infected (I), and resistant (R).

In this paper, we adapt the epidemiological models presented by [1] to model the dynamics of public opinion. By definition, a public opinion is any view prevalent among the general public. Our model considers any topic or issue in which the public has two decisive and opposing viewpoints. In order to understand a certain opinion it is important to ascertain the following: if an individual has adopted the opinion, their particular level of adoption, and if they are capable of and/or active in spreading their ideals to other individuals in the opinion population.

References

[1] Luis M.A. Bettencourt, Ariel Cintron-Arias, David I. Kaiser, and Carlos Castillo-Chavez. 2005. *The power of a good idea: Quantitative modeling of the spread of ideas from epidemiological models*. Elsevier.