

1 Introduction

1.1 Background

Rio de Janeiro is one of the biggest and probably the most famous brazilian city. With more than six million people, Rio de Janeiro is a common vacation destiny, attracting thousands of tourists every year. Most people don't realize how big the city is, many neighborhoods are unknown for the majority of visitors. Another aspect of the city that is not clear for many is Rio's social inequality, which can be exposed by making a Human Development Index (HDI) analysis of each neighborhood. The neighborhoods' HDI ranges from 0.970, higher than the HDI of countries like Norway and Switzerland, to 0.700, more or less equivalent to countries like Egypt, Gabon and Vietnam. Violence directly impacts on these values, it affects everyone's lives in the neighborhoods with the lowest HDI.

1.2 Problem

This work aims to verify the relationship between the HDI of Rio de Janeiro's neighborhoods and the number of venues of each one. Also, a cluster analysis will be made to observe similarities between some neighborhoods based on the kind of the venues present in each one.

1.3 Interest

Public authorities and academic institutions would be the most interested in this work.