

# Covid 19 Perception of risk of contagion in the Costa Rican population.

Carlos Luis Jiménez A.

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## 1. Introduction

### 1.1 Background

Costa Rica is a country that has a fairly high percentage of the population with sufficient education, the disease called COVID-19 brought, above all the Costa Rican people, great uncertainty, the government of the republic through the Ministry of Health, initially took a series determined of measurements.

### 1.2 Problem

To measure the perception of the Costa Rican regarding the possibility of the risk of contagion with COVID-19 in all the country's provinces, the vast majority of the measures taken by the Government are known by Costa Ricans and are respected, however, there are some criticisms that they are not being fulfilled. This report aims to be one more tool, in this specific case to measure the perception of the population at the study sample, Costa Ricans aged between 18 to 80 years.

### 1.3 Interest

This being an independent study, it is obviously to be hoped that people who like to stay informed regarding the issue we are dealing with in particular, can use it to contrast the data presented by the government regarding the pandemic and its progress in the country of Costa Rica.

## 2. Data acquisition and cleaning

### 2.1 Data sources

The data comes from a survey carried out on the internet on a voluntary basis, the study population was:

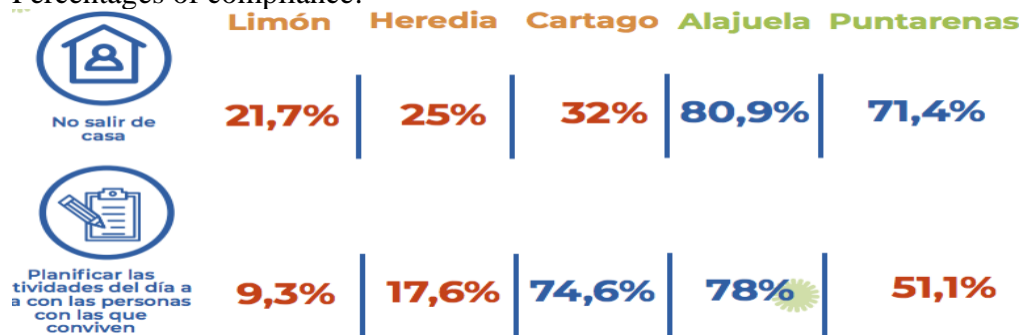
- Costa Ricans with ages between 18 to 80 years.
- Perception of risk of contagion in general: In the Costa Rican population there is a moderate perception of becoming infected with COVID-19. Analyzing variables such as: age, place of work and province of residence, important differences are observed in the perception of risk. When asked about the risk of a person with whom they share daily, this perception of risk is higher in general, that is, the person who responds feels that their risk is less than that of a third party.
- **Perception of risk of contagion according to gender and age:**

- MODERATE 18-29: People (men) between the ages of 18-29 have the perception that the people with whom they share daily have a greater risk of contracting COVID-19 than they.
- MODERATE 30-39: People (men) aged between 30-39 years have a greater perception of the risk of contagion from themselves and from the people with whom they share daily.
- HIGH 40-49: People (women) aged between 40-49 years have a lower perception of risk of contracting COVID-19.
- o HIGH 60-79: People (women) aged between 60-69. and 70-79 years have a moderate perception that they and the people with whom they interact daily are at risk of contracting COVID-19.
- **Perception of risk of contagion according to Province:**
  - Lemon: Greater perception that other people with whom they interact compared to them are at risk of getting COVID-19.
  - Heredia: Less perception that they and other people with whom they interact are infected with COVID-19.

- **Compliance with measures by province**

It is generally observed that the provinces with the lowest percentage of compliance with the five measures that do not exceed 70% are Limón, Heredia and Cartago; while Puntarenas and Alajuela present the highest percentages of people who indicate that they comply with the measures.

- Not attending temples and religious services due to mandatory closure.
- Do not visit medical centers unless it is a true emergency.
- Do not visit beaches or recreation centers. Wash hands with soap and water.
- Percentages of compliance:



## 2.2 Data cleaning

In this case there is no data to clean since they come from a survey carried out on the internet voluntarily, the study population was:

- Costa Ricans with ages between 18 to 80 years.
- Type of study: quantitative, designed with a structured questionnaire self-administered through the Internet through massive and open invitation, where the perception of contagion risk, knowledge and compliance with twenty-three measures established by the Government of Costa Rica and approximation were consulted of Costa Ricans facing COVID-19.
- Sample size: 797 Costa Ricans.
- Period: March 30 to 31, 2020.
- Type of sample: the sample is not entirely a random sample, for this reason, the database was weighted by gender, age, education, employment status, work sector and province of

residence to restore the probability of selection in function of the structure of the Costa Rican population.

- Level of confidence in the estimates: 95%
- Profile of the sample: 3.5% (any difference in the figures greater than 3.5% shows a significant difference)

### 3. Survey study overview.

3.1 Type of study: Quantitative, designed with a structured questionnaire self-administered through the Internet through massive and open invitation, where the perception of contagion risk, knowledge and compliance with twenty-three measures established by the Government of Costa Rica and approximation were consulted of Costa Ricans facing COVID-19.

### 4. Conclusions

4.1 In this study, the investigators analyzed the relationship between

- 18-29 people and 50-59 years follow minus the measurements of the Government and without that the data is confirmatory, exists a tendency to old I do not know adhere to the measurements.
- Schooling no would be a factor explanatory of the adherence, since not for having more or less schooling, would imply follow or not the measurements of protection.
- Fear of contagion and anxiety is presents in major measured in women. Women present more adherence to follow the regulations governmental.
- Depression and suicidal ideation, approximately it is three more times in men who in women.