### Fair Dictator

Progress Presentation Research Practise 2

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April 12th, 2016



Some decisions that humans make are influenced by their ideas of fairness and inequality. We are going to focus in the inequality in an income and study if people's perception of fairness differ depending on achievements and luck. Our objective is to understand those perceptions of EAFIT University students.

#### Main Goal

To compare if there are statistically significant differences in the perception of fair inequality between students of different schools in EAFIT University.

#### Specific Goals

- To adapt the social experiment that use the dictator game to understand the perception of EAFIT University students about fair or unfair inequality.
- Validate if the perceptions of the students change depending on the gender.
- Verified if the division of the income change dependent on the variables like luck and self achievements.

There is a statistically significant difference between two data groups when the p-value that we obtain with a statistical test is less than the significance level.

We chose a significance level of 0.05 and we are going to use the t-test because our number of data is not big enough to have a normal distribution.

We want to compare the perception of the inequality between students of different under graduate programs, for this reason we separate the students in two groups depending on the schools that they come from.

- 1. Sciences and Engineering School students.
- 2. Economics, Administration and Finance School students.

To understand the perceptions of students we will use two versions of the dictator game which were applied in "Fairness and the Development of Inequality Acceptance" [Almas et al., 2010], in that game, students have to divide one amount of money. In this case, the null hypothesis is "The two groups of data do not have the same ideal".

#### Dictator Game:

#### DIVISION ELECTION

You have get XX points and you have to choose how much do you want for you.

Your point's value is 1 pesos.

Her point's value is 1 pesos.

#### Dictator Game: RESULT

You work for XX minutes.

You get YY points.

Your point's value is ZZ pesos.

You have YYxZZ pesos.

#### Dictator Game: Production Phase

## Dictator Game:

ELECTION

You and your assigned partner get XX pesos between both. How many points do you want for you? How you get the money?

YOU

YOUR PARTNER

You got YY points.

She got YY points.

Your point's value is ZZ pesos.

You have YYxZZ pesos.

Her point's value is ZZ pesos.

She has YYxZZ pesos.

In the game, the points that they earn has a random value, what is different for each player, so the dictator has another variable to consider where he is going to split the points, the luck. In the second part of the game, the value of the points for the other participant has more value than the points of the dictator.

#### Dictator Game: Details

#### Questions:

1. Are you a woman or a man?

2. Imagine two secretaries who are both the same age and are both doing the same job. One of them finds out that the other earns a lot more than she does. The best paid secretary is better at her job in many ways. Do you think it is fair or unfair that one secretary earns more than the other?

Choose a point on the scale below:

Those who work hard 12345678910 normally have a better life. Hard work does not help, it is luck and connections that are important. We will divide the students in three groups depending on the points they considered fair to share with the other participant, this division was made in "The Pluralism of Fairness Ideals: An Experimental Approach" [Cappelen et al., 2005].

- 1. Strict Egalitarian Ideal: dictator divide the points in equal parts.
- 2. Meritocratic Ideal: dictator divide the points depending on how much he and the another player earned.
- 3. Libertarian Ideal: dictator divide the points depending on how much he and the another player earned and the value of the points.

To measure the ideals, m is the amount that individual *i* considered fair to share. If *i* has an egalitarian ideal, shares  $m^{E(i)}$ , if has a meritocratic one, shares  $m^{M(i)}$  and if has an libertarian one, shares  $m^{L(i)}$ .

$$m^{E(i)} = \frac{X}{2},$$
  

$$m^{M(i)} = \frac{a_i}{a_i + a_j}X,$$
  

$$m^{L(i)} = \frac{a_i p_i}{a_i p_i + a_j p_j}X,$$

where X is the total income of the two students,  $a_i$  is the points that individual *i* earned, and  $p_i$  is the value of the points for individual *i*.

- Almas, I., Cappelen, A., Sorensen, E., and Tungodden, B. (2010).
   Fairness and the Development of Inequality Acceptance. Science, 328:3.
- Cappelen, A. W., Hole, A. D., Sorensen, E., and Tungodden, B. (2005).
   The Plureliem of Enimous Ideals: An Experimental Approach

The Pluralism of Fairness Ideals: An ExperimentalApproach. *CESifo*, 1611:31.

# Thanks for your attention!