

Introduction to Statistics and Data Analysis

Types of Data/Data Collection

Part I. Consider a class survey asking for the following information:

of Siblings, Distance from Home, Favorite Pizza Topping, # Pairs of Jeans, Eye Color

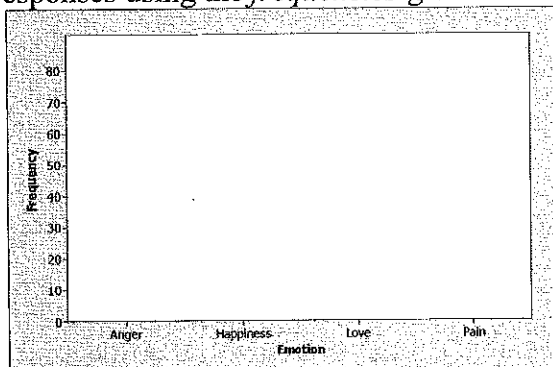
- A. Which of these variables are numerical and discrete?
- B. Which of these variables are numerical and continuous?
- C. Which of these variables are categorical?

Part II. A survey of children asked what emotion they connect with the color red ("Color Association of Male and Female Fourth-Grade School Children," J. Psych., 1988).

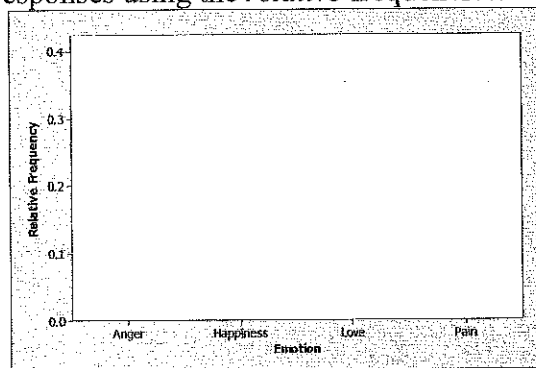
Emotion	Frequency	Relative Frequency
Anger	61	
Happiness	31	
Love	77	
Pain	45	

A. Obtain the relative frequency for each emotion in decimal form.

B. Make a bar chart for the children's responses using the *frequencies* given above.



C. Make a bar chart for the children's responses using the *relative frequencies*.



D. How do the bar charts from parts B and C compare?