Pan Chen
IST-719 Spring 17 - Tuesday
Prof. Hemsley
4/3/17
Why They Did Not Show Up: a data exploration on the patient's no-show problem

Dataset description:

The dataset I am working on has 300,000 medical appointments data as rows and their 15 characteristics as columns. Those characteristics include the patient's gender, age, day of the week of the appointment, what kind of their appointment is, are they receiving government's financial help on medical bills, whether the healthcare provides send them SMS reminder, etc., and most importantly, whether they show up to the appointment or not.

My super compelling story:

I am interested in this dataset because missing medical appointment has become a prevalent problems for the healthcare systems in many countries including the US, as missed appointments cost the U.S. healthcare system more than $150 billion a year (http://www.post-gazette.com/business/businessnews/2013/02/24/No-shows-cost-health-care-system-billions/stories/201302240381). As the politicians and the people of this country are always complaining about too much money spent on the healthcare, I want to explore what factors might contribute to the no-show problem to the medical appointments.

My audiences:

My audience could be the healthcare providers who want to decrease the patient no-show rate, or the government agency who wants to increase the efficiency of the spending on healthcare system.

Poster Layout – Page 2, 3

My questions:

1. Does the patient's age has something to do with their no-show rate? – PAGE 4
2. Does the patient's gender has something to do with their no-show rate? – PAGE 5
3. Does the day of the week of the appointment has something to do with their no-show rate? – PAGE 6
4. Does the patient's preexisting conditions have something to do with their no-show rate? – PAGE 7
5. Does text message reminders affect the no-show rate? – PAGE 8

Data Source: JoniHoppen on kaggle.com
(https://www.kaggle.com/joniarroba/noshowappointments)

Move the title 2 the left a bit

WHY They AIN'T SHOWING

- A study on No-Show Issue

Intro!

Pic of a UH??? frustrated doctor or receptionist

Pic of toddler to adolescent to Adults to elderly

Age Density plot or something

Some conclusion on Age

gender plot ?

conclusion of gender

Does this thing help?

pic of cellphone

~~Cell~~ text message plot

conclusion of sms

Some conclusion

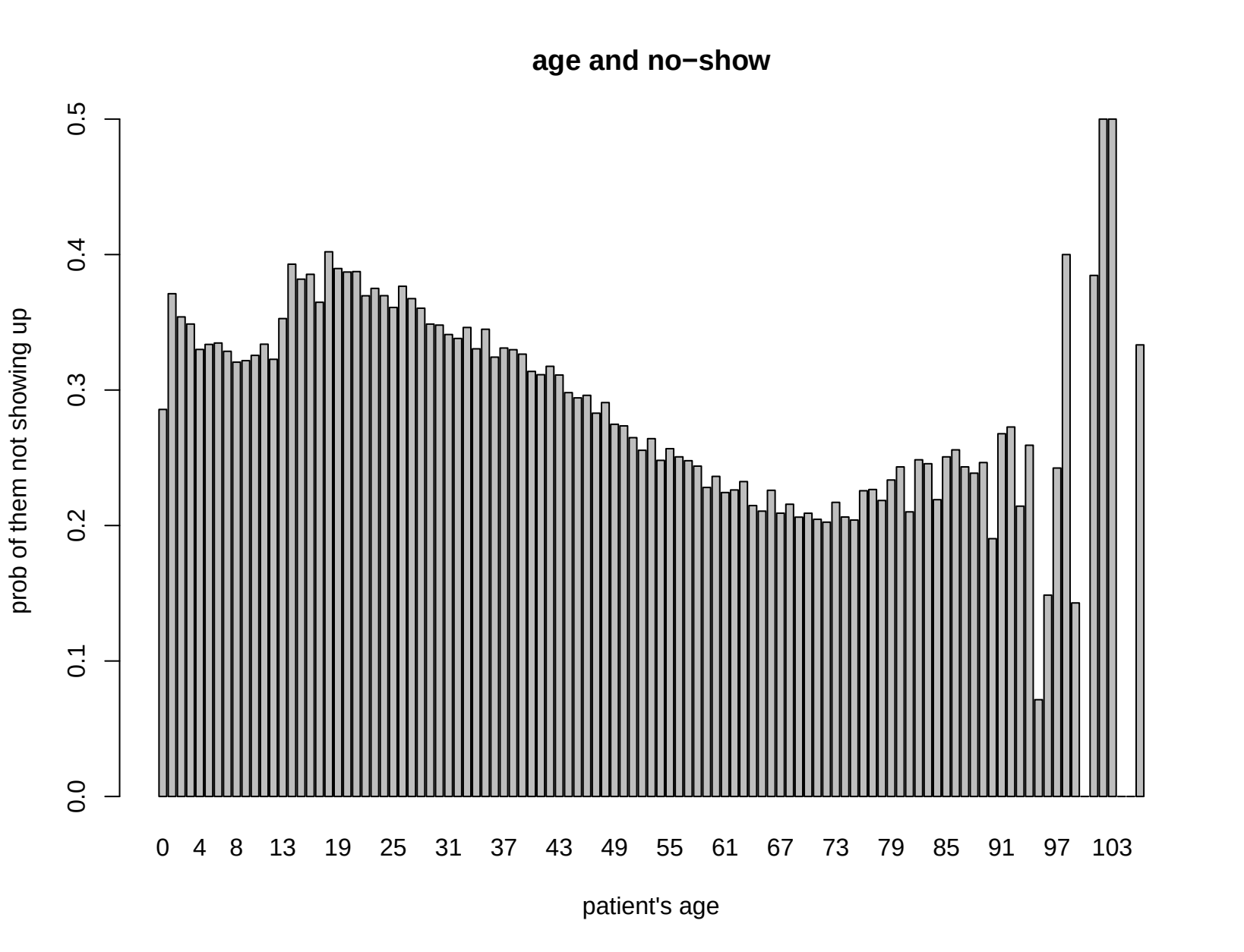
pre existing condition plot

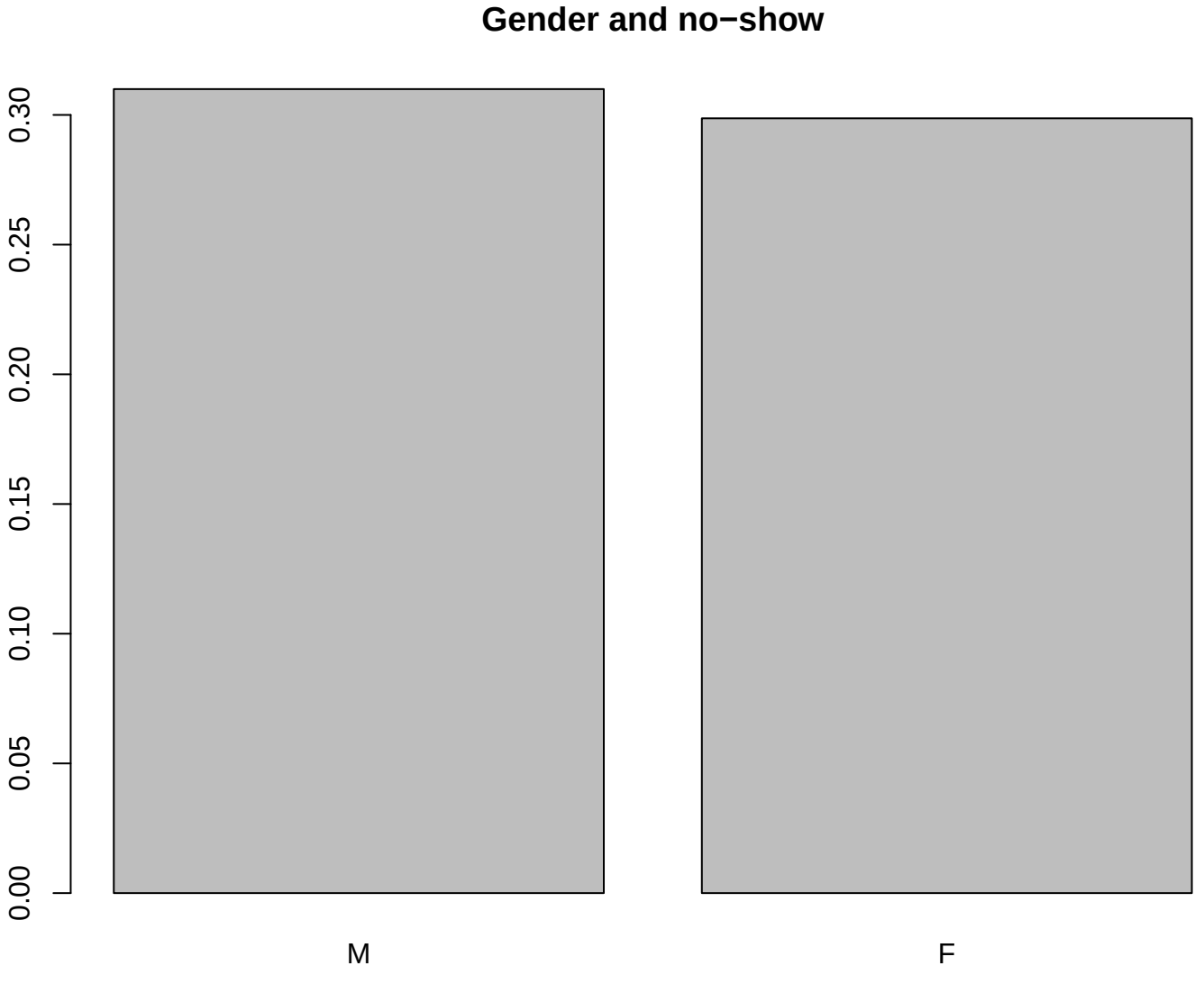
conclusion

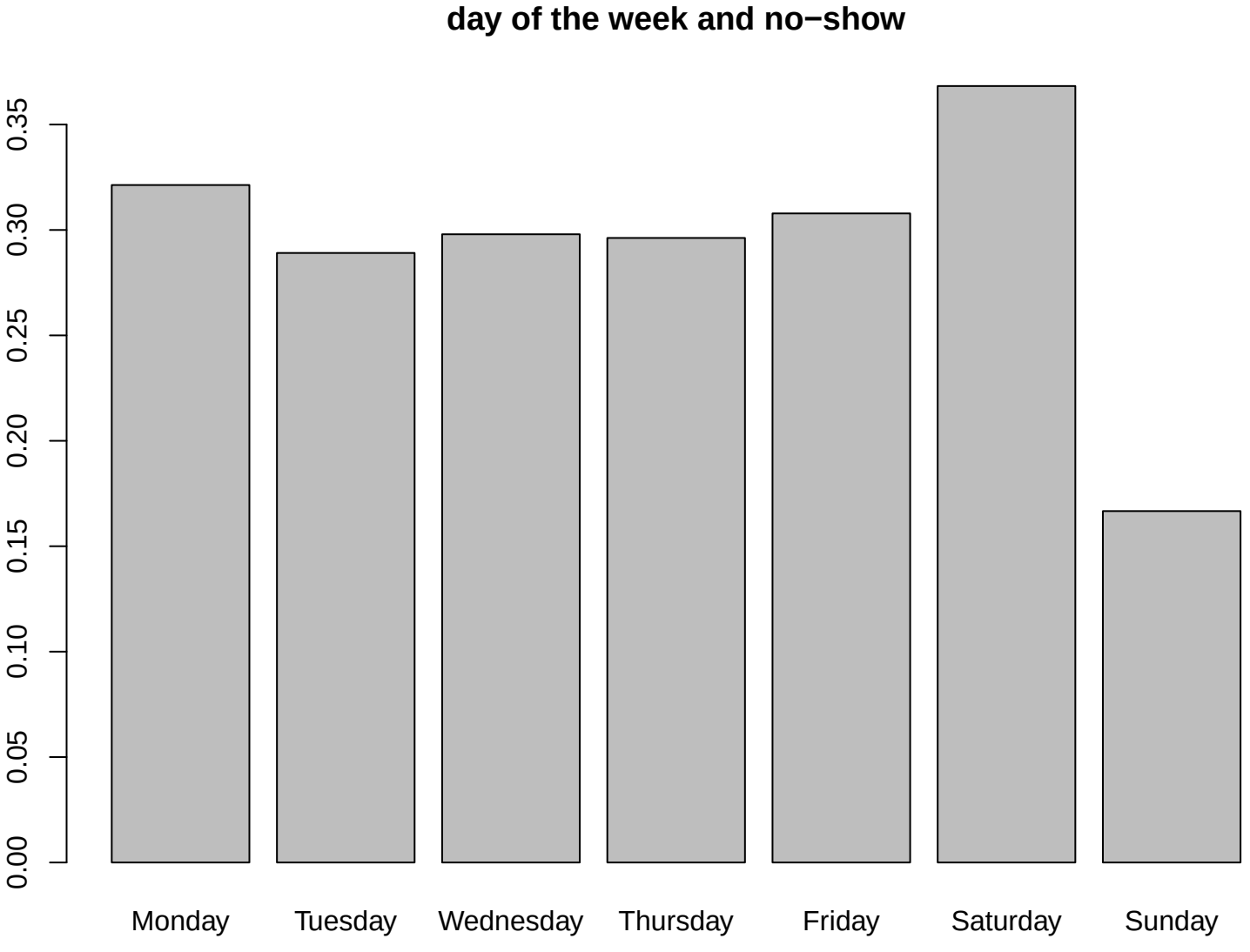
Some conclusion

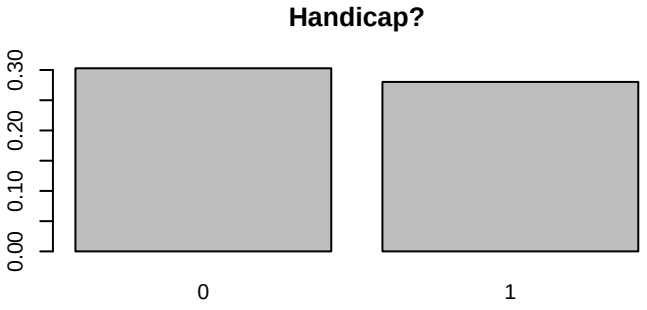
Source:

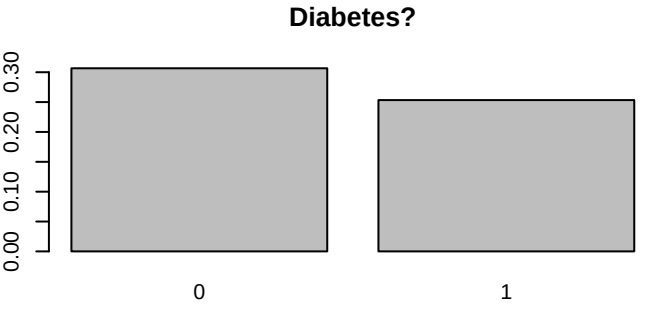

Title
personal info
Age
Gender
Why
pre...
text

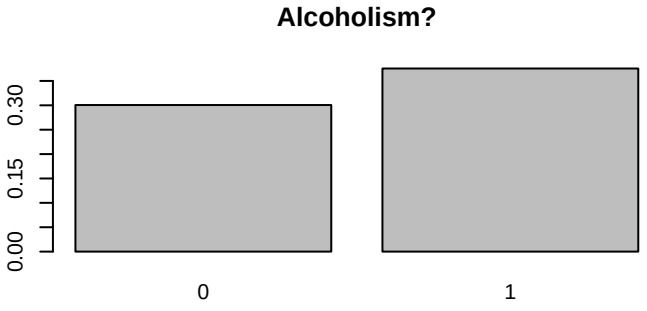

age and no−show
prob of them not showing up
0.0
0.1
0.2
0.3
0.4
0.5
0
4
8
13
19
25
31
37
43
49
55
61
67
73
79
85
91
97
103
patient's age

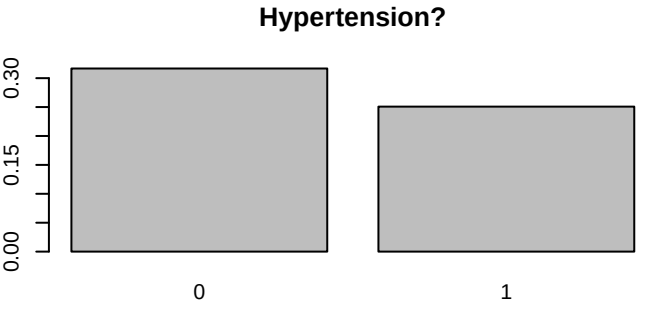

Gender and no−show
0.00
0.05
0.10
0.15
0.20
0.25
0.30
M
F


day of the week and no−show
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

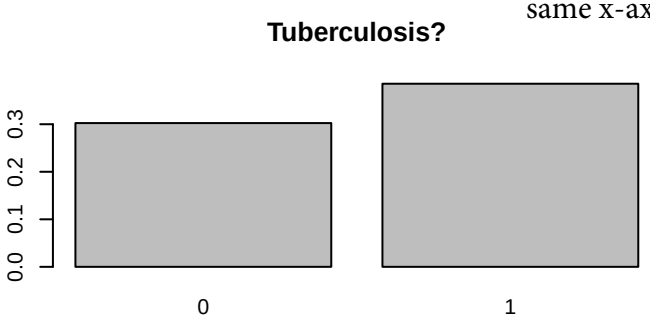


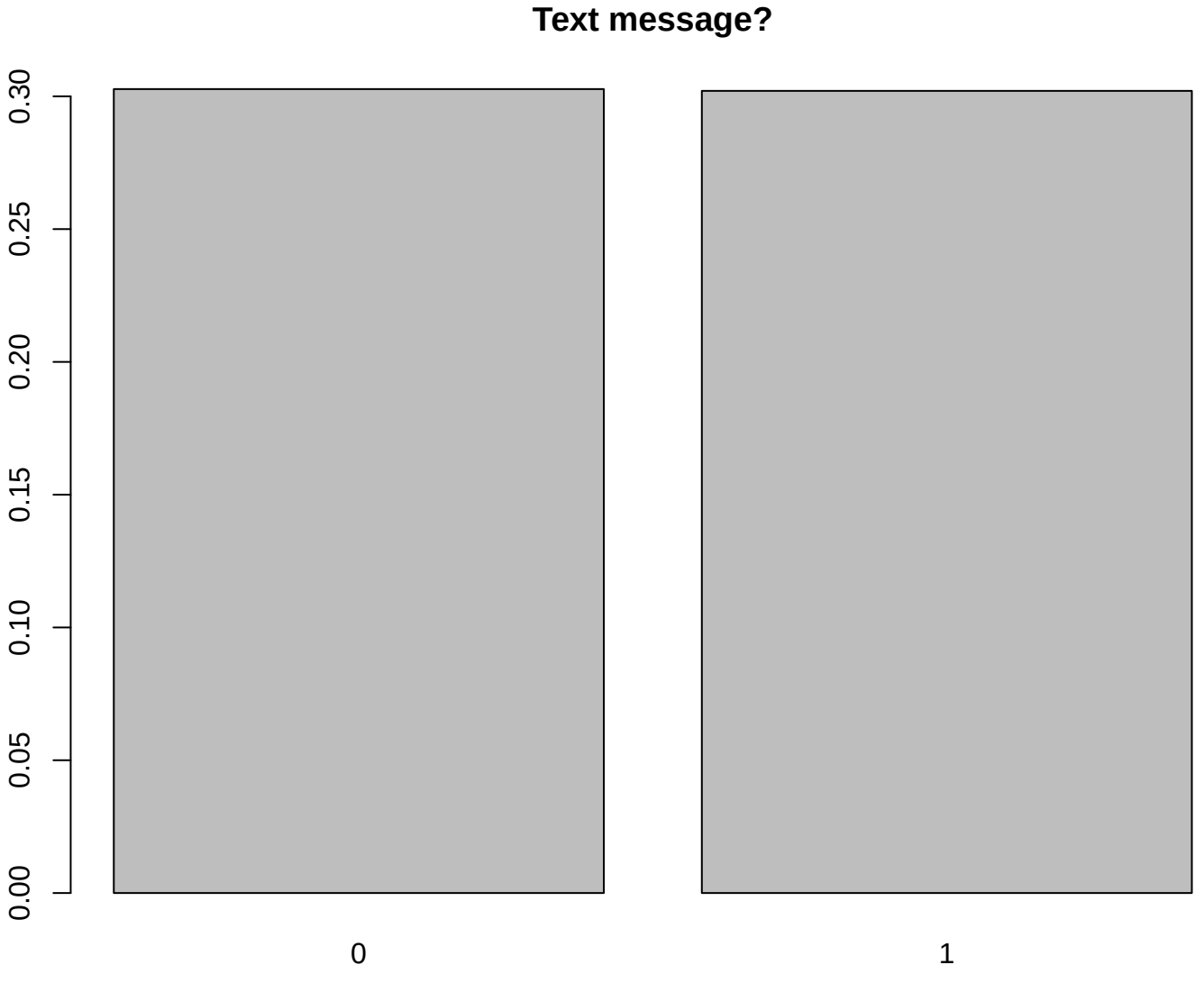






I'mma put them on one graph, line them up on the same x-axis, and make them thinner




Text message?
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
1