Speed Dating Data Analysis

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DASC Capstone project
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I am Ricardo Lu

Sociology Major & Data Science Minor

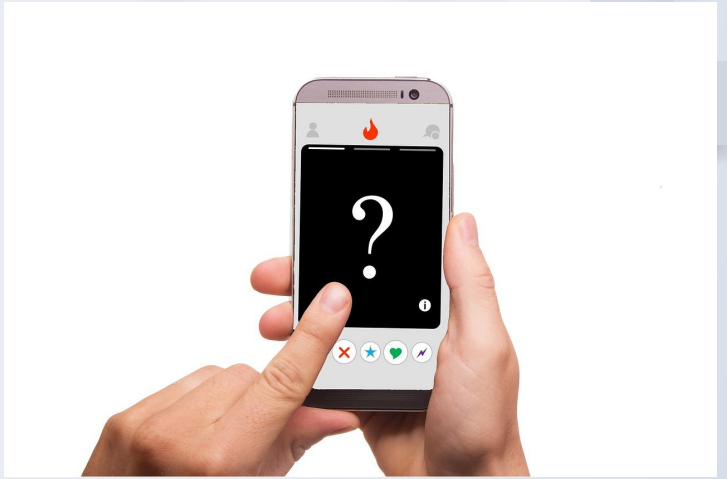
I study race & gender theory

corporate social responsibility (CSR) consultant

I want workplaces to be more inclusive

My previous research:

How race and gender work in online romantic market in the US?



- Race & gender as prominent factors
- Preference as personal choice

“Black and Asian men typically are abjected to the lowest realms in erotic racial preference--black individuals for being seen as hypersexual and Asian men for being seen as asexual.”

--Robinson *“personal preference” as New Racism*

Research Question:

In a speed dating setting with 4 minutes of interaction, does match rate of Asian men, black men & women significantly different from that of whites? If yes, how does the difference look like?

Speed Dating Experiment

Conducted by researchers in Columbia University in 2002-2004

17
waves

4
min/people

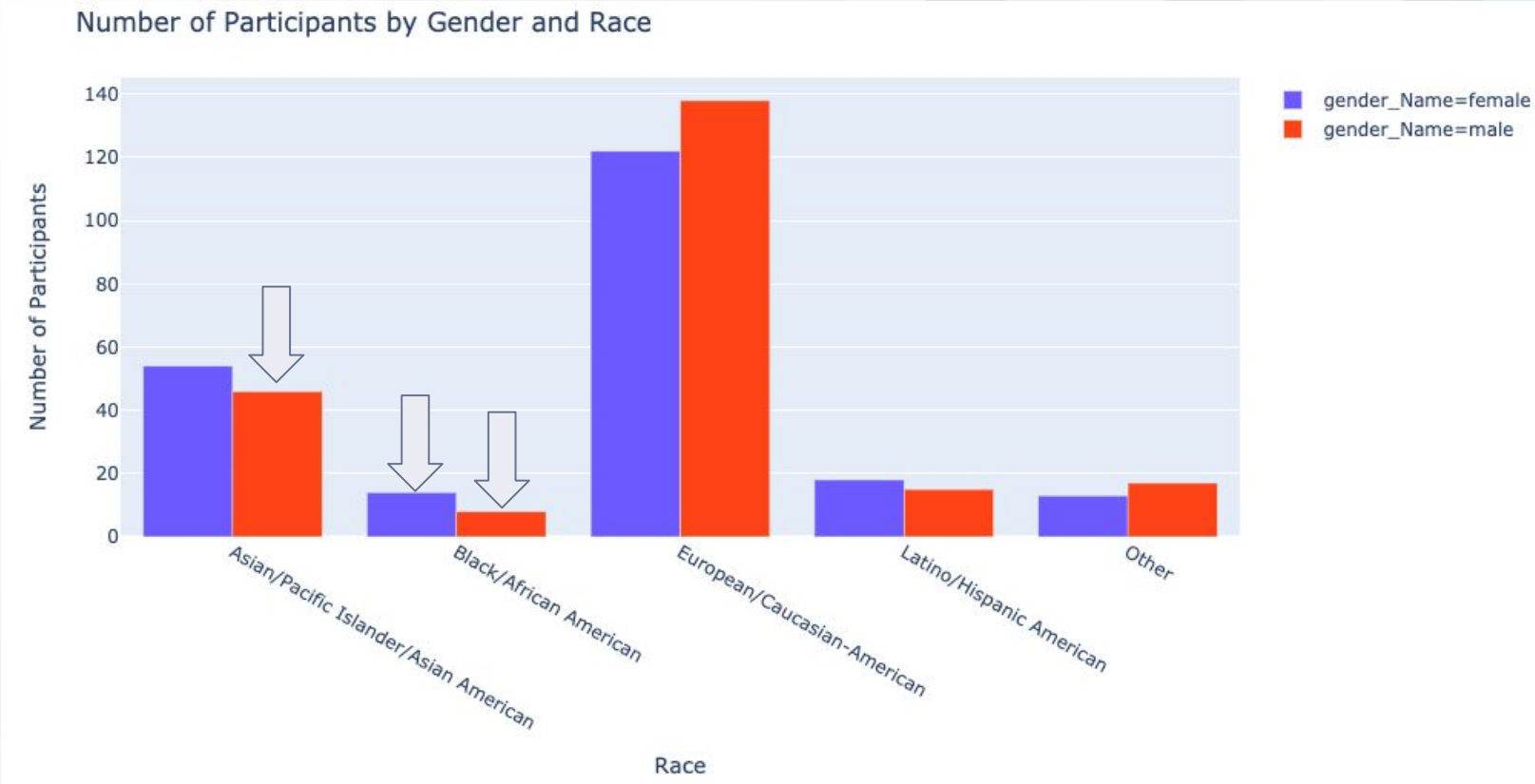
10~40
Participants per wave

~1 : 1
male-female ratio

452
participants in total

The information that I use

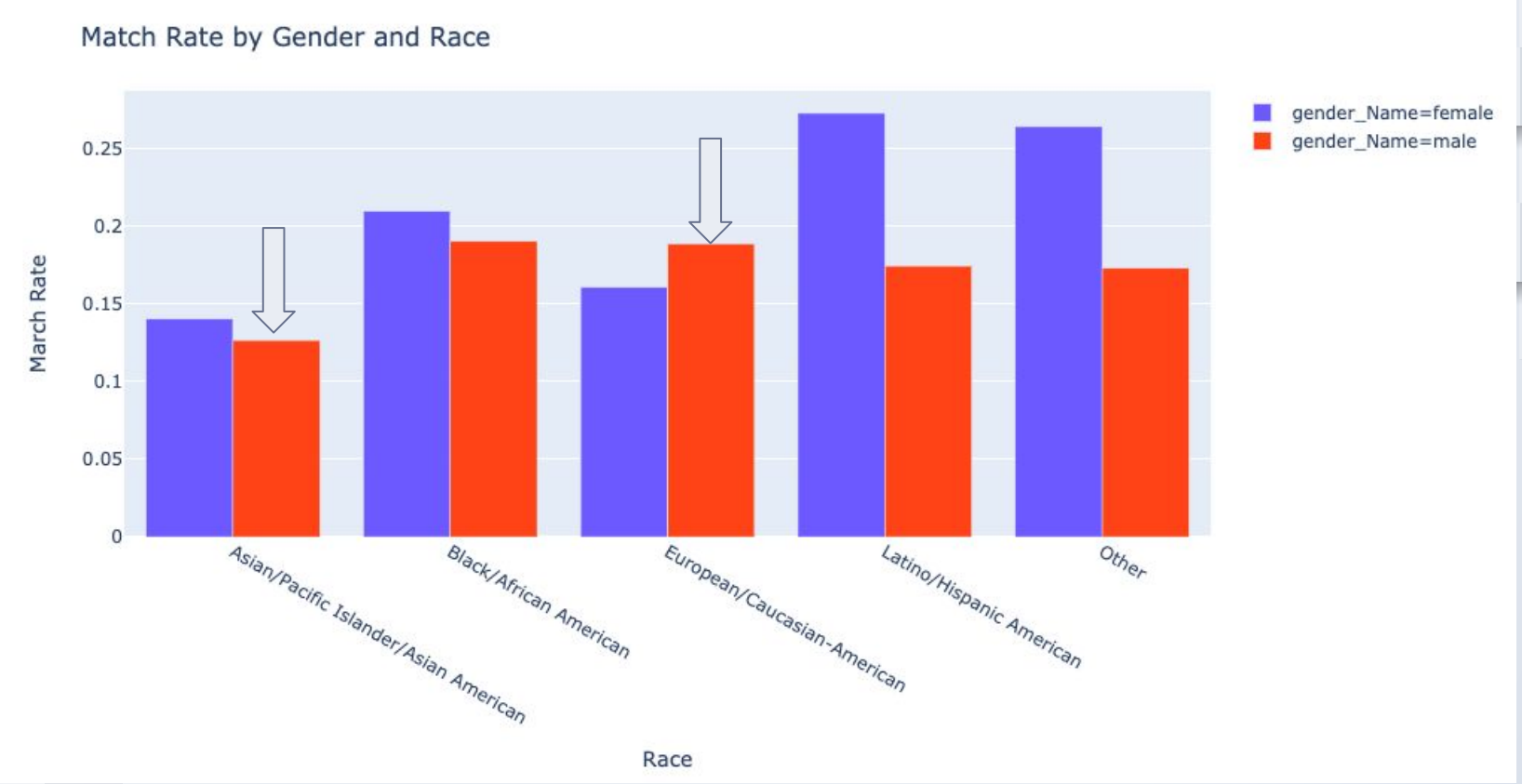
- Personal ID
- Race
  - Same race rate
- Gender
- Match rate



The numbers of Black/African American participants are not large enough to compare in this sample.

Research Question*:

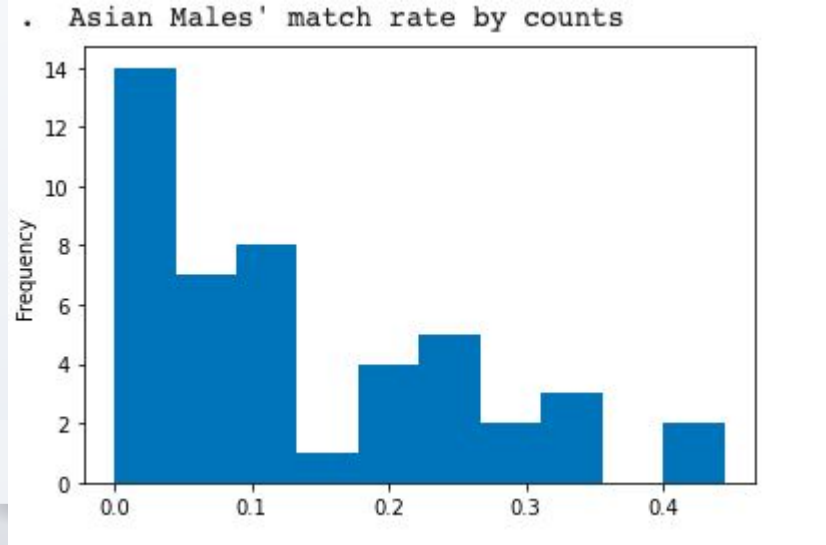
In a speed dating setting with 4 minutes of interaction, Does match rate of Asian man different from that of white men? If yes, how does the difference look like?



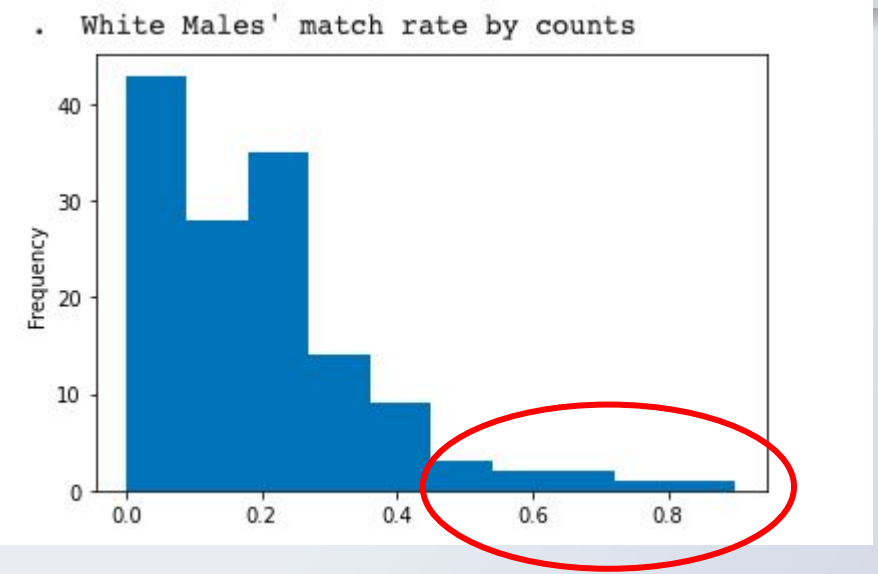
Asian men has the lowest match rate among each gender & race combination

Match Rate Comparison Histogram

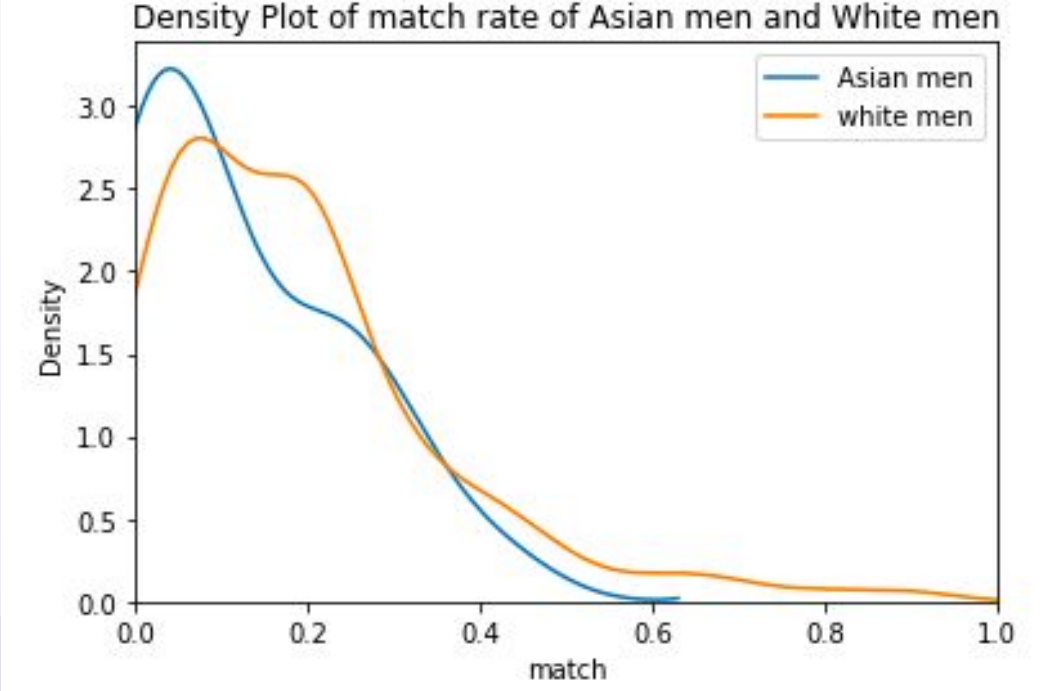
Asian Men



White Men



Match Rate Comparison 2
Density Plot



Levene's test--test of the difference

	N	Mean	SD	SE	95% Conf.	Interval
Asian male	46.000	0.127	0.125	0.018	0.090	0.164
white male	138.000	0.189	0.168	0.014	0.161	0.217

```
[ ]  1 stats.levene(Dating_clean.query('race_Name=="Asian/Pacific Islander/Asian American" and gender_Name=="male"')["match"
     2                                 Dating_clean.query('race_Name=="European/Caucasian-American" and gender_Name=="male"
```

```
LeveneResult(statistic=1.3758951948820026, pvalue=0.24233448843117253)
```

As p > 0.05 the data sets conform to the variance criterion

```
[158] 1 t, p = stats.ttest_ind(Dating_clean.query('race_Name=="Asian/Pacific Islander/Asian American" and gender_Name=="male"
      2                                 Dating_clean.query('race_Name=="European/Caucasian-American" and gender_Name=="male"
      3 t, p
```

```
(-2.305180149239645, 0.02228463534054921)
```

Since p < a (0.05) we say that the null hypothesis is rejected and suggest an alternative: "The match rate of Asian men is significantly different than that of white men", since the mean of match rate of Asian men is bigger than that of white men.

Match rates were higher for white men (M = .189 SD = .168) than for Asian men (M = .127, SD = .123), t(340) = 2.3, p < .05. Levene's test indicated unequal variances (F = 1.38, p = .24).

Result & Interpretation:

1. There are significant match rate difference between Asian men and white men, while Asian men has lowest match rate.
2. Asian men do not have match rate above .5, there seem to be “glass ceiling” for Asian men to find many matches.
3. This specific hypothesis is tested and can support the sociology explanation of conflicted identities.


Thank you for
your time!