Occupational ‘Taste’ Differentiation

February 15, 2023

So far, we've largely discussed measures that collapse rankings or ratings across people

	R1	R2	R3	R4	R5	R6	R7	R8	Average
teacher	5	6	2	6	5	3	7	7	**5.125**
lawyer	8	7	8	3	4	6	8	3	**5.875**
doctor	8	8	7	6	5	6	9	5	**6.75**
judge	9	8	8	5	5	8	9	5	**7.125**
banker	8	6	3	5	3	6	7	2	**5**
cook	3	3	2	6	3	1	5	6	**3.625**
miner	3	3	1	6	5	1	4	7	**3.75**
bus driver	3	1	2	5	4	1	4	6	**3.25**
accountant	6	6	3	5	3	6	6	3	**4.75**
dentist	7	7	6	4	5	4	7	4	**5.5**
athlete	8	6	5	7	5	5	8	2	**5.75**

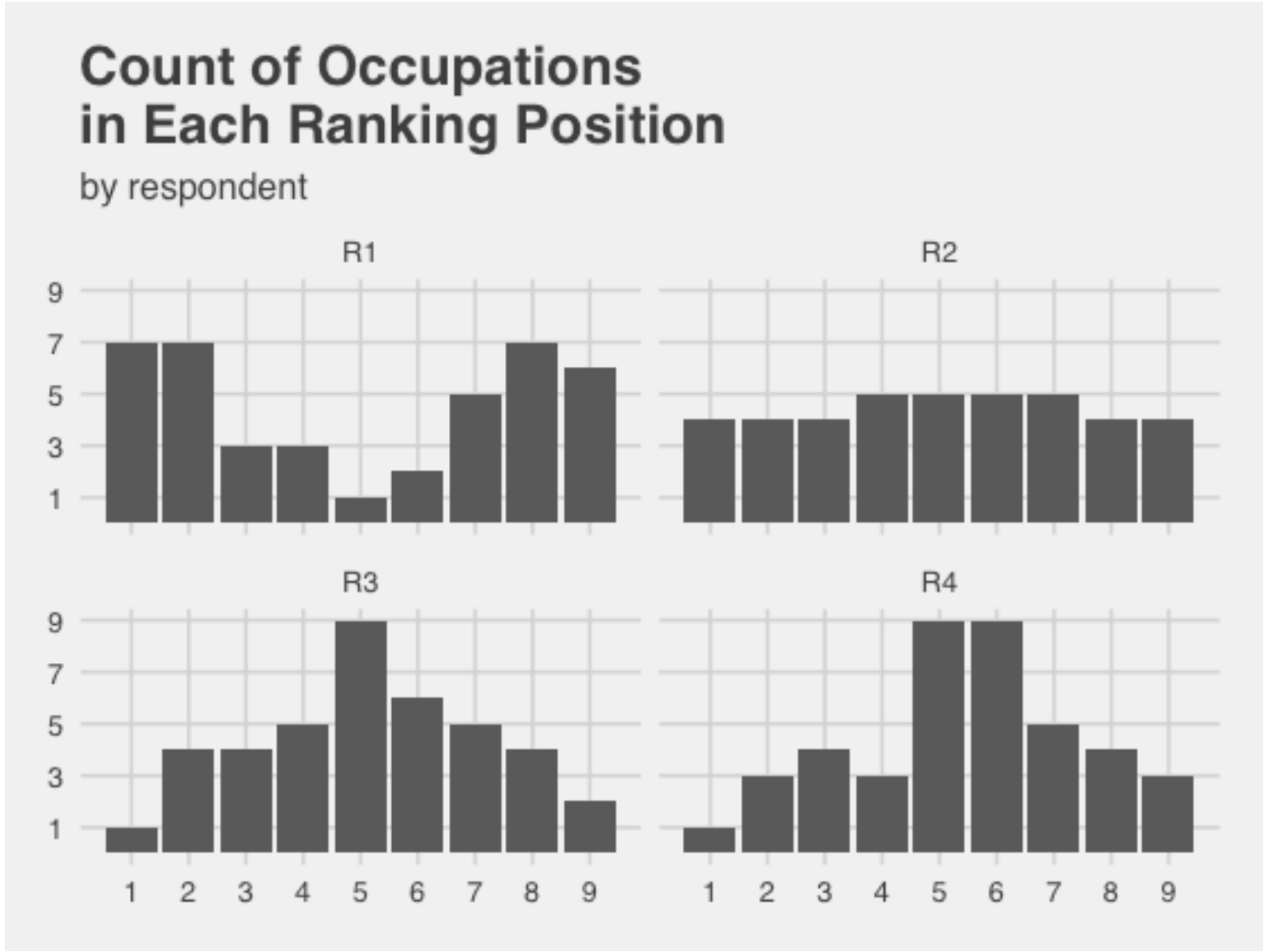
But we may be losing some information…

	R1	R2	R3	R4	R5	R6	R7	R8	Average	SD
teacher	5	6	2	6	5	3	7	7	5.125	**1.81**
lawyer	8	7	8	3	4	6	8	3	5.875	**2.23**
doctor	8	8	7	6	5	6	9	5	6.75	**1.49**
judge	9	8	8	5	5	8	9	5	7.125	**1.81**
banker	8	6	3	5	3	6	7	2	5	**2.14**
cook	3	3	2	6	3	1	5	6	3.625	**1.85**
miner	3	3	1	6	5	1	4	7	3.75	**2.19**
bus driver	3	1	2	5	4	1	4	6	3.25	**1.83**
accountant	6	6	3	5	3	6	6	3	4.75	**1.49**
dentist	7	7	6	4	5	4	7	4	5.5	**1.41**
athlete	8	6	5	7	5	5	8	2	5.75	**1.98**

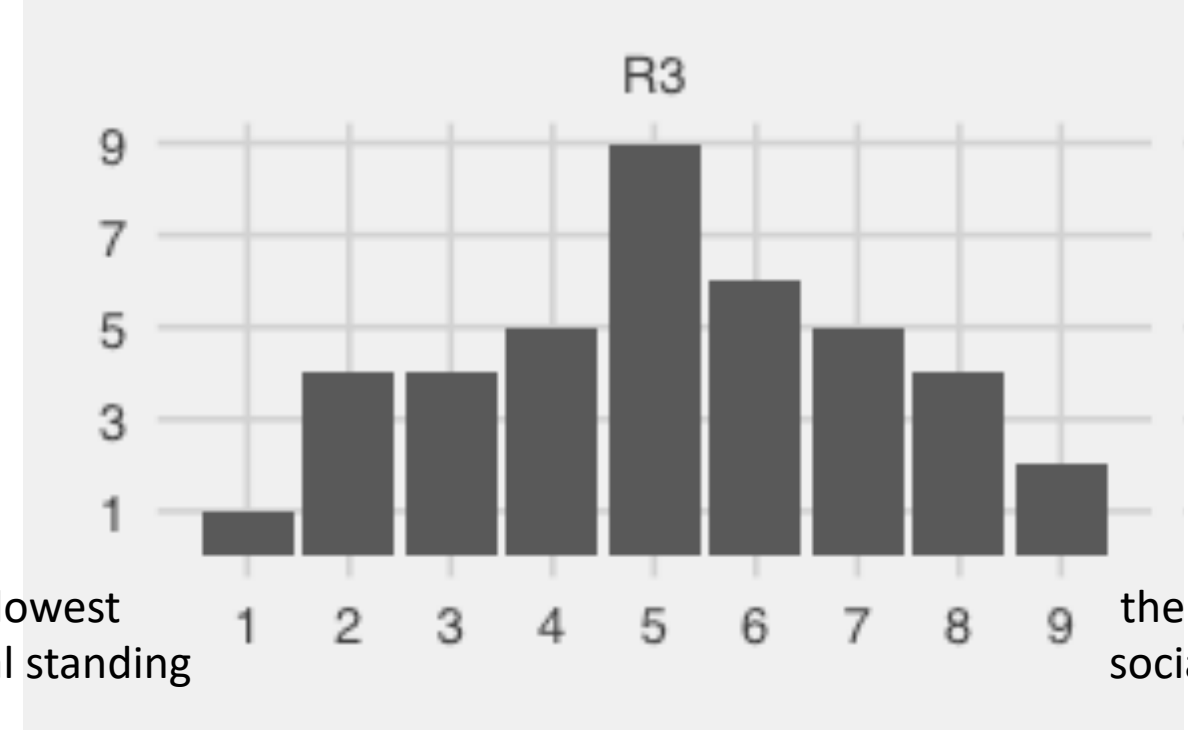
But we are losing some information…

- Not accounting for individual variation in estimates may introduce measurement error
  - Especially if the variation is related to:
    - Characteristics of the individual
    - Characteristics of the item

- Let’s explore some possibilities:


Count of Occupations
in Each Ranking Position
by respondent
R1
R2
R3
R4
9
7
5
3
1
1 2 3 4 5 6 7 8 9

Quick note on reading plots



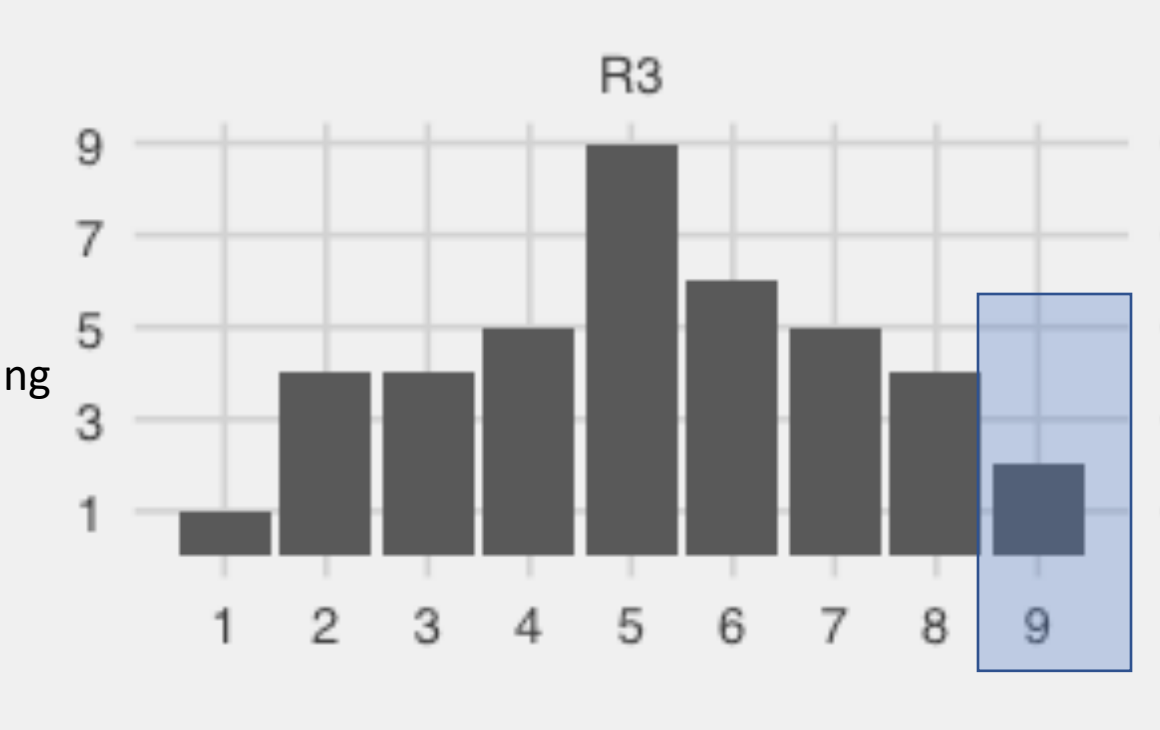
the lowest social standing

the highest social standing

X-axis corresponds to the spot in the ladder according to general social standing

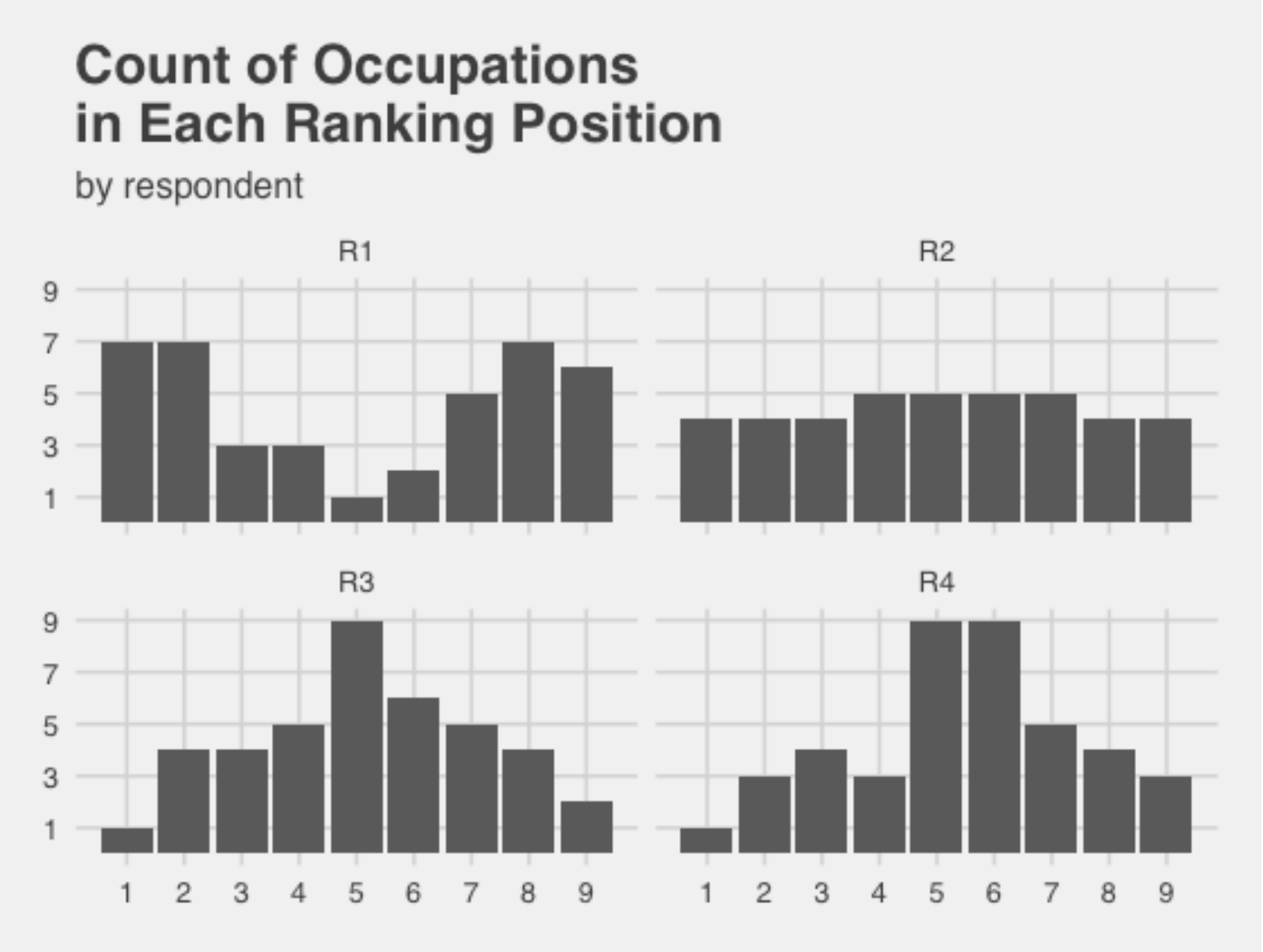
Quick note on reading plots

Y-axis corresponds to the number of occupations that a Respondent placed into that rung

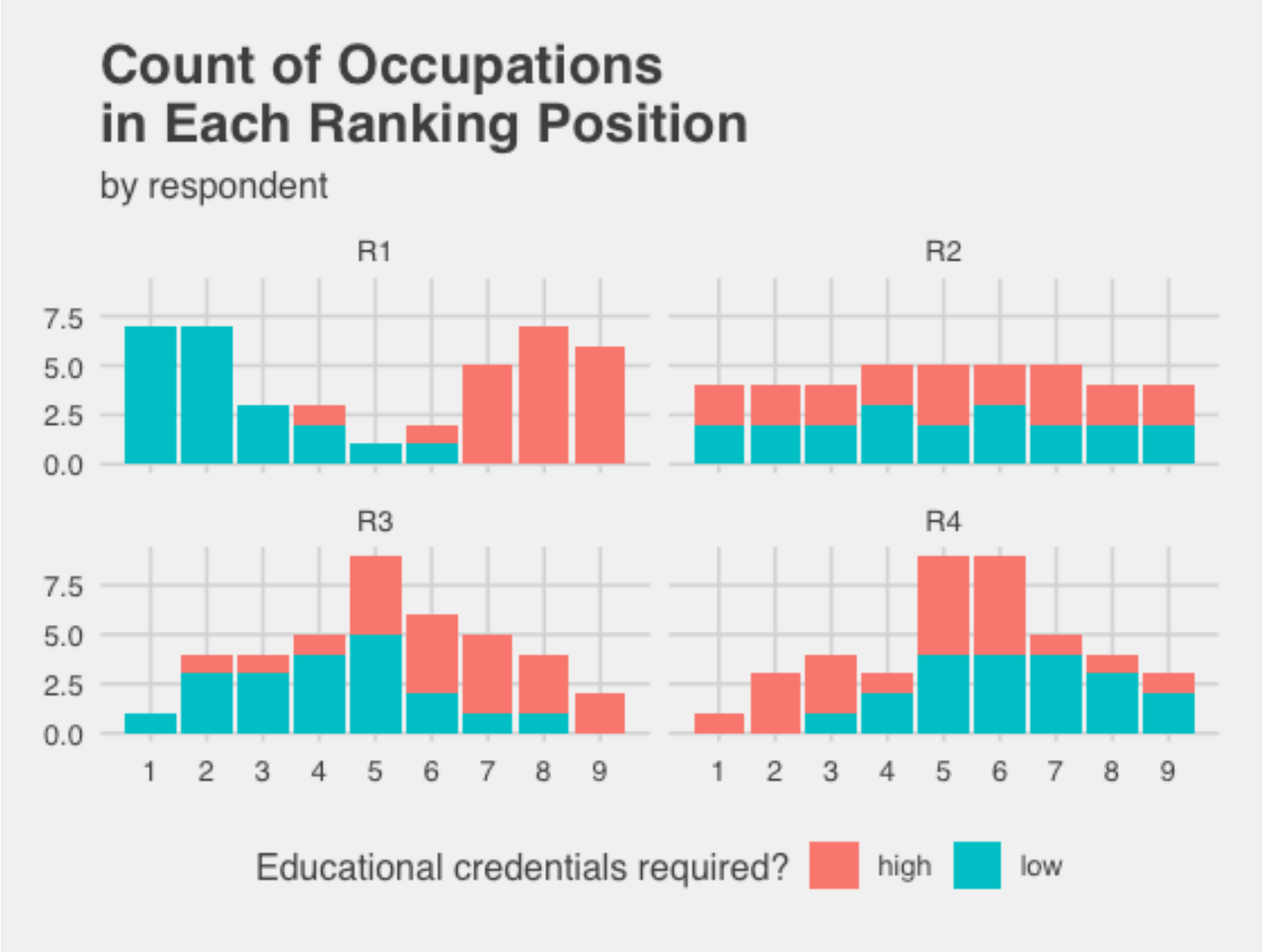


Respondent 3 placed 2 occupations in the top/ninth rung

What patterns / differences do you see?



If we split each count of occupations by the number which require high or low educational credentials…
What patterns/differences do we see?



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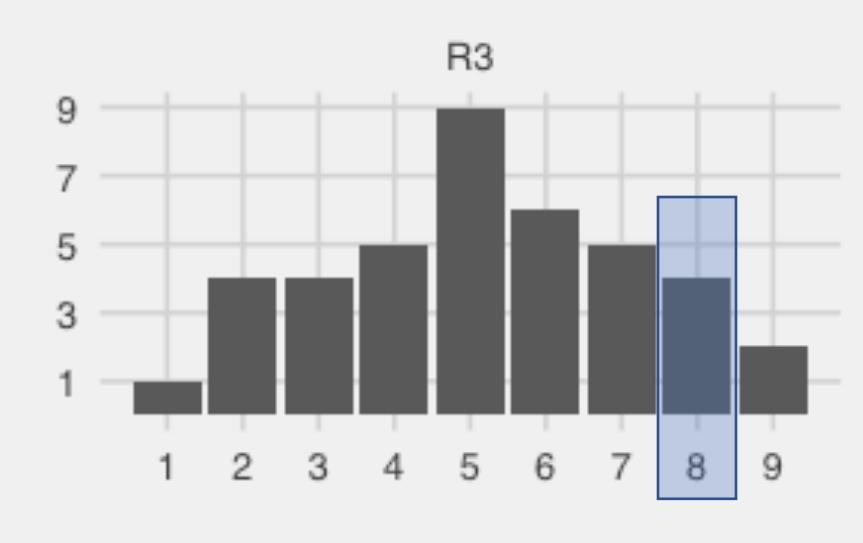
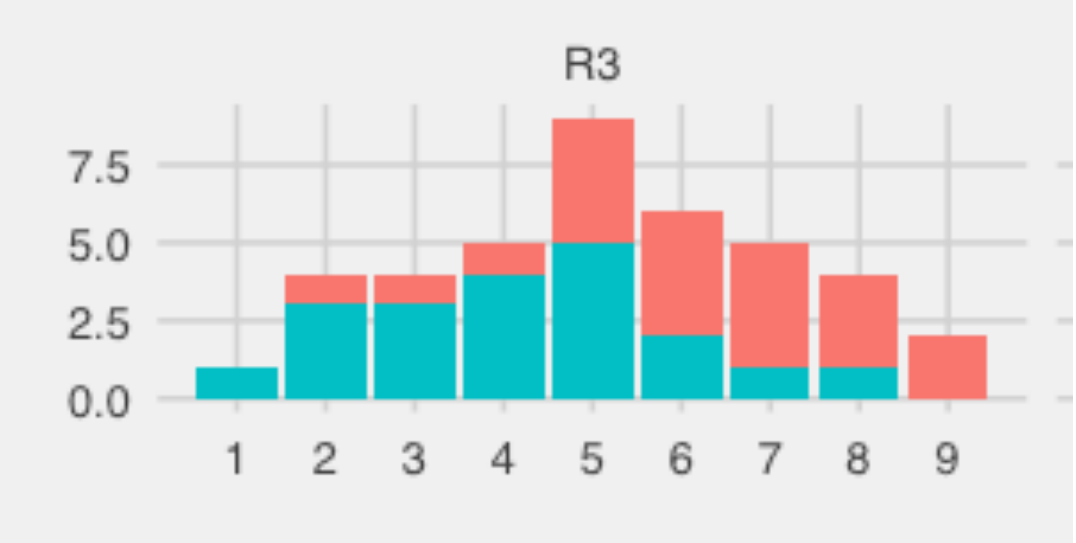
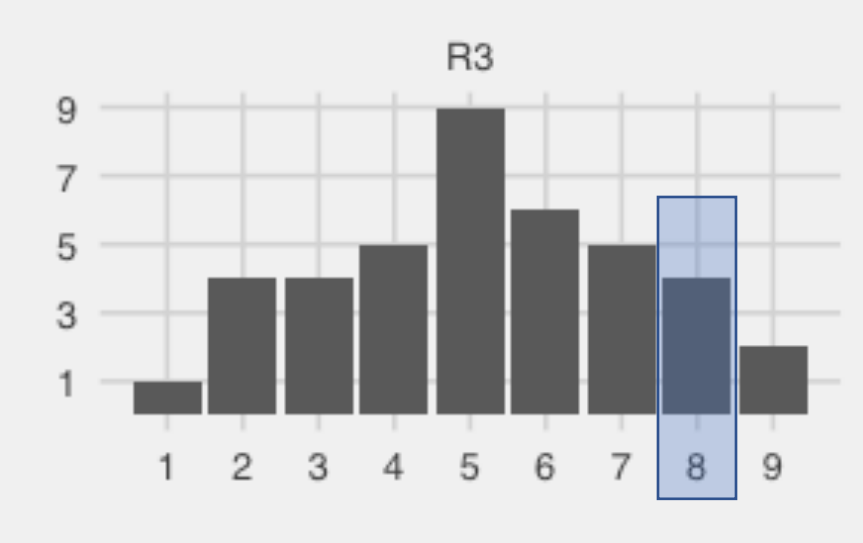




In total, respondent 3 placed
4 occupations in rung 8

Quick note on reading plots



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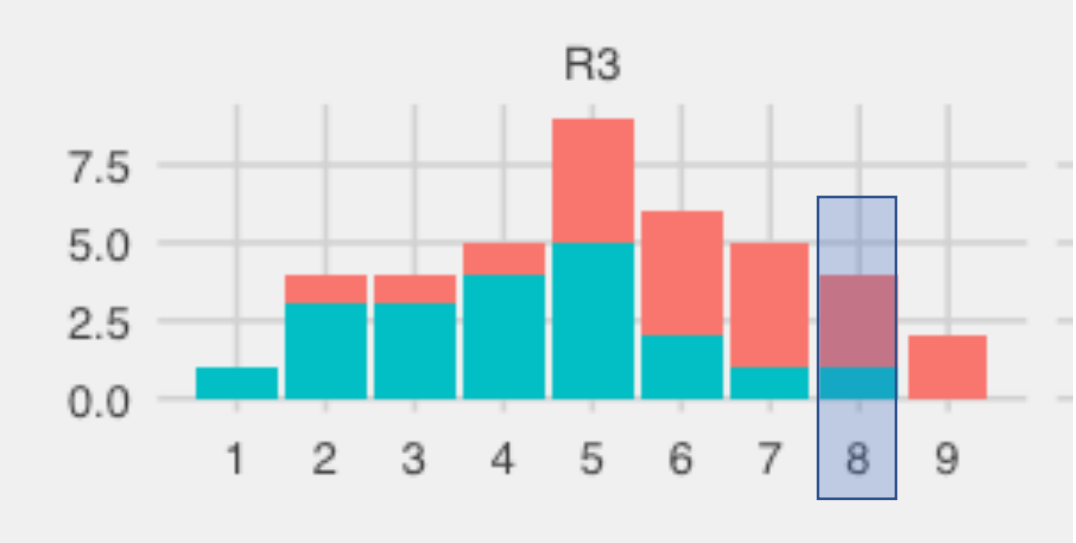
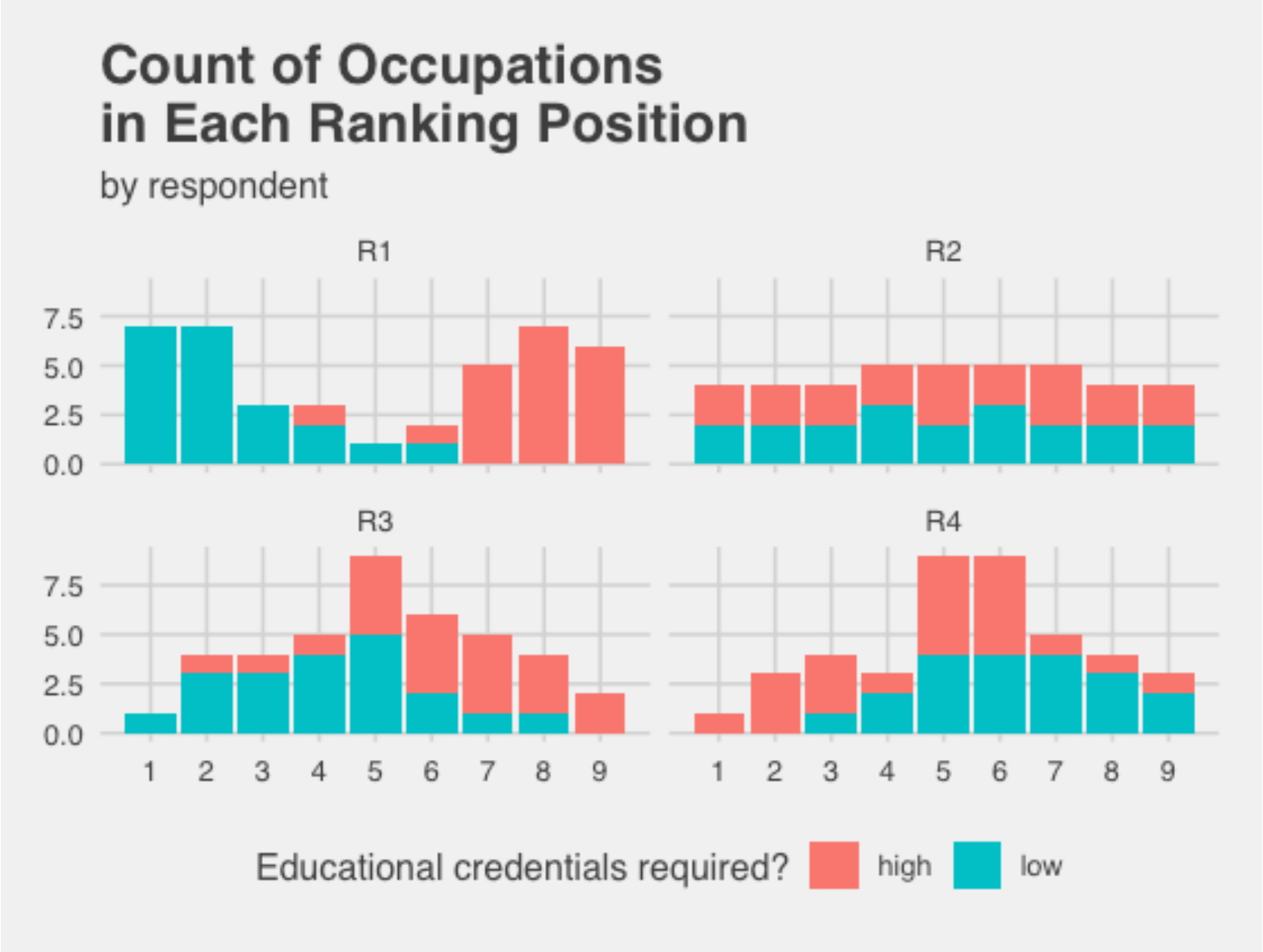


3 of those occupations require
high educational attainment,
1 does not

If we split each count of occupations by the number which require high or low educational credentials…
What patterns/differences do we see?



Why do we think preferences might be linked to social characteristics?

- bit.ly/music_genre

Why do we think preferences might be linked to social characteristics?

- https://www.youtube.com/watch?v=YaRu4g4_lCw

Class distinctions

- What are our intuitions of how class might show up in occupational rankings?

Paper hypotheses

- Higher education → consensus
- Higher education → use education to sort occupations
- Higher education → higher ratings for higher ed occupations
- Higher education → greater differences in ratings for higher ed and lower ed occupations

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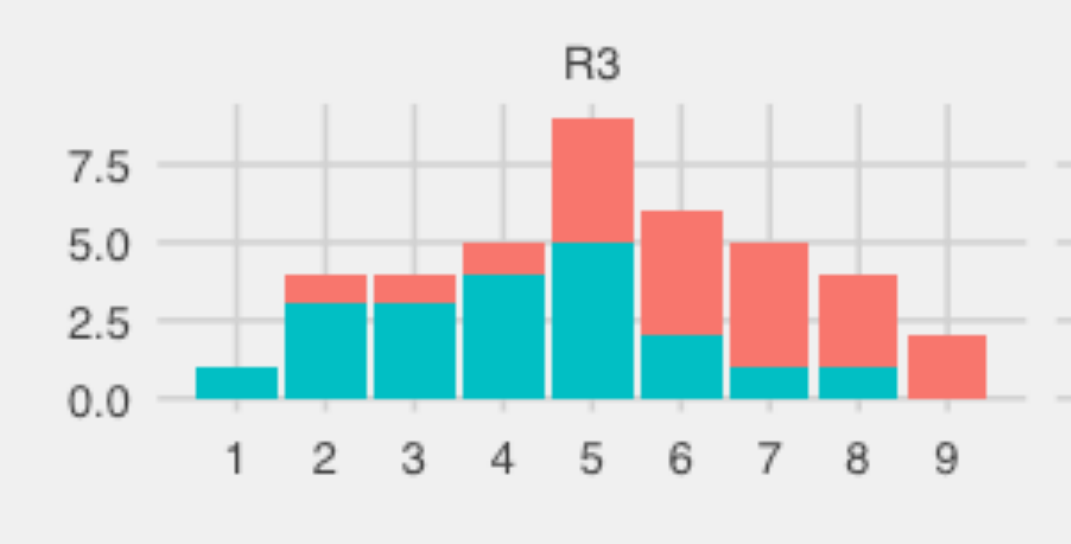
- How do these hypotheses relate to the theoretical ideas introduced in the video from Pierre Bourdieu?

How to test?

- We need a way of measuring:
  - How frequently educational requirements / class distinctions seem to be used by respondents
  - How strong the association is between educational requirement and respondent ranking
- Whether the extent to which that is used varies by:
  - Respondent status
- How similar are respondents to each other? Can they be cleanly categorized?

1. Are Educational Requirements Used?

- Let's return to our fake respondent 3



Rung	Occupation	Education
9	Surgeon	high
9	Judge	high
8	Lawyer	high
8	Firefighter	low
8	Nurse	high

1. Are Educational Requirements Used?

- How often do high and low education occupations coincide in the same rung?

- Actual / **total possible**

- 20 high education occupations & 20 low education occupations
  - Total possible high-low educational credential occupations is
  - 20 * 20 = 400

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- For each rung:
  - multiply number of high * number of low

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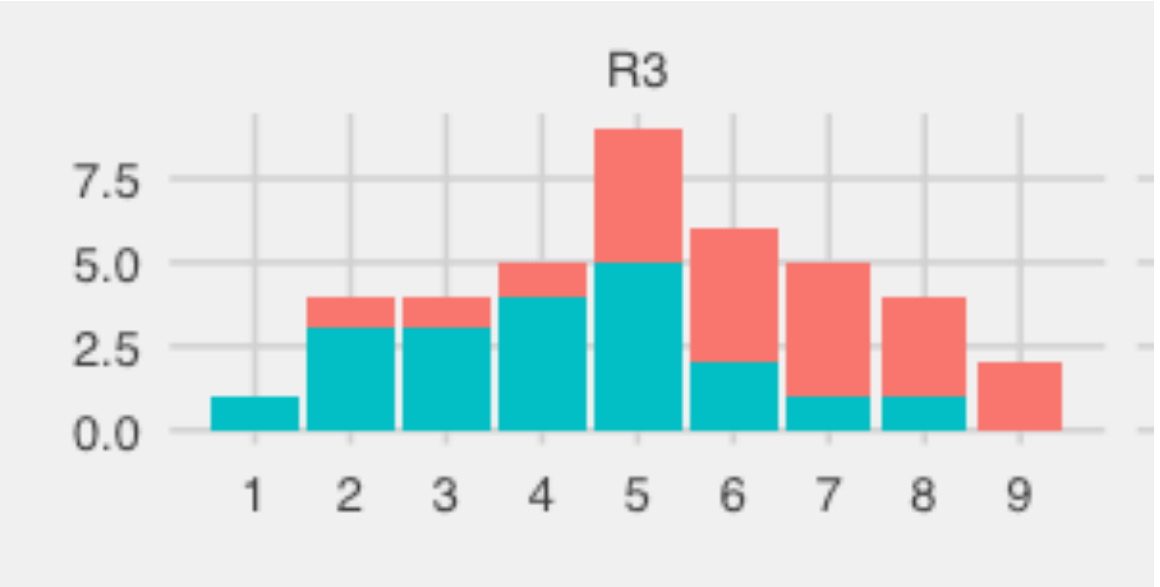


	1	2	3	4	5	6	7	8	9
H	0	1	1	1	4	4	4	3	2
L	1	3	3	4	5	2	1	1	0
*	**0**	**3**	**3**	**4**	**20**	**8**	**4**	**3**	**0**

1. Are Educational Requirements Used?

- How often do high and low education occupations coincide in the same rung?
- **Actual** / total possible
- For each rung:
  - multiply number of high * number of low

	1	2	3	4	5	6	7	8	9
H	0	1	1	1	4	4	4	3	2
L	1	3	3	4	5	2	1	1	0
*	**0**	**3**	**3**	**4**	**20**	**8**	**4**	**3**	**0**

Sum up to get the total number: **45**

1. Are Educational Requirements Used?

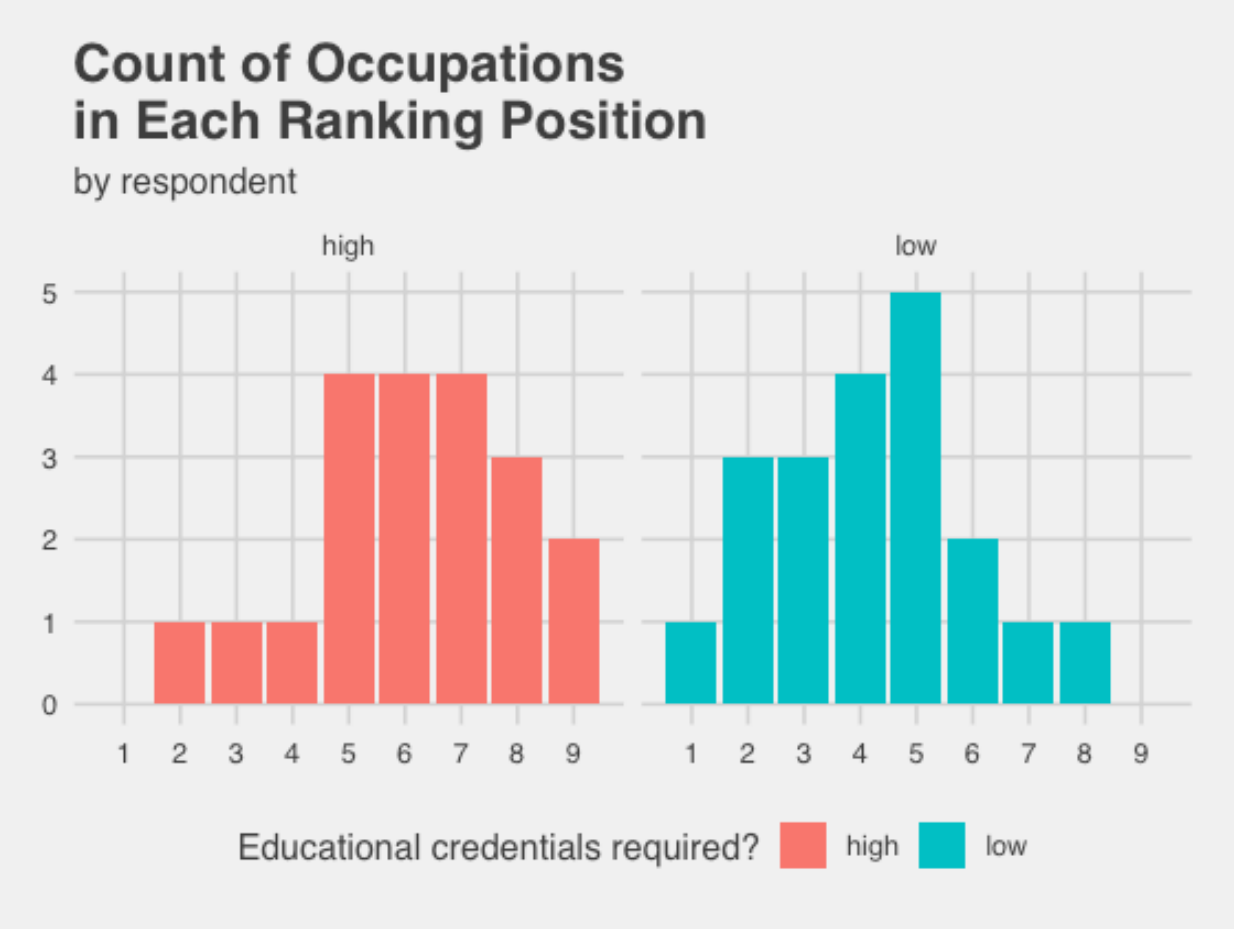
- How often do high and low education occupations coincide in the same rung?

- 45/400 = 11.25%

- Between-category integration / segregation
  - Higher percent is less segregation
  - Lower percent is higher segregation

2. How strong is the association between rung location and educational credential?

Standard deviation of each!



3. How similar are two respondents to each other?

Respondent 3		
Rung	Occupation	Education
9	Surgeon	high
9	Judge	high
8	Lawyer	high
8	Firefighter	low
8	Nurse	high

Respondent 2		
Rung	Occupation	Education
8	Surgeon	high
9	Judge	high
7	Lawyer	high
8	Firefighter	low
5	Nurse	high

3. How similar are two respondents to each other?

Occupation	R2	R3	Difference	Absolute Diff
Surgeon	8	9	-1	1
Judge	9	9	0	0
Lawyer	7	8	-1	1
Firefighter	8	8	0	0
Nurse	5	8	-3	3
				5

3. How similar are two respondents to each other?

- Accounting for how respondents use the scale..

Respondent 3			
Rung, std.	Rung	Occupation	Education
1.095	9	Surgeon	high
1.095	9	Judge	high
-0.730	8	Lawyer	high
-0.730	8	Firefighter	low
-0.730	8	Nurse	high

Respondent 2			
Rung, std.	Rung	Occupation	Education
0.396	8	Surgeon	high
1.055	9	Judge	high
-0.264	7	Lawyer	high
0.396	8	Firefighter	low
-1.583	5	Nurse	high

3. How similar are two respondents to each other?

Occupation	R2	R3	Difference	Absolute Diff
Surgeon	0.396	1.095	-0.699	0.699
Judge	1.055	1.095	-0.04	0.04
Lawyer	-0.264	-0.730	0.466	0.466
Firefighter	0.396	-0.730	1.126	1.126
Nurse	-1.583	-0.730	-0.853	0.853
				3.184

Results

More highly educated respondents exhibit stronger segregation on educational credentials

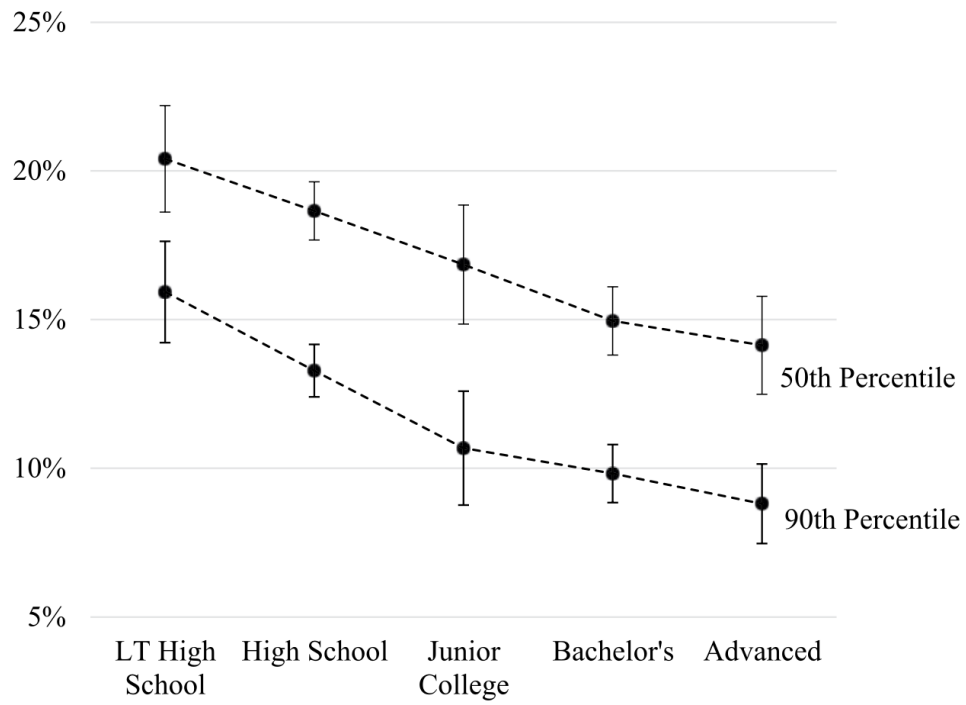


Figure 7. Predicted Between-Category Density by Highest Degree Earned
Note: Estimates are based on the fractional probit regressions shown in Part D of the online supplement. The *y*-axis corresponds to between-category density with respect to HIGH and LOW occupations; higher percentages indicate boundary weakness. The error bars refer to the 95 percent confidence interval for the mean. The top line indicates boundary weakness between HIGH and LOW occupations at the 50th percentile of the TRAIN distribution; the lower line corresponds to the 90th percentile. See Part D of the supplement for the regression results on which these estimates are based.

Results

More highly educated respondents exhibit stronger segregation on educational credentials

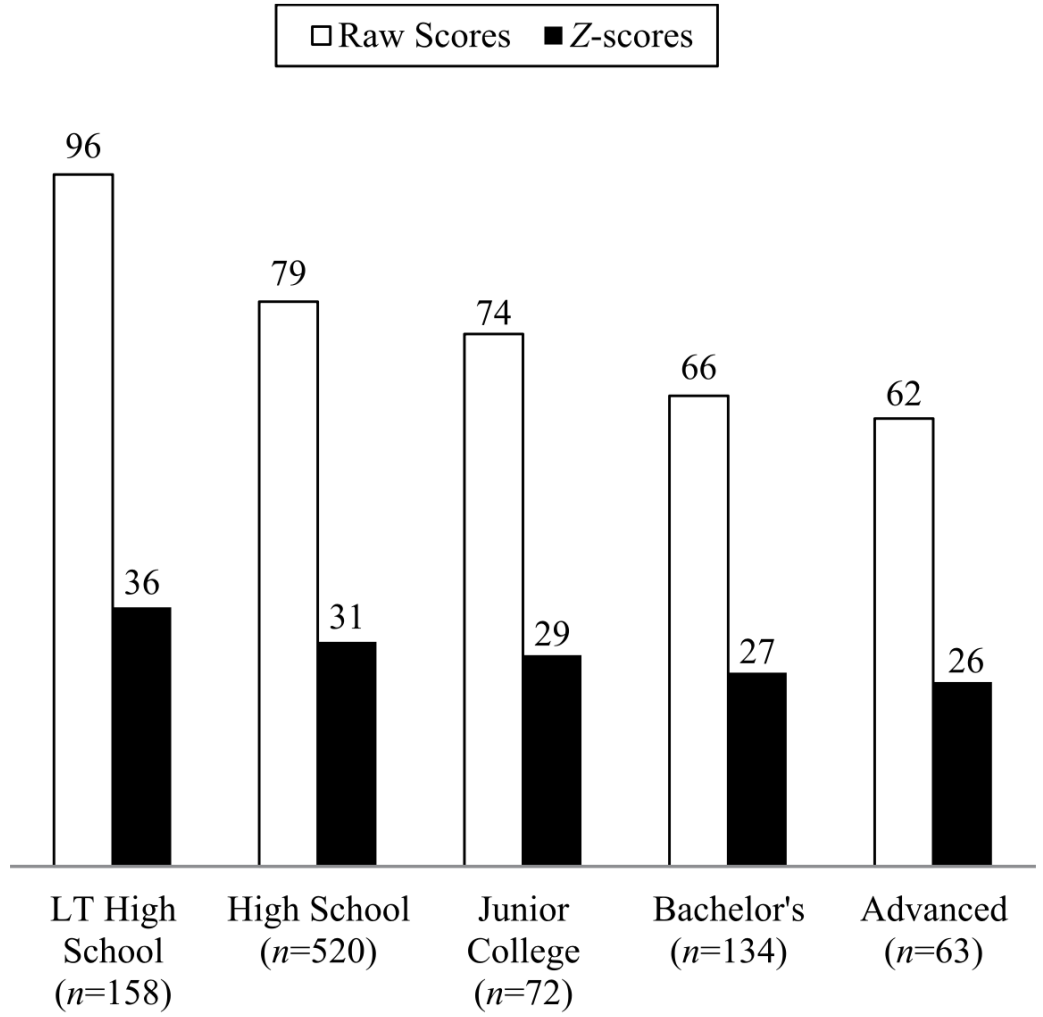


Figure 6. Mean Within-Group Manhattan Distance by Highest Degree Earned

Results

A respondent who has higher educational attainment is:

- More likely to have a higher mean rank of high ed cred occupations

- More likely to have a **larger** difference between mean rank of high ed cred occupations and mean rank of low ed cred occupations

Discussion

- Do you think these findings pose a significant threat to approaches that assume consensus?

Discussion

- What other attributes of occupations do you think would be interesting to investigate their categorization across the prestige rankings?
  - Things like the variable educational credentials required

Discussion

- What other attributes of individuals do you think would be interesting to investigate their categorization tendencies across the prestige rankings?
  - Things like the variable educational attainment

Discussion

- What are the broad implications of these findings?