

R Bootcamp: Pre-Class Survey

DEOHS Bootcamp 2016

Sept. 16, 2016

Contents

| | | |
|----------|----------------------------------|----------|
| 1 | Initial Setup | 1 |
| 2 | Data Import and Cleanup | 1 |
| 2.1 | Data Import | 1 |
| 2.2 | Data Clean-up | 2 |
| 3 | Additional Processing | 2 |
| 3.1 | Yes/No Questions | 2 |
| 4 | Results | 2 |
| 4.1 | Primary DEOHS Role | 2 |
| 4.2 | R Usage | 3 |
| 4.3 | Programming Experience | 3 |
| 4.4 | Participant Goals | 4 |
| 4.5 | Discussion Group | 5 |

1 Initial Setup

- Install and load R packages as needed.
- Disable the code display. The embedded R code will not be echoed in the report.
- Create the `data` folder. It will be created if it does not already exist.
- User-defined functions will be used to help parse the text of survey results.

2 Data Import and Cleanup

Data source: [DEOHS Bootcamp - R](#), UW Catalyst (CSV file)

2.1 Data Import

The steps to read in the data files(s) are as follows:

- Check for existence of data file(s). Abort if they are not found.
- Read the data file(s), count respondents, and set column names.

- Read the questions from a text file.

The survey had a total of 17 respondents.

2.2 Data Clean-up

The steps to prepare the data for analysis are as follows:

- Replace missing values ('999', 'N/A', 'n/a', 'not applicable', and ") with NA.
- Calculate the answer rate (AR) for all questions.
- Remove the 'blank' (empty) column included in the original data file.

3 Additional Processing

3.1 Yes/No Questions

The results for the Yes/No questions are further processed as follows:

- Count the frequency of answers for each of the Yes/No questions.
- Link the question text to the responses by question ID.
- Clean up row and column names.
- Calculate percentages of response counts per number of responses.
- Format question column for better display.

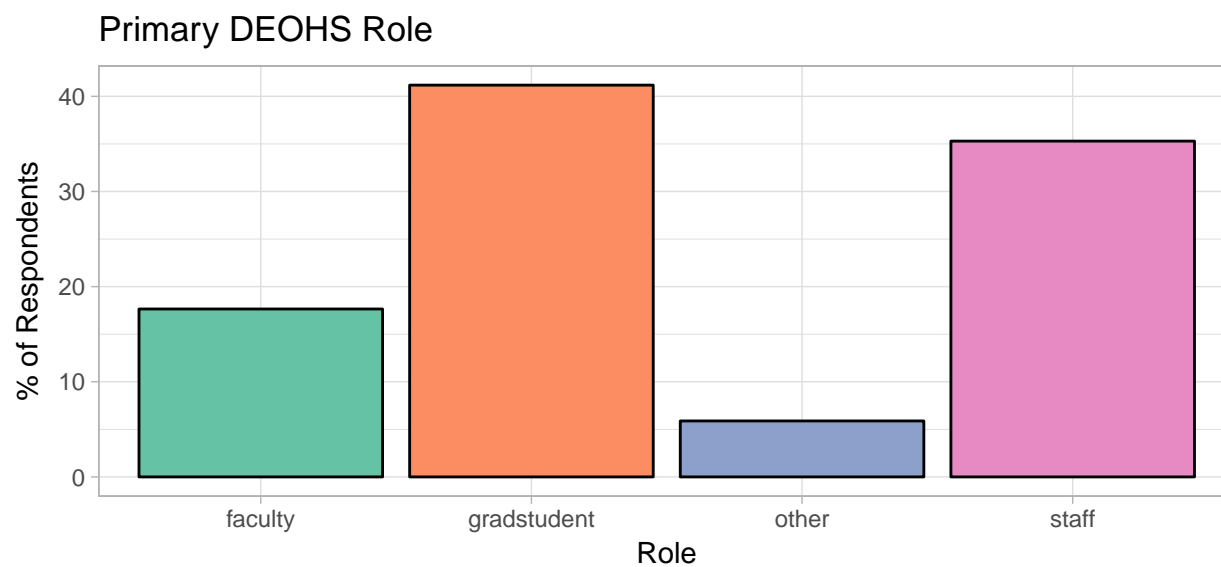
4 Results

4.1 Primary DEOHS Role

Question: *What is your primary role in DEOHS?*

Table 1: Primary DEOHS role frequency counts.

| Role | Count | % of Counts | % of Respondents |
|-------------|-------|-------------|------------------|
| gradstudent | 7 | 41 | 41 |
| staff | 6 | 35 | 35 |
| faculty | 3 | 18 | 18 |
| other | 1 | 6 | 6 |

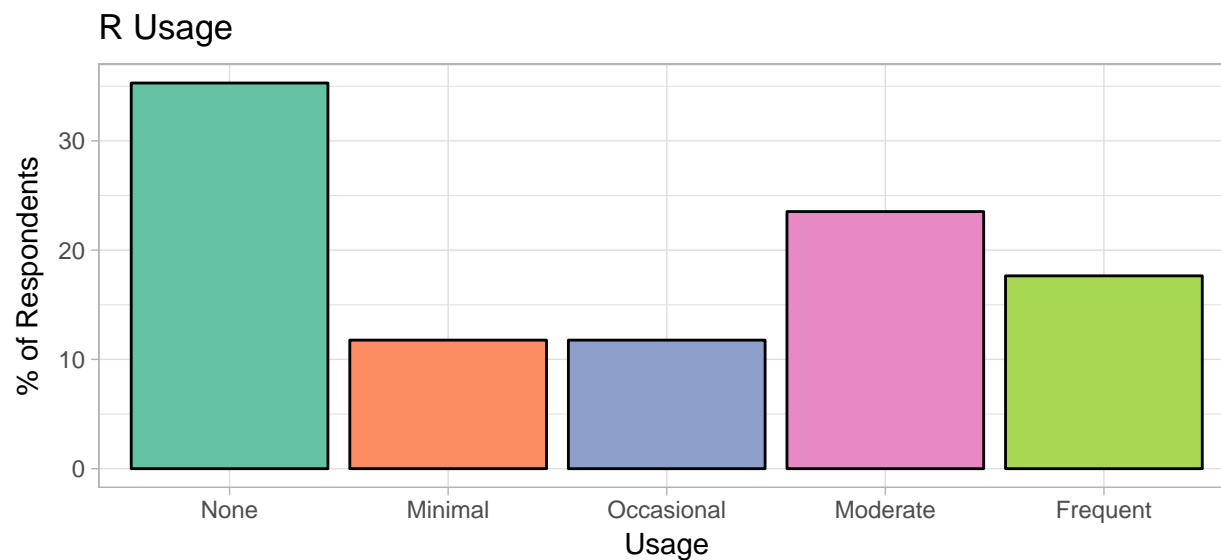


4.2 R Usage

Question: *How would you describe your R usage over the past year?*

Table 2: R usage frequency counts.

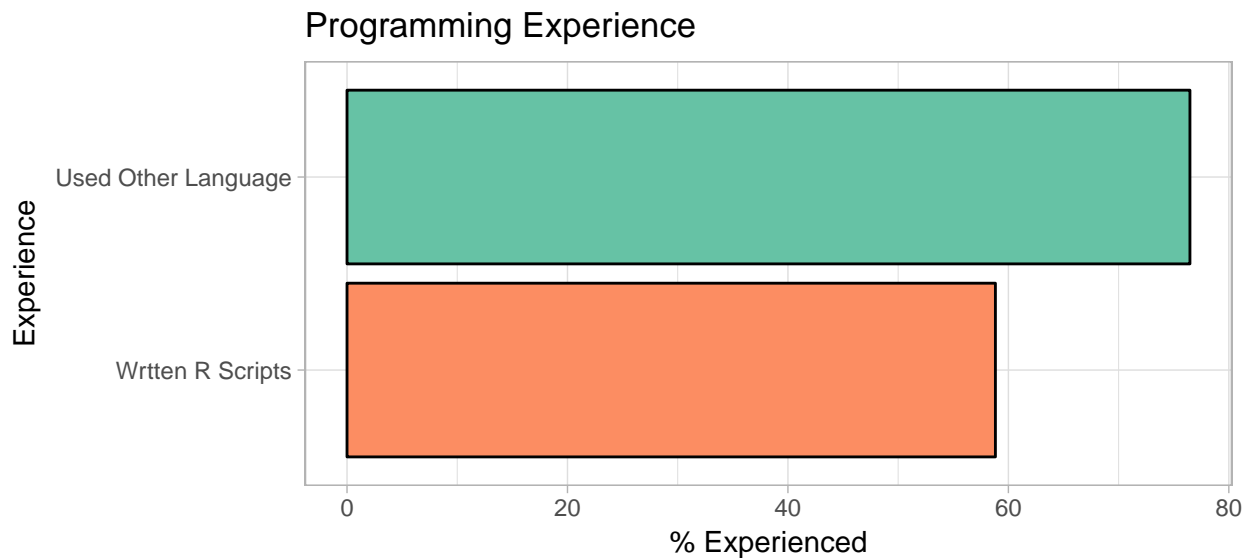
| Usage | Count | % of Counts | % of Respondents |
|------------|-------|-------------|------------------|
| None | 6 | 35 | 35 |
| Minimal | 2 | 12 | 12 |
| Occasional | 2 | 12 | 12 |
| Moderate | 4 | 24 | 24 |
| Frequent | 3 | 18 | 18 |



4.3 Programming Experience

Table 3: R scripting and other programming languages

| Question | Yes | No | Sum | % AR | % Yes | % No |
|--|-----|----|-----|------|-------|------|
| <i>Have you ever written an R script?</i> | 10 | 7 | 17 | 100 | 59 | 41 |
| <i>Have you ever used another programming language other than R?</i> | 13 | 4 | 17 | 100 | 76 | 24 |



4.4 Participant Goals

Question: *What do you hope to get out of this class?*

These are all of the responses for this question:

Response

Help out with class and add some new tools to my R toolbox
 Already finished! But glad to get github integration.
 Basic R tricks and knowledge
 Understand more about the R, and learn how to use it
 Learn something, and scope out for future students.
 Gain additional knowledge or creating packages and using Github.
 Become more comfortable with R
 learn how to use the software and why it would be useful
 better organized in using R, more efficient
 Basic R skills
 Hopefully gain some useful knowledge so I can better help others.
 using R
 Learn some tips and tricks as well as packages to use R more efficiently
 Introduction to programming in R and data management

Response

a story

More experience with a great open-source tool. Ideally, a listserv and regular meetings would be good too. Very grateful for

Better understanding and deeper appreciation for all the awesome work Brian has done

4.5 Discussion Group

Table 5: Interested in joining a discussion group.

| Question | Yes | No | Sum | % AR | % Yes | % No |
|---|-----|----|-----|------|-------|------|
| <i>Would you like to be added to our discussion group</i> <i>deohs-informatics@u.washington.edu</i> <i>where we discuss R and other data science topics (like R) within our department?</i> | 15 | 2 | 17 | 100 | 88 | 12 |
