

What can students gain by switching to R?

Transitory Student Perspective | Rebecca Lai

About Me

- Adult returner to education:
 - Left school at 16
 - Non-conventional path to my degree
 - Scared of maths!
- Undergraduate at Glasgow
- Current Postgraduate:
 - MSc Research Methods of Psychological Science
 - ESRC funding nominee, Psychology Pathway



SPSS Period

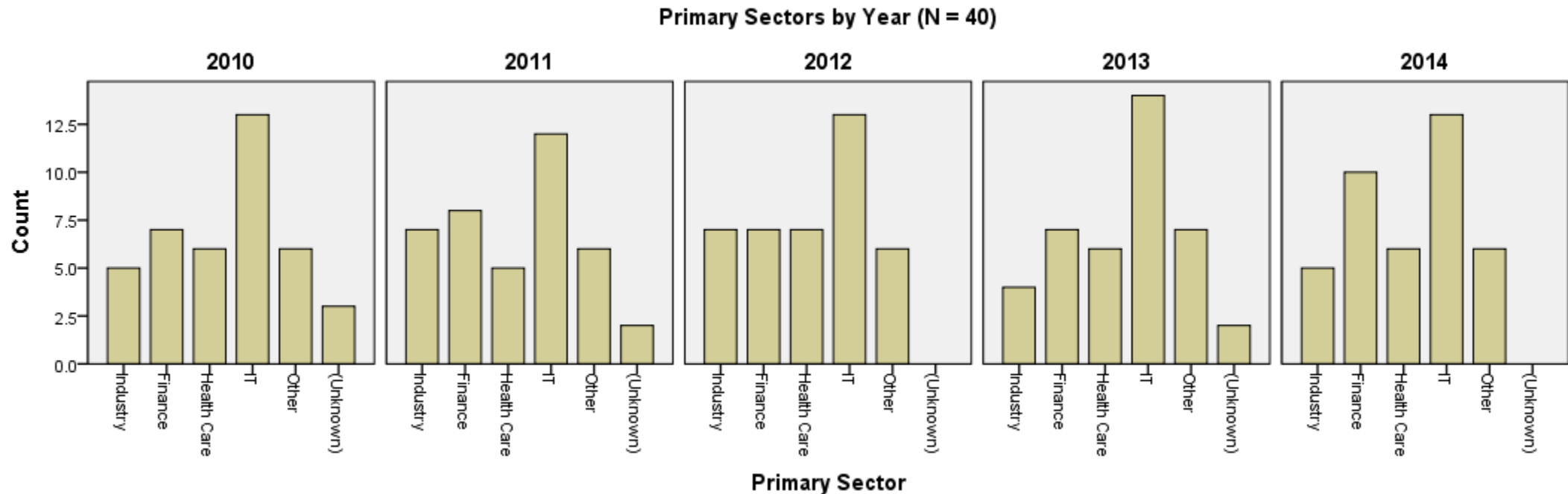
- Awareness of the tests underlying the tasks we were asked to perform.
- Point-and-click method-disconnected from the tests.
- Learning SPSS with cookbook style statistics.



SPSS Period

Results:

Mediocre performance, little understanding and beige graphs.



Transition to R

- Department transition started around 2015/2016.
- Our junior honours given the choice between SPSS and R.
- Reproducibility: can see all the steps!
- Teaching the GLM, not individual “recipes”.
- **And...**



Statistical Analysis
with
The General Linear Model¹

Jeff Miller and Patricia Haden²

Copyright (©) 1988–1990, 1998–2001, 2006, 2013.
Version: February 14, 2013

Transition to R

- Increased demand from students for statistics!



Dale Barr @dalejbarr · 16 Feb 2016



Replying to @Eavanmac

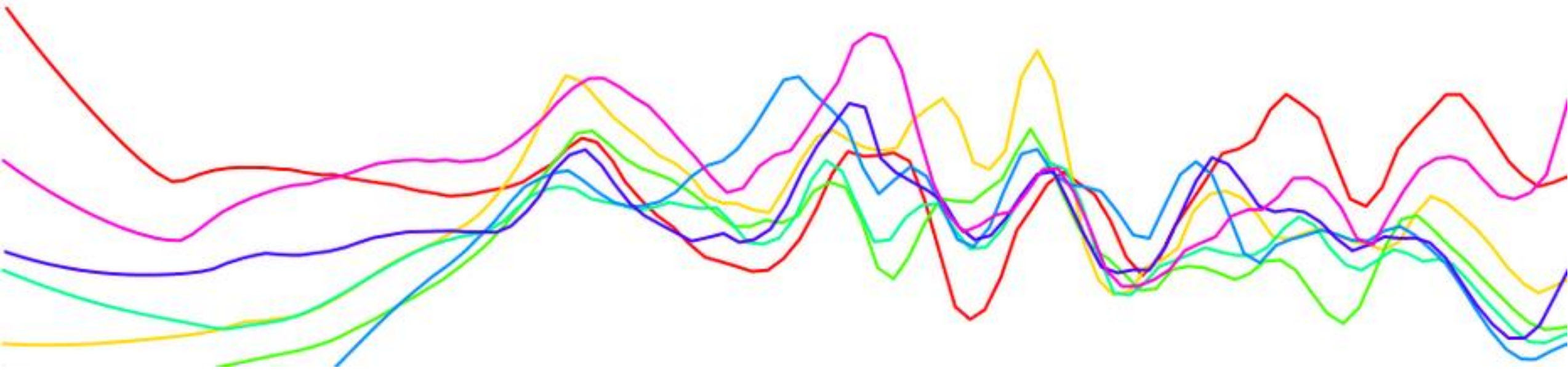
@Eavanmac @lam_bis when I heard there was a FB campaign about stats, this was the first image that came to mind



Transition to R

Results:

An understanding of the framework that underlies the statistical tools we use. Got a bit better. No more *beige*.



Transition to R

- Extra work for staff (in the short term).
- Alleviated by encouragement of peer-support:
 - Collaborative learning.
 - Learning by teaching.
- Peer Assisted Learning (PAL).
- Slack.



ZIYI CAI Oct 31st, 2017 at 1:48 PM
in #the_research_cycle

Anyone who can help me with the Q10? when I try to use `distinct(user_id)` function to remove the duplicate `user_id`, why the other values also be removed as well and only `user_id` column be left?

2 replies



rebeccalai 4 months ago
`distinct()` has an argument you need to insert to keep all the cols. It's in the help documentation for that function.



ZIYI CAI 4 months ago
Got it, thanks!



1



rebecca murphy Feb 8th at 1:47 PM
in #r_help

in the level 2 lab homework for next week I'm having some trouble loading in the 'ez library'. it says 'Error in library("ez") : there is no package called 'ez'' does anyone have the same issue or know how i can fix this

5 replies



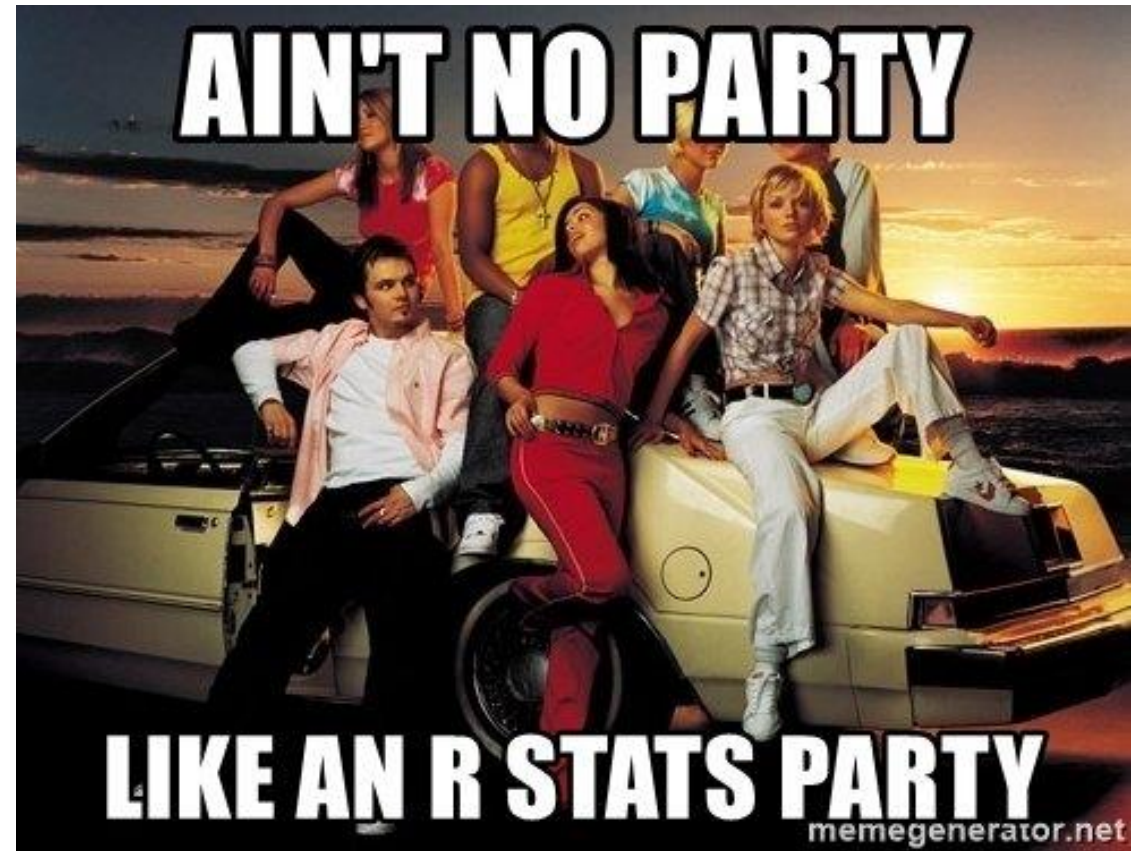
Tommaso 25 days ago
1. Type: `install.packages("ez")` in the console.
2. press the Enter button.



1

Altered Perceptions

- A whole system of interconnected principles that could be understood.
 - Reflected in the R, not completely compartmentalised.
- Re-engagement with the material with a positive attitude and less fear.
 - Fun challenge, not inescapable horror!
- Great preparation for postgrad:
 - Getting used to coding!
 - Teaching and communication.



Conclusions

- Better statistics skills:
 - GLM teaching supported by R and Open Science.
 - Increased engagement with materials.
 - More efficient use of staff time through Slack.
 - Learning through teaching and discussion *with* peers.
- Better communication skills:
 - Written and verbal communication skills developed through peer support.
 - Scientific communication through better understanding of stats, Open Science and data visualisation.

