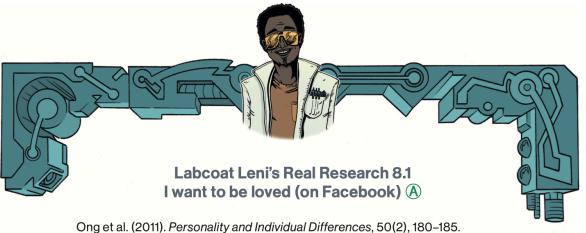
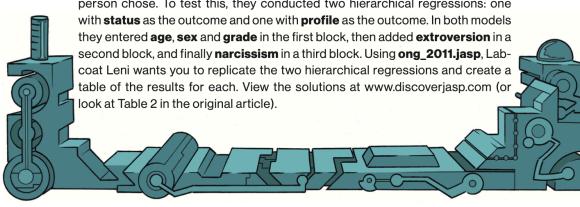
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The companion website contains all data sets and .jasp files containing the results and explanation.

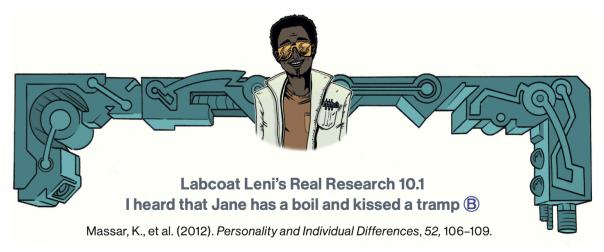
Chapter 8 – Regression



Social media websites such as Facebook offer an unusual opportunity to carefully manage your self-presentation to others (i.e., you can appear rad when in fact you write statistics books and wear 1980s heavy metal band T-shirts). Ong et al. (2011) examined the relationship between narcissism and behaviour on Facebook in 275 adolescents. They measured the age, sex and grade (at school), as well as extroversion and narcissism. They also measured how often (per week) these people updated their Facebook status (status), and also how they rated their own profile picture on each of four dimensions: coolness, glamour, fashionableness, and attractiveness. These ratings were summed as an indicator of how positively they perceived the profile picture they had selected for their page (profile). Ong et al. hypothesized that narcissism would predict the frequency of status updates, and how positive a profile picture the person chose. To test this, they conducted two hierarchical regressions: one

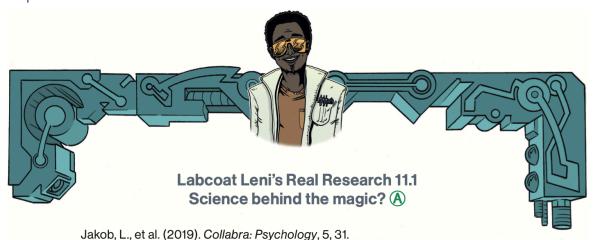


Chapter 10 – Moderation and Mediation



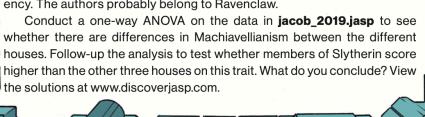
Everyone likes a good gossip from time to time, but apparently it has an evolutionary function. One school of thought is that gossip is used as a way to derogate sexual competitors - especially by questioning their appearance and sexual behaviour. For example, if you've got your eyes on a guy, but he has his eyes on Jane, then a good strategy is to spread gossip that Jane has something unappealing about her or kissed someone unpopular. Apparently men rate gossiped-about women as less attractive, and they are more influenced by the gossip if it came from a woman with a high mate value (i.e., attractive and sexually desirable). Karlijn Massar and her colleagues hypothesized that if this theory is true then (1) younger women will gossip more because there is more mate competation at younger ages; and (2) this relationship will be mediated by the mate value of the person (because for those with high mate value gossiping for the purpose of sexual competition will be more effective). Eighty-three women aged from 20 to 50 (age) completed questionnaire measures of their tendency to gossip (gossip) and their sexual desirability (mate_value). Test Massar et al.'s mediation model using Baron and Kenny's method (as they did) but also using the Process module to estimate the indirect effect (massar_2012.jasp). View the solutions at www.discoverjasp.com (or look at Figure 1 in the original article, which shows the parameters for the various regressions).

Chapter 11 – ANOVA

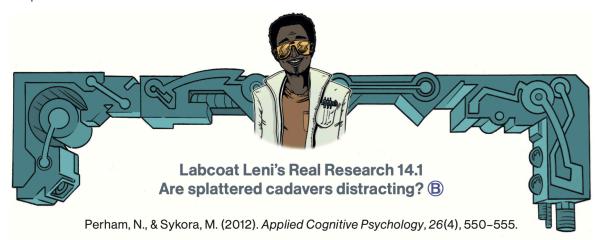


There are a lot of dubious personality tests floating about online, so why not take one from the Harry Potter universe? If you have any affinity with Harry's magical world, you probably have some preconceptions about the four houses at Hogwarts. Ravenclaws live in the library, Gryffindors are suckers for justice, Slytherins conspire to rule the world, and Hufflepuffs will bake you cookies as you rob their house.

Does the Hogwarts' sorting hat have validity as a personality test? Jakob et al. (2019) replicated and improved upon an earlier study that suggested that the Sorting Hat quiz results were related to empirically established personality traits such as conformity, hedonism, and Machiavellianism. In Jakob et al.'s study a considerably larger and more diverse sample of participants took the Sorting Hat quiz to find out their Hogwarts' house. Don't be fooled by the goofy topic – this study is a good example of scientific rigour and research transparency. The authors probably belong to Ravenclaw.



Chapter 14 - RM ANOVA



In Chapter 9, I used the example of whether listening to my favourite music would interfere with people's ability to write an essay. It turns out that Nick Perham has tested this hypothesis (sort of). He was interested in the effects of liked and disliked music (compared to quiet) on people's ability to remember things. Twenty-five participants remembered lists of eight letters. Perham and Sykora (2012) manipulated the background noise while each list was presented: silence (the control), liked music or disliked music. They used music that they believed most participants would like (a popular song called 'From Paris to Berlin' by Infernal) and dislike (songs such as Repulsion's 'Acid Bath', 'Eaten Alive' and 'Splattered Cadavers' – in other words, the sort of thing I listen to, although I don't actually have any stuff by Repulsion). Participants recalled each list of eight letters, and the authors calculated the probability of correctly recalling a letter in each position in the list. There are two variables: position in the list (which letter in the sequence is being recalled, from 1 to 8) and sound playing when the list is presented (quiet, liked, disliked). Fit a model to see whether recall is affected by the type of sound played while learning the sequences (perham_2012.jasp). View the solutions at www.discoverjasp.com (or look at page 552 in the original article).