

# Methods & Analysis in Behavioural Science (PS923)

## PS923 Assignment 2

Feedback for 5637058

**Mark:** 78%

**Grade:** A

**Feedback on your submission**

5637058

TASK 1 76

In Task 1, it was good to set up the ANOVA and report the results, along with the *p*-values, etc. It was also good to do the follow-up tests (and report those).

The stats were professionally reported; well done. It was good to start with the 3-way interaction, to help set other effects in context. It would be good to also report effect size, eta-squared.

There was good effort with describing what the results meant in the context of the study and the overall report showed a lot of good work; well done. There was one non-sequitur in the text, relating to whether the effect of bias on ratings was stronger when references were personalised; although the intercepts differ, the key consideration is whether the gradients differ significantly.

The figures were nicely produced, along with the caption; it was good to show all 8 means (Figure 2 was of more worth than Figure 1, which was arguably not required). As a trivial point, it seemed a little strange to place the positive bias results to the left of negative (as numeric representations usually increase left to right).

It was good to identify a possible future direction.

TASK 2 80

In Task 2, it was good to set up the ANOVA and follow-up tests (along with correction for multiple tests), and report the results.

It was good to spot the NA missing values and deal with them. As a shortcut (and arguably an improvement on simply removing those participants, as it keeps the other data available), bear in mind that you can simply use na.rm *within* the ANOVA call; e.g., aov\_ez("ParticipantID", "response", data, between = "Experience", within = "Level", na.rm = TRUE).

The figures were nicely produced and it's good to have captions, etc. It's good to have plotted all 9 means. It would have been sensible to put the Mixed results between the extremes (Penalty and Shortcut results), to help readers absorb the trends easily. I think that showing the same results twice was unnecessary (my personal preference would be to run with the general layout of Figure 2, but put them all on one plot, with lines linking the three sets of group means over time).

Similar comments to Task 1 with the stats, which were very well reported. A few *p*-values had a 0 before the decimal point. The contrasts were well chosen and there was good effort at putting the results into context.

The coding for each task was clear and suitably commented.

OVERALL (T1 76, T2 80; overall mark for this assignment: 78)

Very good work. The write-ups are very good and the coding style is clear. Remember to include effect size (eta squared) when reporting ANOVA results. You have shown a clear understanding of what you're doing and will be well-set for analysis in the future. Well done.

I hope that you enjoyed the module and found it worthwhile.