### **Research methods 4 – research Results and discussion A**

RM4 Research Report Coursework contributes towards 45% of your Mark for RM4.

## Guidelines for Research Report

This (online) study was conducted among the current first- (recruited on Sona) and second-year students (recruited via forum advert) and contained several different scales. All data collection took place on Qualtrics. On Keats you can find files that will help you navigate through this study and the data.

**The Introduction and Methods section of the report will be provided to you (written by the module staff). Your task will be to write the Title, Abstract, Results and Discussion sections of the report.**

Your task is to **evaluate the factor structure, reliability, and validity** of the new ‘Social Status’ scale that we discussed in the Seminars of Week 1 and 6 and Live Lectures in Week 2 and 7. We will use the term ‘Social Status’ to refer to two properties: real-world social status and online social status. Social status refers to the extent to which we feel that others respect us, admire us, and consider us to be important. Real-world social status refers to our social status (the amount of respect, admiration, importance we receive from others) within face-to-face settings and will likely be influenced by factors such as profession, lifestyle, social class. Whereas ‘Online social status’ refers to our social status on online platforms i.e., social media (Twitter, Instagram, Facebook etc.). This will likely be influenced by factors such as the amount and type of content we post online. Although real-world social status and online social status are probably positively correlated, it is possible for people to be low on real-world social status but high on online social status (e.g., a particularly shy individual who struggles to interact in real-world social settings but posts widely about important and appealing online content) or to be high in real-world social status but low on online social status (e.g., an individual with a well-respected profession and an interesting lifestyle but rarely posts on social media sites or has no social media accounts).

Besides the Social Status scale, you will find a number of other variables in the same dataset. You will need to identify variables that are directly relevant to the tests that you are asked to conduct (see further below). The full list of measures that we included is as follows:

1. Our Social Status scale (both a ‘real-world social status’ subscale and an ‘online social status’ subscale)
2. Status and Inclusion measure from Mahadevan, Gregg, Sedikides, & de Waal-Andrews (2016)
3. UCLA Loneliness scale (version 3) from Russell (1996)
4. Short Big-5 personality inventory (including all 5 subscales) from Gosling, Rentfrow, and Swann (2003)
5. Rosenberg self-esteem scale from Rosenberg (1965)
6. Bergen Social Media Addiction scale from Andreassen, Billieux, Griffiths, Kuss, Demetrovics, Mazzoni, and Pallesen (2016)
7. Age
8. Gender (categorical only)

## Excluded data:

Following data collection, the following three exclusions were made to the dataset. Each should be outlined very briefly in your report:

1. The data for two participants was excluded as the participants did not provide full consent for their data to be included.
2. The data for 11 participants was excluded as they submitted incomplete datasets i.e., they started but did not finish the survey.

You need to complete the following analyses:

## Evaluate the Factor Structure of the Scale

1. Use a confirmatory factor analysis (CFA) to evaluate how well our two-factor model fits the data that has been collected. Use your prior knowledge of the items and subscales that we intended to create to define the two-factor measurement model. Consider if the results from the CFA match our expectations and intentions for the scale design.
2. After conducting the CFA, use an exploratory factor analysis (EFA) to evaluate the factor structure of our Social Status scale using exploratory methods. Use the approach outlined in the EFA practical. Consider what the results tell you, and whether some items need to be excluded based on the analysis. Then, if necessary, perform another EFA on the revised scale (e.g., after dropping some problematic items). Consider if the final scale appears to be measuring Global Social Status with subscales Real World Social Status and Online Social Status as intended. If not, what might the scale be measuring? Are there more appropriate labels for the subscales?

*Tips:*

* The paper by Costello and Osborne (2005) will give you tips how to report and perform your factor analyses, complementing the lecture and practical on this topic.
* You may want to consider the discussions you had in the week 6 seminar in relation to the different conclusions that we can draw depending on the results of the EFA.

## Evaluate the Reliability of the Scale

1. After establishing a satisfying factor structure, you need to assess the reliability of the corresponding scale and any subscales. You will examine the internal consistency using the ‘Cronbach’s alpha’ statistic. Discuss the results for your test of internal consistency and what it means.

*Tips:*

* Chapter 3 of Gravetter and Forzano (2016) will help you interpret the results.
* You may also want to consult your notes for RM1 and RM2.
* Note that this section of the paper is probably quite short, perhaps only 1 paragraph in length.

## Evaluate the Validity of the Scale

In addition to evaluating the factor structure and reliability of the Global Social Status scale, answer the questions below, which are related to the validity of the Global Social Status scale.

1. Investigate whether our new Global Social Status scale has concurrent validity with the Mahadevan Social Status scale.
2. Investigate whether our online social status subscale has predictive validity with social media addiction. Investigate whether the relationship between social media addiction and self-esteem is mediated by online social status.

*Tips:*

## Chapter 3 of Gravetter and Forzano (2016) will help you discuss and interpret validity, as will the materials of the week 1 seminar and week 2 lecture.

## The Sections of Your Report

Overall, you should write the Title, Abstract, Results and Discussions sections of the report as a coherent evaluation of the psychometric properties of the newly developed Social Status scale with the above three elements (factor structure, reliability, validity) as core features. The Introduction and Methods section will be written for you by Module staff – you do not need to include the introduction and methods in your report, instead, provide your abstract and title and then write ‘Introduction and Methods here’ then follow this with your results section, discussion section and your specific reference list. Specific word limits apply to different parts.

## Abstract

This should be a concise but informative summary of the report. **The word limit for the abstract is 150 words.** Note that the word limit of 150 words is quite challenging, so leave yourself plenty of time to write and edit your Abstract. The Abstract should go at the beginning of the report (i.e., after the coversheet, but before the Introduction) on its own page. You may wish to write the abstract last.

## Introduction + Methods section

These sections will be written by the module staff and given to you. You should not therefore write your own introduction or methods section for this report. You do not need to include the introduction and methods in your report, instead, write ‘Introduction and Methods here’.

## Results section

Your results section should cover the analyses set out above. Make sure you fully address the analyses relevant to the questions above - remember to include how the data was analysed, all relevant descriptive statistics and all relevant inferential statistics.

You can use the structure and style of the RM1-4 practical answers as a template for your results section, but you must use your own wording to avoid issues of plagiarism.

## Discussion section

Keep your discussion focussed on your findings, what they mean, and what more could be done in a future study to clarify any issues that could not be resolved by your analyses. Check the details of the week 6 seminar to ensure you are including discussion of all relevant content in this section of the report.

**The word count for the Results and Discussion section combined is 2000 words.**

## Reference section

Include a Reference section with the references listed and set out according to APA conventions. You should use APA 7.

## Appendices

Appendices may be used if you wish to provide full details on something that is not practical to provide these within the Main Text of the report. You do not need to include an Appendix and, where you do, make sure it is necessary to do so. Keep it as concise as possible. The contents of any Appendices do not contribute to the word count for the main text. Note, however, that you should **not** regard Appendices as alternative means of providing essential information that you could not fit into the Main Text of the report. Make sure that all essential information is provided in your methods and results within the Main Text of the report. You will lose marks if you do not include essential information in the main text. For guidance on what is “essential”, please refer to the **Assessment Criteria for a Year 2 Research Report** (on KEATS) and see what will achieve ‘top marks’ on each section of the report.

**Please include your SPSS/JASP output in the appendices**. As stated in the paragraph above, you must report all essential information related to your results in the main body of text. Including your SPSS/JASP output in the appendix, will allow the marker to provide more specific feedback if the results reported in the main body are not as expected (e.g., because of conducting the incorrect analysis).

## Style, structure, and presentation

Use the guidance in your textbook, the RM4 Practicals, and APA-style journal articles to structure and write your report but **be careful to not plagiarise the formats used**. Your objective is to make your report easy to read and straightforward to understand (e.g., if additional subheadings help the readers understanding, then it is a good idea to use additional subheadings).

Any ‘standard’ version of English may be used for determining spelling and grammar: for example, you can use the spelling “colour” (British English) or “color” (American English). However, please be consistent (e.g., stick to one spelling throughout your report)—though use whichever spelling the original author(s) used when quoting directly from a paper, or listing it in your References section.

## A note on tables and figures

All tables and figures should be formatted according to APA-style. Word is helpful for creating tables; Excel is a useful programme to get the formatting right for figures. All tables and figures need to be easy to understand and should be referred to in the main text. Tables and figures are powerful tools to present findings. Use them to convey an idea or essential results.

## Formatting

Your research report should follow the standard format for a psychology research report (Title, Abstract, Introduction, Method, Results, Discussion, References) and should follow APA conventions for in-text referencing. In addition to the main section headings (Introduction, Method, etc.) it is recommended that you use sub-headings (of your choice) in the Method section, and elsewhere if you feel that this helps the reader to follow your report.

**The maximum length for the Results and Discussion sections of the research report is 2,000 words.** The word count includes headings and sub-headings. Avoid using footnotes and note that **footnotes are included in the word count**. The contents of **figures and tables and their associated titles and captions are not included in this word count**. Tables and figures, if included, should be placed at an appropriate place within the main text of the report; and not at the end of the report as is sometimes seen in ‘draft’ work. The Coversheet, Title, **Abstract, Introduction, Methods and the References section are not included in the word count**.

The **Abstract has its own word limit of 150 words maximum.**

For this assignment, **write your own title for the report**. The title has a maximum word limit of **12 words.**

## Over-length reports

Note that for this assignment there are separate word counts for the Title, for the Abstract and for the Results/Discussion. A 2-spine point penalty is applied for every 10% of excess words over the limit, or part thereof will be applied. I.e., if the abstract is 151-165 words it will receive a 2-spine point mark reduction e.g., a 78 will become a 50. If the abstract is 166-180 words, you will receive a 4-spine point mark reduction, e.g., a 78 will become a 14. There is **no** minimum number of words for this assignment; though note that titles, abstracts or reports that are much shorter than the recommended length indicated above are unlikely to contain all essential elements.

## Assessment and Submission

## Assessment criteria

A document containing the **Assessment Criteria for a Year 2 Research Report** is available on KEATS. This is what the markers use when marking this assignment, and it provides a useful checklist for you when you are drafting and editing your report.

## General guidance on report writing

There is useful guidance on academic writing, and on writing a research report in:

* Gravetter & Forzano (2016) Chapter 16
* The practicals and seminars for RM4
* The concise APA handbook

### References

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*, 1-9. Doi:

Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality, 37*, 504-528. Doi: 10.1016/S0092-6566(03)00046-1

Gravetter, F.J., & Forzano, L-A. B. (2016). *Research methods for the behavioral sciences* (5th edition). Stamford, CT: Cengage Learning.

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an Integrative Model of Respect: Implications for Social Engagement and Well-Being. *Personality and Social Psychology Bulletin, 36*(2), 200-212. doi:10.1177/0146167209356787

Konrath, S., Meier, B. P., & Bushman, B. J. (2014). Development and validation of the single item narcissism scale (SINS). *PLOS one, 9*, e103469. Doi: 10.1371/journal.pone.0103469

Mahadevan, N., Gregg, A. P., & Sedikides, C. (2019). Is self-regard a sociometer or a hierometer? Self-esteem tracks status and inclusion, narcissism tracks status. *Journal of Personality and Social Psychology.*

Mahadevan, N., Gregg, A. P., Sedikides, C., & de Waal-Andrews, W. G. (2016). Winners, losers, insiders, and outsiders: Comparing hierometer and sociometer theories of self-regard. *Frontiers in Psychology.* Doi: 10.3389/fpsyg.2016.00334

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*, 20-40. Doi: 10.1207/s15327752jpa6601\_2

Schou Andreassen, C., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychol Addict Behav, 30*(2), 252-262. doi:10.1037/adb0000160