

Academic Skills & Research Methods

Report Writing

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Assessment	Due date
1. 1,000 word quantitative report – Correlation between age and online gaming	12pm Thursday 15 th December 2016
2. 1,500 word quantitative report - T-test on immediate versus delayed recall. Data collection element	12pm Thursday 2 nd March 2017
3. 1,500 word qualitative report – Thematic analysis	12pm Thursday 27 th April 2017
4. 4 hours research participation plus 1,000 word reflective log	12pm Thursday 30 th March 2017

Assignment 1

'Report 1': Correlation between age and online gaming

- **Produce a 1,000 word study report:** This report will allow you to demonstrate report writing skills, including basic reporting of simple inferential statistics in relation to a simple experimental design

Assignment 1

- The report you write on this topic must follow the standard APA structure for report writing with the following subheadings
- All elements of your report must indicate that you have engaged with relevant theory and literature in relation to the subject area, hypotheses and the research design.

Reminder

- You have been provided with an article on Moodle to summarise and write a 120-150 word abstract by the end of this week (Friday 21st October). This article is in the area of online gaming.

Report Writing in Psychology

- Once a study has been carried out and analysed, researchers are required to write a report on:
 - What the study was about
 - What procedures were involved in carrying it out
 - What was found
 - Why things happened as they did during the study
 - What conclusions can be made because of the research

why?
why?
why?
why?

What are empirical reports for?

What are empirical reports for?

- An empirical report in psychology must:
 - Convey sufficient information to enable the study to be replicated
 - State clearly what the study was about and what was found in the study
 - Enable the scientific merits of the research to be evaluated
- Applies to experimental, non-experimental and qualitative research studies

Empirical reports in Psychology

- There are clear rules regarding the format
- Must be a well-structured piece of scientific writing
- Same overall format of a psychology journal article
 - APA report format
 - Undergraduate reports also require copies of raw data/statistical output etc., in the appendices

Structure of an empirical report

- Title
- Abstract
- Introduction
- Method 
 - Participants
 - Design
 - Materials
 - Procedure
- Results
- Discussion
- References
- Appendix

Title

- This should convey information about the main aspects of the study
- Should briefly identify the following:
 - Variables of interest
 - Population of interest
 - Particular method
- Needs to be clear, short, and informative

Title



- 1) An investigation into the effects of sleep deprivation on male students functioning in an exam situation
- 2) The effects of sleep deprivation on functioning in exams

Title



- 1) An interpretative phenomenological analysis of how owning a pet can impact on an individual's psychological well-being
- 2) A qualitative investigation into the effects of pet ownership

Title

- Short, brief, informative
- No more than 15 words (general)
- Short enough to not put the reader

Not necessarily
ALL that was
looked at during
this study

'Do sensation seeking tendencies affect arousal in a simulated gambling situation?'

11 words

Contains
ENOUGH
information

Abstract

- This is a summary of the report – information taken from other parts of the report
- **Written LAST!**
- Approximately 120-150 words
- Should include key details from introduction, method, results and discussion
- Use single line spacing and indent

• The aim of this study was to examine the effect of sensation seeking on arousal in a risk-taking scenario. Sixty six university students (39 male, 47 female) ranging in age from 18 to 39.46) completed the Arnett Inventory.

Measures Seeking, a time perception task to measure arousal, and a simulated horse race. The main hypothesis was that sensation seeking would significantly affect arousal. A three-way between-subjects ANOVA found that the main effect of sensation seeking was significantly associated with level of arousal $F(1,58) = 4.12, p < .05$, indicating sensation seekers became more aroused, with a significant interaction between age and sensation seeking ($F(1,58) = 8.41, p = .005$) showing that this is only true in participants over 26 years. Results also indicate high sensation seekers between 18 and 25 became far more aroused when losing and may be more susceptible to gambling problems.

Discussion

What is an Introduction for?

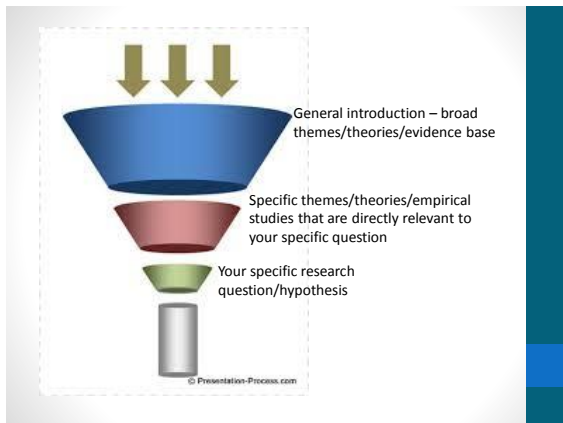


Introduction

- A concise review of relevant empirical and theoretical literature from the area under study
- Sets the scene for the study – a rationale
- A good research question should have been informed by a review of the psychological literature
 - Theory
 - Models
 - Empirical evidence

What is an Introduction for?

- To make the reader understand why your research question is **important** and **relevant**
- Start broad, and then narrow down to focus on the literature most relevant to your research question
- It should be totally clear by the end of your introduction why you are looking at your specific research question



Your introduction should...

- Flow
- Be concise and clear
- Tell a strong academic story
- Be unbiased
- Cover relevant historical and up-to-date literature (studies and theories) in appropriate detail
- Synthesise, critique and evaluate

What does a method section do?



Why do we need it?

Method

- Needs to provide sufficient methodological detail about the study so that:
 - a) The appropriateness of the method you have used can be evaluated
 - b) The study can be easily replicated

Method

- The method should be one of the first sections of the report that is written-up immediately after the study has finished (so you remember exactly what you did!)
- The method should contain enough information for the reader to understand and replicate the study exactly as you did it

Method

- Sub-divided into four sub-sections

- Participants
- Design
- Materials
- Procedure



How to write a good method section

Method: Participants

- Details of the participant sample
- Information on participants includes:
 - Number of participants
 - Sampling method (random, opportunistic, etc.)
 - Demographic information (age, gender, occupation, education level)
 - Any other study-specific criteria (e.g., intelligence level, visual acuity, etc.)

The sample used for this study consisted of 66 (19 male, 47 female) undergraduate Psychology students from Swansea Metropolitan University who ranged in age from 18 years to 60 years ($M = 25.35$, $SD = 9.46$). Participants were recruited through the Psychology experiment management system (EMS) within the university and took part in this study in exchange for credits on the system to progress with their degree. Before signing up online for this experiment, participants read a short description of what would be required of them throughout the duration of the study. The description piece also included a caution stating that any individuals who believed that they could possibly have a problem with gambling should refrain from signing up to participate in this experiment.

Method: Design

- Concise information about:
 - The type of study (independent, repeated, mixed, matched pairs, etc.)
 - Variables measured and how they were measured (independent and dependent)
 - Any other factors that were controlled for

A $2 \times 2 \times 2$ factorial design was employed for this experiment. There were three between-subject independent variables, each of which had two levels. The first independent variable was sensation seeking tendencies; the two levels of this variable were 'low sensation seeker' or 'high sensation seeker'. For the independent variable of success of the bet, the two levels were 'win' or 'lose'. Participants were further categorised into groups for the third independent variable of age; 'emerging adult' for participants aged between 18 and 25, and 'adult' for those aged above 26. The dependent variable in the experiment was arousal.

Method: Materials

- This should include **enough detail** to allow the reader to reproduce similar materials
- Details of specific questionnaires – example items, how they're scored, cut-offs, reliability statistics

The **Arnett Inventory Sensation Scale (AISS; Arnett, 1994)** was used to measure sensation seeking tendencies amongst participants (see appendix A). The paper based questionnaire consisted of **20 items** with two **10-item subscales**; Novelty and Intensity (see appendix B). The questionnaire **included statements such as** 'when I listen to music I like it to be loud', 'I don't like extremely hot and spicy foods', and 'I would never like to gamble with money, even if I could afford it'. Responses were given on a **four-point Likert scale** with participants having to choose how well each statement described them (A= describes me very well, B= describes me somewhat, C= does not describe me very well and D= does not describe me at all). **Items were scored between 1 and 4; A= 4, B=3, C=2 and D=1, with six reversed scoring items** in total (see appendix B). **Final scores obtained** from the questionnaire were between 20 and 80. For the purpose of this study, any individuals who scored between 20 and 50 were **categorised** as 'low sensation seekers' and those who scored between 51 and 80 were categorised as 'high sensation seekers'. **Internal reliability for the total scale was initiated to be .70 (Arnett, 1996).**

Method: Procedure

- What happened to a participant during the study
- Consent and debriefing, how any other ethical issues were dealt with
- Standardised instructions
- Where the study took place / how it was delivered

Method: Procedure

- Think of writing a procedure in the same way as you would describe baking a cake – you need to describe **exactly what was done** in the study, how participants were instructed, and set it out in the order in which things were done
- The procedure should be logical, insightful and contain sufficient information for the reader to follow
- Step by step!

What do I need to include in my results?



Results

- Summarises data collected and reports the statistical analysis used
- Descriptive statistics
- Inferential statistics
- Must not include pages of raw data or statistical print outs!

Results

- Descriptive statistics
 - Report the means and standard deviations in either a table or a graph (not both!)
 - Do not infer support for your hypothesis based upon descriptive stats
 - Tables and graphs must be clearly numbered and labelled (APA format)

Descriptive statistics

- The data relating to **your** sample
- N's, means, SD's, etc
- Simple but clear presentation

All participants completed both scales of the questionnaire. The mean score on the Positive Affect scale was 23.76 ($SD = 9.22$) and the mean score on the Negative Affect scales was 18.19 ($SD = 7.90$), out of a possible scale range of 10-40.

Results

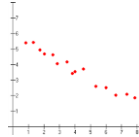
Inferential statistics

- Report what test was used, the value of the statistic, and significance level
 - Each statistical test has its own format for reporting which should be adhered to (more information on reporting statistical tests will be provided during future lectures/seminars)
- Include a final statement regarding whether null hypothesis can be rejected / experimental hypothesis accepted

Results

- The results of a Pearson product-moment correlation indicated that there was a strong negative correlation between the two variables ($r = -.76$, $n = 21$, $p < .05$) with high levels of positive affect associated with low levels of negative affect. The experimental hypothesis was, therefore, supported.

Figure 1: Correlation between Positive and Negative Affect



Results DO NOT:

- Discuss findings in detail
- Discuss the limitations of the study
- This is done in the discussion!

What information needs to be included in my discussion?



Discussion

- A really important section
- A critical analysis of the study as a whole
- Takes time to get it right (and often the weakest part of undergraduate study reports)

Pointers for your Discussion

- Provide a written summary of the findings
 - Do **not** repeat numbers/statistics from the results section
- Relate the findings back to the hypothesis
- Interpret findings in relation to the theory and research covered in the introduction and the specific hypothesis

Pointers for your Discussion

- Consider any shortcomings or limitations of the study and suggest realistic improvements
- Assess implications/applications of your findings to the field of study
- Make sensible suggestions for future work
- Draw the discussion to a close with a good conclusion

And don't forget...

- References – APA style!
- Appendix
 - SPSS key output
 - Copy of measures if needed to understand study design
 - Copy of consent form
 - Copy of debrief form

Successful Report Writing

- Start writing early!
 - Important details about the study might be forgotten if the write-up is left to the last minute
- A naïve reader should be able to follow your report and replicate your findings
- Read!!
 - Journal articles will help you with structuring your report and understand the required style
- Reflect / use feedback
 - Reflect upon the comments you receive on your practical reports and essays – they are provided to help you!

How much do I need to write in each section?



For this report you only have 1500 words...

- Abstract (150 words max) – **not included in the word count!**
- Introduction – approx. 550 words
- Method – approx. 250 words
- Results – approx. 150 words
- Discussion – approx. 550 words
- References – APA style! Make sure to include primary and secondary sources (if used)
- Appendices – Your SPSS output, copy of the consent and debrief forms, etc.



Any
questions?
