APS Interest Group on Psychology Education

Resource Material Submission – Front Page

Title of Material	**Journal Article Analysis Exercise for First Year**
Author(s)	**Sue Morris & Jacquelyn Cranney**
Description/Aim	**This exercise is designed to help students critically read a research report in psychological science. The questions they need to answer focus on the key aspects of the study, including hypotheses, types of variables, results and how they are interpreted.**
Benefits of Resource	Provides a template for critical analysis for research articles, which can lead into a research project and/or a research report. That is, it illustrates the process of research.
Issues for Consideration	Mention is made of some resources that may not be available to everyone, e.g. ILS and IAT, however the exercise in general can be adapted to a different context with a different article.
Approximate Duration	Intermittent individual and group work over 2 weeks or more.
Primary Content/ Process Topic	Research/Critical analysis
Other Categories	NA
Intended student level *(e.g. Secondary, Undergraduate Introductory, Undergraduate 4th Yr/ Honours, Post-graduate)*	Undergraduate – Introductory
Type of Material *(e.g. classroom materials, assessment, lectures, teaching tips, articles, syllabi, simulated learning environments.)*	Classroom Practical/Tutorial
Format of Material	Pdf file
Further Information Contact *(email only)*	s.morris@unsw.edu.au
Review Requested *(Nb: A 'Yes' response to this category indicates that you would like feedback/comments on the materials via email.)*	Yes
Evaluative Data Included *(E.g. Student evaluation, comments etc.)*	No

Description:
This exercise is designed to help students critically read a research report in psychological science. The questions they need to answer focus on the key aspects of the study, including hypotheses, types of variables, results and how they are interpreted. The capacity to undertake such an analysis is a key skill required for literature reviews. Literature reviews are an essential ingredient to writing reports or essays, or to undertaking an independent piece of research.   The exercise described is linked both to the Information Literacy modules that are designed specifically for psychology students, and the later research report that the students will need to individually write. By undertaking this first exercise as a group, there is the opportunity for collaborative learning to take place, and for group pressure to bear on completing the information literacy modules. The research processes of literature search, critically reading articles, and writing a research report are thus scaffolded, and students can see the links between these components of undertaking research. Nevertheless, this exercise could be adapted to different situations; for example, the article analysis could be undertaken in a tutorial situation, with teams competing against each other to come up with the best answers—for marks (= a more interesting way to digest information).

Scholarship/Evaluation of Student learning/Continuous Improvement:
This activity takes some preparation each year with a new article and a new marking criterion sheet for tutors. The marking criterion sheet nevertheless makes marking of the five pieces of work per tutorial relatively efficient. Students see this as a worthwhile exercise (they also value the information literacy modules). These activities tap into the UNSW/ALTC Guidelines for Learning, " 1. Effective learning is supported when students are actively engaged in the learning process", and **"**14. Learning cooperatively with peers - rather than in an individualistic or competitive way - may help students to develop interpersonal, professional, and cognitive skills to a higher level" (see http://www.guidelinesonlearning.unsw.edu.au).

Journal Article Analysis Exercise for First Year

Instructions: Please submit to your tutor **no later than in Week 5 tutorials.** Ensure tutorial time, group name, and **all group members' full names and student numbers** are included on your answer sheet.

Background: Three fundamental components of this course are **Information Literacy Skills, Critical Thinking** and **Research Report Writing.** This exercise requires you to apply "Information Literacy Skills" and work as a group to read a refereed journal article, and try to identify the central research question, background research, hypotheses, method, results, and conclusions. You will be able to use the feedback on this section to assist you in writing your report later in the session. The key criteria for success on this task is the **ability to determine which information is relevant, and to communicate that information in a concise, articulate, and logical manner**, and, **in your own words**.

> **As a group, you will need to read the target research paper cited below, and address each of the following questions**.

McConnell, A. R. & Leibold, J. M. (2001). Relations among the Implicit Association Test, Discriminatory Behaviour, and Explicit Measures of Racial Attitudes. *Journal of Experimental Social Psychology, 37*, 435-442.

1. (3 marks) What is the key research question being investigated in this paper? Include the following components:
   - Aim of the target research.
   - Hypothesis of the target research.

2. (5 marks) What background research led to these aims and hypotheses? For the **most relevant** piece(s) of background, include:
   - Researchers' names and year.
   - What they did.
   - What they found.
   - What they concluded.
   - What the authors believed still remained to be examined in the target study.

3. (3 marks) What did the experimenters do? Outline the method of the target study in you own words. Include:
   - What kind of study was it? (eg descriptive /correlational /experimental)
   - Independent variables (ie what different groups or conditions were compared)
   - Dependent variables (ie what was measured)

4. (2 marks) What did they find? Briefly summarise the key findings in your own words.

5. (3 marks) How did their key results compare to their hypotheses? How did their key results compare to previous research?

6. (2 marks) What would be a sensible suggestion for future research? For example, what could the researchers do differently to clarify a remaining theoretical or methodological issue or to extend their findings?

b) (2 marks). **As a group you must complete a PsycINFO database search to find one full citation plus abstract for an article or book chapter on the topic below**.

The measurement of racial prejudice by the Implicit Association Test.

Your article/book chapter should meet the following criteria:
- English language
- Published between 1960 and 2006
- Available in the UNSW Library

You should attach the original printouts from PsycINFO, including:
- The keywords used to perform your search
- The first 10 results (i.e. the 1st page of results) generated from your keyword search
- Article or Book author and title
- Journal title, volume and page numbers
- Year of publication
- Abstract
- Whether the article is available electronically

You will be assessed as to the RELEVANCE of the article, its UNIQUENESS (i.e. try to find references that other people DON'T have) as well as their CURRENCY.

Note: Each group should submit ONE set of answers, representing the group consensus, **in no more than 500 words** together with the required psycINFO printouts. **All group members will receive the same mark for this section (21 marks = 7%)**

Plagiarism is a serious offence. Please ensure that this is entirely your own group's work. See Manual pg 10.

Group Information Literacy Skills and Journal Article Exercise – Marking Criteria for Tutors

Task a & b) give all groups **1 mark**.

Task c) 1. <u>Aim 1</u>: *"to examine the extent to which it [the IAT] relates to intergroup behavior and to explicit measures of racial attitudes"*.
OR <u>Aim 2</u>: to "*examine[d] whether the IAT relates to explicit measures of prejudice*" either of these or some variant on this is worth **1.5 marks.**

<u>Hypothesis</u>: *"it was our belief that the likelihood of observing significant relations between explicit measures of prejudice and other outcomes (i.e. IAT behaviour) would be improved under conditions in which participants felt minimal presentational concerns"* (worth **1.5 marks).**
OR these essential aspects **a)** this group of subjects would show implicit racist attitudes as measured by the IAT **(½ mark).**
b) IAT will predict the racist attitude score observed from explicit measures **(1 mark).**.

2. <u>Authors:</u> *Greenwald, McGhee & Schwartz, 1998* (**1/2 mark**) NB - do not give anything for "Greenwald et al."
<u>What they did:</u> *Investigate the correlation between the (black white) IAT* (**1/2 mark**) *and explicit measures of prejudice (the feeling thermometer* (**1/2 mark**) *and semantic differential scales*(**1/2 mark**)*).*
<u>What they found/ concluded:</u> *"No correlation between the IAT and explicit measures of prejudice"* **OR** *no consistent relationship between IAT and explicit measures of prejudice* (**1 mark**).
<u>What remains:</u> *To see if a relationship between implicit and explicit measures of prejudice could be found* (**1 mark** for implicit and explicit) *if self-presentation was minimized* (**1 mark** for self-presentation**).**

3. <u>What kind of study</u>: *Correlational* (**1/2 mark**) they can <u>also</u> say "experimental" and/or "descriptive" [given the nature of what they undertook—quite complex], but <u>must</u> include "correlational".
<u>Independent/Predictor variable</u>: *implicit measure - IAT* (**1/2 mark**).

Dependent variables: *explicit measures - Semantic differential scales (black white)* **(1/2 mark)**, *feeling thermometer* **(1/2 mark)**, *judge and/or experimenter ratings of behaviour* **(1/2 mark)**.

4. what did they find **(in their own words)**: * (1)*"significant racial bias was exhibited in participants' **implicit** and **explicit** measures of prejudice"*
**"*as participants IAT scores reflected relatively more positive attitudes toward whites than blacks, social interactions were more positive towards the white experiment than the black experimenter"*
* *"larger IAT effect scores predicted greater speaking time, more smiling, more extemporaneous social comments, fewer speech errors, and fewer speech hesitations in interactions with the white experimenter"*
* (4)*"significant **correlation** between the IAT and explicit reports of prejudice was observed"*
* *"explicit measures of prejudice score was unrelated to any of the judges' ratings"*
(to get **2 marks** must talk about **result 1** and **result 4** in their own words**)**

5. compared to hypotheses: *supported hypothesis* **(1 mark)**
Compared to previous work: *not in line with Greenwald et al regarding relationship between IAT and explicit measures and regarding the existence of strong racial prejudice in explicit measures.***(2 marks).** i.e. McConnell & Leibold found a positive relationship between implicit and explicit measures and also found evidence of explicit racial attitudes. Greenwald found neither of these things.

6. *"future work will be required to better understand the mechanisms that underlie the IAT and to predict when it will, and will not, relate to explicit measures of attitudes."* (some suggestion of this kind and a practical plan for how to explore it gets **2 marks** – needs practical suggestion to get full points**).**

d) ½ mark for RELEVANT PsychINFO printout.
½ mark for the full citation plus abstract from PsychINFO.
1 mark for the relevance, uniquness and currency of the selected article.