IB Psychology 2022 Ciambarella

**List of Approved IA Topics**

**Directions:**

-You must work in a group of 2, 3 or 4 people. You will prepare and conduct your experiment together. The data you collect will be identical. Then you will individually write your own IA report about it.

-You must begin by choosing from one of the following real Psychology studies. You will then do your own experiment somewhat based on one of these studies or theories used in one of these studies.

-Each study has a link to the actual study’s professional paper.

-Your first job is this week to choose a group and choose a topic.

Memory studies

[Baddeley et al Links to an external site.](http://pdfs.semanticscholar.org/b470/cbb6c7c235f670bb63601da7c9d853219718.pdf) (1975).  The word length effect - how the length of a word affects free recall.

[Bransford, J.D. & Johnson, M. K. Links to an external site.](http://www.cogsci.ucsd.edu/~coulson/203/bransford72.pdf) (1972). A study of how schema affect memory.  This study looked at whether hearing a title before a passage is read would actually affect the amount of the passage that would be recalled.  There is more than one version in the original paper.  Students may, of course, write their own passage to make it more relevant to their participants.

[Coltheart Links to an external site.](http://www.springerlink.com/content/k7000276838gw122/) (1992) Testing the Working Memory Model. The extent to which phonological similarity of words impairs short-term memory recall. Participants were asked to count repeatedly to six during list presentation. Concurrent irrelevant articulation lowered recall and abolished the phonological similarity effect for both repeated and novel word lists.

[Etnier & Labban Links to an external site.](https://www.thinkib.net/files/psychology/files/etnier_effects_long-term_2011.pdf) (2011).  This is a great study for students who are interested in sport and exercise. The original study had three conditions: exercise before, exercise after and no exercise while listening to a prose paragraph. Only the exercise perform condition showed significantly higher performance on recall.

[Kargopoulos, Bablekou, Gonida and Kiosseoglou Links to an external site.](https://www.researchgate.net/publication/9086470_Effects_of_Face_and_Name_Presentation_on_Memory_for_Associated_Verbal_Descriptors) (2003). A study that shows when information is paired with a photograph, memory is better than when it is matched with text only.

Landry, P. and Bartling, C. (2011). This study uses a dual task technique to demonstrate the functioning of the phonological loop. A good study for those interested in multi-tasking.

[Loftus and Palmer Links to an external site.](http://webfiles.uci.edu/eloftus/LoftusPalmer74.pdf) (1974).  Participants asked how fast cars were going when they ‘smashed’ into each other, after viewing a car accident, report greater speeds than do participants asked the speed when they ‘hit’ each other.

[Mandler Links to an external site.](http://books.google.cz/books?id=o6jb3VwNt7AC&pg=PA59&lpg=PA59&dq=Mandler+52+cards&source=bl&ots=rihzC3HBEn&sig=uJBnK82F649rLOzi1RRDG5dVvvU&hl=en&sa=X&ved=0ahUKEwjXj-fdof3bAhXDUlAKHSdYDHwQ6AEIQzAE#v=onepage&q=Mandler%2052%20cards&f=false) (1967) In one of Mandler’s studies, participants were given 52 cards with a randomly selected word on each card, they were then asked to sort the cards into between 2 – 7 categories of their choice. They were then asked to recall as many words as they could remember. The more categories the participants had used, the higher their recall of words.

[Miller Links to an external site.](http://psychclassics.yorku.ca/Miller/) (1956). The original chunking experiment is difficult to replicate as the original study is rather difficult for most students to read. But we are allowed to base our studies on an original study or theory, so [this link Links to an external site.](http://psychology.about.com/library/Psychology_Experiments/bl-memory-experiment.htm) is a good idea for how to set up an experiment to test Miller's theory of the Magic 7.

[Paivio Links to an external site.](http://psycnet.apa.org/buy/1971-30197-001) (1971). **Imagery vs rehearsal**: participants recall more words from a (20) word list when they use an imagery method (forming a vivid mental image and linking each item to the last in a dynamic fashion) than if they use either rehearsal (repeat each item until you hear the next) or no particular method (no prior instruction).

[Perham & Vizard Links to an external site.](http://www.researchgate.net/publication/230292633_Can_Preference_for_Background_Music_Mediate_the_Irrelevant_Sound_Effect) (2010) Does background music impair memory? Serial recall was tested under quiet, liked and disliked music sound conditions as well as steady-state (repetition of ‘3’) and changing-state speech (random digits 1–9). Results revealed performance to be poorer for both music conditions and the changing-state speech compared to quiet and steady-state speech conditions.

[Peterson & Peterson Links to an external site.](http://psych.indiana.edu/tradition/Peterson_and_Peterson_1959.pdf) (1959, p. 194) In the memory task, the participant viewed a trigram of consonants (e.g., GKT, WCH,...) and then performed a number of algebraic computations (e.g., counting backwards by 3s) for less than 20 seconds. The data showed that recall of the trigram was less likely as the participant worked on the algebraic computations for longer durations.

[Rogers, Kuiper and Kirker](https://taipeiamericanschool.instructure.com/courses/8468/files/245427/download?wrap=1)[Download Rogers, Kuiper and Kirker](https://taipeiamericanschool.instructure.com/courses/8468/files/245427/download?download_frd=1) (1977). A different aspect of levels of processing theory - this looks at what happens when we make a personal connection to what we are learning - the effect of self-referencing. A sample of a replication of this study [can be found here Links to an external site.](https://www.thinkib.net/files/psychology/files/rogers-and-kuiper%281%29.pdf).

Other areas of research

[Ariely, Loewenstein and Prezlec Links to an external site.](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiL1f24sP3bAhULLFAKHcHPB3AQFggnMAA&url=http%3A%2F%2Fweb.mit.edu%2Fariely%2Fwww%2FMIT%2FChapters%2FCA.pdf&usg=AOvVaw12BIpoMt9WwjJ_XtI82TIa) (2005). Participants are asked to fill in a “group number” on their papers. One group is given a low 2-digit number (e.g. 13) and the second is given a higher value (e.g. 97). Then the participants are asked to consider whether they would pay x number of dollars for items whose value they did not know, such as wine, chocolate and computer equipment. They were then asked to bid for these items, with the result that the participants with higher two-digit numbers would submit bids that were between 60 per cent and 120 percent higher than those with the lower numbers, which had become their anchor.

[Carmon and Ariely Links to an external site.](http://academic.oup.com/jcr/article-abstract/27/3/360/1796841?redirectedFrom=fulltext) (2000) A study of the endowment effect - when we value something more when it is ours.

[Elliot et al Links to an external site.](https://www.thinkib.net/files/psychology/files/effect-of-red.pdf) (2007).  The effect of the colour red on the ability to solve anagrams. The argument is that the colour red impairs processing because it is associated with danger.

[Jonides and Gleitman Links to an external site.](http://link.springer.com/article/10.3758/BF03210934) (1972). Word and letter recognition: Visual search: Participants will take longer to find 0 among letters if it is called zero than when it is called letter ‘oh’ and vice versa.

[Kruger, Wirtz, Van Boven, and Altermatt Links to an external site.](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwinivyKuv3bAhVQaFAKHU1QDSIQFggqMAA&url=http%3A%2F%2Fpsych.colorado.edu%2F~vanboven%2Fvanboven%2FPublications_files%2Fkruger_etal_jesp2004.pdf&usg=AOvVaw2TSa6FvStvmN3QV3FtjdHk) (2004).  A series of experiments on the effort effect - the idea that we tend to assign more value to something that took more effort. In one of the experiments, participants were asked to evaluate the quality of two paintings by Deborah Kleven: *12 Lines* and *Big Abstract.* Half of the participants were told that the former took 4 hours to paint and the latter 26 hours, and the other half were told the opposite. The results showed that participants preferred *12 Lines* over *Big Abstract* when they thought *12 Lines* took longer to paint, but the opposite tended to be true when they thought that *Big Abstract* took longer to paint.

[Nisbett and Wilson Links to an external site.](http://deepblue.lib.umich.edu/bitstream/handle/2027.42/92158/TheHaloEffect.pdf) (1977) The halo effect states that attractive people are perceived as having more positive attributes. For a summary of the classic experiment, [click here Links to an external site.](http://www.experiment-resources.com/halo-effect.html).

[Pachur and Biele Links to an external site.](http://www.sciencedirect.com/science/article/pii/S0001691806000801?via%3Dihub) (2007) A study of the recognition heuristic.  When asked to make predictions about which team would win in a competition, the name that was more familiar is more often chosen.

[Shih, Huang, and Chiang (2012) Links to an external site.](https://www.ncbi.nlm.nih.gov/pubmed/22523045). Another study on music, but this time looking at attention. The researchers looked at how music with lyrics vs. music without lyrics affects attention. Fun study for those who like to study with music. Fun fact: this study was conducted in Taiwan by Taiwanese researchers!

[Sparrow et al Links to an external site.](http://scholar.harvard.edu/dwegner/publications/google-effects-memory-cognitive-consequences-having-information-our-fingertips)(2011) A Googletastic delight.  The effect of computer use on memory. **Theories:***Transactive memory.*

[Strack and Mussweiler Links to an external site.](http://www.google.cz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjdjuT0m-DVAhWGWxQKHaJ2CWkQFgglMAA&url=http%3A%2F%2Fbear.warrington.ufl.edu%2Fbrenner%2Fmar7588%2FPapers%2Fstrack-mussweiler-jpsp97.pdf&usg=AFQjCNEVmB2bNaVx3_r0vd5ye5GEBZR6Tw) (1997) A study in anchoring effect.  There are actually several studies in this paper.  From the online textbook, you will find the study where participants are asked to estimate the Gandhi's age at the time of his death - both with plausible and implausible anchors.

[Stroop effect Links to an external site.](http://psychclassics.yorku.ca/Stroop/) (Stroop 1935)  The classic study of interference between system 1 and system 2 processing.

[Triplett Links to an external site.](http://psychclassics.yorku.ca/Triplett/) (1898)  Social Facilitation Theory - The idea is that people tend to perform better when in groups than when on their own. Participants can be given tasks (e.g. word searches) either in groups or on their own to test this theory.

[Tversky and Kahneman Links to an external site.](http://www.sciencedirect.com/science/article/pii/0010028573900339) (1973) A study of the availability heuristic. If people recall more items from one set than from another they assume that there actually were more in the former set. Demonstrate this by giving participants a set of names to remember containing 19 very famous males and 20 not so famous females. Since participants tend to recall more male names they tend to judge that more males were on the list.

[Tversky and Kahneman Links to an external site.](http://www.sciencemag.org/content/185/4157/1124) (1974) A study of anchoring bias.  This paper has a series of different studies of the anchoring effect.  For example, 10! in ascending and descending order.

[Weinstein Links to an external site.](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwjH5Jm8sf3bAhWNZ1AKHTUHDWkQFggvMAE&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.535.9244%26rep%3Drep1%26type%3Dpdf&usg=AOvVaw2dUq0lx_F1kTuvxy2TgYQd) (1980). A study in optimism bias. Participants were asked to rate how likely various life events were to happen to them, relative to their classmates. The results were that participants thought that good events were more likely to happen to them, while bad events were more likely to happen to other students.

[Williams and Bargh Links to an external site.](http://psycnet.apa.org/record/1996-06400-003) (2008)  Does reading something about old age make you walk more slowly?  A study of priming that has been very much challenged.  Here is also [a good article Links to an external site.](http://www.psychologytoday.com/us/blog/social-brain-social-mind/201203/does-thinking-grandpa-make-you-slow) on the original study.