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#### Abstract

Memory retention for verbal and non-verbal tasks across genders and streams of education were examined among undergraduate students in a Malaysian university. There were one-hundred-and-sixty participants, with a balanced ratio between male and female students, as well as hard science and social science students who were recruited using stratified random sampling. In this experiment, participants were asked to perform a series of memory tests (four verbal memory tests and four non-verbal memory tests), which approximately took 40 minutes. Participants' performance in the memory tests were recorded by the experimenter throughout the tests. The results support many of the findings in previous research: that female participants outperformed males in verbal memory tests, and by contrast, male participants performed better in nonverbal tests which include Memory for Location and Abstract Visual Memory, the two spatial tests most widely identified as a male's strength in many previous literatures. Interestingly, test results examining the education streams reveal new findings where the hard science students significantly outperformed the social science students in the three non-verbal tests mastered by the male students. On the other hand, results on the verbal memory tests (Memory for Stories) show only slight difference in the findings between the hard science students' and social science students' performances. The rest of the verbal memory tests do not show any concrete evidence on which groups (hard science or social science) have actually performed better. In addition to the findings detailed above, the interaction between genders and streams of education was found to have a significant bearing in three non-verbal memory tests: Abstract Visual Memory, Visual Sequential Memory and Memory for Location. This suggests that female and male students have responded differently to these memory tests based on their education streams.

Keywords: Verbal Memory, Non Verbal Memory, Memory Retention, Spatial Memory