

Hemispheric Differences in the Appreciation of the Overall Meaning of Passages

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*This thesis is presented in partial fulfillment of the requirements for the degree of
Bachelor of Psychology (Honours), Murdoch University, 2013.*

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary educational institution.

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Jason Lloyd

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Abstract

This study examined hemispheric differences in processing the overall meaning of passages. Based on past research it was hypothesised that the right hemisphere (RH) would be uniquely involved in processing the overall meaning of passages. A sample of 52 right-handed Murdoch University students participated in a lexical decision task, with reaction time (RT) and error rates recorded. Stories were read between each trial with half of the target words presented in the passages to manipulate the independent variables of: visual field of presentation (left or right), relatedness to the overall meaning of passages (related or unrelated), and presence in passages (in or out). A significant facilitation effect in favour of the LH over the RH was found for words that were not present in the passages, however there was no significant difference in facilitation effects between hemispheres for words in the passages. Further, this LH advantage was found for males but not for females, with females having no significant hemispheric differences for facilitation effects. The results therefore did not replicate the findings of previous studies demonstrating a RH dominance for the appreciation of the overall meaning of stories (Jung-Beeman, 2005). Rather, the presence effect demonstrates a LH dominance for making the inferences necessary for the appreciation of the overall meaning of stories. The results are also consistent with McGlone's (1977) interhemispheric model, claiming that language is predominately processed in the LH for males and bilaterally for females.

Keywords: lexical decision task, hemisphere, visual field, language, overall meaning

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