

# THE EFFECTS OF BIRTH ORDER ON READING COMPREHENSION

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## Abstract

Reading comprehension is important in everyday life. Being able to read and interpret what is being read is vital to living a competent life. Learning if any external factors may affect one's reading comprehension is important. The purpose of this study was to consider the relationship of birth order with reading comprehension scores. A sample of 121 (78 women, 42 men, and 1 unidentified) participants answered a demographics questionnaire regarding their birth order and then completed a reading comprehension test. No statistically significant differences were found in reading comprehension scores related to birth order. However, the women who completed the test had higher reading comprehension scores than the men who completed the test. Implications of this data and further research suggestions are then discussed.

## Limitations

- Construct includes too many variables
- Too complex to predict external behavior
- Timed Test
- Length of test
- investigate family size and parent IQ
- Age gaps between siblings

## Implications

- Reinforces previous research
- Cannot say for certain birth order effects reading comprehension scores
- Educators to use this information
- Future research is suggested

## Hypotheses

01 First borns = higher reading comprehension scores

02 Women = higher reading comprehension scores

## Participants

- Recruitment at Northwestern College
- 121 Adults
- 78 Women
- 42 Men
- 1 Unidentified Gender
- Ages < 18 - 23+

## Methodology

- Gates-MacGinity Reading Comprehension & Vocabulary Test
- 135 Questions
  - 53 Vocabulary Questions
  - 82 Reading Comprehension Questions
- .93 - .95 Reliability Coefficients

## Analyses

### Hypothesis 1: One-way ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2272.117	3	757.372	1.998	.118
Within Groups	42458	112	379.097		
Total	44730.991	115			

Results: Hypothesis not supported.  $F(2,115) = 1.998$ ,  $MSE = 757.37$ ,  $p = .118$

### Hypothesis 2: T-Test

Group Statistics	Gender	N	Mean	Std. Deviation	Std. Error Mean
Score	Male	41	51.8537	19.87657	3.10420
	Female	74	60.4459	19.16843	2.22828

Results: Hypothesis supported.  $t(113) = -2.272$ ,  $p = .025$

Independent Sample Test		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Diff.	Lower	Upper
Score	Equal variances assumed	.000	.996	-2.272	113	.012	.025	-8.59229	3.78126	-16.08364	-1.10094