A Longitudinal Study of Writing by Psychology Majors: A Quantitative Text Analysis

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Introduction

- Hartley, Pennebaker and Fox (2002) performed a LIWC analysis of abstracts, introductions and discussions.
- APA Style emerged as part of the Behaviorist movement in Psychology.
- APA writing style is a genre different from ones in Science and Arts & Humanities.
- This archival study examined student papers in electronic department portfolio.
- We asked whether and how papers vary from first to fourth year in both linguistic features and psychological processes.
- The overall study focuses on four papers, however, present analysis focuses on 2nd and 4th year papers due to similar formatting which allows an analysis similar to Hartley et al.
- Papers were broken into abstracts, introductions, and discussion sections for analysis with the goal of comparing students papers with an analysis of published articles.

Method

- Analyzed the structure and language of research papers from four different levels of undergraduate psychology classes.
- Papers in WebPortfolio for Psych majors.
- N = 23 students provided complete papers.
- Linguistic Inquiry and Word Count (LIWC) Software & MS Word Readability statistics.
- Preformed analysis for 11 variables from the LIWC dimensions.

LIWC Dimensions

- Standard Linguistic
  - Dictionary Words
  - Words Per Sentence
  - Six Letter Words
- Psychological Processes
  - Percent Passives
  - Tentative
  - Past, Present and Future
- Microsoft Word Readability
  - Flesch Reading Ease
  - Passive sentences

Results

- 2 (course) x 3 (section) ANOVA was preformed for each linguistic variable.
- Of the 11 linguistic variables, 1 (word count) was significant across course.
- Of the 11 linguistic variables, 10 were significant across section of paper.
- Results imply that students in upper and lower-level Psychology courses perform similarly.
- Flesch Reading Ease was consistently rated as "difficult".
- Significant differences for 10/11 linguistic variables across sections.
- There was significantly more use of tentative vocabulary than certain vocabulary.

Implications

- Disappointing similarity in performance across courses. It would be preferable to have a greater difference across courses.
- Suggests little improvement in writing over time.
- Suggests need for better stylistic writing programs or implementation of different grading guidelines.

Discussion

- Students follow APA guidelines across courses.
- Professors can require students to submit a Word Count and Flesch Reading Ease score in with their submitted papers to verify progress.
- Future research will include information gathered directly from students on how they learned APA style.
- Future research will expand to include text analysis of full APA style papers as well as sectioned analysis.

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