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### Literate Vocabulary in the Written Language Samples of Seventh-Graders

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# Literate Vocabulary in the Written Language Samples of Seventh-Graders

Laura Allred, Madeline Julin, Kiley Kremmel

## OBJECTIVE

The purpose of this study was to add to the local normative database of adolescent writing samples by examining the use of literate vocabulary

The research questions that guided this study were:

1. Is there a relationship between use of literate vocabulary in the persuasive essays of seventh-graders and their reading scores?
2. What is the typical production of a) adverbial conjuncts, b) metaverbs, and c) abstract nouns in the written persuasive essays of seventh-graders?
3. Is the use of literate vocabulary in persuasive writing correlated with other standardized measures of literacy?

## INTRODUCTION

Language sample analysis (LSA) is a preferred practice pattern according to ASHA however, not many school-based speech-language pathologists (SLPs) are eliciting LSAs with adolescents

- Some reasons include:
  - Unaware of what aspects of language are relevant to examine with this population
  - Recent surveys indicate SLPs who are analyzing language samples are doing so with very young clients (Hux et al., 1993)
  - The aspects of language that are targeted for analysis in younger children are not diagnostically relevant to examine in adolescents
  - Lack of large scale database of adolescent language norms for comparison (Heilmann & Malone, 2014)

School based SLPs largely rely on standard assessments to determine adolescents' eligibility for services and in selecting treatment goals

- Spoken and written language must be assessed efficiently
- Tests often assess what they are *capable* of doing, but not representative of *actual* production
- Standardized assessments often use contrived formats to elicit the language forms of interest
- Literate vocabulary is a language form of interest because it involves words that have a low frequency of occurrence in spoken language, but does occur in formal writing (Nippold, 2010)

- Greater knowledge of literate vocabulary increases with age, but in unequal measure
  - Abstract noun usage continues to increase into adulthood
  - Meta-verb and adverbial conjunct usage plateaus in the teen years
- A database of adolescent persuasive writing samples would provide SLPs with greater knowledge of typical literate vocabulary usage

Table 1  
Literate Vocabulary Forms

Literate Vocabulary Forms	Examples
Adverbial conjuncts	<i>meanwhile, furthermore, however, typically, finally, nevertheless</i>
Abstract Nouns	<i>diversion, federalism, gumption, implication, respect, kindness, longevity</i>
Metacognitive/ metalinguistic verbs	<i>predict, apply, hypothesize, say, think, know, reflect, argue, disagree</i>

## METHODS

### Participants

- Typically developing adolescents, currently attending seventh grade in Missoula, Montana
- No subjects in data had been retained
- Anonymity was preserved, and no exact dates of birth reported
- Date of birth reported as a range for further anonymity
- Each essay was coded

Table 2  
Number of Students in Each Demographic Category

Age Range						Gender		Race		Free/Reduced Lunch Eligibility
12y;4m-12y;6m	12y;7m-12y;9m	12y;10m-13y;0m	13y;1m-13y;3m	13y;4m-13y;6m	13y;7m-13y;9m	M	F	Ca	Other	31
8	28	21	22	9	2	40	50	79	11	

F= female, M= male, Ca = Caucasian

### Procedure

- Participants were prompted to write a persuasive essay using Circus Controversy Protocol (Nippold, 2005)
- Participants were provided with a written prompt as well as a video-recording of one of the investigators reading the prompt aloud.
- Students had 20 minutes to complete their essay
- After 20 minutes, the students were asked to finish and hand in their essay

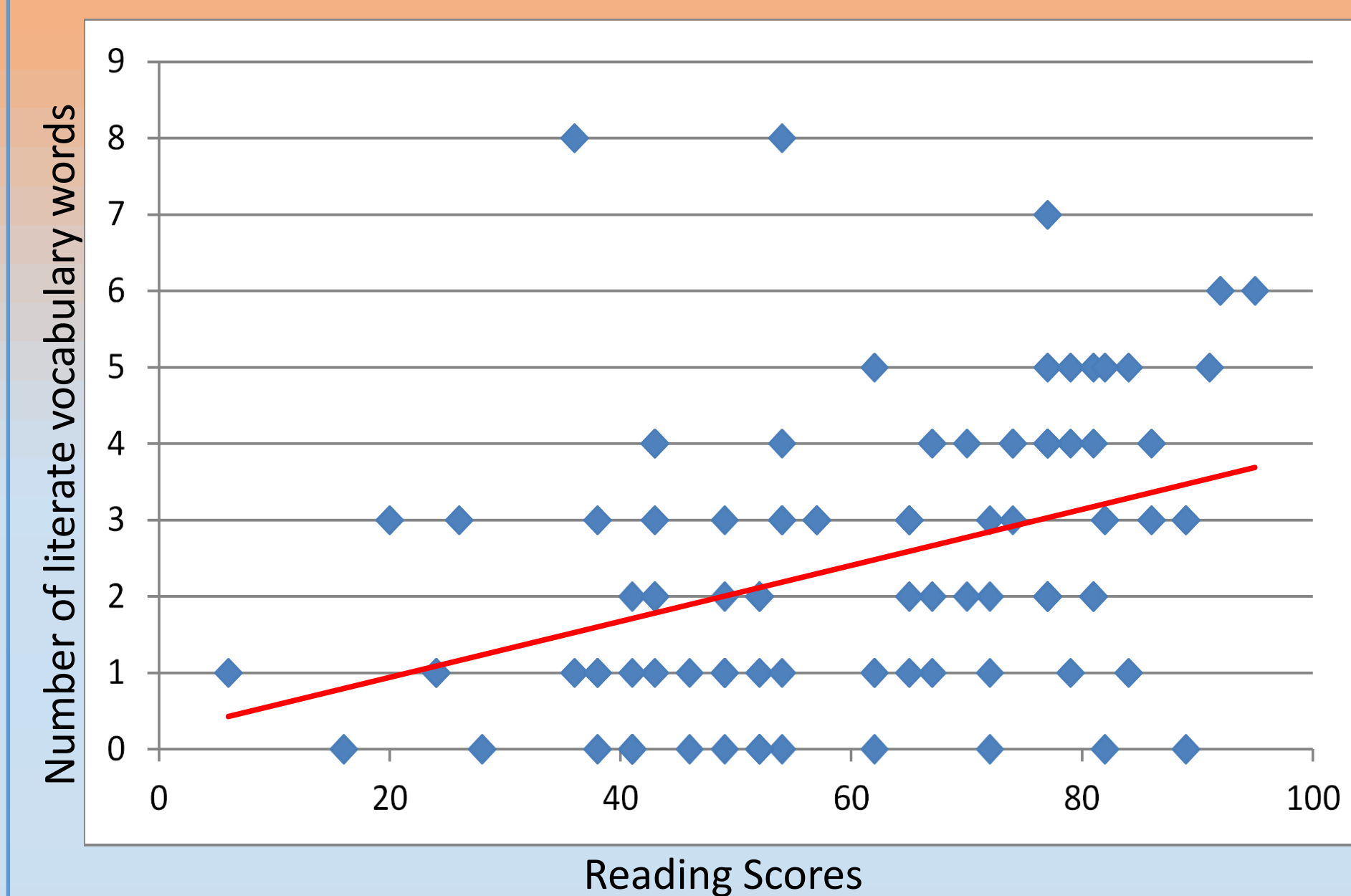
## Data Collection & Analysis

- Each vocabulary variable was coded for adverbial conjuncts, abstract nouns, and metacognitive verbs, [AC], [ABN], [MTVL]
  - From the data, researchers hypothesized that there would be a correlation between reading scores and use of literate vocabulary
- Each writing sample was coded by two separate investigators. Reliability for coding each vocabulary variable reached at least 95%.

## RESULTS

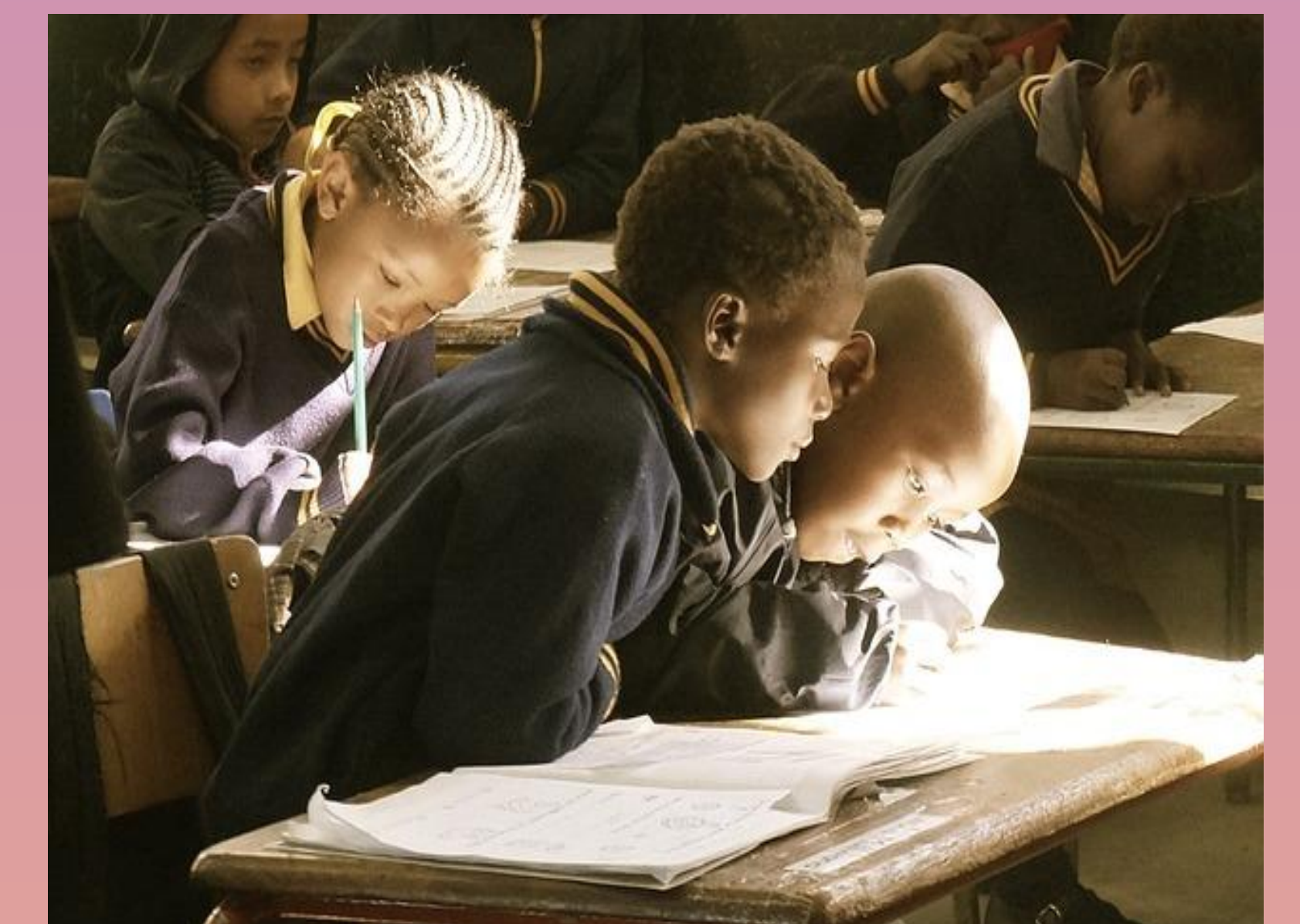
- The relationship between the use of literate vocabulary in the persuasive essays of seventh-graders and their reading scores was investigated using Pearson product-moment correlation coefficient
- Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity
- There was a **moderate, positive correlation** between the two variables,  $r = .42, n = 93, p < .001$ , with high literate vocabulary use associated with high reading scores
- A multiple regression was conducted to determine if meta-verb, abstract noun, and adverbial conjunct use predicted reading scores
- Using the enter method it was found that meta-verb and adverbial conjunct use account for 18% of the variance in reading scores ( $F(3, 89) = 6.43, p < .001, R^2 = .18, R^2_{Adjusted} = .15$ )
- The analyses show that meta-verb ( $Beta = .07, t(93) = 0.61, ns$ ) and adverbial conjunct use ( $Beta = .04, t(93) = 0.23, ns$ ) did not independently significantly predict reading scores, although when combined did significantly predict reading scores ( $Beta = .36, t(93) = 2.11, p = 0.04$ ).

Figure 1. Literate vocabulary and reading scores



## CONCLUSIONS

- Since few studies have used language sample analysis to determine developmental milestones in adolescent language, this study contributes to the gap in the literature regarding adolescent language norms
- This research added to the local normative data base for speech-language pathologists serving the Missoula adolescent population and provides an understanding of the average productivity and usage of literate vocabulary for adolescents in 7th grade.



- The results from this analysis indicated that there was a moderate, positive correlation between high literate vocabulary usage and high standardized reading scores
- Persuasion is a critical skill for adolescents to master, SLPs are urged to include it in their assessments and examine the use of literate vocabulary
- An adolescent who is not using literate vocabulary in formal writing contexts may be struggling with higher level literacy skills
- These writing samples can be used to create a normative database in regards to these measures



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