A Multi-Dimensional Contrastive Study of Open Accessible Summaries and Their Corresponding Abstracts

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Introduction

summaries for non-experts

- To make research more accessible
- Controversies: questionable textual readability and whether these summaries represent progress in scientific publishing
- My study: investigate multi-dimensional differences between summaries for non-experts and abstracts for experts

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Research Questions

Research Question 1: How do summaries for non-experts and the original academic abstracts for experts differ in textual readability?

Research Question 2: How do summaries for non-experts and the original academic abstracts for experts differ in Biber's multi-dimensional scores? In other words, do they constitute distinctive register types?

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Methods

- Corpus: 629 summaries selected from OASIS (Open Accessible Summaries in Language Studies) + 629 corresponding abstracts
- Criteria of selection:1) the language summary written in is English, 2) the year of publication is within the range from 2021 to 2023.

Table 3.1 A summary of independent and dependent variables

Independent variable	Dependent variables
Summary vs. abstract	Flesch reading ease score
	Six dimensional scores according to the MD framework
	Text type within Biber's typology of English texts

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How do language aptitude vs. grit influence L2 learning outcomes?

What this research was about and why it is important

Grit is defined as a combination of perseverance and passion for long-term goals. It has been argued to predict success outcomes in various domains beyond talent. As such, in this study we sought to test this hypothesis by examining the comparative effects of grit and aptitude on language achievement. Furthermore, we investigated how age, L2 learning experience, and gender may influence one's grit and aptitude levels. Our findings demonstrated that both L2 grit and aptitude similarly and positively predicted language achievements. Moreover, certain aspects of L2 grit and aptitude were found to be malleable as learners aged and gained more L2 learning experiences, whereas their gender had no significant part in this respect.

What the researchers did

- The study participants were 236 English-major university students who studied English as
  Iran. The sample comprised 168 females and 68 males whose age ranged from 18 to 66.
- The students completed the L2 domain-specific grit scale and took the download version of
  tests. The students' end-of-semester scores in grammar, speaking, and listening courses, ar
  were collected as measures of their language achievement.

What the researchers found

- Both L2 grit and language aptitude similarly and positively predicted language achievement.
- Age negatively predicted language aptitude, whereas L2 learning experience positively predi
  aptitude.
- Gender played no part in L2 learners' grit and aptitude levels.
- The LLAMA tests had a one-component structure, and the L2 grit scale had a two-componer

Things to consider

- We found that L2 grit and aptitude are strong predictors of L2 achievement. This finding c
  hypothesis by Angela Duckworth and her colleagues that grit is as important as talent i
  outcomes. Using the metaphors of the Hare and the Tortoise, on the bumpy road of L2 learnin
  the Hare and the Tortoise is the key toward crossing the finish line of mastering an L2.
- We also found that some aspects of the students' language aptitude and L2 grit are suscepti
  age and gain more L2 learning experiences, but their gender played no reliable part in this re
  should further examine the malleability of L2 grit and aptitude as research findings in this re
- From a pedagogical perspective, we champion motivational interventions to increase the stu
  effort and consistency of interest toward their L2 learning goals.

OASIS
Open Accessible Summaries In Language Studies

The Hare and the Tortoise: The Race on the Course of L2 Learning

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Abstract

Defined as a combination of perseverance and passion for long-term goals, grit has been hypothesized to be as important as talent in determining the success of students, adding incremental predictive validity for achievement criteria above and beyond natural or inherent ability. In this study, we tested this hypothesis by comparing the effects of second language (L2) aptitude and L2 grit on L2 achievement. We also explored how age, L2 learning experience, and gender of the students influenced their L2 aptitude and L2 grit levels. The findings showed that L2 aptitude and L2 grit had similar, positive effects in predicting language achievement measures. Moreover, some aspects of the students' language aptitude and L2 grit were susceptible to change as they aged and gained more L2 learning experiences, but their gender played no reliable part in this regard.

Results, Discussions, and Conclusion

Textual readability analysis

Table 4.1 Descriptive statistics of the Flesch reading ease score and the test of variation by text type

	N	Mean (SD)	Min-Max	*t*	*p*
Abstract	629	20.82 (14.27)	-24.7 – 69.2	-24.32	p<.001***
Summary	629	38.86 (11.83)	3.9 – 82.4		

*p<.05, **p<.01, ***p<.001

There is a significant difference in readability between summaries and their abstracts.

Summaries for non-experts are easier to read than abstracts for experts.

Table 4.2 Descriptive statistics of the Flesch reading ease score of abstracts and summaries with corresponding school level and the degree of reading ease

FRES	Description	Frequency	
		Abstract	Summary
-30 – 0	/	53	0
0 – 10	Extremely difficult to read	93	5
10 – 30	Very difficult to read	319	146
30 – 50	Difficult to read	148	358
50 – 60	Fairly difficult to read	15	99
60 – 70	Plain English	1	20
70 – 80	Fairly easy to read	0	0
80 – 90	Easy to read	0	1

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Multi-dimensional analysis and register type analysis

Summaries for non-experts score higher on D1, D4, and D5 than their abstracts. They also score lower on D3 and D6.

Summaries for non-experts tend to be more involved, less informational, less explicit, more context-dependent, and contains less online informational elaboration than their abstracts.

Summaries for non-experts may have a tendency to contain more narrative and persuasive elements than the original abstracts.

One-way MANOVA of dimension scores among the registers reveals significant multi-variate main effects for register (Wilk's $\lambda = .77$, $F(1,1256) = 63.57$, $p < .001$).

Table 4.3 Results of ANOVA to examine the effect of summary/abstract differences on dimension scores

	Summary (n=629)		Abstract (n=629)		$F(1, 1256)$	p	η^2
	Mean1	SD1	Mean2	SD2			
D1	-14.63	5.23	-18.24	5.31	147.79	p<.001***	.105
D2	-2.11	2.22	-2.10	3.30	0.01	0.93	.000
D3	6.62	4.07	9.34	5.01	111.15	p<.001***	.081
D4	-2.27	2.71	-4.28	3.09	150.88	p<.001***	.107
D5	3.94	3.64	3.43	5.23	3.96	.047*	.003
D6	0.32	1.59	1.01	2.39	36.33	p<.001***	.028

*p<.05, **p<.01, ***p<.001

**Note*: (D1) informational vs. involved production, (D2) narrative vs. non-narrative concerns, (D3) explicit vs. situation-dependent reference, (D4) overt expression of persuasion, (D5) abstract vs. non-abstract information, (D6) online informational elaboration

Table 4.4 Descriptive statistics of text type frequency

	Abstract		OASIS	
	number	percentage	number	percentage
Learned exposition	441	70.1%	284	45.2%
Scientific exposition	148	23.5%	224	35.6%
General narrative	35	5.6%	106	16.9%
Involved persuasion	5	0.8%	15	2.4%

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