



# A readability assessment of plain language summaries and abstracts before and after Cochrane guidance

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I have no actual or potential conflict of interest in relation to this presentation

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## Template and guidance for writing a Cochrane Plain language summary

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## Objective

- To analyse the readability of PLSs and abstracts of CSRs of interventions before and after the implementation of the newest Cochrane guidance
- English
- Spanish

# Methods

- Cross-sectional study: CSRs of intervention published in 2019 and 2023
- Excluded protocols, withdrawn, non-intervention reviews, overviews
- English: Simple Measure of Gobbledygook Index (SMOG)
- Spanish: Inflesx scale (syllables/word, words/phrase)
- We compared the readability index 2019 versus 2023
- Analysis of how current PLSs adjust to the 2022 Cochrane Guidance for PLS
- We analysed whether readability differs if the main author comes from a native English-speaking country.

# Results: English

## RESULTS: English

**Table 1: SMOG readability index for abstracts and PLS**

	Before guidance (n=541)		After guidance (n=386)	
	SMOG index	Grade level (age range)	SMOG index	Grade level (age range)
<b>Abstract<sup>1</sup></b>	13.13 ±1.16	College level (18-20)	12.84 ±1.25	College level (18-20)
<b>PLS<sup>2</sup></b>	11.35 ±1.47	11th grade (16-17)	10.80 ±1.27	11th grade (16-17)

t-test for independent samples ( significance level 0.05)  
 1. P-value =0.004  
 2. P-value < 0.0001

**Table 2: SMOG index values for PLS per authors' country of affiliation**

English native speaking countries	Non-English native speaking countries	p-value
11.14 ± 1.37	11.40 ± 1.44	0.6890

No abstract or PLS published after the release of Cochrane Guidance met Cochrane's recommendation of being readable for an 11-year-old.

# Results: Spanish

## INFLESZ readability index

	Before guidance (n=541)		After guidance (n=384)		
	INFLESZ	Interpretation	INFLESZ	Interpretation	
<b>Abstracts</b>	56.6 ± 0.28	Normal	57.2 ± 0.36	Normal	p=0.164
<b>PLS</b>	50.9 ± 0.28	Moderately hard	54.0 ± 0.29	Moderately hard	P<0.001

INFLESZ scale score	Interpretation
0-40	Very hard
40-55	Moderately hard
55-65	Normal
65-80	Moderately easy
80-100	Very easy

# Conclusions

- Readability indices in English have improved for both abstracts and PLS
- This improvement does not downgrade the schooling level and still fails to comply with Cochrane's Guidance recommendation
- There are no significant differences between PLS readability when written by native English-speakers and non-native English-speakers
- Readability indices in Spanish have improved in PLSs
- This improvement does not downgrade the difficulty level.



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