A COMPARISON OF THE PHRASEOLOGICAL LEXICON OF CLIL AND NON-CLIL LEARNERS OF DUTCH OR ENGLISH IN FRENCH-SPEAKING BELGIUM: A LONGITUDINAL STUDY

Amélie Bulon

OUTLINE

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2. Theoretical background
3. Research questions and hypotheses
4. Methodology
5. Results
6. Conclusions

1. INTRODUCTION

ARC PROJECT: ASSESSING CLIL – LINGUISTIC, COGNITIVE AND EDUCATIONAL PERSPECTIVES

- Objective: investigate the influence of CLIL and other educational and motivational factors on the acquisition of a target language (TL)
- Sample (928 pupils)

	CLIL Dutch	Non-CLIL Dutch	CLIL English	Non-CLIL English
Primary school pupils (455)	175	71	103	106
Secondary school pupils (473)	141	114	104	114

- Linguistic tasks, cognitive tests, socio-affective questionnaires, …
- Comparison between CLIL and NON-CLIL learners :
  - Which differences?
  - For which linguistic aspects?
  - Influence of cognitive, socio-emotional and pedagogical factors?

2. THEORETICAL BACKGROUND

THEORETICAL BACKGROUND
FOCUS ON PHRASEOLOGY

- Phraseology deals with the study of word combinations, rather than single words (ex: *good at*, *in addition to*, *op reis gaan*, *bloedmooi*, …)
- Phraseological competence is at the centre of linguistic competence in both first and second/foreign language acquisition (Siepmann, 2008)
- Essential component of native-like fluency (Handl, 2008; Granger & Meunier, 2008)
- Few studies focusing on the phraseological knowledge of CLIL learners

THEORETICAL BACKGROUND LONGITUDINAL STUDIES

- Studies are not unanimous regarding the development of TL phraseological competence over time

- Accuracy appears to suffer whenever there is an increase in the range of the learners' phraseological units (Laufer & Waldman, 2011; Thewissen, 2013)

- Greater progress in the writing development of CLIL learners compared to NON-CLIL peers (vocabulary being one of the features measured) (Ruiz de Zarobe, 2010; Juan-Garau, Salazar-Noguera & Gené-Gil, 2013; Gené-Gil, Juan-Garau & Salazar-Noguera, 2015; Roquet i Pugès, 2011)

RESULTS FROM PREVIOUS ANALYSES

- Higher phraseological production in CLIL
- Higher accuracy of phraseological productions in CLIL
- Same tendencies in English and Dutch as target languages

3. RESEARCH QUESTIONS

RESEARCH QUESTIONS (1)

- How does the phraseological language of CLIL and NON-CLIL learners develop longitudinally in terms of frequency of use? (RQ1)
- How does the phraseological language of CLIL and NON-CLIL learners develop longitudinally in terms of accuracy? (RQ2)

➡ **Hypothesis:** It is believed that time spent learning a target language and proficiency in that language are positively correlated (Meunier, 2015). Even though this is not always the case regarding phraseological competence, we expect CLIL and NON-CLIL learners to perform better at Time 2

RESEARCH QUESTIONS (2)

- To what extent does the phraseological lexicon of CLIL and NON-CLIL learners differ in their longitudinal development in terms of frequency of use? (RQ3)
- To what extent does the phraseological lexicon of CLIL and NON-CLIL learners differ in their longitudinal development in terms of accuracy? (RQ4)

➡ **Hypothesis:** We expect the CLIL learners' TL phraseological language to improve more than the one of NON-CLIL learners since they benefit from more exposure in the target language

4. METHODOLOGY

PARTICIPANTS

- 339 French-speaking secondary school learners of English or Dutch in CLIL and NON-CLIL contexts

- First data collection (T1): from October 19th to November 9th 2015 in LLN => 5th year of secondary school

- Second data collection (T2): from April 10th to May 15th 2017 in LLN => 6th year of secondary school

Dutch CLIL	Dutch NON-CLIL	English CLIL	English NON-CLIL
123	72	78	66

CORPORA

- Same timed writing task in computer rooms
- E-mails to a friend of at least 15 lines
- Topics: holidays or party

	TIME 1			TIME 2		
	Number of texts	Number of words	Mean text length	Number of texts	Number of words	Mean text length
CLIL English	78	25,537	327	78	24,447	313
NON-CLIL English	66	17,341	263	66	17,284	262
TOTAL English	**144**	**42,878**	**298**	**144**	**41,731**	**290**
CLIL Dutch	123	34,786	283	123	33,495	272
NON-CLIL Dutch	72	14,031	194	72	15,535	216
TOTAL Dutch	**195**	**48,817**	**250**	**195**	**49,030**	**251**

EXTRACTION AND CLASSIFICATION

- Step 1: Wordsmith Tools (Scott, 2012)
- Step 2: classification of phraseological units (Granger & Paquot, 2008)

Referential phrasemes

Lexical collocations
Compounds
Grammatical collocations
Phrasal verbs
Idioms
Bi/Trinomials
Similes

Textual phrasemes

Complex prepositions
Complex conjunctions
Linking adverbials
Textual sentence stems

Communicative phrasemes

Speech act formulae
Attitudinal formulae
Slogans
Proverbs
Commonplaces

- Step 3: classification of phraseological errors (Thewissen, 2008 and Hong et al., 2001)

LONGITUDINAL ANALYSES

- Intra-group analysis: look at the two groups independently => progress between Time 1 and Time 2? (Juan-Garau, Salazar-Noguera & Gené-Gil, 2013; Gené-Gil, Juan-Garau & Salazar-Noguera, 2015)

- Inter-group analysis: measure the differential linguistic gains between the two learners groups => difference between CLIL's and NON-CLIL's progress? (Roquet i Pugès, 2011)

5. RESULTS DUTCH

INTRA-GROUP ANALYSIS FREQUENCY OF USE (CLIL)

	TIME 1		TIME 2		
	Mean	SD	Mean	SD	
Number of words	282.81	58.25	272.32	50.28	
Number of phrasemes	31.77	8.92	30.28	8.28	
Referential phrasemes	26.22	8.29	24.11	7.00	**
Textual phrasemes	2.91	2.09	3.33	2.33	
Communicative phrasemes	2.64	1.53	2.85	1.71	
Lexical collocations	14.04	5.76	11.37	4.39	***
Compounds	3.17	2.25	3.12	2.38	
Grammatical collocations	7.11	3.57	7.72	3.49	
Phrasal verbs	1.86	1.44	1.90	1.57	
Complex prepositions	0.13	0.34	0.24	0.48	
Complex conjunctions	2.33	1.91	2.54	1.98	
Linking adverbials	0.36	0.77	0.46	0.81	
Speech act formulae	1.46	1.22	1.53	1.18	
Attitudinal formulae	1.19	1.11	1.30	1.12	

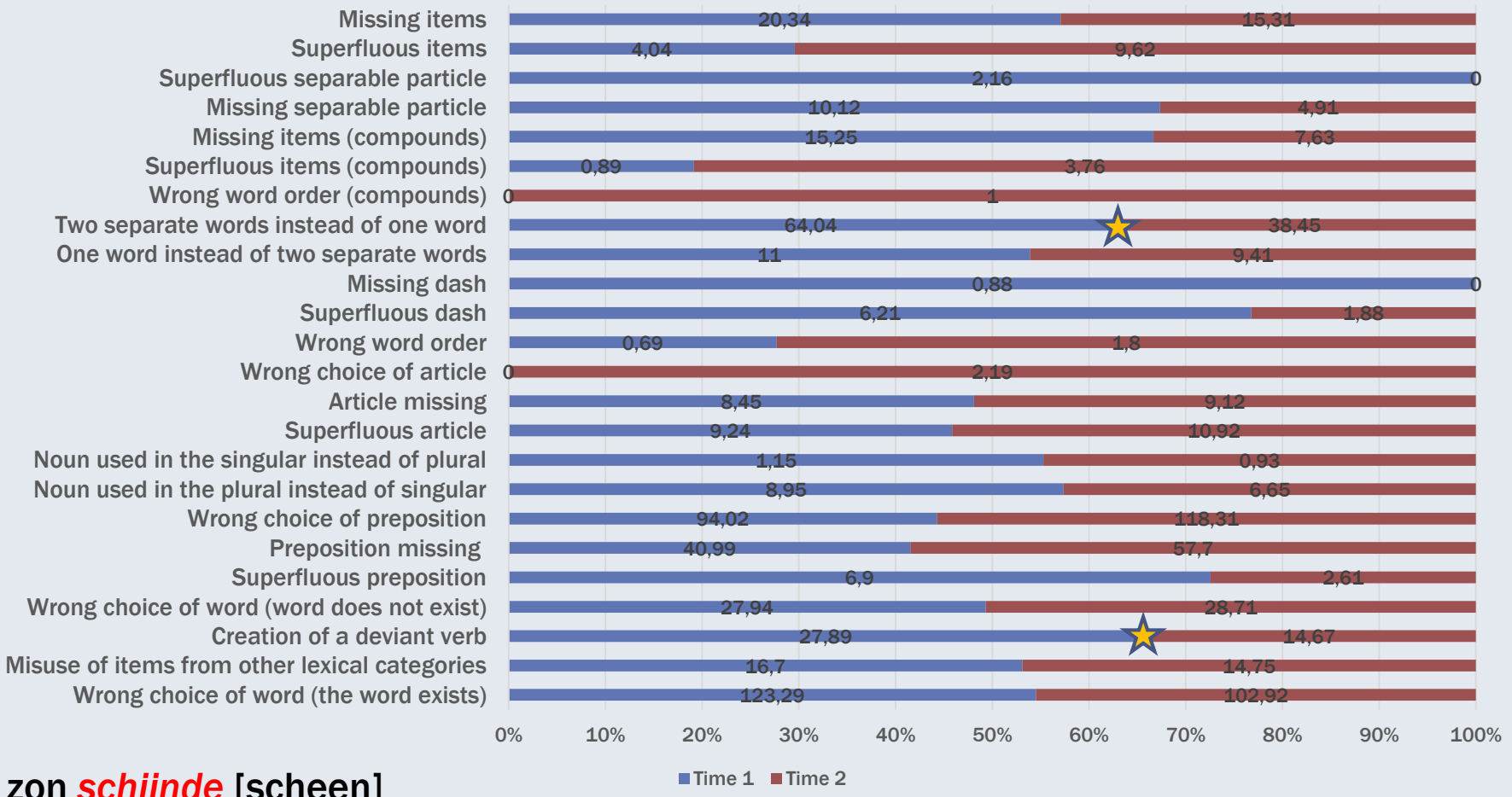
INTRA-GROUP ANALYSIS FREQUENCY OF USE (NON-CLIL)

	TIME 1		TIME 2		
	Mean	SD	Mean	SD	
Number of words	194.88	62.96	215.76	47.53	**
Number of phrasemes	22.08	8.04	24.64	7.68	*
Referential phrasemes	18.69	7.29	20.12	7.25	
Textual phrasemes	1.26	1.60	1.82	1.71	*
Communicative phrasemes	2.12	1.85	2.69	1.95	*
Lexical collocations	10.50	4.26	10.82	4.43	
Compounds	1.86	1.68	2.00	1.93	
Grammatical collocations	5.44	3.56	6.57	3.54	*
Phrasal verbs	0.85	1.08	0.74	1.20	
Complex prepositions	0.04	0.20	0.15	0.40	*
Complex conjunctions	1.04	1.39	1.29	1.32	
Linking adverbials	0.17	0.50	0.37	0.86	
Speech act formulae	1.44	1.46	1.47	1.30	
Attitudinal formulae	0.68	1.11	1.22	1.33	**

SUMMARY INTRA-GROUP ANALYSIS FREQUENCY OF USE (RQ1)

- Clear improvement in the production of phraseological units in the NON-CLIL group
  - statistically significant increase in half of the categories
- No significant improvement in the CLIL group
  - statistically significant decrease in two categories

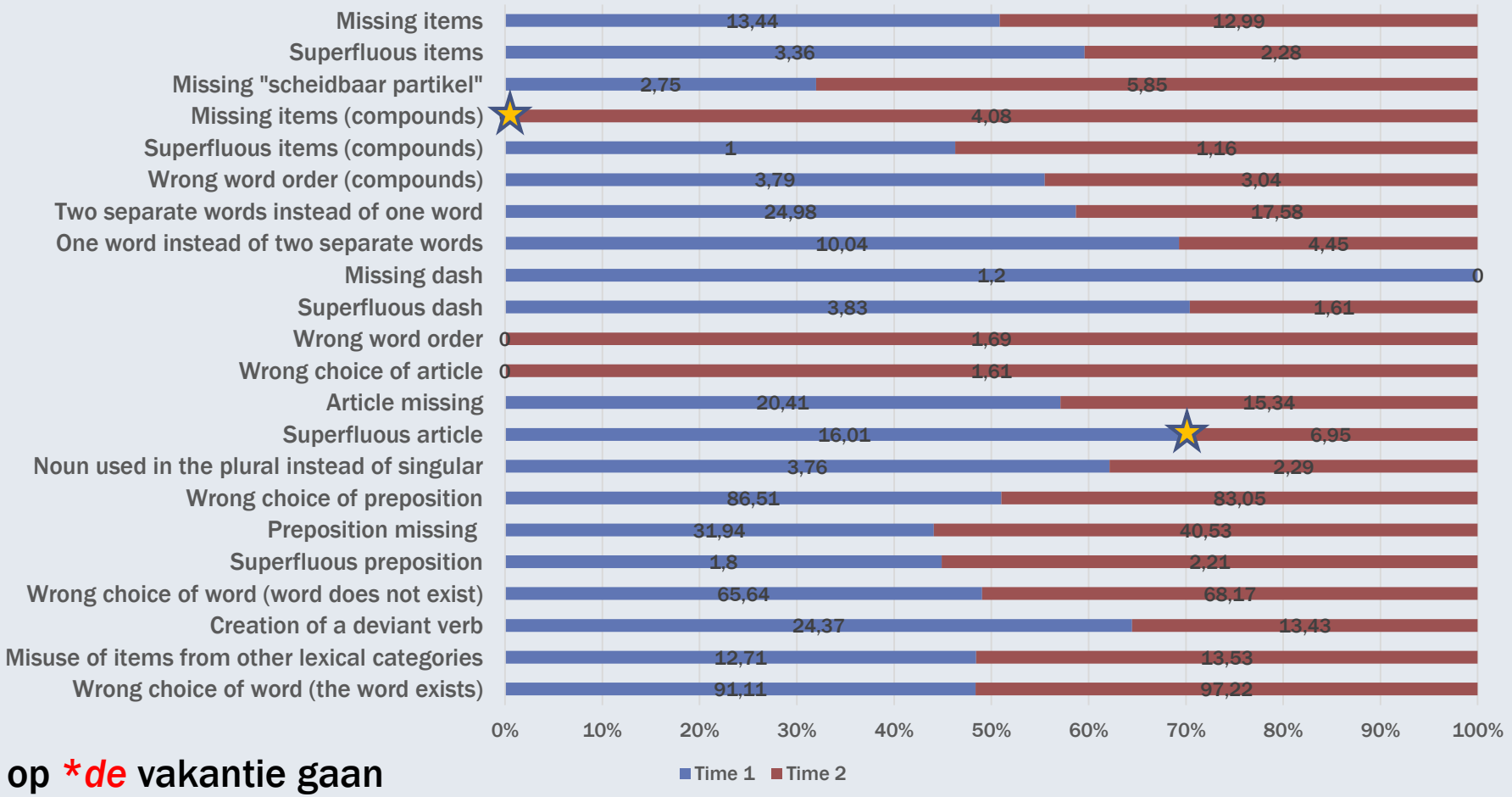
INTRA-GROUP ANALYSIS ACCURACY (CLIL)



zon *schijnde* [scheen]

zomer vakantie

INTRA-GROUP ANALYSIS ACCURACY (NON-CLIL)



op ***de** vakantie gaan

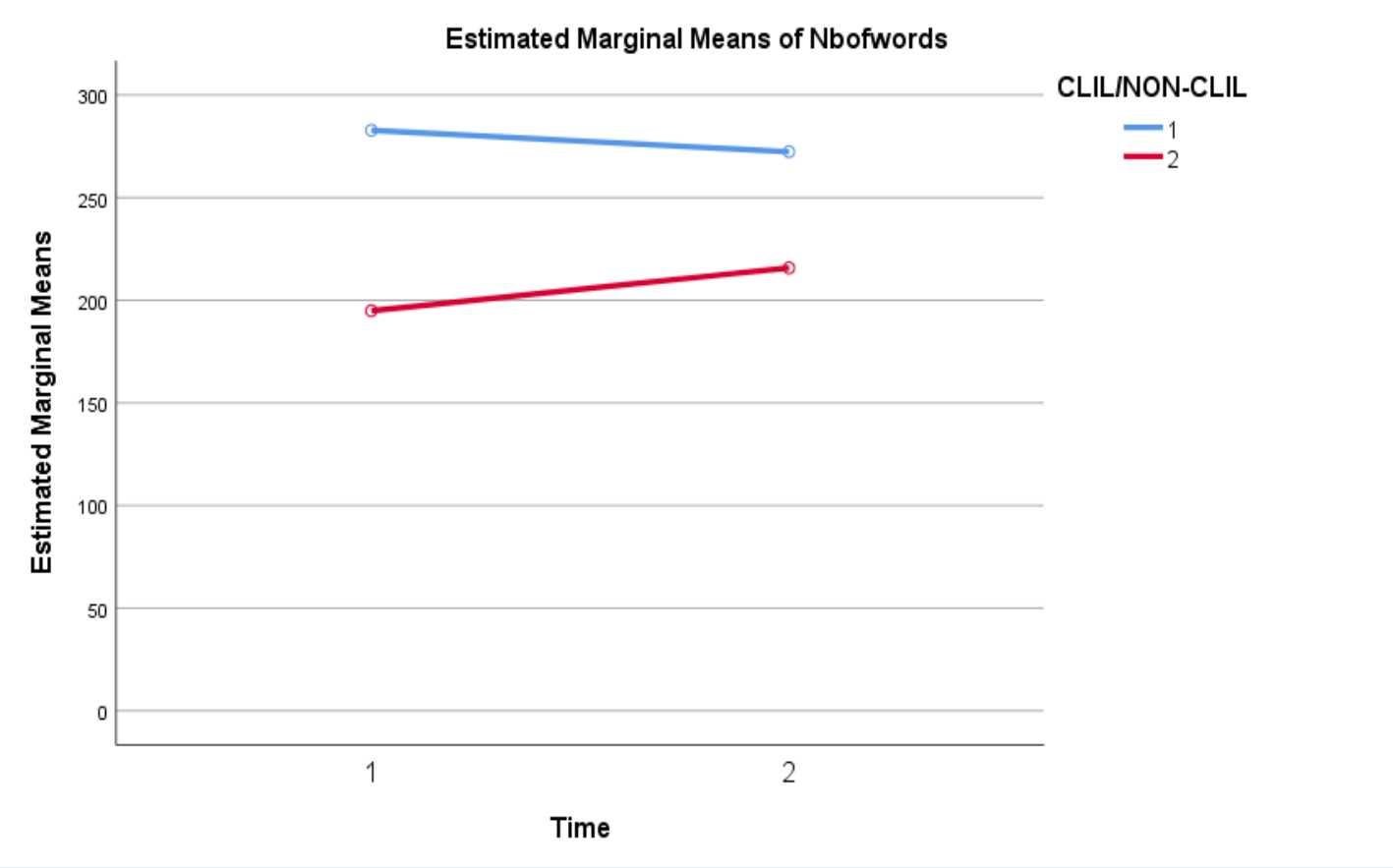
verjaardag*[s]*feest

SUMMARY INTRA-GROUP ANALYSIS ACCURACY (RQ2)

- Global trend: improvement of accuracy in both groups
  - less phraseological errors in more than half of the categories
- Improvement seems greater in the CLIL group
  - CLIL: significantly less errors in two categories
  - NON-CLIL: significantly less errors in one category and significantly more errors in one category

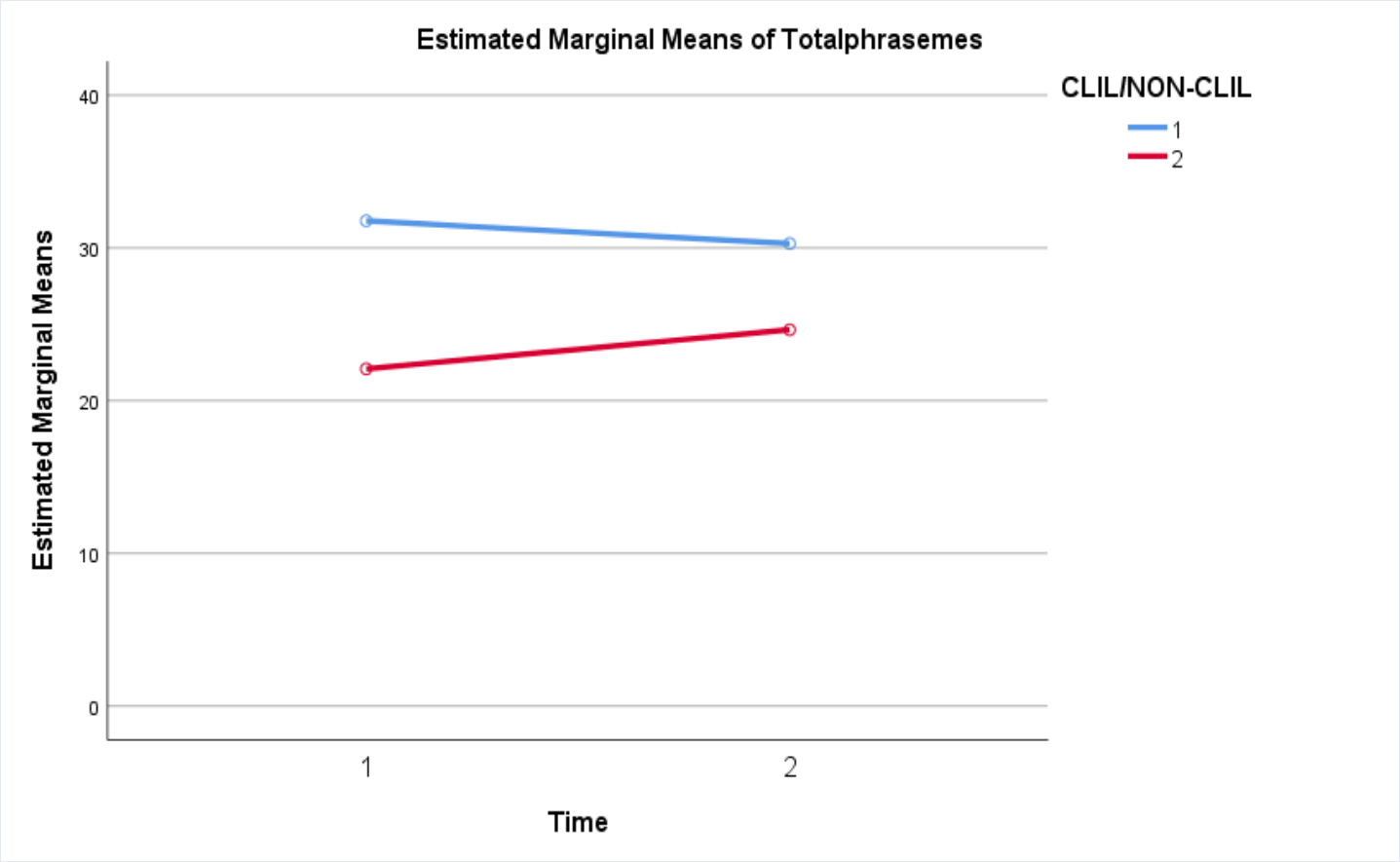
INTER-GROUP ANALYSIS FREQUENCY OF USE

Total number of words



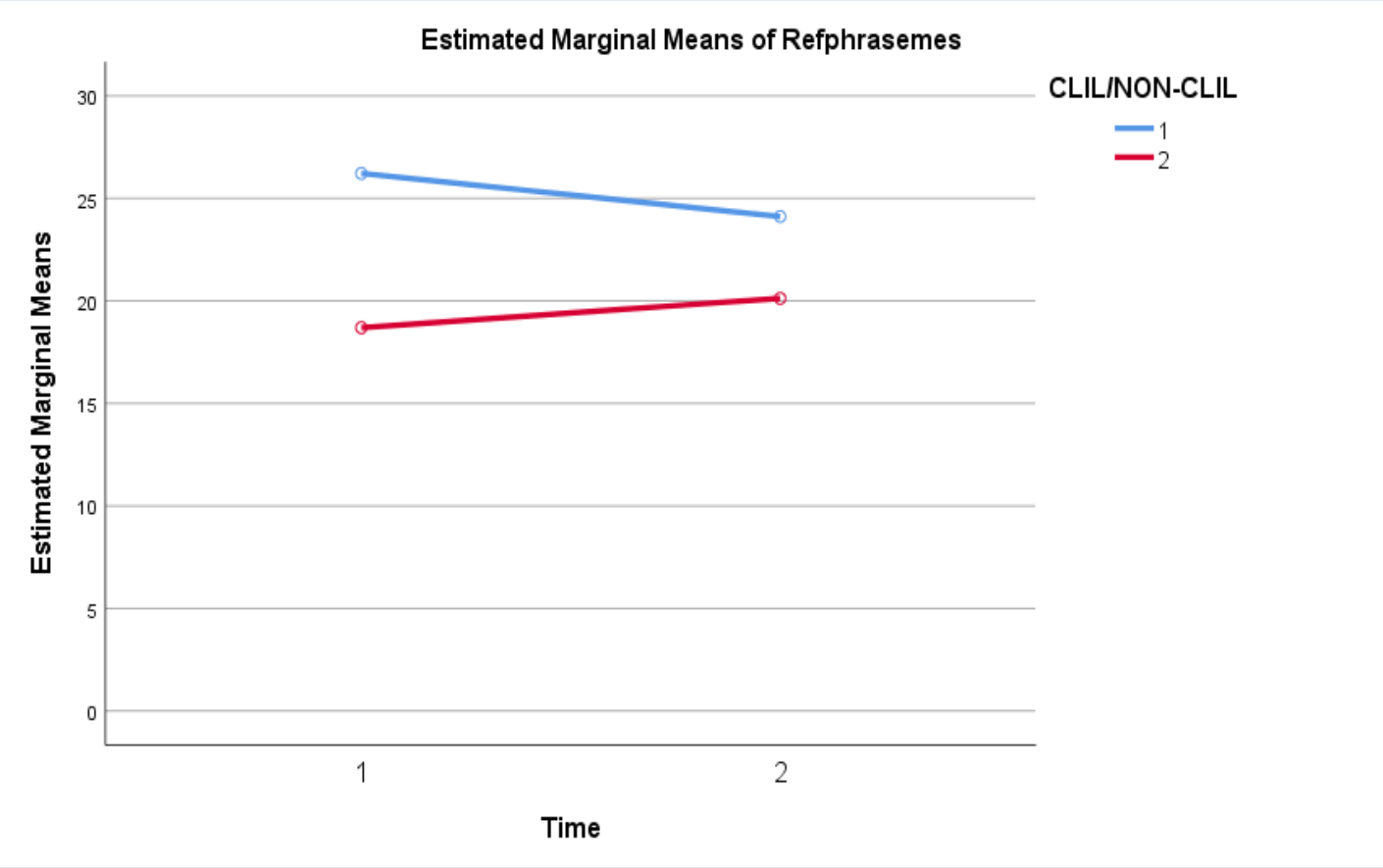
INTER-GROUP ANALYSIS FREQUENCY OF USE

Total number of phraseological units



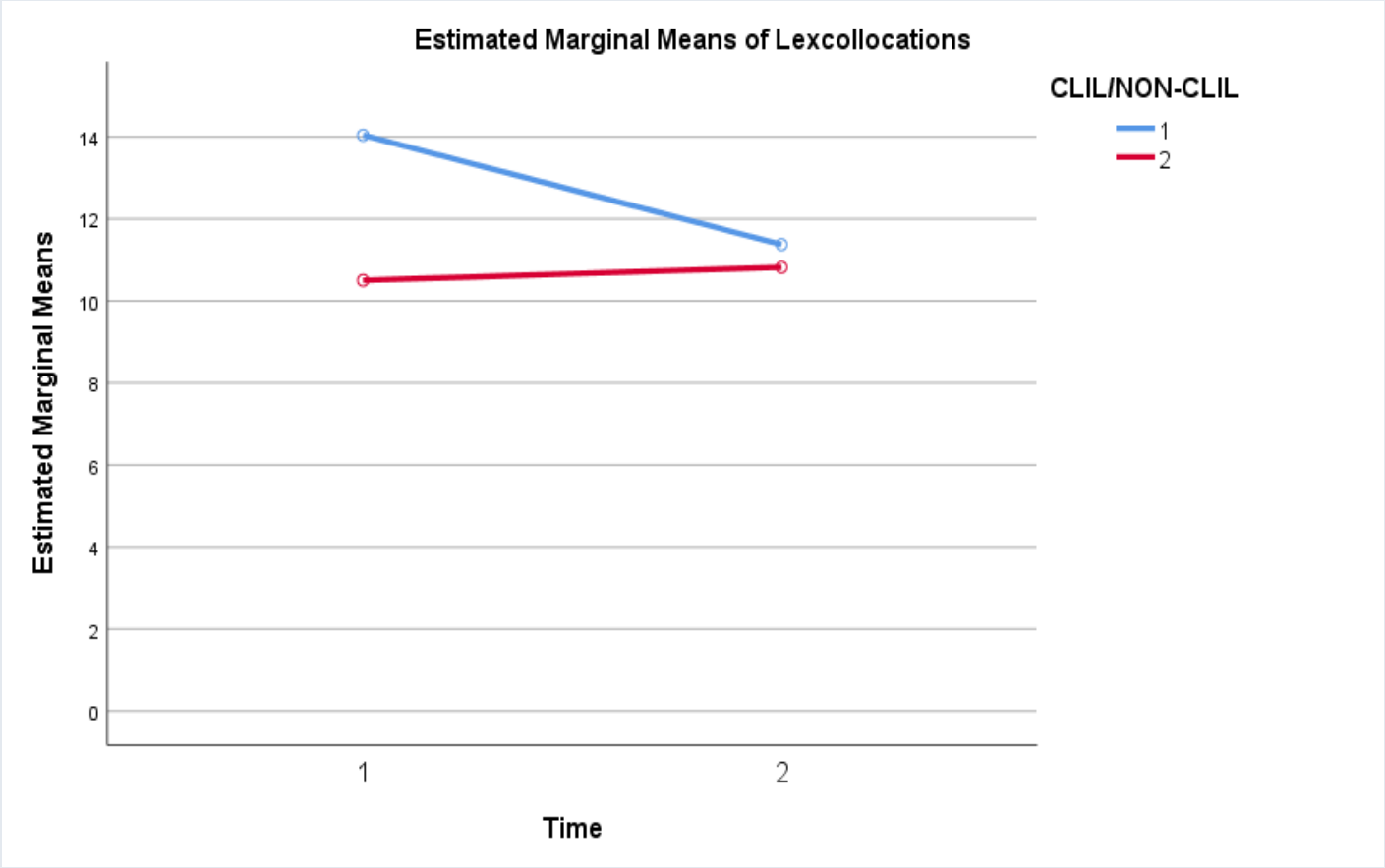
INTER-GROUP ANALYSIS FREQUENCY OF USE

Referential phrasemes



INTER-GROUP ANALYSIS FREQUENCY OF USE

Lexical collocations

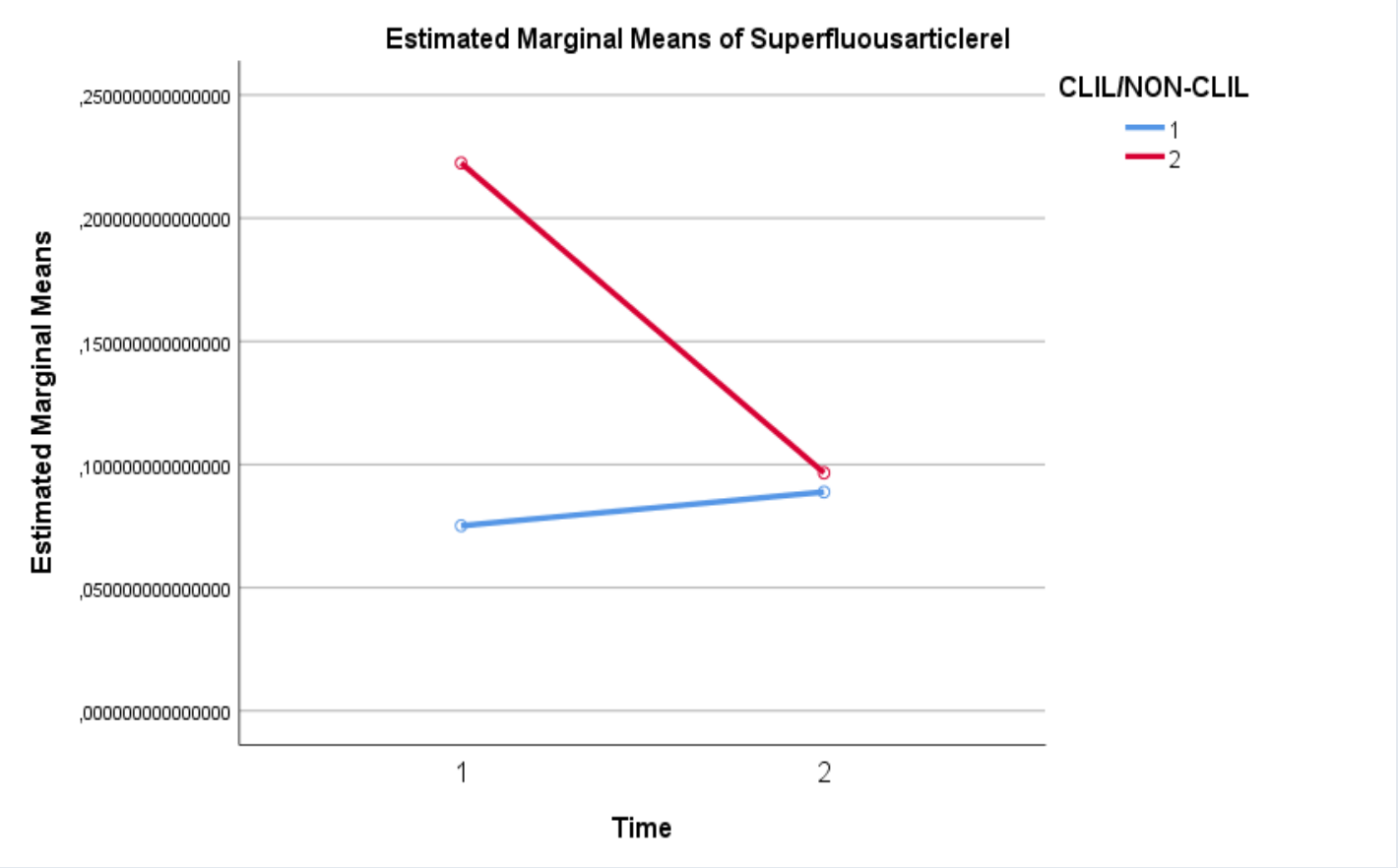


SUMMARY INTER-GROUP ANALYSIS FREQUENCY OF USE (RQ3)

- Significant difference in the development of CLIL versus NON-CLIL learners in four of the categories measured
  - systematic increase of production in the NON-CLIL group
  - systematic decrease of production in the CLIL group

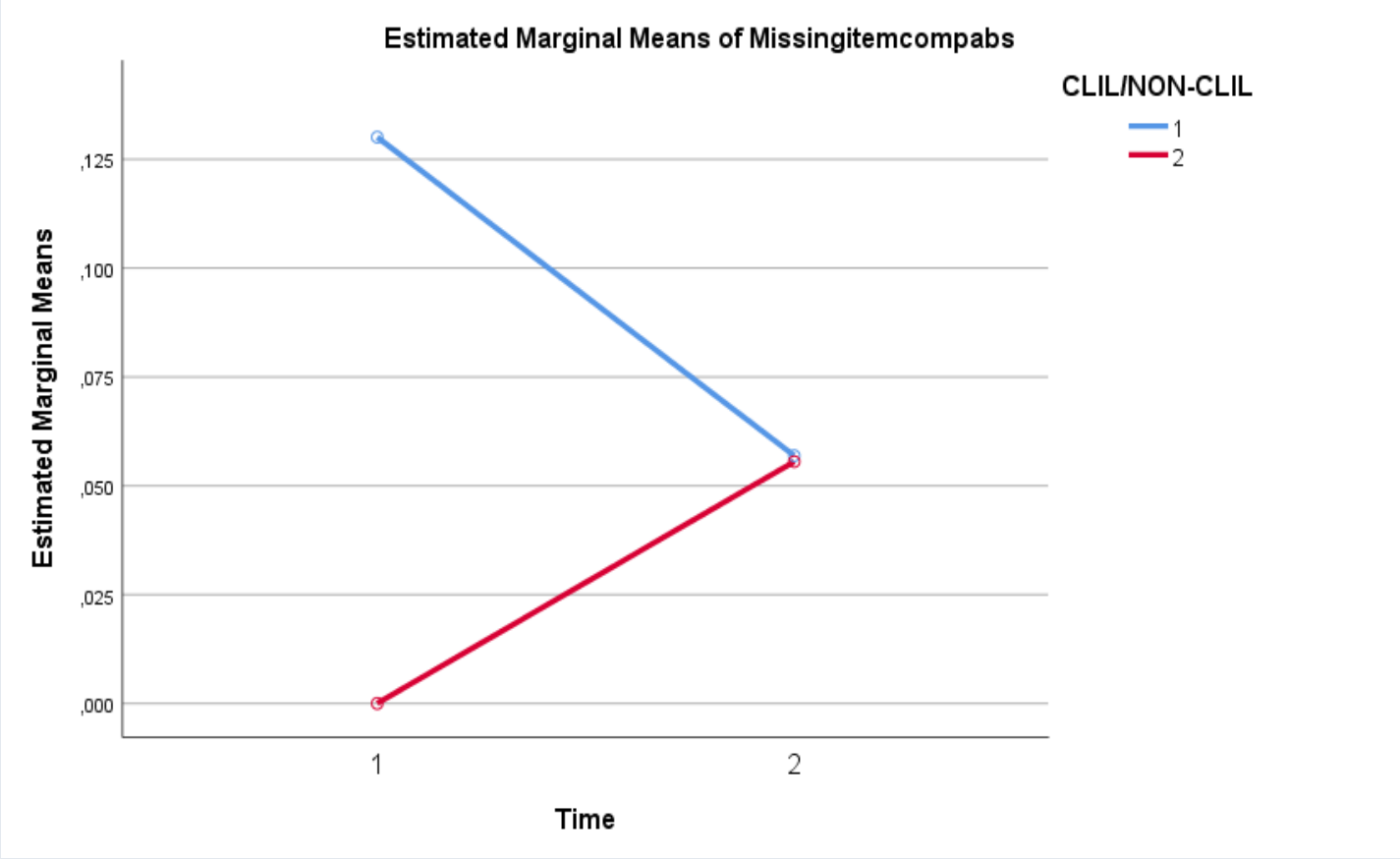
INTER-GROUP ANALYSIS NUMBER OF ERRORS

Use of a superfluous article (relative freq)



INTER-GROUP ANALYSIS
NUMBER OF ERRORS

Missing item in compounds (absolute freq)



SUMMARY INTER-GROUP ANALYSIS ACCURACY (RQ4)

- Significant difference in the development of accuracy of CLIL versus NON-CLIL learners' phraseological productions in two categories of phraseological errors
  - No systematic trend

6. RESULTS ENGLISH

INTRA-GROUP ANALYSIS FREQUENCY OF USE (CLIL)

	TIME 1		TIME 2		
	Mean	SD	Mean	SD	
Number of words	327.40	65.39	313.42	71.43	
Number of phrasemes	31.38	9.07	33.85	8.65	*
Referential phrasemes	27.92	8.42	30.22	8.09	*
Textual phrasemes	1.04	1.26	1.28	1.18	
Communicative phrasemes	2.42	2.21	2.35	1.90	
Lexical collocations	10.37	4.66	10.58	4.85	
Compounds	7.10	3.69	6.24	3.19	
Grammatical collocations	9.72	4.51	12.90	5.19	***
Phrasal verbs	0.54	0.93	0.42	0.67	
Complex prepositions	0.36	0.68	0.49	0.64	
Complex conjunctions	0.26	0.52	0.35	0.62	
Linking adverbials	0.40	0.81	0.41	0.65	
Speech act formulae	1.53	1.28	1.40	1.32	
Attitudinal formulae	0.90	1.70	0.95	1.13	

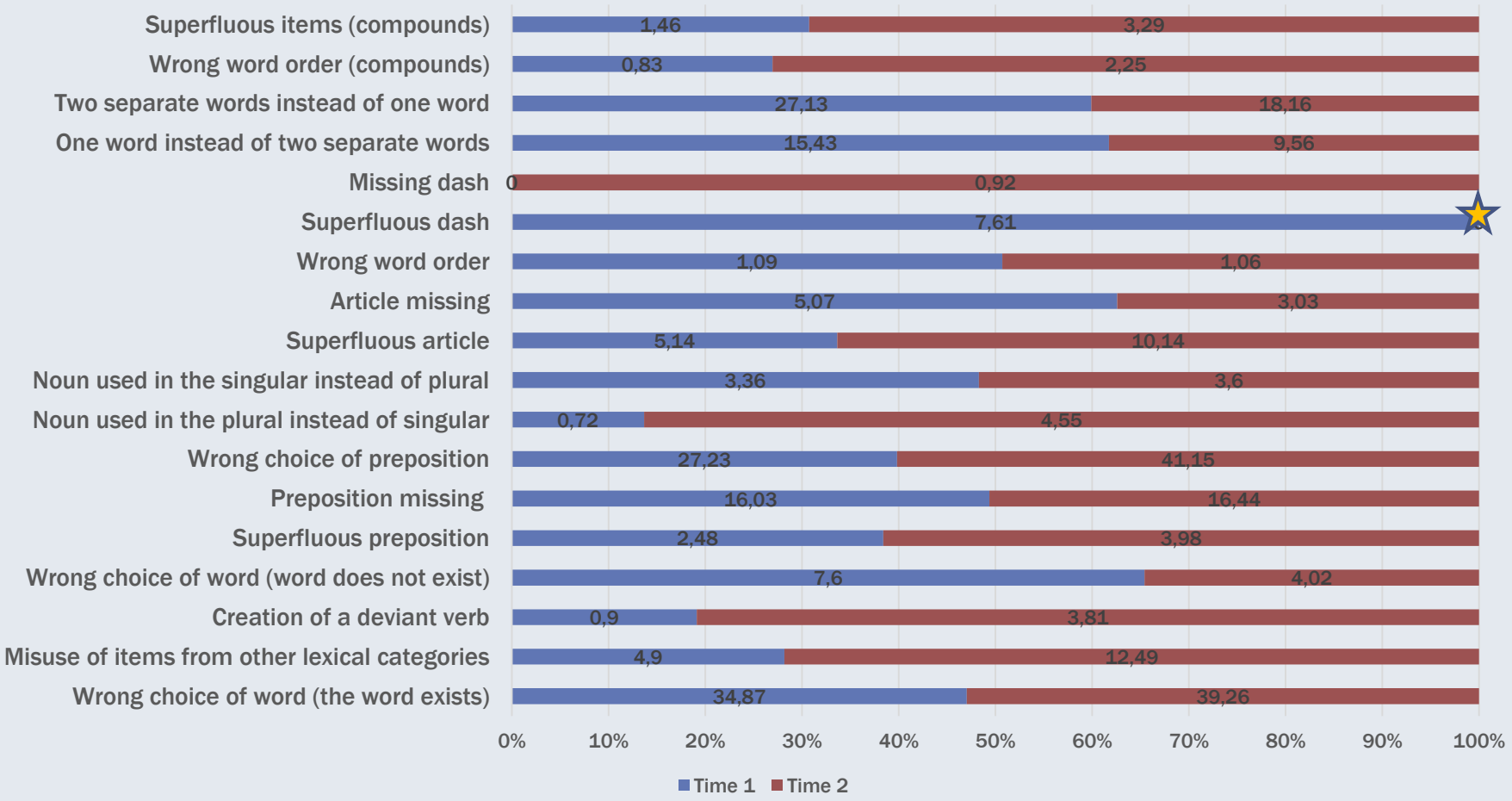
INTRA-GROUP ANALYSIS FREQUENCY OF USE (NON-CLIL)

	TIME 1		TIME 2		
	Mean	SD	Mean	SD	
Number of words	262.74	82.46	261.88	54.80	
Number of phrasemes	22.18	8.90	28.79	8.01	***
Referential phrasemes	19.85	8.12	26.00	7.44	***
Textual phrasemes	0.52	0.83	0.47	0.75	
Communicative phrasemes	1.82	1.55	2.26	1.68	
Lexical collocations	8.97	4.51	10.94	4.00	**
Compounds	4.36	3.25	5.09	2.79	
Grammatical collocations	6.42	3.78	9.94	3.94	***
Phrasal verbs	0.05	0.21	0.06	0.30	
Complex prepositions	0.09	0.29	0.11	0.31	
Complex conjunctions	0.08	0.32	0.12	0.54	
Linking adverbials	0.35	0.67	0.21	0.41	
Speech act formulae	1.35	1.18	1.70	1.41	
Attitudinal formulae	0.47	0.83	0.56	0.79	

SUMMARY OF INTRA-GROUP ANALYSIS FREQUENCY OF USE (RQ1)

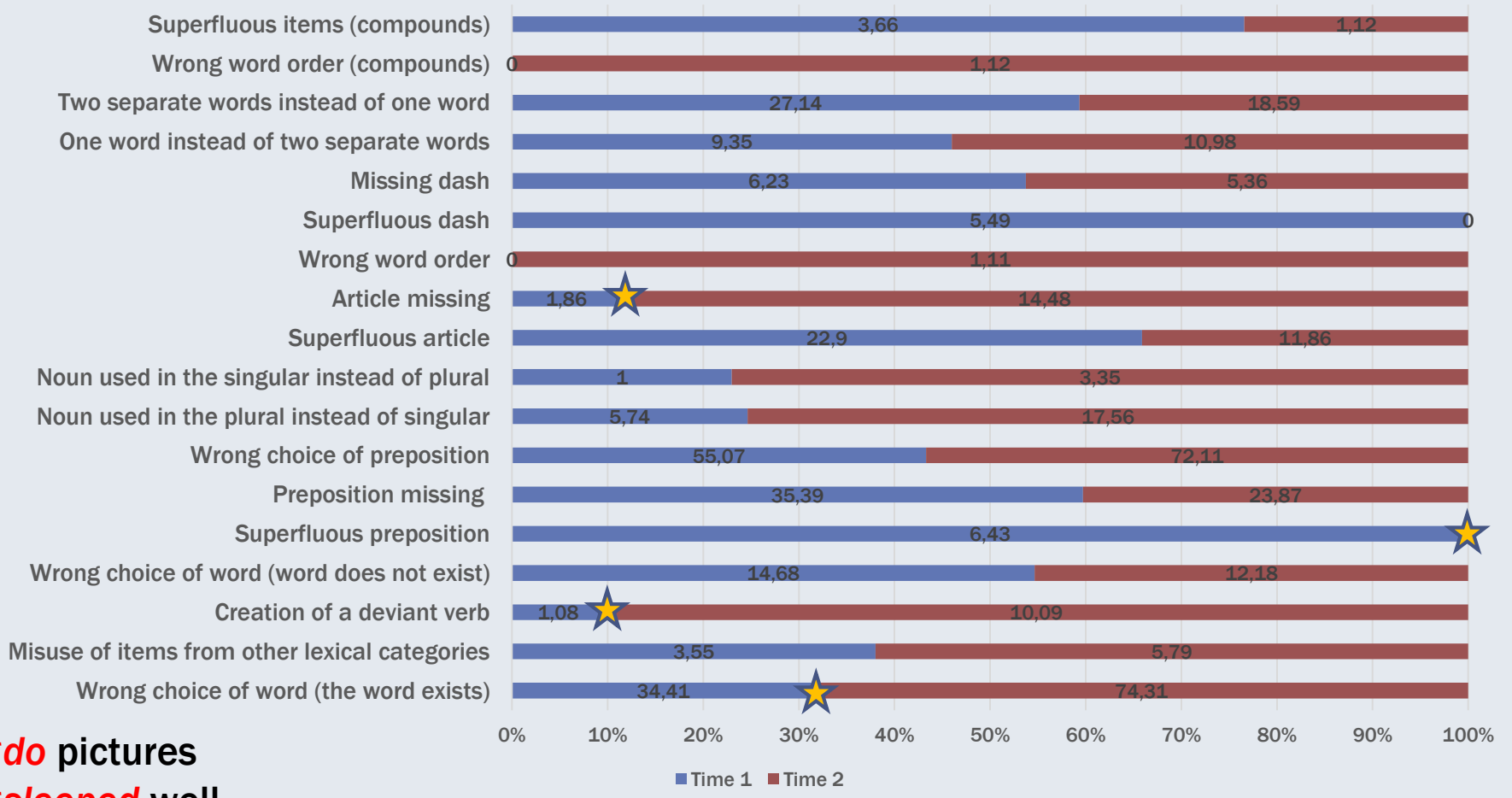
- Significant improvement in both groups of learners
  - CLIL: progress in three of the categories measured
  - NON-CLIL: progress in four of the categories measured
- Same categories involved

INTRA-GROUP ANALYSIS ACCURACY (CLIL)



grand-mother [grandmother]

INTRA-GROUP ANALYSIS ACCURACY (NON-CLIL)



*do pictures

*sleeped well

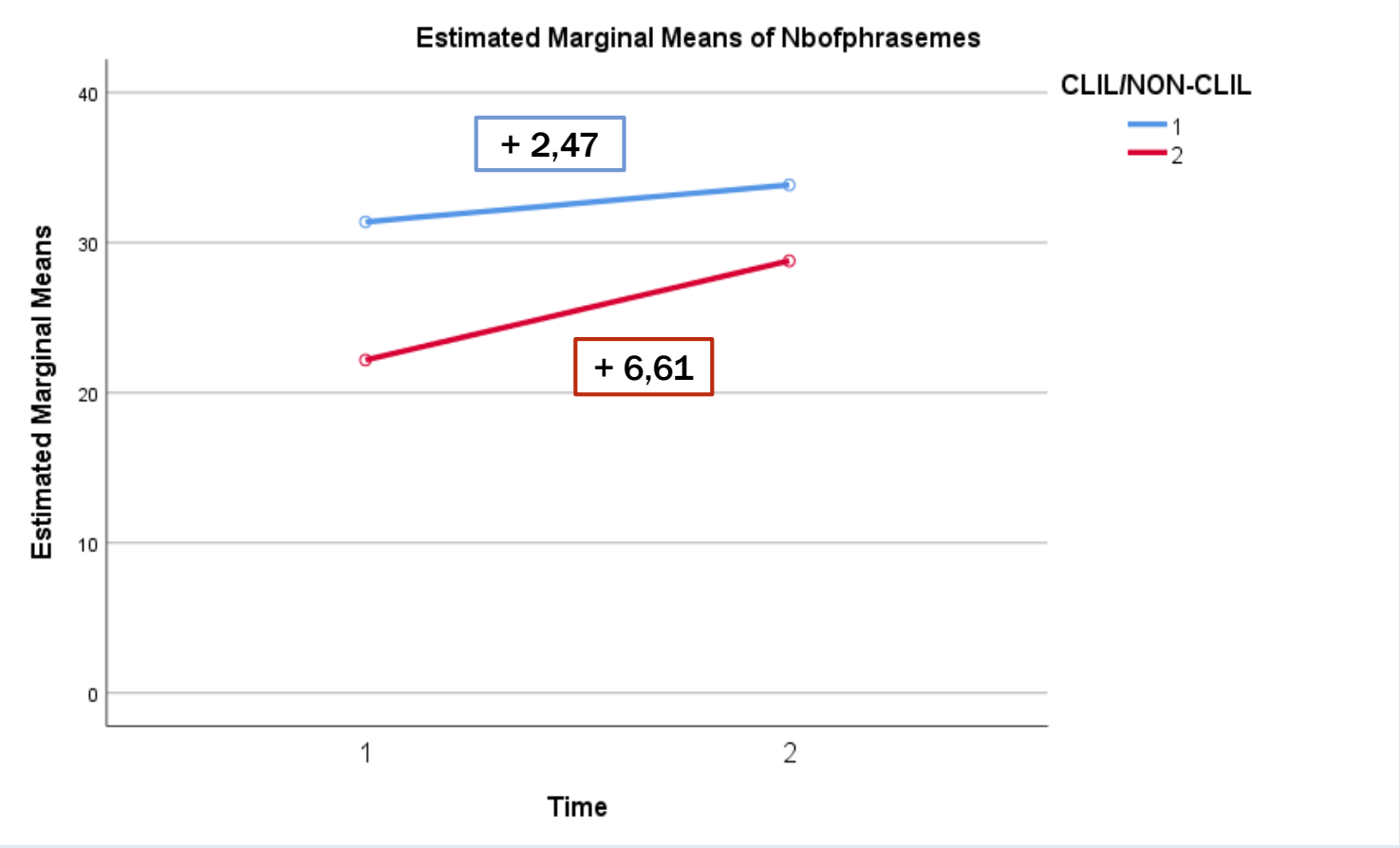
have [a] great time

SUMMARY INTRA-GROUP ANALYSIS ACCURACY (RQ2)

- Global trend: decrease in the accuracy of the learners' phraseological language
  - more phraseological errors in more than half of the categories
- Decrease seems greater in the NON-CLIL group
  - CLIL: significantly less errors in one category
  - NON-CLIL: significantly more errors in three categories and significantly less errors in one category

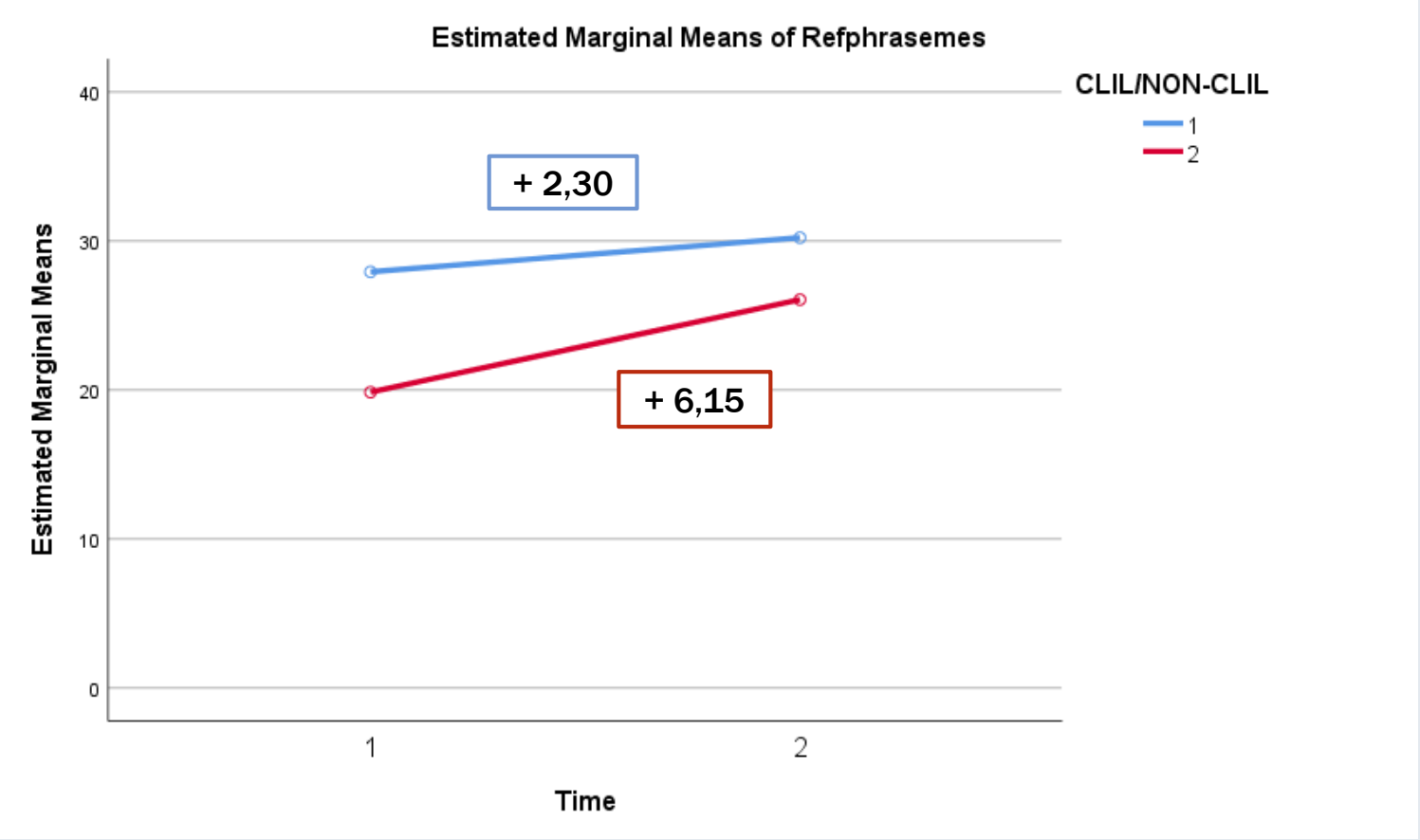
INTER-GROUP ANALYSIS FREQUENCY OF USE

Total number of phraseological units



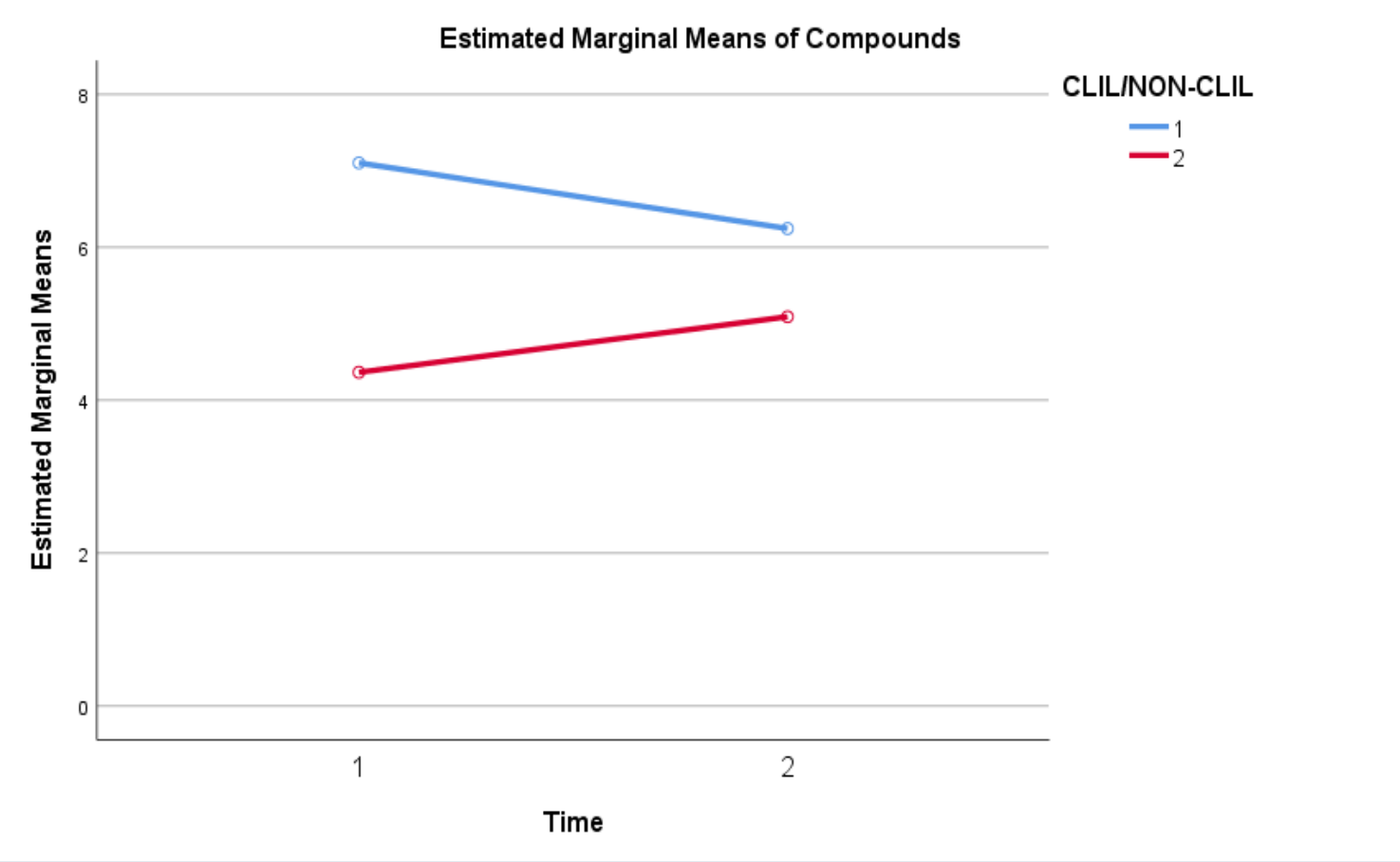
INTER-GROUP ANALYSIS FREQUENCY OF USE

Referential phrasemes



INTER-GROUP ANALYSIS FREQUENCY OF USE

Compounds

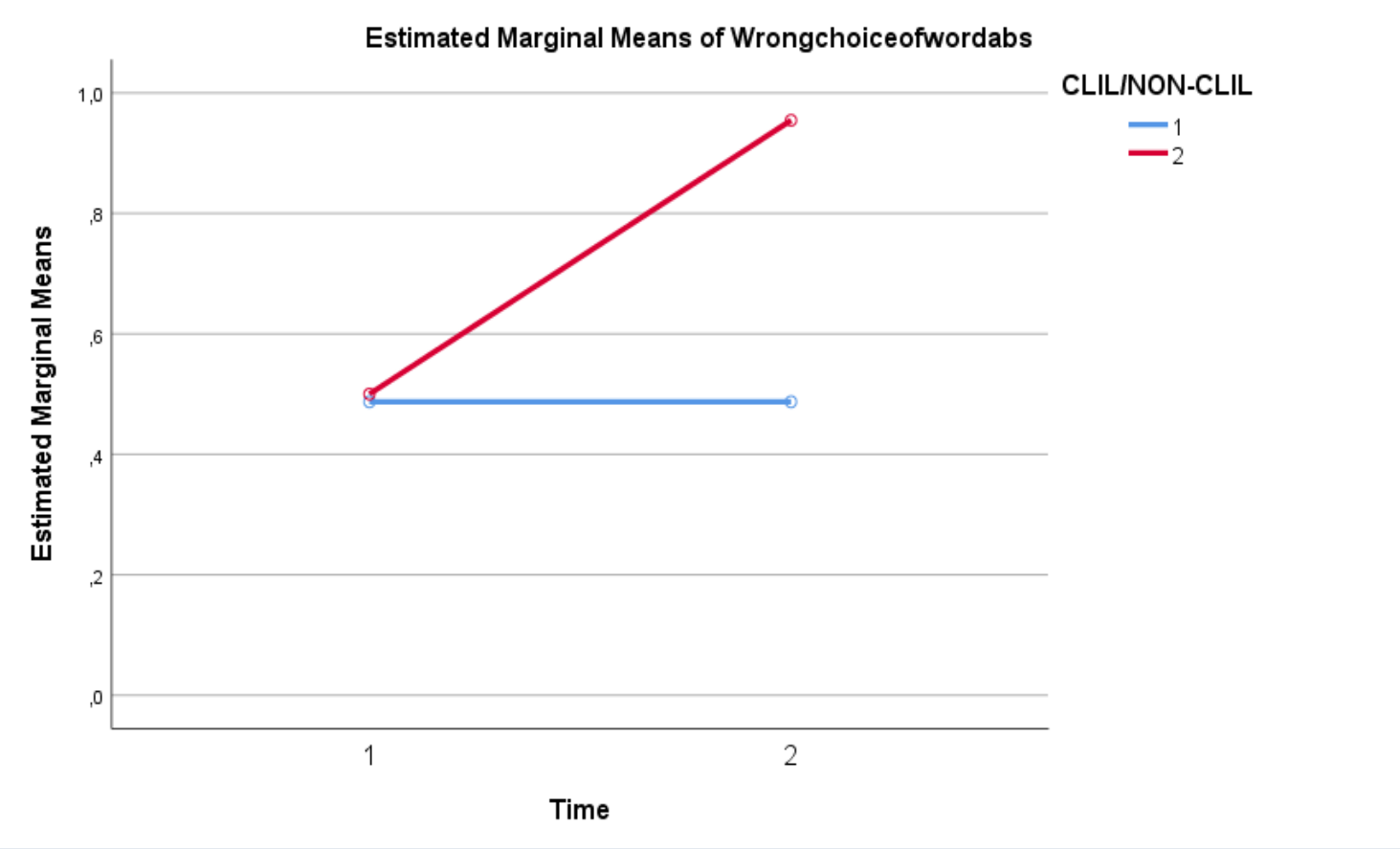


SUMMARY INTER-GROUP ANALYSIS FREQUENCY OF USE (RQ3)

- Significant difference in the development of CLIL versus NON-CLIL learners in three of the categories measured
  - NON-CLIL learners systematically outperformed CLIL learners

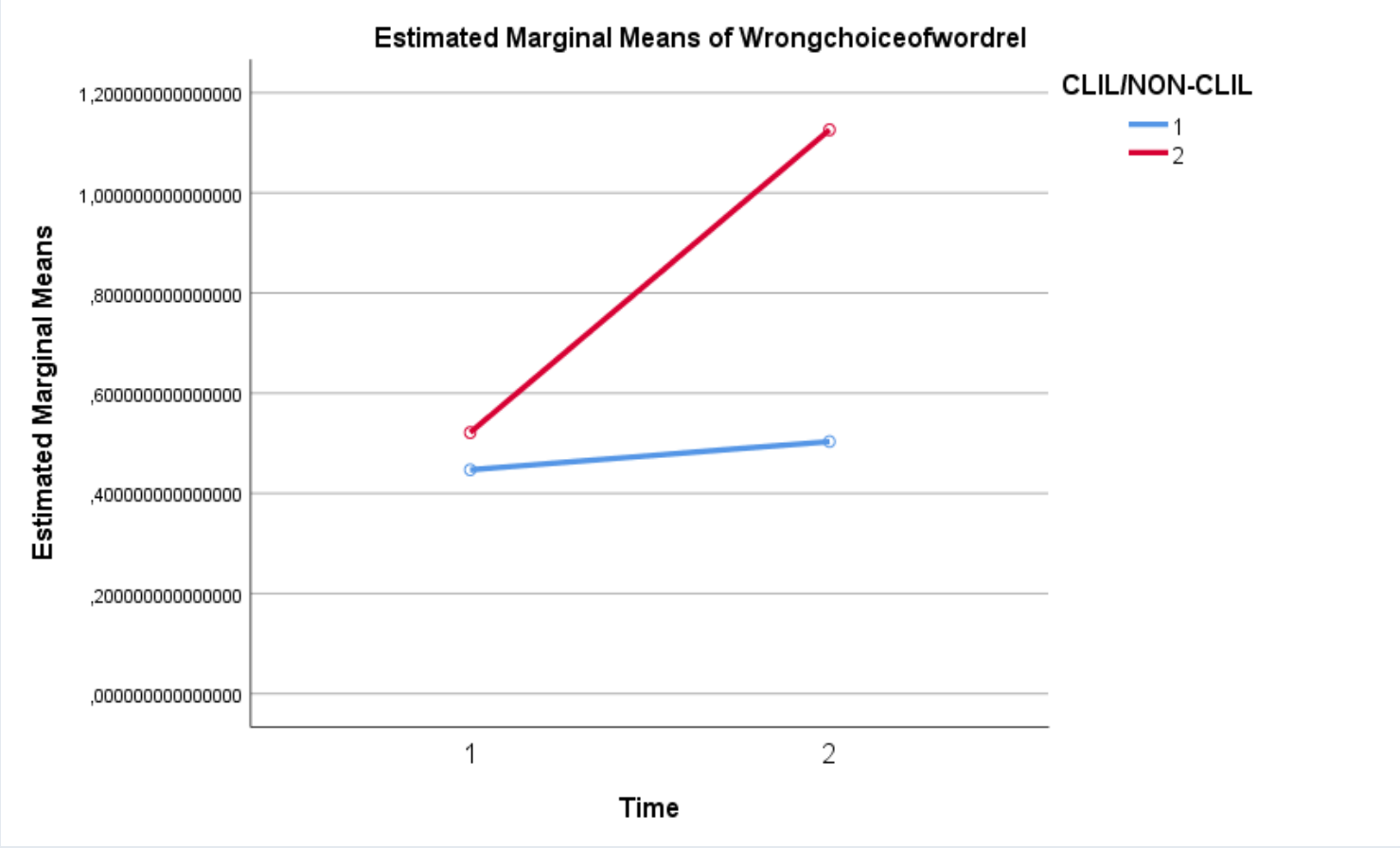
INTER-GROUP ANALYSIS NUMBER OF ERRORS

Wrong choice of existing words (absolute freq)



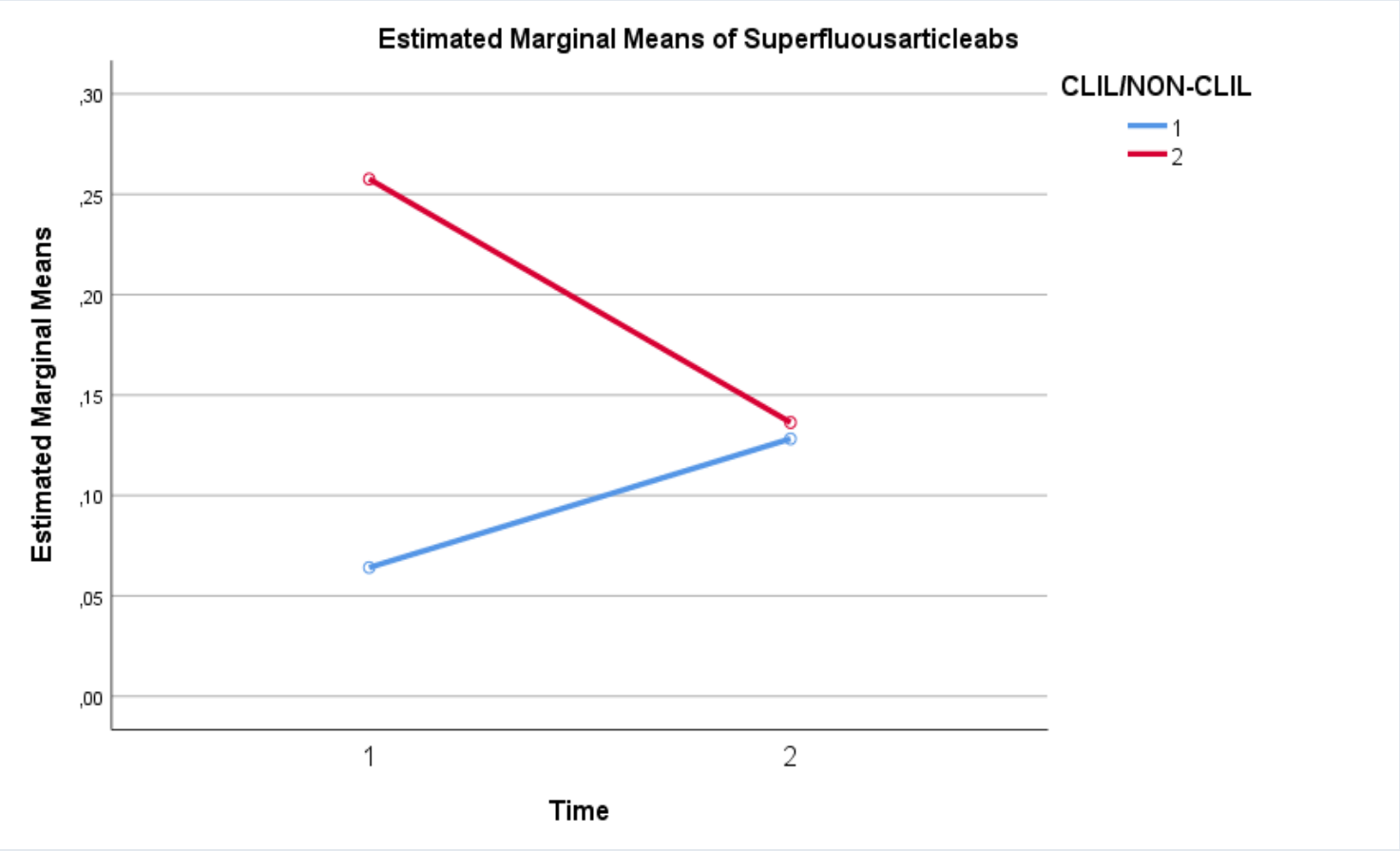
INTER-GROUP ANALYSIS NUMBER OF ERRORS

Wrong choice of existing words (relative freq)



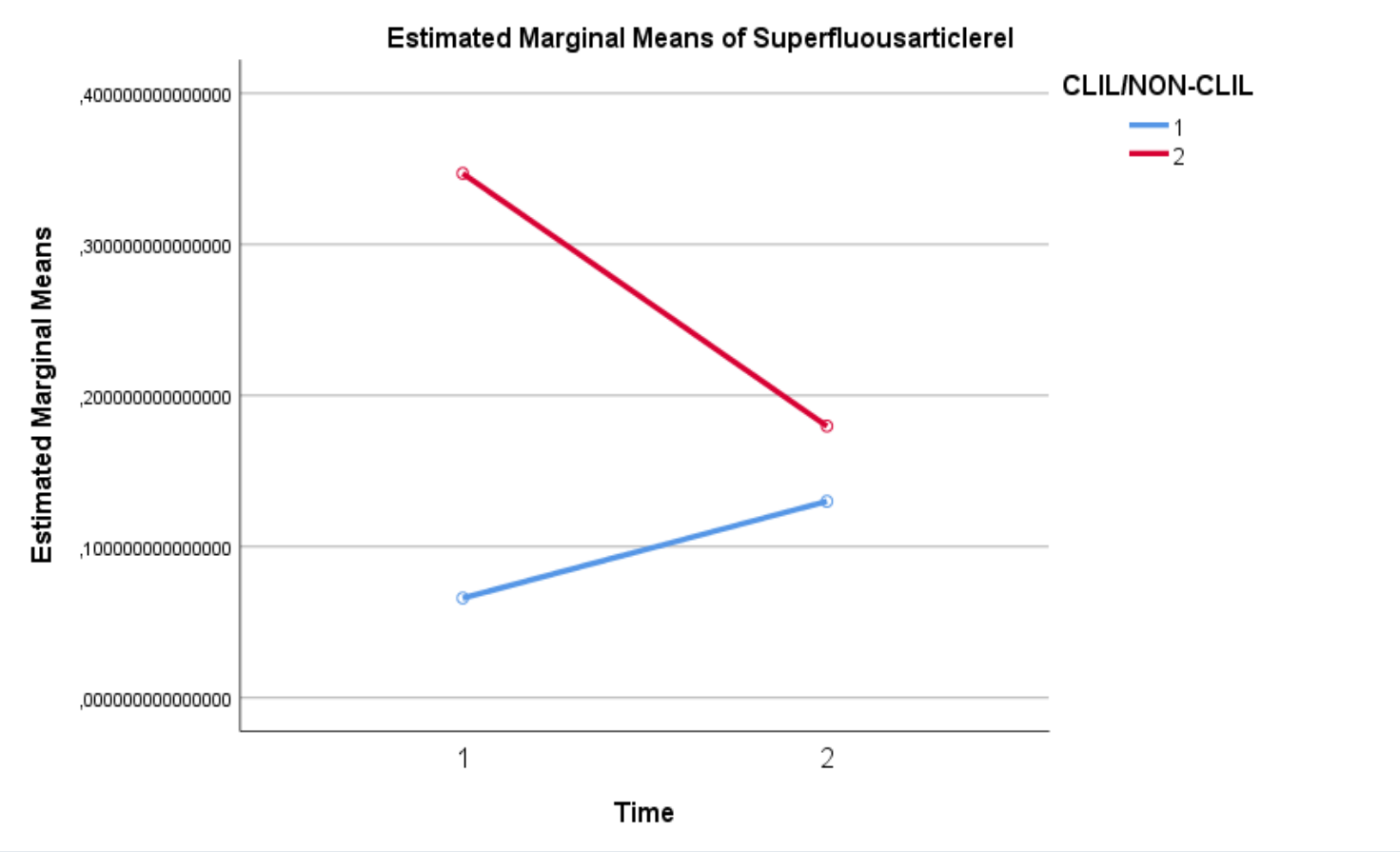
INTER-GROUP ANALYSIS
NUMBER OF ERRORS

Superfluous article (absolute freq)



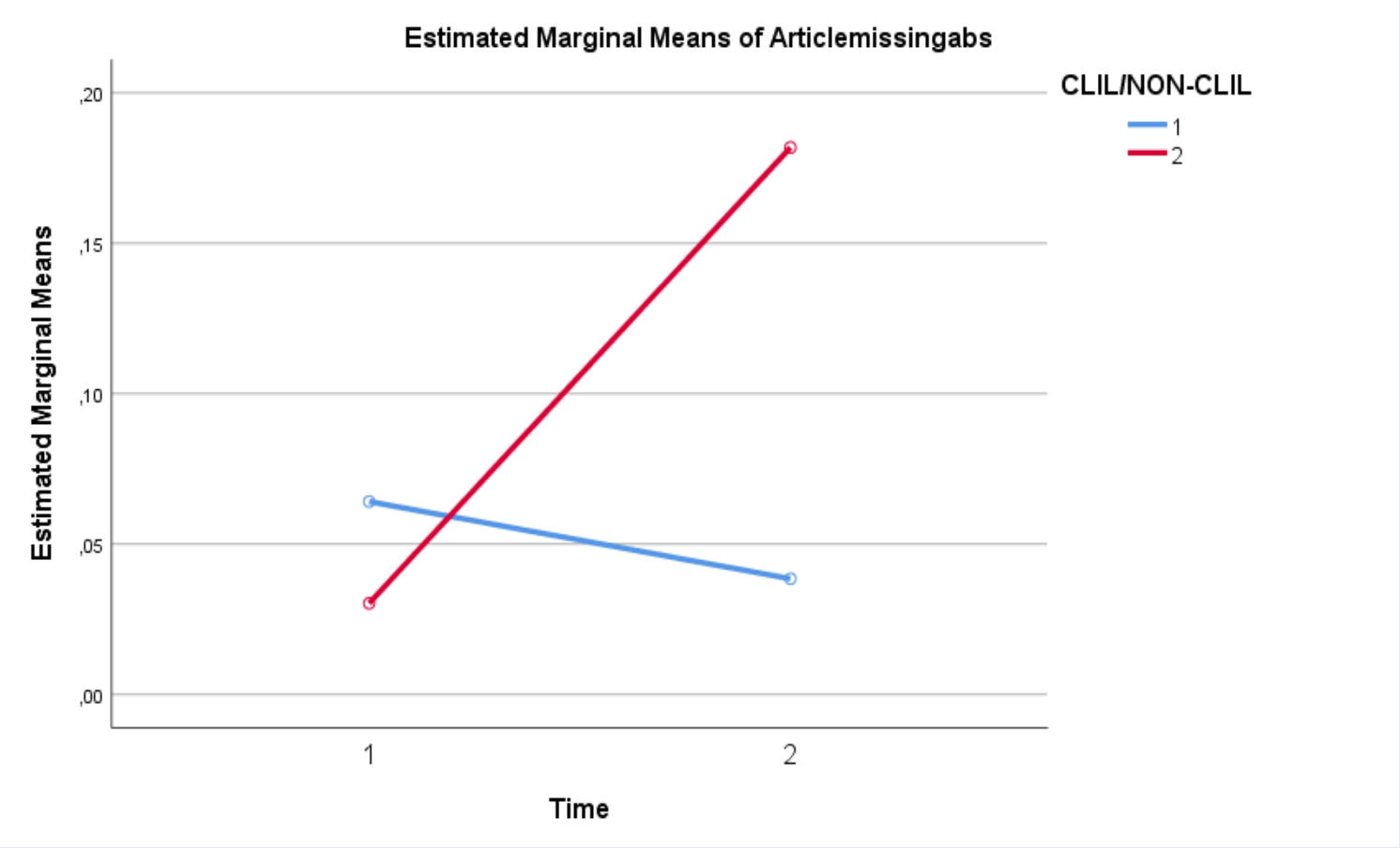
INTER-GROUP ANALYSIS
NUMBER OF ERRORS

Superfluous article (relative freq)



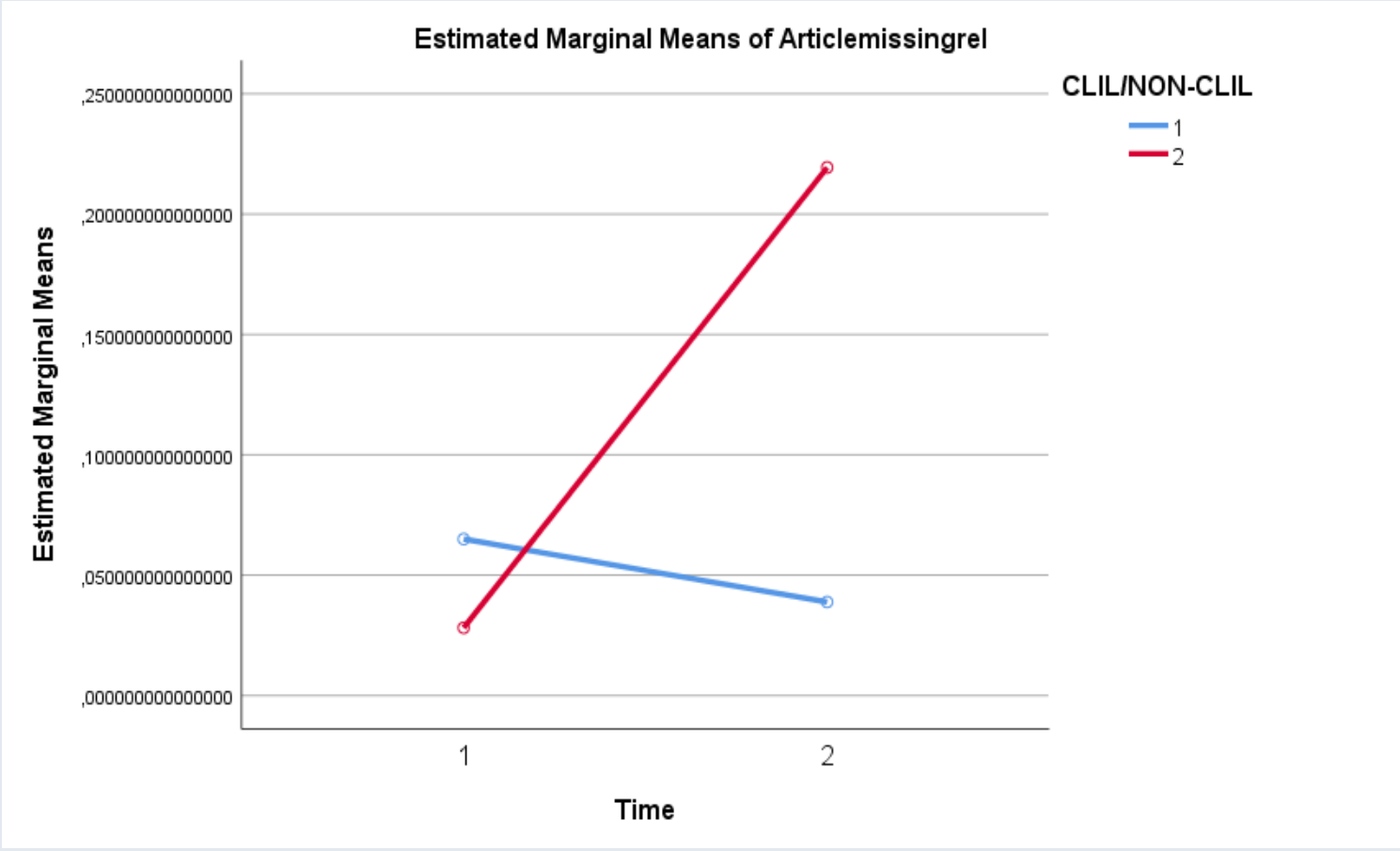
INTER-GROUP ANALYSIS NUMBER OF ERRORS

Article missing (absolute freq)



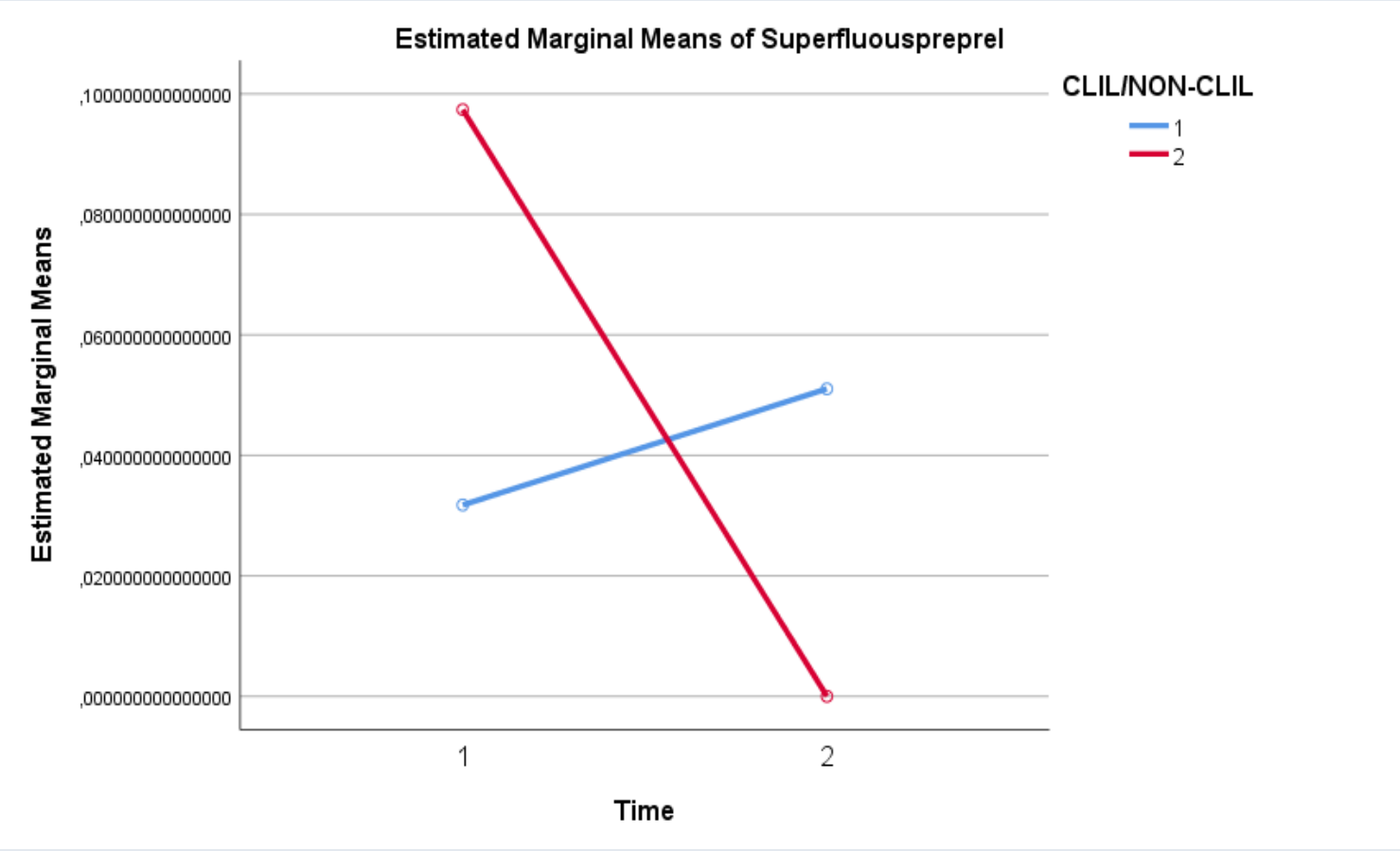
INTER-GROUP ANALYSIS NUMBER OF ERRORS

Article missing (relative freq)



INTER-GROUP ANALYSIS
NUMBER OF ERRORS

Superfluous preposition (relative freq)



SUMMARY INTER-GROUP ANALYSIS ACCURACY (RQ4)

- Significant difference in the development of accuracy of CLIL versus NON-CLIL learners' phraseological productions in four categories of phraseological errors
  - No systematic trend

7. CONCLUSIONS

CONCLUSIONS FOR DUTCH

- Frequency of use
  - Contrasting trends with the NON-CLIL group improving and the CLIL group decreasing their production of phraseological units
- Accuracy
  - Global improvement in both groups of learners

CONCLUSIONS FOR ENGLISH

- Frequency of use
  - Significant improvement in both groups, but larger gains in the NON-CLIL group
- Accuracy
  - No clear progress in the accuracy of the learners' phraseological productions

CONCLUDING REMARKS

- High input environment of CLIL contexts did not seem to boost the learners' phraseological competence over two consecutive school years
- Different results according to the target language: already one of the findings of Van Mensel et al.'s study => prompt for more research on different TL
- Limitation: only two data collection points BUT other longitudinal analysis using the same sample (Hendrikx et al., 2019, forthcoming, on intensifying constructions) revealed similar patterns

THANK YOU FOR YOUR ATTENTION!

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