DISCOURSE IN PSYCHOSIS

2025 Consortium Satellite Meeting

C-ORAL BRASIL

C-ORAL-ESQ: A Brazilian Portuguese multimodal corpus of individuals diagnosed with schizophrenia

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Introduction

The **C-ORAL-ESQ** corpus aims to represent the spontaneous speech and visual communication of individuals diagnosed with Schizophrenia (DSM V) during regular psychiatric consultations.

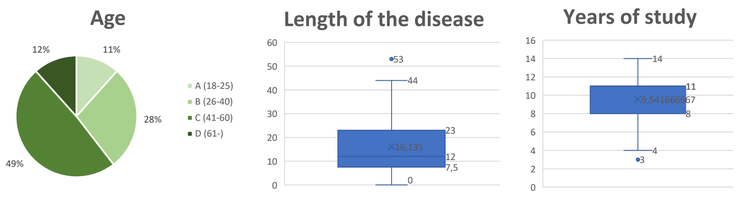
The consultations were recorded at two public medical facilities at Belo Horizonte (Brazil): Instituto Raul Soares and Hospital das Clínicas.

The corpus comprise 43 recordings (24 only audio recordings and 19 audio-video recordings).

The patients present low positive symptoms and variable negative symptoms and were assessed though different scales (PANSS, SIMPSON-ANGUS, BARNES, BACS, HINTING, BLERT, PSP).

The patients

scale	mean	SD	min	max
PANSS P	11	11	7	19
PANSS N	19	18	8	35



Methods

Semi-ortographic transcription preserving various speech features

Prosodic segmentation

Audio, video and text alignment in Elan

Clip-on wireless microphones

Digital audio recorder

GoPro Hero 7 cameras

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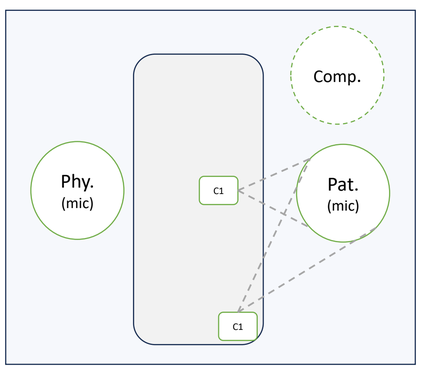
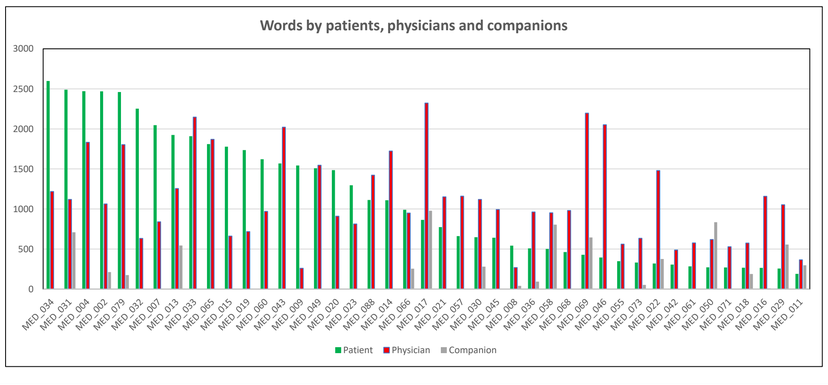


General features

	words	mean	median	SD	min	max
Patient	47722	1110	865	782	190	2599
Physician	47980	1116	994	546	261	2322
Companion	7055	164	0	271	0	978
Intervenient	646	15	0	36	0	168
Total	103.403					

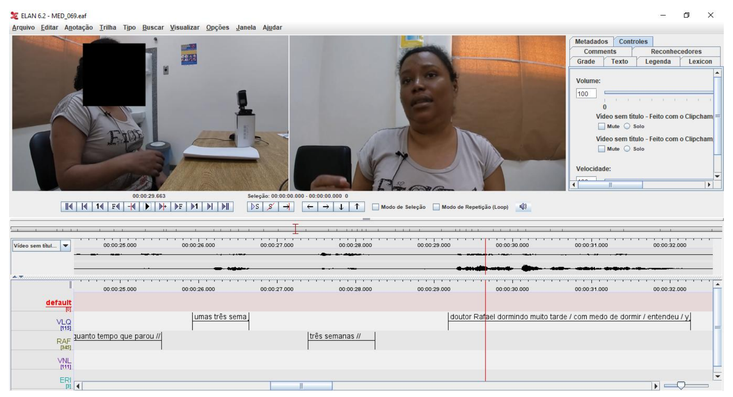


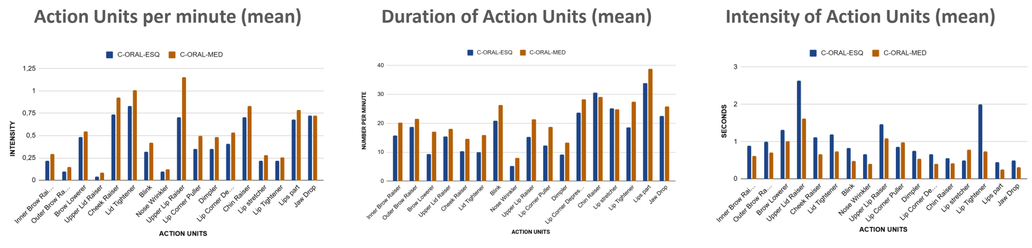
Correlations between linguistic features and scales

		PANSS N Total		N1		N2		N3		N4		N6		EPS		BACS MV		BACS SD		BACS CS		UPSA Communic.		UPSA_B_BR Total	
words	Pearson's r	-0,368	*					-0,393	*			-0,573	**					0,614	*	-0,672	*				
	2-tailed	0,023						0,015				0						0,026		0,026					
	N	38						38				38						13		12					
words/second	Pearson's r							-0,433	**			-0,666	**									0,704	*	0,617	*
	2-tailed							0,007				0										0,011		0,032	
	N							37				37										12		12	
utterances	Pearson's r	-0,427	**	-0,385	*	-0,411	**	-0,403	**	-0,307	*	-0,409	**					0,507	*	0,601	*				
	2-tailed	0,002		0,012		0,007		0,008		0,048		0,007						0,038		0,014					
	N	42		42		42		42		42		42						17		16					
tone_units	Pearson's r	-0,467	*	-0,316	*	-0,439	**	-0,432	**	-0,343	*	-0,554	**	-0,338	*			0,549	*	0,616	*	0,519	*		
	2-tailed	-2		0,041		0,004		0,004		0,026		0		0,041				0,023		0,011		0,033			
	N	42		42		42		42		42		42		37				17		16		17			
words/dialogic turns	Pearson's r	-0,337		-0,381	*			-0,405	**			-0,644	**			0,552	*	0,564	*			0,573	*	0,566	*
	2-tailed	0,029		0,013				0,008				0				0,026		0,018				0,016		0,018	
	N	42		42				42				42				18		17				17		17	
retracted words	Pearson's r					-0,403	**	-0,384	*			-0,42								0,501	*	0,615	**		
	2-tailed					0,008		0,018				0,006								0,048		0,009			
	N					42		42				42								16		17			

Facial expressions

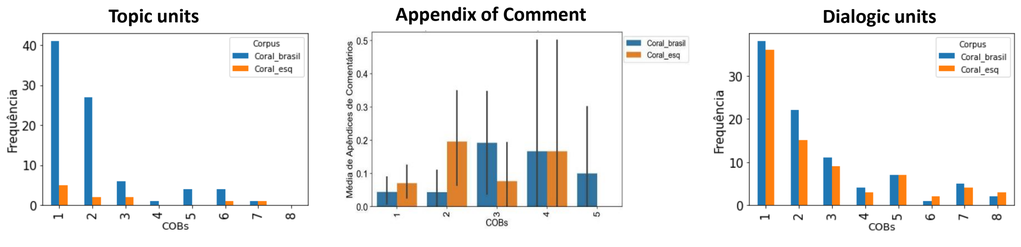
TOLEDO (in preparation): 20 recordings from C-ORAL-ESQ and 17 recordings from C-ORAL-MED, with 30 seconds of continuous speech from each recording, processed with OpenFace software (BALTRUŠAITIS et al., 2016)





Information structure

COSTA JÚNIOR, J. C. (2022): 6 recordings from C-ORAL-ESQ vs. 6 recordings from C-ORAL-BRASIL, comparing utterances with the same number of illocutionary units



FIORILO & ROCHA (in preparation): 6 recordings from C-ORAL-ESQ vs. 6 recordings from C-ORAL-BRASIL, comparing the prosodic realization of the topic unit

C-ORAL-ESQ	C-ORAL-BRASIL
250 syllables of TOPIC	243 syllables of TOPIC
115 nuclear syllables of TOPIC	103 nuclear syllables of TOPIC
32 (**13%**) with prosodic variation > 4 ST	54 (**22%**) with prosodic variation > 4 ST
20 (**17%**) with prosodic variation > 4 ST	35 (**34%**) with prosodic variation > 4 ST