



IMPACT OF COVID-19 LOCKDOWN IN DEPRESSION, ANXIETY, STRESS AMONG STUDENTS IN POLYTECHNIC OF SANTAREM AND LEIRIA

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BACKGROUND

- The context of coronavirus in higher education caused upsetting consequences on students' lives (Torales, Higgins, Castaldelli-Maia & Ventriglio 2020).
- The restrictions on social mobility and the consequent reduction of interpersonal contacts brought them unprecedented stressful situations (Ramírez-Ortiz, Castro-Quintero, Lerma-Córdoba, Yela-Ceballos & Escobar-Córdoba, 2020).
- The extent and quality of adaptation to these situations, due to the uniqueness of each person's resources, needs to be early known to prevent eventual and serious psychological disorders (Ramírez-Ortiz, Castro-Quintero, Lerma-Córdoba, Yela-Ceballos & Escobar-Córdoba, 2020).



MAIN GOAL

- To evaluate the impact of the COVID-19 pandemic on higher education students at the Polytechnic Institute of Santarem and the Polytechnic Institute of Leiria.

SPECIFIC MAINS

- Identify the levels of anxiety, depression and stress of the studied sample, using the Depression, Anxiety, Stress Scale (DASS-21);
- Identify the differences in these domains considering sociodemographic variables.



METHODS

- Quantitative, descriptive-correlational study, aiming to describe phenomena and subsequently identify and explore possible relationships between variables (Grove, Burns & Gray, 2013; Rosa, 2016)
- Depression Anxiety, Stress Scale-21 (DASS-21 of Lovibond & Lovibond, 1995; in the Portuguese version EADS-21, by Pais-Ribeiro, Honrado & Leal, 2004).
- The data were analyzed using the IBM SPSS Statistics for Windows, Version 27.0 software.



Instrument - DASS-21

Consisting of 21 questions

- DASS - 21 is organized into three scales: Depression, Anxiety, Stress, each of which includes seven items.
- The rating is given by the sum of the results of the 7 items, obtaining a score for each subscale with a minimum result of 0 and a maximum of 21.
 - Higher grades correspond to more negative affective states.

(Pais-Ribeiro, Honrado & Leal, 2004).



The population - 6483 students



Sample

775 students (both genders), aged between 17 and 55 years. from the 2nd to the 4th year of daytime education



Held in the period of 19 November till 4 December 2020

IPSantarém Ethics Committee' approval (112020Saúde), October 26, 2020

Authorization requested to the authors of the questionnaire validated for the Portuguese population

Link on the Schools' webpages for free filling by students, anonymously, via Microsoft Forms (with informed consent before the questionnaire starts)



RESULTS

Table 1. General sample characteristics

Sociodemographic characterization		
	n	%
Gender		
Female	570	73,5
Male	205	26,5
Age group		
< 23 years	626	80,8
> 23 years	149	19,2
Marital status		
Single / divorced	716	92,4
Married / consensual union	59	7,6
Children		
Without children	726	93,7
With children	49	6,3
Residence District		
Leiria	269	34,7
Santarem	244	31,5
Lisbon	154	19,9
Others	108	13,9
Curricular year		
2nd year	389	50,2
3rd year	292	37,7
4th year	94	12,1



RESULTS

Table 2 – Summary of intercorrelations, means, and standard deviations for DASS-21 (n=775).

MEASURE	DASS Depression	DASS Anxiety	M	SD
DASS Depression	--		6.87	5.47
DASS Anxiety	.73**	--	4.27	4.60
DASS Stress	.80**	.83**	7,67	5.38

Note:

DASS, Depression Anxiety Stress Scales (Pais-Ribeiro, Honrado e Leal, 2004).

** $p < .001$.

Table 3 - Distribution of students according to domains anxiety, depression, stress (0-21), by institute and gender

RESULTS	INSTITUTES	GENDER	No	DOMAINS	MIN	MAX	M	SD	
	RESULTS	IPSANTAREM	MALE	110	DEPRESSION	0	21	4,09	4,51
ANXIETY					0	16	1,94	3,00	
STRESS					0	19	3,70	4,04	
FEMALE			241		DEPRESSION	0	21	5,92	4,75
					ANXIETY	0	21	3,90	4,08
					STRESS	0	21	7,54	4,84
MALE		95		DEPRESSION	0	21	8,20	6,20	
				ANXIETY	0	17	3,87	4,51	
				STRESS	0	20	7,67	5,58	
FEMALE	329		DEPRESSION	0	21	8,12	5,56		
			ANXIETY	0	21	5,43	5,06		
			STRESS	0	21	9,10	5,44		

Source: Lovibond e Lovibond, 1995; Pais-Ribeiro, Honrado e Leal, 2004



RESULTS

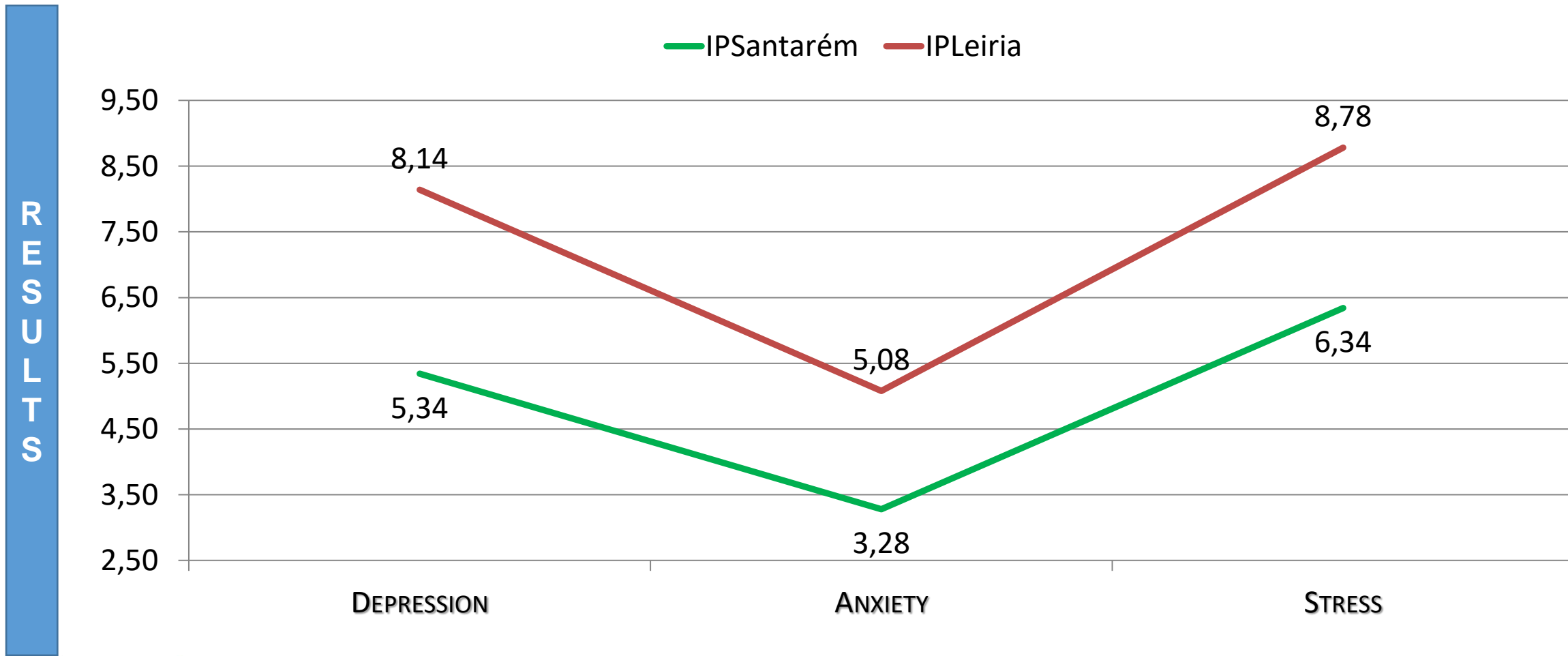
Table 4 -Severity of affective-emotional states of students (n=775)

CLASSIFICATION	Stress Frequency %		Depression Frequency %		Anxiety Frequency %	
Normal	679	87,6	562	72,5	618	79,7
Light	64	8,3	108	13,9	47	6,1
Moderate	32	4,1	91	11,7	73	9,4
Severe	--	--	14	1,8	32	4,1
Extremely Severe	--	--	--	..	5	0,6
TOTAL	775			100		

Source: Lovibond & Lovibond, 1995; Pais-Ribeiro, Honrado e Leal, 2004



GRAPH 1. Institute attended by levels of EADS



RESULTS

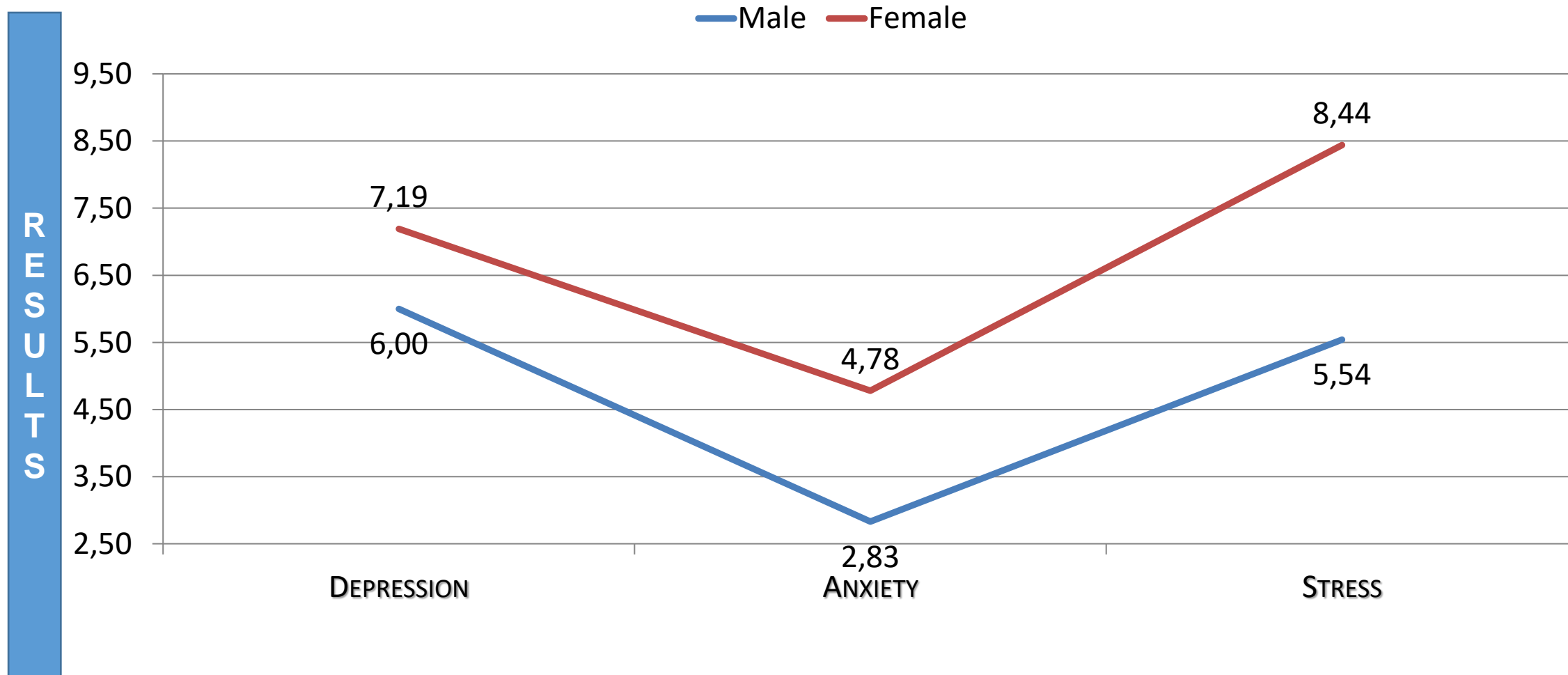


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Graph 2. Gender Differences in Levels of EADS





- It should be noted that 14 students (1.8%) and 37 (4.7%) have values considered worrying from the point of view of mental health (depression and anxiety), respectively, which contradicts the results of (Pinto, Martins, Pinheiro & Oliveira, 2015).
- IPLeiria students are the ones with the most negative affective states (Depression, Anxiety, Stress)
- Girls have the highest values in relation to boys, that is, their affective states are more negative (Depression, Anxiety and Stress), what is in accord with (Apóstolo, Figueiredo, Mendes & Rodrigues, 2011; Apóstolo, et al, 2011; Rebelo-Pinto, Amaral, Silva, Silva, Leal & Paiva, 2012; Galeazzi, 2017)



C O N C L U S I O N

The findings suggest that higher education institutions should understand this experienced phenomenon and develop strategies to improve students' affective states (Hudson, Lawton & Hugh-Jones, 2020; Apóstolo, Figueiredo, Mendes & Rodrigues, 2011).

The importance of a transdisciplinary approach is emphasized, and the involvement of all stakeholders is encouraged.



CONCLUSION

The fact that the sample is of convenience is the biggest limitation of this study, and therefore it is not possible to extrapolate the results.

Likewise, it cannot be assumed that the increased levels of anxiety, depression and stress are due only to the pandemic, but also to other factors.

Nevertheless, this study is a starting point for future research in this area.



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