



Educação & Formação

ISSN: 2448-3583

Universidade Estadual do Ceará

Pereira-Neto, Lauro Lopes; Faria, Ana Amália Gomes de Barros Torres; Almeida, Leandro Silva  
Satisfação acadêmica no contexto da pandemia da Covid-19 em estudantes do Ensino Superior

Educação & Formação, vol. 7, no. 1, e8477, 2022

Universidade Estadual do Ceará

DOI: <https://doi.org/10.25053/redufor.v7.e8477>

Available in: <https://www.redalyc.org/articulo.oa?id=585869643036>

- How to cite
- Complete issue
- More information about this article
- Journal's webpage in redalyc.org

UECE  redalyc.org

Scientific Information System Redalyc

Network of Scientific Journals from Latin America and the Caribbean, Spain and Portugal

Project academic non-profit, developed under the open access initiative

## Academic satisfaction in the context of the pandemic of Covid-19 in students of Higher Education

**Lauro Lopes Pereira-Neto**<sup>i</sup> 

Federal Institute of Alagoas, Maceió, AL, Brazil

**Ana Amália Gomes de Barros Torres Faria**<sup>ii</sup> 

Federal Institute of Alagoas, Maceió, AL, Brazil

**Leandro Silva Almeida**<sup>iii</sup> 

University of Minho, Braga, Portugal

### Abstract

This article presents the results of a research on the psychosocial factors that impacted the academic satisfaction of Higher Education students related to their academic performance during the Emergency Remote Learning. Through the application of the Questionnaire of Satisfaction with the Remote Academic Experience, it aimed to assess the level of academic satisfaction of a sample of 365 students enrolled in Higher Education courses at the Federal Institute of Alagoas. Academic satisfaction was directly impacted by the students' social and digital vulnerability, especially among the older students regarding satisfaction with economic resources, the perspective of future professional achievement and employability. Even without a satisfactory digital infrastructure to follow the remote activities, the majority of students were motivated to continue their studies, because they believed that only investing in their own academic training would guarantee them the upward social mobility they had so longed for.

### Keywords

Higher Education; Covid-19; Emergency Remote Teaching; academic satisfaction.

### Satisfação acadêmica no contexto da pandemia da Covid-19 em estudantes do ensino superior

### Resumo

Este artigo apresenta os resultados da investigação sobre os fatores psicossociais que impactaram a satisfação acadêmica dos estudantes do Ensino Superior relacionados ao seu desempenho acadêmico durante o Ensino Remoto Emergencial. Por meio da aplicação do Questionário de Satisfação com a Experiência Acadêmica Remota, objetivou-se avaliar o nível de satisfação acadêmica de uma amostra de 365 estudantes matriculados nos cursos superiores do Instituto Federal de Alagoas. A satisfação acadêmica foi diretamente impactada pela vulnerabilidade social e digital dos estudantes, especialmente entre os de maior idade quanto à satisfação com os recursos econômicos, à perspectiva de realização profissional futura e à empregabilidade. Mesmo não possuindo uma infraestrutura digital satisfatória para o acompanhamento das atividades remotas, a maior parte dos estudantes mostraram-se motivados para a continuidade dos estudos, pois acreditavam que só com o investimento na própria formação acadêmica iriam garantir a mobilidade social ascendente tão almejada.

### Palavras-chave

Ensino Superior; Covid-19; Ensino Remoto Emergencial; satisfação acadêmica.

## Satisfacción académica en el contexto de la pandemia de Covid-19 en estudiantes de la Educación Superior

### Resumen

Este artículo presenta los resultados de la investigación sobre los factores psicosociales que inciden en la satisfacción académica de los estudiantes de Educación Superior relacionados con su rendimiento académico durante el Enseñanza Remota de Emergencia. A través de la aplicación del Cuestionario de Satisfacción con la Experiencia Académica a Distancia, se pretendió evaluar el nivel de satisfacción académica de una muestra de 365 estudiantes matriculados en cursos de Educación Superior en el Instituto Federal de Alagoas. La satisfacción académica se vio directamente afectada por la vulnerabilidad social y digital de los estudiantes, especialmente entre los discentes de mayor edad en cuanto a la satisfacción con los recursos económicos, la perspectiva de logros profesionales futuros y la empleabilidad. Incluso sin una infraestructura digital satisfactoria para supervisar las actividades a distancia, la mayoría de los estudiantes estaban motivados para continuar sus estudios porque creían que solo invirtiendo en su propia formación académica podrían garantizar la movilidad social ascendente que tanto habían anhelado.

### Palabras clave

Educación Superior; Covid-19; Enseñanza Remota de Emergencia; satisfacción académica.

## 1 Introduction

In Brazil, in recent decades, there has been an increase in student enrollment in Higher Education (HE) associated with a significant psychosocial and cultural diversity. This is due to the implementation of public policies aimed at the expansion of HE. In the Instituições Federais de Educação Superior (IFES), for example, this increase was from 880 thousand in 2003 to 1.8 million in 2017, thus enabling an important step in opening access to Higher Education in Brazil (HERINGER, 2018; TREVIZAN, 2019). A historic milestone in Brazilian education, this process provided scientific and technological qualification for the general population and democratized access to higher education for less favored ethical and cultural groups, providing a significant change in the profile of the students enrolling.

Previously intended exclusively for a socioeconomic elite, Higher Education began to be filled by a “new public” characteristically heterogeneous and diverse due to the expansion process and policies to democratize access to higher education. These students have peculiar psychosocial characteristics: they belong to older age groups, are married have kids and are workers with low social capital. Tendentially, they are socioeconomically more vulnerable students who, previously excluded, now access the university seeking to

add new knowledge and a greater technical/professional qualification. That is, they invest in their academic training since it represents the most significant factor of upward social mobility in contemporary societies (ALMEIDA *et al.*, 2012; FRAGOSO; VALADAS, 2018a; GONZÁLEZ-MONTEAGUDO; HERRERA-PASTOR; PADILLA-CARMONA, 2018; HERINGER, 2018; MARTINS, 2016; PAULA, 2017; PINTO; LEITE, 2020).

In Portugal, for example, there is specific legislation that allows young adults, over 23 years old, to participate in an exam of skills and motivation to access higher education without complete High School. This is part of a policy to promote equal opportunities which, in recent years, has been responsible for the significant increase in enrollments in HE. As these students are different from other traditional students, they tend to be older when they enter HE and they usually have jobs and families (BAPTISTA, 2007, 2009; FRAGOSO; VALADAS, 2018a, 2018b; GONÇALVES, 2014; GONÇALVES *et al.*, 2011; VALADAS; FRAGOSO, 2022), this is factor of students diversity. Although Brazil does not offer special conditions for older students to access HE, in recent decades, due to the policy of quotas, there has been a growing incidence of enrollment of these students, who differ from conventional students - young adults between 18 and 24 years old – by a set of psychosocial variables associated with higher age (ALMEIDA *et al.*, 2012; BARBOSA, 2019; DIAS *et al.*, 2011; HERINGER, 2018; PASCUEIRO, 2009; PAULA, 2017; SMANIOTTO, 2011).

Despite acknowledging that public policies were successful in promoting the expansion and massification of higher education, which ensured more democratic access to HE for this new public coming from less favored socio-cultural realities, it appears that, unfortunately, higher education institutions do not are sufficiently prepared for this change. This lack of preparation translates into the absence of policies that guarantee the necessary conditions for successful adaptation, academic satisfaction, and, consequently, the academic success of these students (ALMEIDA *et al.*, 2012; BARBOSA, 2019; CERDEIRA; CABRITO; GEMELLI, 2021; HERINGER, 2018).

So, the need to investigate the academic path followed by students after entering higher education brought about several studies on the process of academic adaptation in the area of educational psychology, with emphasis on students' profiles and the academic needs of older adults who usually go to university after establishing professional careers and starting a family. Today, these students make up the new

Brazilian university public, living daily with the conventional students, presenting a heterogeneous and diversified profile, not only due to socioeconomic status or age but because they assume, daily, multiple responsibilities - professional, family, and academic – and for presenting specific academic expectations and motivations (EGITO; SILVEIRA, 2018; FARIAS; ALMEIDA, 2020; FERRÃO; ALMEIDA, 2019; FRAGOSO; VALADAS, 2018a; MARTINS, 2016; PEREIRA-NETO; ALMEIDA, 2021; PINTO; LEITE, 2020).

On the other hand, if for students - conventional or not - academic adaptation was already a challenge (ANDRIOLA; ARAÚJO, 2021; CAMPIRA *et al.*, 2021; CASANOVA; BERNARDO; ALMEIDA, 2021; FIOR, 2021; FIOR; MERCURI, 2018; PINTO, 2020), during the Covid-19 pandemic and with the adoption of Emergency Remote Teaching (ERT), these challenges have increased in diversity and intensity: some students who had moved out had to return to their parents' home – many far from large urban centers; interpersonal relationships with classmates and professors began to be digital only; in-person classes were replaced by online classes and, finally, students, connected - better or worse - at home, were challenged to implement new study and learning strategies. In particular, asynchronous meetings required more autonomy from students, imposed the appropriation and mastery of technological resources, as well as the development of skills in handling their interfaces (AMARAL; POLYDORO, 2020; COBO-RENDÓN *et al.*, 2022; NONATO; CONTRERAS-ESPINOSA, 2022; OLIVEIRA; SILVA, O.; SILVA, M., 2020; SEABRA; AIRES; TEIXEIRA, 2020).

Studies developed during the pandemic showed that most students did not have a satisfactory digital infrastructure to use during the remote academic activities. Starting with the lack of basic requirement - a stable and quality internet - students reported not having adequate technological equipment (computer, tablet, or notebook) and that the family environment was not conducive to monitoring activities, since they needed to share the space with other family members and with their daily activities (FERRAZ *et al.*, 2020; KANASHIRO, 2021; SANTOS; REIS, 2021; SILVA, G.; FILHO; SILVA, M., 2021).

To reduce this digital inequality, the Ministério da Educação (MEC) and public institutions of higher education, including Instituto Federal de Alagoas (IFAL), adopted public student aid policies, providing students without access to the Internet with the maintenance of the institutional bond, through remote communication, guidance, and

interaction. To reduce the difficulties triggered by the change in the teaching model, students in social vulnerability received a SIM CARD with a mobile data package and connectivity aid, financial support for the purchase of a tablet (BRASIL, 2016, 2020a, 2020b).

To identify the impacts of adopting the ERT on academic adaptation and on the propensity to drop out or successfully remain in their students, HEIs have promoted several studies on satisfaction with the remote academic experience. Considered a multidimensional construct, academic satisfaction can be described as a majority by the student who, when experiencing the feeling of advancing in their educational goals, develops a high level of identification and belonging to the course, establishes good interpersonal relationships with colleagues and professors and, consequently, promotes the quality of their learning and the feeling of academic success. Of course, the pandemic and remote learning have complicated students' academic life, and higher levels of dissatisfaction, emotional fatigue, and difficulty regulating emotions are to be expected from them (ESTRADA ARAOZ; GALLEGOS RAMOS, 2022; PELISSON; BORUCHOVITCH, 2022). These studies can contribute to validating the quality of educational services provided during the pandemic, as well as allow us to understand how the conditions experienced by students impact academic satisfaction, learning, and, consequently, their intention to stay or drop out of the course (AMBIEL *et al.*, 2020; COBO-RENDÓN *et al.*, 2022; HASSAN *et al.*, 2021; OSTI *et al.*, 2020a, 2020b; OSTI; PONTES JÚNIOR; ALMEIDA, 2021).

In line with this theoretical framework, the main objective of this study was to evaluate, through the application of the Remote Academic Experience Questionnaire (QSEA-R), the level of academic satisfaction of a sample of students from higher education courses at IFAL/Maceió. A secondary objective of the research was to investigate the psychosocial factors that most impacted the academic satisfaction of students during the emergency remote teaching.

## 2 Methodology

### 2.1 Participants



The study included 365 students enrolled in 2021 (school semester 2020.1) in Emergency Remote Teaching (ERT) of higher education courses offered by the Instituto Federal de Alagoas. The students were aged between 17 and 65 years ( $M = 30$ ,  $SD = 10.25$ ), and divided into two age groups: between 17 and 24 years (40.6%) and 30 years or older (59.4%). Most were enrolled in night courses (69.6%), were female (61.3%), worked and studied at the same time (65.2%), and had a monthly per capita income equal to or less than 1.5 minimum wage (55.1%). These students attended short courses, called technological courses (65.8%), followed by long-term courses, bachelor's and teaching degrees (34.2%).

## 2.2 Instruments

The Satisfaction with Remote Academic Experience Questionnaire (QSEA-R) was used in this study, adapted to the Emergency Remote Teaching modality-ERT of Brazilian HE students, proposed by Pereira-Neto, Faria e Almeida ([s. d.]). Consisting of 25 items, the questionnaire assesses five dimensions: a) satisfaction with economic resources, sought to describe students' satisfaction with their economic resources and the impacts triggered by Covid-19, involving the sufficiency of resources to pay for the course, their own subsistence, and the digital infrastructure necessary to monitor activities remote; b) satisfaction with remote teaching, sought to describe the students' satisfaction with the remote teaching environment, involving the evaluation of the quality of remote teaching, the relationship with teachers, the adequacy of digital evaluation methods, and the planning of remote activities; c) satisfaction with learning and performance, described students' satisfaction with learning and academic performance, involving the organization of studies, learning behaviors during remote classes, participation in online classes (synchronous), and commitment to performing remote (asynchronous) activities; d) satisfaction with interpersonal relationships described students' satisfaction with interpersonal relationships in the context of remote teaching, namely the establishment and maintenance of friendship relationships, now mediated by digital media; e) professional satisfaction sought to describe the students' satisfaction concerning professional achievement, projects for the future, career investment, and the perspective of future employability. Previous studies found Cronbach's alpha coefficients above .70 in the various dimensions of the

questionnaire, confirming the metric qualities in terms of validity of the internal structure and reliability.

In addition, a Sociodemographic Questionnaire was applied with questions related to the students' personal information - gender, age, course, monthly income, professional experience - and experiences in the ERT: conditions for remote study (in terms of space, equipment, and study time); the number of hours per week dedicated to studying and carrying out asynchronous activities; assessment of participation (attention) during synchronous meetings; satisfaction with academic performance during the ERT; personal propensity to stay or drop out of studies.

### 2.3 Procedures

During the Covid-19 pandemic in 2020, classes in higher education courses at the Instituto Federal de Alagoas were suspended and were only resumed in January 2021 in the Remote Teaching format (online). In May 2021, after the end of the first semester of implementation of the ERT in IFAL/Maceió, referring to the 2020.1 academic semester, the QSEA-R was applied to evaluate the level of satisfaction of students with the remote academic experience. It should be noted that the Satisfaction with Academic Experience Questionnaire (QSEA), originally proposed by Osti and Almeida (2019), was part of the list of research instruments for the doctoral study in Educational Sciences at the University of Minho, Braga-Portugal (CEP approval nº 4.338.899), it was adapted to the reality of the pandemic, changing its name to the Remote Academic Experience Questionnaire (QSEA-R). An electronic questionnaire developed on the Google Docs platform, hosted at the link: <https://forms.gle/uTk19XyGFTi3BShP9>. After ensuring confidentiality and anonymity in data processing, students were informed of the study objectives, invited to access the electronic form, and answer the QSEA-R. Statistical analyses were performed using the IBM/SPSS program, version 28.0.

## 3 Results

The students' responses to the sociodemographic questionnaire, taking the variables referring to satisfactory conditions for remote learning and their propensities



regarding staying or dropping out of the course, indicate that 39.5% of students responded that they did not have satisfactory conditions for remote (online) study, while 48.5% reported having thought about dropping out of school during the pandemic. Surprisingly, most students (91.5%) intended to continue with their studies in the 2020.2 semester, even though they were aware that IFAL would offer subjects in the Remote Teaching model. Table 1 presents students' responses in the five dimensions of satisfaction with the academic experience in remote teaching, describing the amplitude, mean, standard deviation and the distribution skewness and kurtosis of the results.

**Table 1** – Results in the five dimensions of satisfaction with the remote academic experience

Satisfaction	N	Min.	Max.	Mean	Standard deviation	skewness	Kurtosis
Professional	354	5.00	25.00	18.40	4.12	-0.80	0.64
Interpersonal	357	5.00	25.00	16.99	4.95	-0.39	-0.37
Economic Resources	357	5.00	25.00	14.95	5.14	-0.11	-0.61
Remote Teaching	357	5.00	25.00	18.84	4.24	-0.89	0.80
Learning and Performance	357	5.00	25.00	17.22	4.25	-0.66	0.36

Source: Own elaboration (2021)

We can see that the results indicate a higher average, that is, closer to the maximum score, in the dimension of satisfaction with remote teaching, as well as in the dimension of professional satisfaction. On the other hand, the results point to a lower average in the students' responses to the dimension of satisfaction with economic resources. In any of the five dimensions, the results range from the minimum and maximum theoretically possible scores, registering appropriate levels of skewness and kurtosis towards a Gaussian distribution of the sample values.

Table 2 presents the correlation analysis, using Spearman's rho test, seeking the association between the students' responses regarding their experience in ERT and the perception of their academic performance.

**Table 2** – Correlations between responses related to experiences in the ERT and Covid-19 and the dimensions of academic satisfaction

Satisfaction	Study hours asynchronous activities	Participation in synchronous meetings	Satisfaction with academic performance	Dropping out in 2020.1	Continue studies in 2020.2
Professional	-0.02	.221**	.403**	.281**	-.184**
Interpersonal	0.00	.333**	.372**	.292**	-.160**
Economic Resources	-0.01	.200**	.337**	.229**	-0.07
Remote Teaching	-0.01	.355**	.517**	.330**	-.162**
Learning and Performance	.143**	.611**	.741**	.498**	-.204**

Key: \*  $p < .05$ , \*\*  $p < .001$ .  
Source: Own elaboration (2021).

The data show very significant levels of correlation in the answers to all the dimensions of academic satisfaction studied in association with the students' evaluation regarding participation in synchronous meetings, their own academic performance, and their propensity to drop out of studies during the ERT. The results revealed that academic satisfaction is higher among students who better evaluated their participation in the meetings, were satisfied with their own academic performance, and, consequently, did not show a desire to drop out. The results also revealed high levels of academic satisfaction among the group of students who reported a desire to continue remote studies in the 2020.2 semester. With the caveat that the students most likely to drop out of the course during the ERT were those who expressed dissatisfaction with the economic resources.

A significant and isolated fact also stands out, when comparing the students' responses regarding the hours of study dedicated to the asynchronous activities, the students who showed positive satisfaction with learning and academic performance were those who best self-regulated, that is, they were able to manage their time successfully keeping up and executing activities on the teaching platforms without the professor.

To understand the impact of psychosocial variables (monthly income and digital infrastructure for remote study) on the results of students' responses to the Remote Academic Experience Questionnaire (QSEA-R), given the moderate or high correlations between some dimensions of the questionnaire, multiple analysis of variance was performed (F-Manova: 3 x 2).

Table 3 presents the descriptive statistics of the results of the students' responses in the five dimensions of academic satisfaction, grouped according to gender, satisfactory digital conditions, and monthly income.

**Table 3** – Results in the five dimensions of academic satisfaction by student groups

Dimensions of Satisfaction	Monthly income	Satisfactory digital infrastructure	N	Mean	Standard deviation
Professional	Up to 1.5 minimum wage	Yes	98	19.70	3.68
		No	86	17.15	4.48
	Between 1.5 and 3 minimum wages	Yes	74	19.01	3.77
		No	27	16.81	4.29
	More than three minimum wages	Yes	37	17.84	4.27
Interpersonal Relationships		No	18	17.50	3.40
	Up to 1.5 minimum wage	Yes	98	18.51	4.44
		No	86	14.79	5.51
	Between 1.5 and 3 minimum wages	Yes	74	17.42	4.33
		No	27	15.00	4.60
Economic Resources	More than three minimum wages	Yes	37	18.73	4.69
		No	18	17.00	4.35
	Up to 1.5 minimum wage	Yes	98	15.40	4.38
		No	86	10.44	4.44
	Between 1.5 and 3 minimum wages	Yes	74	16.35	3.92
Remote Teaching		No	27	14.74	3.74
	More than three minimum wages	Yes	37	19.35	4.28
		No	18	19.17	5.14
	Up to 1.5 minimum wage	Yes	98	20.20	3.56
		No	86	16.73	4.47
Learning and Performance	Between 1.5 and 3 minimum wages	Yes	74	19.85	3.44
		No	27	16.70	4.47
	More than three minimum wages	Yes	37	19.27	4.81
		No	18	18.28	4.51
	Up to 1.5 minimum wage	Yes	98	19.10	3.44
		No	86	15.10	4.31
	Between 1.5 and 3 minimum wages	Yes	74	18.47	3.33
		No	27	14.37	4.60
	More than three minimum wages	Yes	37	18.11	4.16
		No	18	14.67	3.97

Source: Own elaboration (2021).

Analyzing the averages in the dimensions of the questionnaire, it is observed that the students were more satisfied in the following dimensions: professional, which refers to the expectation of employability and the future probability of professional success; and remote teaching, related to academic experiences during the ERT. Here, special emphasis: the students who best evaluated these two dimensions were those who declared that they had a satisfactory digital infrastructure to engage with the remote activities. On the other hand, it is observed that the absence of a digital infrastructure greatly impacted the

academic satisfaction of students, especially in the dimensions related to economic resources and self-regulation.

Table 4 presents the main and interaction effects that proved to be significant taking the two independent variables and the five dimensions of academic satisfaction with the remote teaching experience (ERT). Levene's test results showed homogeneity of sample variance with low F values and p values > .05.

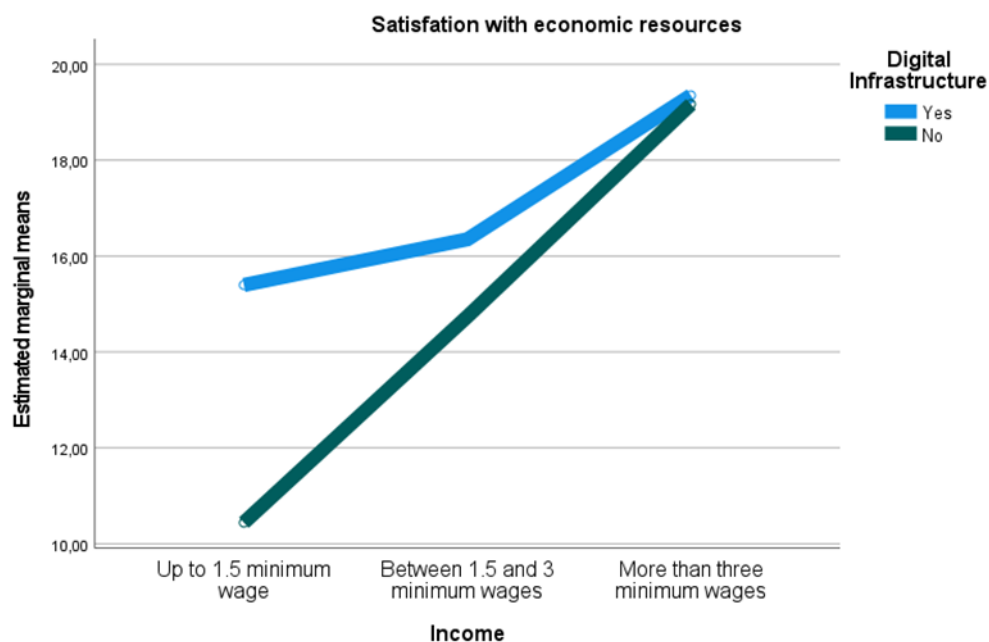
**Table 4** – Analysis of the impact of psychosocial variables monthly income and digital infrastructure on the dimensions of academic satisfaction

	Satisfaction	Mean Squares	Z	Sig.	$\eta^2$
Income	Professional	14.74	0.914	0.40	0.01
	Interpersonal	42.49	1.887	0.15	0.01
	Economic Resources	819.60	44.674	0.00	0.21
	Remote Teaching	3.70	0.226	0.80	0.00
	Learning and Performance	18.16	1.218	0.30	0.01
Digital Infrastructure	Professional	167.15	10.362	0.00	0.03
	Interpersonal	399.50	17.739	0.00	0.05
	Economic Resources	294.14	16.033	0.00	0.05
	Remote Teaching	373.87	22.768	0.00	0.06
	Learning and Performance	859.58	57.658	0.00	0.15
Income * Digital Infrastructure	Professional	23.58	1.462	0.23	0.01
	Interpersonal	24.73	1.098	0.33	0.01
	Economic Resources	149.66	8.157	0.00	0.05
	Remote Teaching	29.71	1.809	0.17	0.01
	Learning and Performance	1.84	0.124	0.88	0.00

Source: Own elaboration (2021).

We started the analysis by taking the secondary effects or interaction between the two studied variables. Statistically significant effects were observed in the dimension related to economic resources ( $F(2,334) = 44.674$ ,  $p < .001$ ), with an eta squared ( $\eta^2 = .21$ ), which explains 21% of the sample response variance. This interaction effect of the variables monthly income and digital infrastructure can be better understood in the analysis of graph 1.

**Graph 1** – Effect of the interaction of the variables monthly income and digital infrastructure on responses to the dimension of satisfaction with economic resources



Source: Own elaboration (2021).

Students who received higher wages, that is, those who declared a monthly income of more than 3 minimum wages, regardless of whether or not they had the adequate digital infrastructure for remote studies, were more satisfied with this dimension. However, those students in social vulnerability and who declared that they did not have the appropriate conditions - regarding the technological equipment and digital tools necessary to conduct remote activities - were dissatisfied with the dimension of economic resources. This significant difference in the responses of the three groups of students, when differentiated in terms of monthly income is evidenced by the Bonferroni test ( $p < .001$ ) and by the correlation analysis ( $r = .45$ ,  $p < .001$ ). Satisfaction with economic resources is directly related to the increase in students' monthly income.

Finally, significant levels of performance are observed in all dimensions of academic satisfaction studied, when the digital infrastructure variable is taken as a reference. Students who reported having an adequate digital infrastructure to conduct remote classes and activities, regardless of monthly income, are more satisfied in all dimensions studied.

## 4 Discussion

Our findings indicated that students financially impacted by the Covid-19 pandemic reported not having the satisfactory digital infrastructure necessary to attend remote activities, showing a high propensity to drop out of the course during the ERT. Despite this digital vulnerability, the absolute majority of students intended to continue with their studies in the 2020.2 semester, even though they were aware that IFAL would offer the subjects in the Remote Teaching model. These results, while confirming the existence of a profound social and digital inequality among students, confirm the efforts launched to mitigate these inequalities (BRASIL, 2016, 2020a, 2020b). During the pandemic and the ERT, IFAL prioritized investment in public aid policies to the students, thus providing actions that could guarantee the successful permanence of its socially vulnerable students (AMBIEL; BARROS, 2018; KANASHIRO, 2021)

The results showed that students, at the end of the first semester, positively evaluated their participation in the remote teaching environment, regarding the evaluation of the quality of teaching, the relationship with professors, the digital evaluation methods, and the planning of remote activities. They also pointed out evidence that the experiences during ERT provided positive perspectives regarding future professional achievement and the perception of employability after completing the course, especially among socially vulnerable students. It is understood that socially vulnerable students, generally those who are older - called the "new public" of higher education - believe that investing in academic training at a higher level will guarantee them the possibility of upward social mobility, reinforcing the idea from previous studies (GONZÁLEZ-MONTEAGUDO; HERRERA-PASTOR; PADILLA-CARMONA, 2018; HERINGER, 2018; MARTINS, 2016; PINTO; LEITE, 2020; VALADAS; FRAGOSO, 2022).

On the other hand, our studies showed a marked dissatisfaction with economic resources, revealing that adaptation to the remote teaching model was directly impacted by social and financial conditions, strongly compromised by the pandemic and by the social isolation measures adopted, especially among older students. The pandemic created more uncertainties and difficulties in students - emotional, personal, and financial - especially among those from the low-income population and who did not have the necessary digital infrastructure to follow up on remote classes and activities. The results corroborate



previous studies (AMARAL; POLYDORO, 2020; FARIA; PEREIRA-NETO; ALMEIDA, 2021; OSTI; PONTES JÚNIOR; ALMEIDA, 2021) by highlighting that the students' economic resources, strongly affected by the Covid-19 pandemic and the social isolation measures adopted, had a significant impact on academic satisfaction during the experiences of emergency remote teaching.

## 5 Final considerations

Knowing the factors that promote student satisfaction, whether conventional or not, based on the assessment of their interests and perceptions about the experiences experienced in higher education, is essential to help them achieve success. At the same time that it allows the understanding of the students' profile, the assessment of academic satisfaction allows inferring the effectiveness of educational contexts and the institutional actions involved in the process of academic adaptation of students during the ERT.

Our research showed social inequalities among students of higher education courses at IFAL/Maceió - especially when we differentiate them by age - which, aggravated by the Covid-19 pandemic, generated digital inequality. Older students were more economically and digitally vulnerable, a condition that significantly interfered with academic satisfaction levels. This digital vulnerability, experienced during emergency remote teaching, significantly impacted these students' perspectives regarding future professional fulfillment and the perception of employability after completing the course.

However, even though they did not have a satisfactory digital infrastructure to carry out remote activities, the absolute majority of students were motivated to continue their studies, since they believed that only investment in their academic training would guarantee them the so-desired ascendant social mobility.

It is also necessary to highlight IFAL's effort to promote student assistance policies during the pandemic and offer ERT. The adoption of programs such as connectivity assistance and financial support, aimed at vulnerable students, promoted the necessary conditions for carrying out remote activities, thereby ensuring successful permanence and, to a certain extent, minimizing inequalities.

The limitations of this research point to carrying out studies with broader samples, different public, institutions, and with other constructs which academic satisfaction may be

related, such as academic integration, motivation to learn, and students' expectations concerning the various aspects of academic life. As a result of this study, it would be pertinent to develop future research to investigate the variables that impact students' academic satisfaction, beyond their psychosocial characteristics. Including, for this purpose, measures of culture and institutional behavior, data associated with the academic nature, performance measures such as the academic performance coefficient and the approval, failure, and evasion rates.

Finally, with this study, we hope to contribute to the expansion of knowledge about the phenomena related to students' academic satisfaction, especially students who make up the “new public” of higher education. We believe that, by understanding the role of this construct in their academic experience, these students will be even more committed to their own training process, thus enhancing their performance and academic success. It is also expected that higher education institutions, using studies on academic satisfaction, can better understand the psychosocial profile and identify the expectations and difficulties experienced by students in the process of academic adaptation, to provide equitable learning conditions to the diverse and heterogeneous universe of its student population. And, with that, they can assess their institutional effectiveness and direct planning, intervention, and investment actions, to promote integral development and guarantee the successful permanence of their students.

## 6 References

ALMEIDA, L. *et al.* Democratização do acesso e do sucesso no ensino superior: uma reflexão a partir das realidades de Portugal e do Brasil. *Avaliação: Revista da Avaliação da Educação Superior*, Campinas, v. 17, n. 3, p. 899-920, 2012.

AMARAL, E.; POLYDORO, S. Os desafios da mudança para o ensino remoto emergencial na graduação na Unicamp - Brasil. *Linha Mestra*, Campinas, n. 41a, p. 52-62, 2020.

AMBIEL, R. A. M. *et al.* *Adaptação e permanência no Ensino Superior em tempos de pandemia*. Porto Alegre: Psicovida, 2020.

AMBIEL, R. A. M.; BARROS, L. O. Relações entre evasão, satisfação com escolha profissional, renda e adaptação de universitários. *Psicologia: Teoria e Prática*, São Paulo, v. 20, n. 2, p. 254-267, 2018.

ANDRIOLA, W. B.; ARAÚJO, A. C. Adaptação de alunos ao ambiente universitário: estudo de caso em cursos de graduação da Universidade Federal do Ceará. *Ensaio: Avaliação e Políticas Públicas em Educação*, Rio de Janeiro, v. 29, n. 110, p. 135-159, 2021.

BAPTISTA, A. V. Motivação para o ingresso e aprendizagem no Ensino Superior: o caso dos estudantes maiores de 23 da Universidade de Aveiro. In: CONGRESSO LUSO-AFRO-BRASILEIRO DE CIÊNCIAS SOCIAIS, 10., 2009, Braga. *Atas [...]*. Braga: Universidade do Minho, 2009.

BAPTISTA, A. V. O concurso para maiores de 23 anos: uma nova porta de acesso ao ensino superior para estudantes não-tradicionais. In: CONGRESSO GALEGO-PORTUGUÊS DE PSICOPEDAGOGIA, 9., 2007, A Corunha. *Atas [...]*. A Corunha: Universidade da Corunha, 2007.

BARBOSA, M. L. O. Democratização ou massificação do Ensino Superior no Brasil?. *Revista de Educação*, Campinas, v. 24, n. 2, p. 240-253, 2019.

BRASIL. *Deliberação nº 55/Cepe, de 25 de outubro de 2016*. IFAL-Cepe: Plano Estratégico Institucional de Permanência e Êxito dos Estudantes do IFAL, 2016. Available at: <https://www2.ifal.edu.br/o-ifal/ensino/legislacao-e-normas/arquivos-legislacao/pro-reitoria-de-ensino/plano-estrategico-institucional-de-permanencia-e-exito-dos-estudantes-do-ifal-deliberacao-no-55-cepe-2016-ifal.pdf/view>. Accessed on: Aug. 10, 2022.

BRASIL. *Instrução normativa nº 2 / 2020*. IFAL-Proen-DPE: Dispõe sobre os procedimentos a serem adotados para o reestabelecimento do vínculo entre os/as estudantes e a Instituição por meio da sua inserção em políticas de conectividade, a saber: Auxílio Conectividade e Projeto Alunos Conectados, 2020a. Available at: <https://www2.ifal.edu.br/noticias/proen-publica-instrucao-normativa-sobre-politica-institucional-de-conectividade/instrucao-normativa-2-proen-dpe-assinada.pdf>. Accessed on: Aug. 10, 2022.

BRASIL. *Portaria nº 2984, de 1º de setembro de 2020*. IFAL-REITORIA: Estabelece as condições, os valores e as etapas dos procedimentos para regulamentação dos editais para concessão de Auxílio Conectividade, no âmbito Instituto Federal de Alagoas (IFAL), 2020b.

CAMPIRA, F. P. *et al.* Satisfação acadêmica: um estudo qualitativo com estudantes universitários de Moçambique. *Educação & Formação*, v. 6, n. 3, p. 1-16, 2021.

CASANOVA, J.; BERNARDO, A. B.; ALMEIDA, L. S. Dificuldades na adaptação acadêmica e intenção de abandono de estudantes do 1º ano do Ensino Superior. *Revista de Estudios e Investigación en Psicología y Educación*, A Coruña, v. 8, n. 2, p. 211-228, 2021.

CERDEIRA, L.; CABRITO, B. G.; GEMELLI, C. E. Mercantilização e democratização da educação superior portuguesa: perspectivas de impactos pós-pandemia. *Humanidades e Inovação*, Palmas, v. 8, n. 62, p. 113-122, 2021.

COBO-RENDÓN, R. *et al.* Aceptación tecnológica, autorregulación del aprendizaje y satisfacción académica en universitarios durante la pandemia por Covid-19. *Revista E-Psi*, [S.l.], v. 11, n. 1, p. 28-45, 2022.

DIAS, D. *et al.* The democratisation of access and success in higher education. *Higher Education Management and Policy*, [S.l.], v. 23, n. 1, p. 1-20, 2011.

EGITO, N. B.; SILVEIRA, M. I. M. O letramento acadêmico de estudantes “não tradicionais” em cursos superiores tecnológicos: avaliando uma experiência de mediação pedagógica. *Revista Brasileira de Linguística Aplicada*, Belo Horizonte, v. 18, n. 4, p. 799-819, 2018.

ESTRADA ARAOZ, E. G.; GALLEGOS RAMOS, N. A. Cansancio emocional en estudiantes universitarios peruanos en el contexto de la pandemia de Covid-19. *Educación & Formación*, Fortaleza, v. 7, n. 1, p. e6759, 2022.

FARIA, A. A. G.B. T.; PEREIRA-NETO, L. L.; ALMEIDA, L. S. Efeitos da aprendizagem remota em estudantes do Ensino Superior. *Revista Educação em Debate*, Fortaleza, v. 43, n. 86, p. 136-150, 2021.

FARIAS, R. V.; ALMEIDA, L. S. Expectativas acadêmicas no Ensino Superior: uma revisão sistemática de literatura. *Revista E-Psi*, [S.l.], v. 9, n. 1, p. 68-93, 2020.

FERRÃO, M. E.; ALMEIDA, L. S. Student's access and performance in the Portuguese Higher Education: Issues of gender, age, socio-cultural background, expectations, and program choice. *Avaliação: Revista da Avaliação da Educação Superior*, Campinas, v. 24, n. 2, p. 434-450, 2019.

FERRAZ, A. S. *et al.* *Questionário de Adaptação ao Ensino Superior - Ensino Remoto*. Campinas: [s.n.], 2020. Relatório técnico não publicado.

FIOR, C. A. Evasão do Ensino Superior e papel preditivo do envolvimento acadêmico. *Amazônica: Revista de Psicopedagogia, Psicologia Escolar e Educação*, Humaitá, v. 13, n. 1, p. 9-32, 2021.

FIOR, C. A.; MERCURI, E. Envolvimento acadêmico no Ensino Superior e características do estudante. *Revista Brasileira de Orientação Profissional*, Campinas, v. 19, n. 1, p. 85-95, 2018.

FRAGOSO, A.; VALADAS, S. T. Dos “novos públicos” do Ensino Superior aos estudantes “não tradicionais” no Ensino Superior: contribuições para a construção de um breve mapa do campo. In: FRAGOSO, A.; VALADAS, S. T. (coord.). *Estudantes não tradicionais no Ensino Superior*. Coimbra: [s.n.], 2018a. p. 19-38.

FRAGOSO, A.; VALADAS, S. T. *Estudantes não tradicionais no Ensino Superior*. Coimbra: [s.n.], 2018b.

GONÇALVES, P. F. D. *et al.* Os novos públicos no Ensino Superior: vivências acadêmicas dos maiores de 23 anos na Universidade do Minho. In: CONGRESSO INTERNACIONAL DE PSICOPEDAGOGIA, 11., 2011, A Coruña. *Atas [...]*. A Coruña: Universidad de A Coruña, 2011.

GONÇALVES, P. F. D. *Transição e adaptação dos novos públicos ao Ensino Superior: o caso dos maiores de 23 na Universidade do Minho*. 2014. Tese Doutorado em Ciências da Educação – Programa de Pós-Graduação em Ciências da Educação, Universidade do Minho, Braga, 2014.

GONZÁLEZ-MONTEAGUDO, J.; HERRERA-PASTOR, D.; PADILLA-CARMONA, M. T. Abordagens biográfico-narrativas com estudantes universitários não tradicionais. FRAGOSO, A.; VALADAS, S. T. (coord.). *Estudantes não tradicionais no Ensino Superior*. Coimbra: [s.n.], 2018. p. 59-77.

HASSAN, S. U. N. *et al.* Academic self-perception and course satisfaction among university students taking virtual classes during the Covid-19 pandemic in the kingdom of saudi-arabia (Ksa). *Education Sciences*, [S.l.], v. 11, n. 3, p. 1-14, 2021.

HERINGER, R. Democratização da Educação Superior no Brasil: das metas de inclusão ao sucesso acadêmico. *Revista Brasileira de Orientação Profissional*, Campinas, v. 19, n. 1, p. 7-17, 2018.

KANASHIRO, P. R. Exclusão digital, desigualdade e iniquidade: ensaio sobre a educação pública em tempo de isolamento social. *Olhar de Professor*, Ponta Grossa, v. 24, n. 1, p. 1-9, 2021.

MARTINS, M. *Univers(al)idade - estudantes “não tradicionais” no Ensino Superior: transições, obstáculos e conquistas*. [S.l.: s.n.], 2016.

NONATO, E. R. S.; CONTRERAS-ESPINOSA, R. S. Educação, Ensino Remoto Emergencial e tecnologias. *Revista da Faeeba: Educação e Contemporaneidade*, Salvador, v. 31, n. 65, p. 13-18, 2022.

OLIVEIRA, S. S.; SILVA, O. S. F.; SILVA, M. J. O. Educar na incerteza e na urgência: implicações do ensino remoto ao fazer docente e a reinvenção da sala de aula. *Interfaces Científicas: Educação*, Aracaju, v. 10, n. 1, p. 25-40, 2020.

OSTI, A. *et al.* Satisfação acadêmica de estudantes universitários: construção de uma escala de avaliação. *Educação: Teoria e Prática*, Rio Claro, v. 30, n. 63, p. 1-13, 2020a.

OSTI, A. *et al.* Satisfação acadêmica: pesquisa com estudantes brasileiros de uma universidade pública. *Revista E-Psi*, [S.l.], v. 9, n. 1, p. 94-106, 2020b.

OSTI, A.; PONTES JÚNIOR, J. A. F. P.; ALMEIDA, L. D. S. O comprometimento acadêmico no contexto da pandemia da Covid-19 em estudantes brasileiros do Ensino Superior. *Praksis*, Novo Hamburgo, v. 3, p. 275-292, 2021.



PASCUEIRO, L. Breve contextualização ao tema da democratização do acesso ao Ensino Superior: a presença de novos públicos em contexto universitário. *Educação, Sociedade e Culturas*, Porto, v. 28, p. 31-52, 2009.

PAULA, M. F. C. Políticas de democratização da educação superior brasileira: limites e desafios para a próxima década. *Avaliação: Revista da Avaliação da Educação Superior*, Campinas, v. 22, n. 2, p. 301-315, 2017.

PEREIRA-NETO, L. L.; ALMEIDA, L. S. Estudantes adultos no Ensino Superior: estudo no IFAL-Maceió tomando as expectativas e dificuldades do regresso à vida acadêmica. *Amazônica: Revista de Psicopedagogia, Psicologia Escolar e Educação*, Humaitá, v. 13, n. 1, p. 152-172, 2021.

PEREIRA-NETO, L. L.; FARIA, A. A. G. B. T.; ALMEIDA, L. S. Adaptação e evidências de validação do questionário de satisfação com a experiência acadêmica remota (QSEA-R). *Revista Ibero-Americana de Estudos em Educação*, São Paulo, v. no prelo.

PELLISSON, S.; BORUCHOVITCH, E. Estratégias de regulação emocional de estudantes universitários: uma revisão sistemática da literatura. *Educação & Formação*, Fortaleza, v. 7, n.1, e7152, 2021.

PINTO, J. R. C. O abandono de estudantes do Ensino Superior: estudo de variáveis pessoais e contextuais. 2020. Tese (Doutorado em Ciências da Educação) – Programa de Pós-Graduação em Ciências da Educação, Universidade do Minho, Braga, 2020.

PINTO, M.; LEITE, C. As tecnologias digitais nos percursos de sucesso acadêmico de estudantes não tradicionais do Ensino Superior. *Educação e Pesquisa*, São Paulo, v. 46, n. e216818, p. 1-17, 2020.

SANTOS, G. M. T.; REIS, J. P. C. Aprendizagem e o Ensino Remoto Emergencial: reflexões em tempos de Covid-19. In: IOLE (org.). *Ensino Remoto e a pandemia de Covid-19*. Boa Vista: IOLE, 2021. p. 71-97.

SEABRA, F.; AIRES, L.; TEIXEIRA, A. Transição para o Ensino Remoto de Emergência no Ensino Superior em Portugal – um estudo exploratório. *Dialogia*, São Paulo, n. 36, p. 316-334, 2020.

SILVA, G.; SANTOS FILHO, J. D.; SILVA, M. V. A realização de atividades acadêmicas no ensino superior em tempos de pandemia: até que ponto é possível?. *Dialogia*, São Paulo, n. 38, p. 1-18, 2021.

SMANIOTTO, S. R. U. Alunos adultos e a vivência no Ensino Superior. *Momentum*, Atibaia, v. 1, n. 9, p. 95-120, 2011.

TREVIZAN, E. Programa de apoio a planos de reestruturação e expansão das universidades federais (Reuni): contextos, condicionantes e resultados de sua implementação. 2019. Tese (Doutorado em Educação) – Programa de Pós-Graduação em Educação, Universidade Estadual Paulista, Marília, 2019.



VALADAS, S. T.; FRAGOSO, A. As desigualdades no acesso e na transição para o mercado de trabalho de estudantes não tradicionais. *Revista E-Psi*, [S.l.], v. 11, n. 1, p. 208-225, 2022.

**Lauro Lopes Pereira-Neto**, Federal Institute of Alagoas, University of Minho

 <https://orcid.org/0000-0001-9429-0798>

Professor EBTT in Instituto Federal de Alagoas - IFAL/Maceió. Masters in Cognitive Psychology, Federal University of Pernambuco. PhD student in Educational Sciences, specialty in Educational Psychology, at University of Minho.

Author contribution: Conducted the theoretical review of the article, the collection and statistical analysis of data, and took over the writing.

Lattes: <http://lattes.cnpq.br/2294245620497736>

E-mail: [lauro.pereira@ifal.edu.br](mailto:lauro.pereira@ifal.edu.br)

**Ana Amália Gomes de Barros Torres Faria**, Federal Institute of Alagoas, University of Minho

 <https://orcid.org/0000-0003-4096-0041>

Psychologist at Federal Institute of Alagoas (IFAL). Masters in Education by Federal University of Alagoas. PhD student in Educational Sciences, specialty in Educational Psychology, at University of Minho.

Author contribution: Conducted the data collection and revision of the text.

Lattes: <http://lattes.cnpq.br/1312123484694493>

E-mail: [ana.faria@ifal.edu.br](mailto:ana.faria@ifal.edu.br)

**Leandro Silva Almeida**, University of Minho, Institute of Education

 <https://orcid.org/0000-0002-0651-7014>

Head Professor of Instituto de Educação. PhD in Psychology, specialty in Educational Psychology, by University of Porto.

Author contribution: Guided the research, its theoretical framework, statistical analyzes and revision of the final writing.

Lattes: <http://lattes.cnpq.br/9704136908005990>

E-mail: [leandro@ie.uminho.pt](mailto:leandro@ie.uminho.pt)

**Responsible editor:** Lia Machado Fiuza Fialho

**Ad hoc experts:** Linoel de Jesus Leal Ordonez and Maria de Lourdes Pinto de Almeida

### How to cite this article (ABNT):

PEREIRA-NETO, Lauro Lopes; FARIA, Ana Amália Gomes de Barros Torres; ALMEIDA, Leandro Silva. Academic satisfaction in the context of the pandemic of Covid-19 in students of Higher Education. *Educ. Form.*, Fortaleza, v. 7, e8477, 2022. Available at: <https://revistas.uece.br/index.php/redufor/article/view/8477>



Received on June 13, 2022.

Accepted on October 28, 2022.

Published on December 6, 2022.