

IMPACTS OF COVID-19 ON INTERNATIONAL STUDENT MOBILITY TO PORTUGAL: STUDENT'S LIVED EXPERIENCES AND FUTURE PERSPECTIVES

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Abstract: The COVID-19 pandemic has profoundly affected the Higher Education community. Suddenly, universities worldwide had to shift from face-to-face lectures to online teaching and learning, and students faced challenges, that created anxieties about their future careers and mobility plans. This research questions the impacts of the pandemic on international student mobility flows to Portugal and the student's lived experiences during the pandemic. To this end, the study adopted a mixed-method design, combining official data and primary data from an online survey questionnaire and semi-structured interviews with International Students (IS).

Although it is not possible to foresee the effects of the pandemic on the internationalization of Portuguese Higher Education Institutions (HEI), our findings indicate that Portugal tends to remain an attractive country for international students, especially for those coming from the former colonies. Furthermore, the student's reports of their experiences during the health crisis, demonstrate different levels of vulnerability across gender, geographical origin and level of education attended.

Keywords: international student mobility, international students, higher education, COVID-19, Portugal

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IMPACTO DA COVID-19 NA MOBILIDADE INTERNACIONAL DE ESTUDANTES PARA PORTUGAL: EXPERIÊNCIAS VIVIDAS PELOS ESTUDANTES E PERSPETIVAS FUTURAS

Resumo: A pandemia da COVID-19 afetou profundamente a comunidade do ensino superior. De repente, as universidades em todo o mundo tiveram que mudar de aulas presenciais para ensino e aprendizagem online, e os alunos enfrentaram desafios que criaram ansiedades sobre as suas futuras carreiras e planos de mobilidade. Isto A investigação questiona os impactos da pandemia nos fluxos de mobilidade internacional de estudantes para Portugal e as experiências vividas pelos estudantes durante a pandemia. Para tal, o estudo adoptou um desenho de método misto, combinando dados oficiais e dados primários de um questionário de inquérito online e semi-entrevistas estruturadas com Estudantes Internacionais (IS).

Embora não seja possível prever os efeitos da pandemia na internacionalização das Instituições de Ensino Superior (IES) portuguesas, as nossas conclusões indicam que Portugal tende a continuar a ser um país atrativo para estudantes internacionais, especialmente para aqueles provenientes das ex-colónias. Os relatórios das suas experiências durante a crise sanitária demonstram diferentes níveis de vulnerabilidade em função do género, da origem geográfica e do nível de ensino frequentado.

Palavras chaves: mobilidade estudantil internacional, estudantes internacionais, ensino superior, COVID-19, Portugal

REPERCUSIONES DE LA COVID-19 EN LA MOVILIDAD INTERNACIONAL DE ESTUDIANTES A PORTUGAL: EXPERIENCIAS VIVIDAS POR LOS ESTUDIANTES Y PERSPECTIVAS DE FUTURO

Resumen: La pandemia de COVID-19 ha afectado profundamente a la comunidad de la Educación Superior. De repente, las universidades de todo el mundo tuvieron que pasar de clases presenciales a enseñanza y aprendizaje en línea, y los estudiantes enfrentaron desafíos que generaron ansiedad sobre sus futuras carreras y planes de movilidad. Esta investigación analiza los impactos de la pandemia en los flujos de movilidad estudiantil internacional hacia Portugal y las experiencias vividas por los estudiantes durante la pandemia. Para ello, el estudio adoptó un diseño de métodos mixtos, combinando datos oficiales y datos primarios obtenidos a través de una encuesta en línea y entrevistas semi-estructuradas con estudiantes internacionales (EI).

Aunque no es posible prever los efectos de la pandemia sobre la internacionalización de las instituciones de educación superior portuguesas (IES), nuestros hallazgos indican que Portugal tiende a seguir siendo un país atractivo para los estudiantes internacionales, especialmente para aquellos provenientes de las antiguas colonias. Además, los informes de los estudiantes sobre sus experiencias durante la crisis sanitaria demuestran diferentes niveles de vulnerabilidad en función del género, la procedencia geográfica y el nivel educativo cursado.

Palabras clave: movilidad estudiantil internacional, estudiantes internacionales, educación superior, COVID-19, Portugal.



Introduction

In recent decades, as a consequence of the emergence of knowledge-based global economies, the increasing massification of higher education and the development of new technologies, international student mobility (ISM) has significantly increased the relevance of this topic, both in political and academic debates and in the economic agenda of some countries. In this logic, many receiving countries in the global North have developed strategies for attracting foreign students to increase the level of internationalisation of their Universities. Portugal has followed this trend towards greater internationalisation of Higher Education, focusing its efforts on attracting students from Portuguese-speaking Countries, namely Brazil, and other EU countries⁴.

In this regard, the number of International Students (IS) enrolled in Portuguese Higher Education Institutions (HEI) has kept growing at high pace during the last fifteen years (DGES, 2020), and most international students (IS) traditionally come from former colonies such as Angola, Cape Verde, and Brazil (IORIO, 2018; ALVES, 2021; IORIO & FONSECA, 2018; FONSECA et al., 2016). Factors like the language of study, quality of programs, immigration policy, tuition fees, and recognition of foreign

⁴ The relevance given by the Portuguese Government to the recruitment of international students is clearly demonstrated by the publication of the Status of the International Student - *Estatuto do Estudante Internacional* (Decree-Law no. 36/2014 of 10th March), which regulates the issues pertaining to international students (Fonseca, Pereira & Iorio, 2016).

degrees can explain the students' choices as study destinations (OECD, 2015; PEREZ-ENCINAS et al., 2021). However, some authors (CARUSO & DE WIT, 2015, PERKINS AND NEUMAYER, 2014, FRANÇA et al., 2018) identify those factors such as the costs of living, economic conditions, perceptions about security, connections with previous migrants to get support in the host country, the shared language, and the bonds created by colonial ties, have more prevalence on student choice than the quality of teaching.

In the case of Portugal, the attraction of international students to higher education is closely associated with the geopolitical position of the country, resulting from its colonial past and European integration. In other words, on the one hand, it benefits from the historical and cultural links with the former colonies and, on the other hand, from the incentives for inter-university mobility, through the ERASMUS programme and the creation of the European Higher Education Area (FONSECA, ESTEVES, IORIO, 2015). In this sense, the current trends in international students' enrolments in Portuguese HEI echo the historical legacy and play a crucial role to counteract the negative effect of an ageing population in the number of students attending tertiary education in the country and enhancing financial stability of the Universities. In addition, there is also an economic multiplier effect extending the benefits of the internationalisation of higher education to regional development (CANAL DOMÍNGUEZ, 2021).

The COVID-19 pandemic has dramatically affected higher education development, which began in early 2020 (IORIO et al, 2020), bringing with it the need for a rapid transition to online teaching and learning. In this way, the pandemic has accelerated the adaptation of students and teachers to technological and cultural change (TESAR, 2020). However, this change has also made inequalities in international students' access to information and communication technologies more evident (TASCI, 2021). Moreover, the negative effect of the pandemic on international student mobility will bring substantial financial challenges for countries and universities that depend on fees from students coming from other countries (TASCI, 2021).

The economic downturn and concerns about physical distance have caused thousands of students to postpone or change their plans to study abroad, leading to substantial revenue losses for universities around the world. Burki (2020), analysing the impact of Covid-19 on higher education, cites the case of the United Kingdom where international student tuition fees accounted in 2019 for about a third of the total value (about £6.9 billions per year). The pandemic has also caused a decrease in other complementary income from accommodation, bookshops and conferences. Thus, the decrease in the number of international students will entail severe consequences for these institutions (BURKI, 2020).

Give this background, the aim of this paper is to examine the impact of Covid-19 on international student mobility flows to Portugal and the student's lived experiences during the pandemic. The research is based on two main questions:

1. What was the effect of COVID-19 on international student mobility to Portugal? Were credit mobility and degree mobility affected in the same way?
2. What were the main difficulties experienced by international students during the period of confinement? To what extent did the pandemic affect their career prospects?

The study follows a mixed-methods approach, combining data from secondary data sources, primary data from an online survey questionnaire and 22 semi-structured online interviews with international students.

The paper is organised as follows: the introduction is followed by an outline of the methodology. Then, the results section first points out the current trends and future perspectives of ISM to Portugal, and secondly analyses the impact of the pandemic on the student's lived experiences in Portugal and the coping strategies that they developed in this particular context. Finally, we offer some concluding remarks

Methodology

As mentioned before, this paper intends to explore how the COVID-19 pandemic affected international student mobility flows to Portugal and international students enrolled in a higher education institution in Portugal.

Given the complexity of the topic, this study adopted a mixed-method research design, combining official data collected by the Directorate General for Education and Science Statistics (DGEEC) of the Ministry of Education and Science (of Portugal), through the Survey on Enrolled Students and Graduates of Higher Education and primary data from an online survey questionnaire and 22 semi-structured online interviews with international students.

The online survey was addressed to international students and students of foreign nationality in Portuguese higher education, enrolled in a Portuguese higher education institution (IORIO, et al., 2020). The survey was carried out between the 7th April and the 7th May, (almost entirely during the lockdown) and focus on the student's perspectives on the impacts of the pandemic on four main issues: housing, health and well-being, employment, teaching and learning strategies. A total of 703 valid responses were obtained. However, only international students, in credit and degree mobility (578 respondents) are considered in this study.

The online survey was advertised through various digital media (social media and email distribution lists of higher education institutions). The participants were aged between 18 a 50 and included 190 males (32.9%) and 387 females (67.0%); only 1 student did not indicate the gender. There was a notable variety among participants' countries of origin (45 countries); however, the majority of the respondents (75.1%) came from a Portuguese speaking country (59.3% from Brazil and 15,8% from PALOP - Portuguese-speaking African countries). 18.2. % of the respondents lived in a EU country, the main origin being Spain, followed by Italy.

The interviews were conducted between September 2020 and January 2021 and were carried out through virtual communication platforms (Zoom, Skype, Whatsapp). A large part of these interviews was conducted during a period when the State of Emergency was in force in Portugal, between 9 November 2020 and 7 January 2021. Some students who had responded to the *online* survey volunteered to participate in this phase of the study, and from them, through the snowball method, other participants were recruited. The sample is diverse, including bachelor's, master's and doctoral students, 15 women and 7 men, from a very diverse range of countries (Brazil, Angola, Cape Verde, Guinea-Bissau, Spain, Italy, Argentina, Colombia, and Chile). The respondents were enrolled in different Portuguese universities (Lisbon, Porto, Évora, Beira Interior, Algarve, Minho, European, and ISCTE - Lisbon University Institute).

Challenges and Transformations in International Student Mobility

IS mobility has always been accompanied by a series of vulnerabilities, but the Covid-19 pandemic has exacerbated these challenges, revealing new dimensions and demanding significant adaptation from students and institutions (IORIO et al, 2020). The ISs face specific vulnerabilities when they leave their home countries to study abroad. These vulnerabilities include limitations on the right to work due to visa conditions, the absence of international habitus (BRITO, 2004), distance from family support networks, and language barriers (ALBERTOVNA SHAKIROVA & ROZA ALEXEEVNA, 2016). The Covid-19 pandemic has aggravated these situations, intensifying feelings of fear, stress, and anxiety (MISCA & THORNTON, 2021). In this regard, the health crisis also impacted job prospects and social interactions, primarily due to the isolation imposed by lockdown measures (SILVA et al, 2024; MALET et al., 2022).

Various studies had showed the pandemic profoundly impacted ISs academically, socio-emotionally, and financially. In escpecific, the remote and hybrid learning demanded digital skills that many students lacked, delaying academic progress and increasing emotional stress (de BOER, 2021; Aristovnik et al., 2020). In this regard, ISs from developing countries faced additional difficulties adapting to online education due to equipment shortages and inadequate infrastructure (FIRANG, 2020; Malet et al., 2022). However, many demonstrated resilience and adaptability, using their transnational support networks to overcome the challenges imposed by the pandemic (HARI et al., 2021; WANG, 2021).

Moreover, the pandemic accelerated the shift towards a new form of student mobility: virtual mobility. Information and communication technologies (ICTs) facilitated the continuation of distance learning despite significant challenges (AMARAL, 2016). Platforms such as Zoom and Google Meet became crucial for teaching and interaction between students and educators. While this new educational paradigm can reduce costs and increase access to international education, its success relies heavily on adequate infrastructure and the capacity of educational institutions to adapt to this model (ROOS BREINES et al., 2019). In this context, the shift to virtual mobility, while not a complete replacement for the in-person experience, provided a viable alternative during times of crisis. However, both institutions and students were unprepared to address digital inequalities and ensure that everyone had access to the necessary resources for quality education (PAPACHARISSI, 2009).

In this vein, the Covid-19 pandemic has brought to light and intensified pre-existing vulnerabilities of ISs, but it has also catalyzed significant transformations in the international education landscape. The resilience demonstrated by students, combined with the support of their transnational networks and the technological adaptation of institutions, points to a future where student mobility can become more inclusive and flexible. However, it is crucial to continue exploring and addressing structural inequalities to ensure that all students can fully benefit from the opportunities offered by international education, whether in-person or virtual.

Covid-19 pandemic and international student mobility to Portugal: recent trends and future prospects and challenges

In this section, we analyse the evolution of IS in Portugal according to the official data collected by the Directorate General for Education and Science Statistics (DGEEC) of the Ministry of Education and Science (of Portugal), through the Survey on Enrolled Students and Graduates in Higher Education. It should be noted that the DGEEC databases, contrary to UNESCO, OECD and EUROSTAT,

use the designation "internationally mobile students" instead of international student, differentiating between credit⁵ and degree mobility⁶.

Based on these data and, complementarily, with some results of the online survey to international students in Portugal, previously mentioned, we intend to shed light on the effects of COVID 19 pandemic on future prospects of international student mobility flows to Portuguese Higher Education Institutions, both on credit and degree mobility.

In 2020/21, the number of internationally mobile higher education students in Portugal (55321) represented 13.4% of the total number of students enrolled in this level of education (411995).

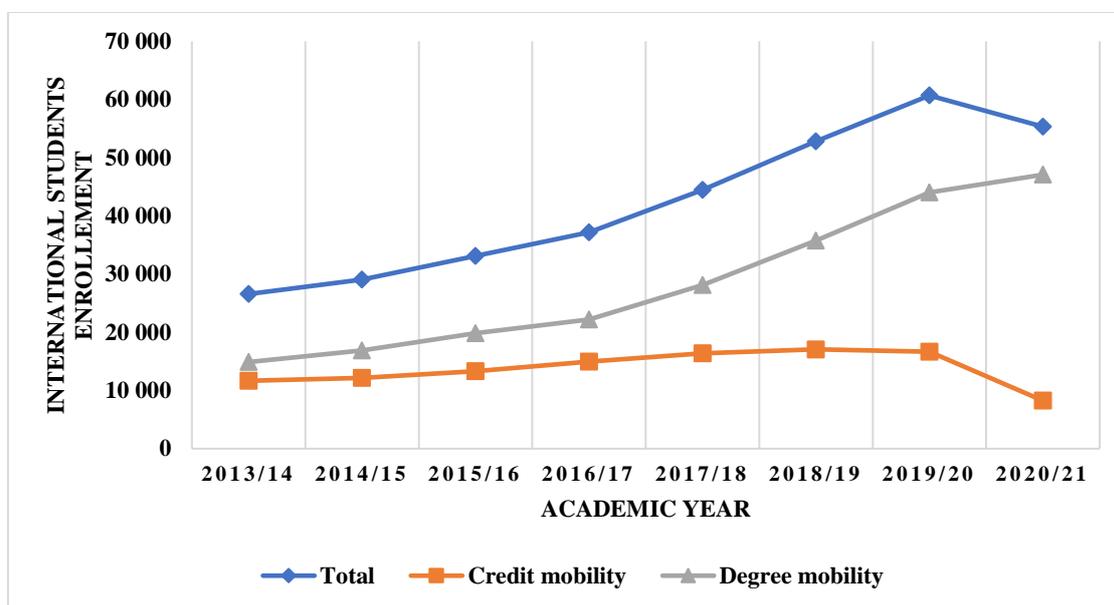
In 2020/21, more than half of the international students in credit and degree mobility (54.6%) were enrolled in bachelor's and integrated master's degrees. However, relative to the total number of students, they represent a higher fraction in master's and doctoral degrees. The public higher education institutions concentrate 80.2% of the international students, in degree and credit mobility, but in relation to the total number of students enrolled, they have a greater weight in the private universities. Engineering, Social Sciences, Commerce and Law and Health are the scientific areas which attract the highest number of students from other countries. In terms of regional distribution, the Region of Lisbon stands out with 35.6% of the total, followed by the North and Centre Regions, respectively with 33.4% and 22.8%. However, it should be noted that, in relation to the total number of students (national and international), in the last two regions they represent a higher proportion than in the first.

As shown in figure 1, between 2013/14 and 2020/21, the number of international students grew by 28751 students (108.2%), which corresponds to an increase of 6.1 percentage points of their weight in the total number of students enrolled in university and polytechnic education (7.3% in 2013/14 and 13.4% in 2020/21). The reinforcement of the attractiveness of Portuguese higher education institutions is mainly manifested in the continuous and consistent increase of international students in degree mobility, even after the emergence of the pandemic crisis. In contrast, credit mobility was deeply affected by the COVID-19 pandemic, with the values registered in 2020/21 being less than half of those observed in the academic year 2018/19.

⁵ Students enrolled in a Portuguese higher education institution, in a study or traineeship modality, for a certain period of time, with the purpose of obtaining academic credits later recognized by their foreign institution of origin.

⁶ Students enrolled in a course/cycle of studies at a Portuguese higher education institution, who have concluded secondary education in a foreign country and who intend to obtain a Portuguese diploma.

Figure 1 - International student enrolments in Portugal (2013/14 - 2020/21)



Source: DGEEC - Survey on Enrolled Students and Graduates of Higher Education, with own processing.

The difference observed in the effects of the pandemic crisis, in credit mobility and in degree mobility, is associated with different types of motivations of international students to study abroad. According to Perez-Encinas et al. (2021), degree mobility students show patterns related mainly to three factors: career prospects, academic issues, living expenses, or financial help services, being dominant areas for them related to career prospects and academics. On the other hand, credit-mobility students focus more on academics, living expenses, and social life.

A gender disaggregated analysis also shows a higher presence of women compared to men, especially in the case of credit mobility. This is common to other European countries, even when the figures are weighted by the proportion of female students in higher education (BÖTTCHER et al., 2016). However, it is interesting to note that the reduction in credit mobility caused by the pandemic has also affected women more severely than men, so that between the academic years 2018/19 and 2020/21 there has been, respectively, a 52.6% and 44.2% reduction in the number of credit mobile female and male international students enrolled in a higher education institution in Portugal.

With regard to degree mobility, in the same period, there was a growth rate of 31.6% for men and 31.7% for women. Therefore, the latter continued to represent slightly more than half (52.3%) of the international students in degree mobility in the academic year 2020/21.

Most of the international students, in degree mobility, enrolled in higher education in Portugal in 2020/21, as shown in Table 1, come from Brazil (17,629; 37.5%) and the Portuguese-speaking countries (1,16470; 35%). The top 10 countries of origin also include France, Italy, Germany and Spain, together representing 5721 students (12.2%). Compared to the situation before the pandemic (academic year 2018/19), the main change is the increase in the proportion of Portuguese-speaking

African Countries and Timor-Leste, especially Guinea-Bissau and Cape Verde, and the decrease in Brazil and Angola, although in absolute value, both continued to increase.

Table 1 - International students, in degree mobility, enrolled in a higher education institution in Portugal, by country of origin, 2019/18 and 2020/21

Country where they completed their secondary education	Academic Year			
	2018/19		2020/21	
	Number	%	Number	%
TOTAL	35 755	100,0	47 072	100,0
Brazil	15 373	43,0	17 629	37,5
PALOP and East Timor	10 334	28,9	16 470	35,0
<i>Cape Verde</i>	3 338	9,3	5 349	11,4
<i>Angola</i>	3 246	9,1	3 552	7,5
<i>Guinea-Bissau</i>	1 484	4,2	4 730	10,0
<i>Mozambique</i>	996	2,8	1 545	3,3
<i>Sao Tome and Principe</i>	954	2,7	980	2,1
<i>Timor-Leste</i>	316	0,9	314	0,7
France	1 510	4,2	2 563	5,4
Spain	1 002	2,8	1 014	2,2
Italy	926	2,6	1 075	2,3
Germany	722	2,0	1 069	2,3
Other countries	5 888	16,5	7 252	15,4

Source: DGEEC - Survey on Enrolled Students and Graduates of Higher Education, with own processing.

The geographical pattern of recruitment of international students, in credit mobility, is quite different from that of degree mobility, although before the pandemic crisis, Brazil was also the main country of origin of students who opt for temporary attendance at a higher education institution in Portugal (19.3% of the total number of foreign students enrolled in this scheme in 2018/19) (Table 2). As this is a type of mobility strongly encouraged by the European Union, through the ERASMUS Programme, it is easily understandable that most of the foreign students who opt for a study period in Portugal have European citizenship and are beneficiaries of this programme (66.1% in 2018/19 and 80.2% in 2020/21).

Table 2 - International students, in credit mobility, enrolled in a higher education institution in Portugal, by country of origin, 2019/18 and 2020/21

Country of nationality	Academic Year			
	2018/19		2020/21	
	Number	%	Number	%
TOTAL	17 066	100,0	8065	100,0
Brazil	3 299	19,3	623	7,7
EU 27	11 276	66,1	6471	80,2
Spain	2 659	15,6	2 547	31,6
Italy	2 101	12,3	2 060	25,5
Poland	1 173	6,9	1 159	14,4
Germany	1 147	6,7	1 147	14,2
France	723	4,2	654	8,1
Czech Republic	408	2,4	386	4,8
Turkey	547	3,2	544	6,7
Other countries	1 944	11,4	427	5,3

Source: DGEEC - Survey on Enrolled Students and Graduates of Higher Education, with own processing.

Spain, Italy, Poland, Germany and France are, in this order, the EU countries that send most students to Portugal for credit mobility and are also the most attractive to Portuguese students for outgoing mobility. The reasons for choosing Portugal are diverse, including factors such as the geographical, linguistic and cultural proximity, especially relevant for Spanish, Brazilian and Italian students, the existence of strong links with the Portuguese diaspora established in these countries, in the cases of Germany and France, or the mildness of the climate, the quality of the beaches and the low cost of living compared to other European destinations, factors often mentioned by Polish and Czech students (VALE et al., 2019).

The COVID-19 pandemic, apart from causing a sharp drop in the total number of international students in credit mobility (-52.7%), was mainly reflected in the reduction in the number of Brazilian students who, between 2018/19 and 2020/21 registered a decrease of -81.1%. With regard to the European countries, although all of them suffered high declines, there were no changes in the geography of origins.

Although it is difficult to anticipate how the pandemic and the economic recession it caused, as well as the generalisation of distance learning, may affect the evolution of the international mobility of higher education students, the results of the analysis carried out indicate that, in the case of Portugal, once the initial shock, caused by the restrictions to mobility and the difficulties of the health systems in responding to the demand for medical care, has been overcome, there will continue to be an increasing trend in the recruitment of international students, especially those who come under degree mobility. Besides students from Portuguese-speaking countries, attracted by sharing the same language and by the historical ties they have with Portugal, the climate, the safety conditions, the affirmation of the country as an international tourist destination and the prestige and high recognition of the quality of teaching and research that is practiced in some scientific areas and national universities, have contributed to consolidate their internationalisation and increase their capacity to

attract foreign students. In addition, the relatively lower tuition fees than in other European countries, as well as the average cost of living (accommodation, food and transport costs) are also relevant factors in the decision to choose a higher education institution in Portugal (Sá et al., 2021).

However, as Iorio et al. (2020) point out, the experience of the pandemic also demonstrated the greater vulnerability to the consequences of the global health crisis of international students compared to native students, due to the absence of a close support network (family and friends). Therefore, higher education institutions will have to find appropriate response mechanisms to meet the specific needs of an increasingly diverse student population and, simultaneously, take advantage of the knowledge acquired with distance learning, to make the best use of its development potential, in articulation with face-to-face education.

In the following section, based on the online survey and interviews of the international students in Portuguese higher education described above, we will seek to identify and discuss how the pandemic affected their daily lives during their periods of confinement, as well as their future career perspectives.

Students' lived experiences during the pandemic crisis

The effects of the pandemic COVID-19 on international higher education students in Portugal began to be felt immediately after the closure of all educational establishments, from 16 March 2020. In addition to the direct impacts on academic life, resulting from the suspension of face-to-face teaching, the health crisis deeply affected many aspects of their lives, associated with economic difficulties, social isolation, health problems and even their future life projects. Since this population is very differentiated in terms of type of mobility, country of origin, social class, cycle of studies, family context, gender and age, it is natural that these difficulties were not felt by all with the same intensity, particularly affecting the most economically and socially vulnerable individuals (Iorio, et al, 2020).

The restrictive measures on the circulation of people, even within national territory, although they left no one immune to the effects of this pandemic, particularly affected immigrants, including international students, and all those displaced from their habitual residence, who intended to return to their countries or regions of origin.

The desire to return to the home country due to the pandemic was expressed by 12.8% of the international students who responded to the online survey, with a statistically very significant difference ($p < 0.01$) between those on credit and degree mobility (21.8% in the first case and 9.7% in the second).

Furthermore, it should be noted that, as some of the students interviewed stated, despite the restrictions on mobility, many students, internationals and internally displaced persons, returned home as soon as conditions of movement allowed:

A lot of people have left. A lot of people going back to their countries of origin, either by cancellation of the contract (of residence), or to pass the pandemic. Especially the Portuguese, obviously, who have their houses away from Oporto, and also a lot of people from Mozambique came back. Ah, and the French! All the French left! All of them! (Brazilian student; male; 23 years old; University of Oporto, degree mobility - integrated master's degree).

Based on the results of the survey and the interviews conducted, the effects of the pandemic on the lives of international students in four key areas are presented below: social life, mental health, academic issues and future perspectives, in terms of career prospects.

Social life

The lack of social conviviality was felt with great intensity by the students who, besides being far from their families, were deprived of socialising with friends in Portugal:

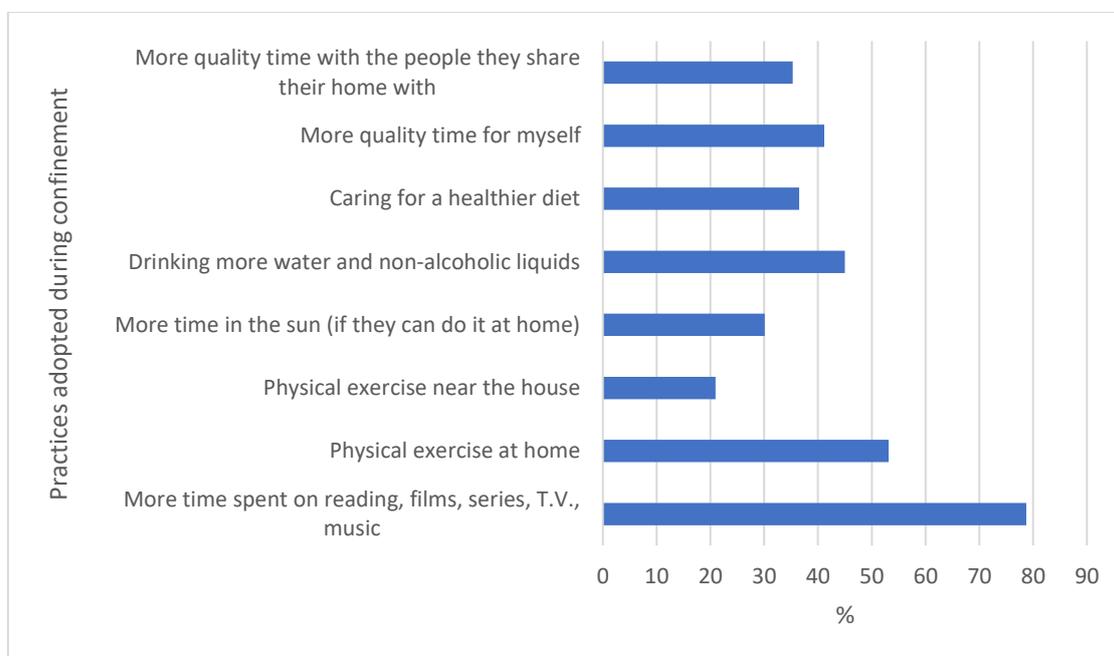
We miss the old environment. When, for example, I got tired, in case I was studying, reading, I would go to meet a friend to talk, or sometimes I would go to a cinema... And today I can't do that.... (Angolan student, male, 31 years old, University of Beira Interior, degree mobility - PhD).

The students who lived in the halls of residence reported that it was more difficult for them to socialise with other colleagues because the rules for living in these spaces had become stricter. It can be observed, however, that some students have taken advantage of the isolation to dedicate themselves more to some individual projects, which they did not have time to do before:

Then the isolation came and, for me, it was strangely wonderful! I managed to be alone, I managed to be without anything to do at home, I watched the movie I always wanted... my house was all the time clean, I was cooking, super-dedicated to my classes... I was exercising, I've never, never been one to exercise, me alone... and I was exercising every day! (Colombian student, female, 27 years old, University of Lisbon, degree mobility - master's degree)

The results of the online survey are in agreement with the information collected in the interviews, highlighting the main changes in the daily practices of international students during their first period of confinement in Portugal (Fig.2).

Figure 2 - Practices developed by the surveyed students during the first confinement period



Source: Online survey to international students enrolled in Higher Education in Portugal, 2020

As shown in figure 2, reading, watching movies, series and TV and listening to music were the most frequent activities, having been mentioned by 78.7% of the respondents. The practice of physical exercise at home or nearby was also mentioned by 53.1% and 20.9% of respondents,

respectively. Another relevant aspect of the change in daily routines during the pandemic, also related to the students' health and well-being, was the concern with the adoption of healthier eating habits, spending more time in the sun and the possibility of having more time for themselves, their families or other people with whom they live.

Despite their concern to remain active and healthy, around two thirds of the respondents felt that social isolation was affecting their health and mental wellbeing. The following section presents some of the manifestations of mental health problems reported by the students who responded to the online survey.

Health and well-being

Social isolation, associated with possible loss of income, either personal or from close family members, inactivity, fear of being infected by the coronavirus, or difficulties in adapting to distance learning, increase mental health problems, not only in the immediate, but also in the long term (BROOKS, et al., 2020; MANICA, 2021). However, the effects of the pandemic on health and well-being did not affect the universe of international students in the same way, with the application of the chi-square test showing statistically significant differences according to gender and geographical origin. The results of the survey allowed us to verify that the number of women and of students from Brazil is higher than the expected values, if the distribution of respondents who reported that the new coronavirus crisis affected their mental health was independent of gender and country of residence before coming to Portugal ($p < 0.01$, in both cases).

Figure 3 shows the most frequently reported problems, namely lack of initiative, difficulty in relaxing, lack of positive thinking, insomnia and difficulty in keeping calm.

Figure 3 - Situations experienced during social isolation (%)



Source: Online survey to international students enrolled in Higher Education in Portugal, 2020

The experience of these situations was also reported by many of the students interviewed:

I had a lot of stress because of university, because I didn't know how things were going to be done, I didn't understand, like, if I had to deliver an assignment online and I didn't arrive on time, and then fear too, fear that something would happen with my family or with me, and I didn't feel well psychologically like that, I was all the time thinking that something bad could happen. (Student with dual Argentinian/Italian nationality, 20 years old, University of Évora, degree mobility, bachelor's degree)

I think I mainly felt anxiety, the issue, a little bit, of fear, because you are not with your family here, so you also become afraid, not only for yourself, but also for your family. this fear of not knowing how it will be in the future, so this ends up breaking your structure because you can't plan (Master's student, Brazilian, female, 25 years old, University of Algarve, degree mobility - master's degree)

These quotes also led to the conclusion that the main causes of mental health problems experienced by students were anxiety, worry about distant relatives, uncertainty about the future and about how the higher education institution they were attending would organise teaching and assessment methods, stress linked to the need to study at home and the emergence of family conflicts or conflicts with co-habitants in university residences or other shared accommodation.

Academic issues

Most respondents to the online survey (81.7%) stated that they were taking distance classes and had a computer (88.9%) and Internet (97.8%) at home. However, 15.6% share their computer with one or more people and 35.3% are not comfortable using the digital tools needed to take classes by videoconference. Therefore, many of the international students we interviewed reported that, academically, the main difficulty they experienced during their period of confinement was that not everyone enjoyed the best conditions for accessing remote learning. Internet connection problems were the most frequently mentioned: "...my [Internet], particularly, was failing a lot. So there were times when I had to turn off the camera, or when I lost part of the content...", said a Colombian student studying in Lisbon. According to a Chilean student, also living in Lisbon, "...when me and the 3 people who live here were having meetings or classes, the Internet would crash." For those who did not have their own computer or did not have a quality mobile phone, this compromise was even greater: "...I felt the need to have a new computer, right? Only I said, I'm not going to ask the university, because there are students who don't have any computer and they were providing for the students that didn't have a computer...", explained a Brazilian student from the University of Évora.

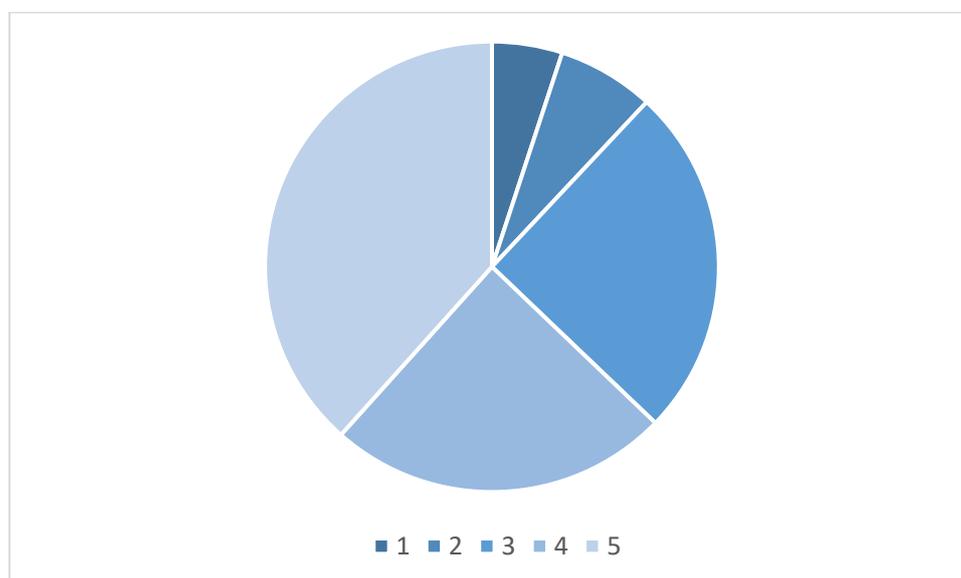
Due to these technical failures, the interaction in the classes was compromised, especially for students who already had some difficulty communicating through the Portuguese language. In addition to the problems arising from access to the Internet, about a fifth of the respondents to the survey also mentioned the lack of preparation of teachers for distance learning.

In a global assessment of how the higher education institutions they attend have responded to the pandemic, around two thirds of the surveyed students (62.3%) expressed a positive opinion. However, in a more disaggregated analysis, statistically significant or very significant differences were found, confirmed by the chi-square test, according to the age group ($p=0.02$), the level of education they attend ($p=0.003$) and the country of provenance ($p=0.005$). Thus, it can be seen that the proportion of students who have less favourable opinions of the performance of Portuguese universities in the context of this health crisis is higher than expected among the youngest students, those enrolled in first cycle courses and those from Brazil.

Living expenses

The suspension or reduction of activity in various sectors caused by the COVID-19 pandemic, deeply affected the economy, increasing unemployment, aggravating precarious employment situations and, consequently, decreasing the income of many families around the world. In these conditions, some international students faced financial difficulties to fund their stay in Portugal. This fact is evidenced by the results of the online survey which served as basis for this study, observing that a high percentage agree that the health crisis will affect the completion of their studies in Portugal (Fig. 4). A large proportion of respondents also reported that the pandemic will affect their savings (59.7%), funding from parents or other relatives (64.9%) and income from work (47.9%).

Figure 4 - Degree of agreement, on a scale of 1 to 5, with the statement: "The COVID-19 crisis will affect the completion of my studies in Portugal"



Source: Online survey to international students enrolled in Higher Education in Portugal, 2020

One of the problems frequently mentioned by the students we interviewed was the effect of the economic crisis caused by the pandemic on the devaluation of the currency of their home countries against the Euro. As a result, they had to resort to their own savings or to financial help from relatives, friends or the educational institution itself, in order to continue their studies in Portugal, as explained by a Chilean student studying in Lisbon:

... I asked at the social services for some scholarship, but I didn't get it, and then I asked for other support. After many months, they contacted me, in the middle of the pandemic, first for lunches... and for me it didn't do much good to spend 30, 40 euros on transport [to pick up lunches at the university], I wasn't going to save much money on that, so I said no. But after a while I got another email, kind of without context, saying that I had three hundred euros to pay my tuition fees.... It was 310 euros. It was super good... but I had other classmates who were also having a hard time, and they didn't receive any support... (Chilean student, female, 30 years old, University of Lisbon, degree mobility - master's degree)

Similar difficulties were reported by a Brazilian student enrolled at the University of Oporto, stating that although the university had sought to assist people who were being affected by Covid-19,

he made two attempts to apply for aid, but was not granted it. According to this student, "*many people said that they were not getting [support],*" due to the eligibility criteria for obtaining it. He also informed that, when he decided to study in Portugal, he calculated that the exchange rate difference between the Brazilian currency (real) and the euro "*would reach, at most, 5 reals. I did not imagine that what happened would happen... the euro skyrocketing... I always have someone to turn to in Brazil, you know, my uncles, but we never want to, you know?*" Therefore, to continue his studies in Portugal, he decided to change from engineering to a course at the Faculty of Arts, with a cheaper tuition fee. Moreover, at the time he was interviewed, he was also considering the possibility of starting to work for home-delivery platforms.

These accounts clearly illustrate the high financial costs associated with international mobility of higher education students, as well as the need for the less privileged to rely on support from their families, precarious jobs and even the universities they attend to fund their studies abroad (Cairns et al., 2021; França, et al., 2017).

Future perspectives, in terms of career prospects

In addition to the immediate effects on health, social relationships, academic activity, income and living conditions, the pandemic also affected the professional career perspectives and future life projects of the international students who chose Portugal for their higher education studies. As already mentioned, these students experienced moments of high stress and anxiety, aggravated by the fact that they did not have a support network of family and/or close friends. The accounts of some of the participants in this study express such intense concern and uncertainty regarding the present moment that studies and plans for the future lost meaning:

Look [the pandemic], it completely changed the perspective of tomorrow, I became more focused on today, on escaping today, and that includes future plans, I don't have future plans anymore, I forgot about future plans. I want to think about today, I want to save myself today, that's it. The course is no longer so important. Everything is no longer so important, you know, I think. (Brazilian student, female 43 years old, University of Lisbon, degree mobility - master's degree).

Regarding professional career perspectives, besides the feeling of inability to plan the future, the fears of worsening difficulties in terms of insertion in the labour market stand out, both because of the fear of increased discrimination against foreign workers and because the pandemic has more intensely affected some of the sectors where they intended to develop their professional careers, such as tourism, hotels, restaurants and related activities:

I think it's this question of not knowing anything, of not being able to plan. Because I have many career plans, but it seems that my hands are tied, I can't execute almost any of them. (Master's student, dual nationality (Brazilian and Italian), female, 28 years old, University of Évora, credit mobility - bachelor's degree).

I am concerned about the issue of work, of job opportunities, if it is already difficult to hire, imagine hiring a foreigner? (Masters student, Brazilian, female, 25 years old, University of Algarve, degree mobility – master's degree)

... in terms of future plans, I keep thinking, imagine, I'm doing the tourism course, which involves travelling, journeys, oh my God! It worries me a lot! And so, every day I stay at home thinking, I have to find another way around it if this keeps up, or if we have to reinvent another way of doing tourism, even if it's virtual!". (Cape Verdean student, Female, 24 years old, University of Évora, undergraduate mobility).

Given the difficulties experienced by international students in Portugal during the pandemic and the rapid transformation of face-to-face teaching into distance learning, it is important to question how these changes may affect the international mobility of students in the future, especially degree mobility and what are the strategies of Portuguese higher education institutions to address the problems identified, both at the level of infrastructures to receive these students and the e-learning training offer.

Conclusion

This article aimed to analyze how the COVID-19 pandemic affected the daily lives of international students attending higher education in Portugal, as well as its effects on the attraction of new international students, in the immediate and post-pandemic future. The pandemic has profoundly impacted international higher education students, revealing significant vulnerabilities across various dimensions of their experiences. The immediate cessation of in-person classes from March 16, 2020, and the subsequent transition to remote learning disrupted academic pursuits and exacerbated economic, social, and mental health challenges. The analysis of student experiences, differentiated by mobility type, country of origin, social class, study cycle, family context, gender, and age, underscores the heightened adversity faced by the most economically and socially vulnerable individuals (Iorio et al., 2020).

Travel restrictions and university closures led many students worldwide to change or cancel their plans to study abroad. In Portugal, while there was a decrease between 2019/20 and 2020/21 in the total number of credit and degree mobility students, this was exclusively due to the decrease in credit mobility students, while degree mobility maintained its growth trend. The pandemic's medium- and long-term effects on the internationalization of Portuguese higher education remain uncertain. However, given that most international students in Portugal come for degree mobility from Brazil and Portuguese-speaking African countries, it is expected that these markets will continue to expand due to cultural proximity, shared language, and historical ties.

Socially, the absence of familial support and the inability to engage in usual social activities led to heightened feelings of loneliness and stress. The mental health impacts were profound, with significant issues like anxiety, insomnia, and difficulty maintaining positive thinking reported by a large portion of students. Statistically significant differences were noted in mental health impacts based on gender and geographic origin, with female students and those from Brazil being disproportionately affected.

Academically, while a majority had access to computers and the internet, many faced challenges due to inadequate digital tools and the unpreparedness of educational institutions for effective remote teaching. The lack of interaction in classes and internet connectivity issues further impeded their learning experiences. Financially, the pandemic strained many students, with a substantial percentage indicating that it would affect the completion of their studies. The economic downturn and devaluation of home currencies forced students to seek additional financial support or take on precarious jobs to continue their education.

Looking ahead, the uncertainty brought by the pandemic has significantly altered students' career prospects and future plans. Many expressed concerns about entering a job market potentially biased against foreign workers and sectors severely hit by the pandemic, such as tourism and hospitality. The necessity to rethink career paths and adapt to new realities has become a pressing issue for these students.

Difficulties in adapting to new distance learning methods, economic difficulties, and mental health problems were particularly noted among women. However, it remains unclear how these situations will impact school performance and the quality of academic training. Many questions persist about the immediate and future impacts of this crisis on academic trajectories, the development of new teaching methods, forms of cooperation and knowledge transfer between universities, and the evolution of international student mobility. Addressing these vulnerabilities is crucial for sustaining the attractiveness and inclusivity of Portugal's higher education system in the face of future crises.

Therefore, this is a complex problem requiring integrated and collaborative responses from universities, governments, institutions, and organizations representing the student community. Working together is essential to minimize the pandemic's negative effects on students and university institutions.

Referências

- ALBERTOVNA SHAKIROVA, ALINA; ROZA ALEXEEVNA, VALEEVA. Linguistic barriers to academic mobility. *Journal of Organizational Culture, Communications & Conflict*, v. 20, special issue, p. 79-85, 2016. Disponível em: <https://www.alliedacademies.org/articles/jocccvol20special-issue2016.pdf>. Acesso em: 2 fev. 2023.
- ALVES E. P. (2021), *Angolan and Cape Verdean students in Portuguese higher education: motivations and mobility strategies*, PhD in Migration – Human Geography, University of Lisbon.
- AMARAL, I. Redes sociais na Internet: sociabilidades emergentes. Covilhã: LABCOM.IFP Ed, 2016.
- ARISTOVNIK, Aleksander; KERŽIČ, Damijana; RAVŠELJ, Dejan; TOMAŽEVIČ, Nina; UMEK, Lan. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, v. 12, n. 20, p. 8438, 2020.
- Böttcher L, Araujo N., Nagler J., MENDES J. F., HELBING D., Herrmann H. (2016), "Gender gap in the ERASMUS mobility program", *PLOS ONE*. 11. e0149514. 10.1371/journal.pone.0149514.
- BRITO, ANGELA XAVIER de. Habitus de herdeiro, habitus escolar: os sentidos da internacionalização nas trajetórias dos estudantes brasileiros no exterior. In: ALMEIDA, ANA MARIA et al. (Org.). *Circulação internacional e formação intelectual das elites brasileiras*. Campinas: Editora da Unicamp, 2004. P. 85-104.
- S. K., Webster R. K., Smith L. E., Woodland L., Wessely S., Greenberg N., Rubin, G J. (2020), "The psychological impact of quarantine and how to reduce it: rapid review of the evidence", *The Lancet*, 395(10227), pp. 912-920.
- DE BOER, Harry. COVID-19 in Dutch higher education. *Studies in higher education*, v. 46, n. 1, p. 96-106, 2021.
- Burki T. K. (2020), "COVID-19: consequences for higher education", *The Lancet Oncology*, 21(6), 758. doi:10.1016/S1470-2045(20)30287-4.
- Canal Domínguez, J. F. (2021), "Higher education, regional growth and cohesion: insights from the Spanish case", *Regional Studies*, 55(8), pp. 1403-1416.
- Caruso R., & De Wit H. (2015), "Determinants of mobility of students in Europe: Empirical evidence for the period 1998-2009", *Journal of Studies in International Education*, 19(3), pp. 265-282.
- Chen D., Yang X. (2014), "Striving and thriving in a foreign culture: A mixed method approach on adult international students' experience in USA", *Journal of Education and Training Studies*, 2(3), pp.16-25.
- Cairns D., França T., Malet Calvo, D. & Azevedo, L. (2021), "An immobility turn? The Covid-19 pandemic, mobility capital and international students in Portugal", *Mobilities*, 16:6, pp. 874-887, DOI: 10.1080/17450101.2021.1967094
- FIRANG, David. The impact of COVID-19 pandemic on international students in Canada. *International Social Work*, v. 63, n. 6, p. 820-824, 2020.
- Fonseca M. L., Esteves A., Iorio J. C. (2015). "Mobilidade internacional de estudantes do ensino superior", In: Peixoto J., Padilla B., Marques J. C., Góis P. (Eds.), *Vagas Atlânticas. Migrações entre Brasil e Portugal no Início do Século XXI*, Lisboa, Mundos Sociais, pp. 135-158.
- Fonseca M. L., Pereira S., Iorio J. C. (2016), "International mobility of Brazilian students to Portugal: the role of the Brazilian government and university strategies in Portugal", In: Domínguez-Mujica J. (Ed.), *Global Change and Human Mobility*. Springer Singapore. <https://doi.org/10.1007/978-981-10-0050-8>
- França T., Alves E., Padilla B. (2018), "Portuguese policies fostering international student mobility: A colonial legacy or a new strategy?", *Globalisation, Societies and Education*, 16(3), pp. 325–338.
- HARI, Amrita; NARDON, Luciara; ZHANG, Hui. A transnational lens into international student experiences of the COVID-19 pandemic. *Global Networks*, v. 23, n. 1, p. 14-30, 2023.
- Iorio J. C. (2018), *Trajetórias de Mobilidade Estudantil Internacional: estudantes brasileiros no ensino superior em Portugal* (Doctoral dissertation, Universidade de Lisboa, Repositório da Universidade de Lisboa, <https://repositorio.ul.pt/handle/10451/37454>).

- IORIO, JULIANA; SILVA, ADÉLIA; FONSECA, LUCINDA. O impacto da Covid-19 nos e nas estudantes internacionais no ensino superior em Portugal: uma análise preliminar. *Finisterra*, v. 55, n. 115, p. 153-161, 2020.
- Iorio J. C., Fonseca M. L. (2018). "Estudantes brasileiros no ensino superior português: construção do projeto migratório e intenções de mobilidade futura", *Finisterra*, 53(109), pp. 3-20.
- Manica G. B. (2021), *O impacto da pandemia de COVID-19 na saúde mental de estudantes universitários: o efeito mediador do capital psicológico* [Dissertação de mestrado, Iscte - Instituto Universitário de Lisboa]. Repositório do Iscte. <http://hdl.handle.net/10071/24369>.
- MALET CALVO, Daniel et al. 'There was no freedom to leave': Global South international students in Portugal during the covid-19 Pandemic. *Policy Futures in Education*, v. 20, n. 4, p. 382-401, 2022.
- MISCA, Gabriela; THORNTON, Gemma. Navigating the Same Storm but Not in the Same Boat: Mental Health Vulnerability and Coping in Women University Students During the First covid-19 Lockdown in the UK. *Frontiers in Psychology*, v. 12, 2021. Disponível em: <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.648533/ful> l. Acesso em: 19 ago. 2023.
- OECD (2015), *Education at a glance 2015: OECD Indicators*, Paris, OECD.
- PAPACHARISSI, Z. The virtual sphere 2.0: The Internet, the public sphere, and beyond. *Routledge handbook of Internet politics* London: Routledge, 2009. p. 230-245. <https://doi.org/10.4324/9780203962541>
» <https://doi.org/10.4324/9780203962541>
- Perez-Encinas A., Rodriguez-Pomeda J., de Wit, H. (2021), "Factors influencing student mobility: a comparative European study" *Studies in Higher Education*, 46(12), pp. 2528-2541.
- Perkins R. M., Neumayer E. (2014), "Geographies of educational mobilities: Exploring the uneven flows of international students", *The Geographical Journal*, 180 (3), pp. 246– 259.
- ROOS BREINES, M.; RAGHURAM, P.; GUNTER, A. Infrastructures of immobility: enabling international distance education students in Africa to not move. *Mobilities*, v. 14, n. 4, p. 484-499, 2019. <https://doi.org/10.1080/17450101.2019.1618565>
» <https://doi.org/10.1080/17450101.2019.1618565>
- Sá C., Sin C., Pereira F., Aguiar J., Tavares O. (2021), *Estudantes nacionais e internacionais no acesso ao ensino superior: quem são, que escolhas fazem e como acedem ao mercado de trabalho*, EDULOG. <https://www.edulog.pt/storage/app/uploads/public/61a/52b/c82/61a52bc82dc22884838784.pdf>.
- SILVA, A. V., IORIO, J. C., & FONSECA, M. L. (2024). Vidas interrompidas e futuros suspensos: experiências de estudantes brasileiros em Portugal durante a pandemia Covid-19. *REMHU: Revista Interdisciplinar da Mobilidade Humana*, 32, e321837.
- Sin C., Tavares O., NEAVE G. (2017), "Student Mobility in Portugal: Grappling with Adversity", *Journal of Studies in International Education*, 21 (2), pp. 120–135. doi:10.1177/1028315316669814.
- Tasci G. (2021), "The impact of COVID-19 on Higher Education: Rethinking internationalization behind the iceberg: COVID-19 and Higher Education", *International Journal of Curriculum and Instruction*, 13(1), pp. 522-536.
- Tesar M. (2020), "Towards a post-Covid-19 "New Normality?": Physical and social distancing, the move to online and higher education", *Policy Future in Education*, 18 (5), pp. 556-559.
- Vale M., Cachinho H., Morgado P. (2019), *A internacionalização do Ensino Superior português no âmbito do Erasmus 2014-2016*, Lisboa, IGOT e Agência Nacional Erasmus.
- WANG, Bingyu. Time, temporality, and (im) mobility: Unpacking the temporal experiences among Chinese international students during the COVID-19. *Population, Space and Place*, v. 28, n. 5, e2545, 2021.