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Tres continentes, tres países: educación a distancia bajo la mirada de estudiantes de educación superior en tiempos de pandemia

Three continents, three countries: the remote education by higher education students in the pandemic time

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RESUMEN

La situación epidemiológica provocada por la pandemia del COVID-19 ha propiciado el cierre de espacios físicos de escuelas de todos los niveles educativos. Para superar esto, fue necesario adoptar medidas de emergencia, incluida la Educación Remota de Emergencia (ERE), utilizando tecnologías para interactuar sincrónicamente con los estudiantes. Además, también se requirió reconfigurar las prácticas educativas y desarrollar habilidades en alfabetización digital para permitir la continuidad de las experiencias educativas, respetando el aislamiento pero manteniendo la interacción de docentes y estudiantes. Consideramos fundamental recopilar información sobre el grado de satisfacción de los estudiantes con el (ERE) en los tres países (Portugal, Brasil y Turquía), ubicados en tres continentes (Europa, América y Asia). Los datos fueron recopilados el 20/19 y el 20/21 por investigadores de los países utilizando una encuesta creada en Google Forms, asegurando la confidencialidad de los datos. Se obtuvieron 566 respuestas válidas: Portugal 140, Turquía 359 y Brasil 67. A partir de los resultados, los modelos elegidos en los tres países no complacieron de manera unánime a todos los estudiantes involucrados. Existen diferencias significativas en el acceso, el conocimiento de las plataformas utilizadas e incluso en las metodologías utilizadas por los diferentes profesores en relación con los países. Por el contrario, sobre la posibilidad de pasar a un modelo online permanente, hay unanimidad, verificando a partir de las opiniones que la educación presencial no es sustituible por el modelo que se ha utilizado en los últimos dos años.

PALABRAS CLAVE

Educación Remota de Emergencia; Estudiantes; Educación Superior; Grado de Satisfacción.

ABSTRACT

The epidemiological situation caused by the COVID-19 pandemic has led to the close of physical spaces of schools of all levels of education. To overcome this, it was necessary to adopt emergency measures, including Emergency Remote Education (ERE), using technologies to interact synchronously with students. Besides, it was also required to reconfigure educational practices and develop skills in digital literacy to enable the continuity of educational experiences, respecting isolation but maintaining the interaction of teachers and students. We consider that it is essential to collect information about the degree of student satisfaction with the (ERE) in three countries (Portugal, Brazil and Turkey), located on three continents (Europe, America and Asia). Data were collected on 19/20 and 20/21 by researchers from the countries using a survey created on Google Forms, assuring the confidentiality of the data. We obtained 566 valid responses: Portugal 140, Turkey 359 and Brazil 67. From the results, the models chosen in the three countries did not please in a unanimous way all the students involved. There are significant differences in access, knowledge of the platforms used and even in the methodologies used by different teachers concerning countries. On the contrary, about the possibility of moving to a permanent online model, there is unanimity, verifying from the opinions that face-to-face education is not replaceable by the model that has been used over the last two years.

KEYWORDS

Emergency Remote Education; Students; Higher Education; Degree Satisfaction.

1. INTRODUCTION

On December 31, 2019, the World Health Organization (WHO) was alerted to several cases of pneumonia in Wuhan City, Hubei Province, People's Republic of China. It was a new strain (type) of coronavirus that had not been identified before in humans (Roullan et al., 2021).

On January 7, 2020, Chinese authorities confirmed that they had identified a new type of coronavirus; the coronaviruses are everywhere. They are the second leading cause of common cold (after rhinovirus) and, until recent decades, have rarely caused more severe diseases in humans than the common cold (Pimentel et al., 2020).

On January 30, 2020, WHO declared that the outbreak of the new coronavirus constitutes a Public Health Emergency of International Importance (ESPII) – the highest level of alert of the Organization, as provided for in the International Health Regulations. This decision sought to improve coordination, cooperation and global solidarity to stop the spread of the virus (2021).

Until February 2020, the world was living a reality: Brazil, as usual, was preparing to start the year only after the carnival was finished, higher education institutions rushed to the beginning of the school year; in sum, everything anticipated a year more in our lives, with its load of dreams, hopes, fears and expectations (Brazil, 2020). In Portugal, the expectations of a new year also permeated everyone's feelings. Turkey announced its first confirmed case on March 11, 2020. As of that date, the government has implemented measures to contain the outbreak; all led primarily by the Ministries of Health and the Interior.

Then, March gave a definitive character to the fear that, from the east, specifically the city of Wuhan, China, began to spread increasingly insistently around the world in the form of a pandemic outbreak that would transform the reality of all. That month, the WHO declared a global alert state.

The borders in the world, later some ended up closing inexorably, people, some afraid, others reticent, found themselves in the obligation to stay in their homes, in the face of this imposed reality, to the end that sent us very quickly to understand the true importance of global communication technologies. Each individual in the world had to renounce direct contact with people who did not integrate into their family circle. Finally, the devices were used not to connect with links, websites or files; on the contrary, they were used to connect us with people.

In this way, and to turn the crisis into an opportunity, as the catchphrase of the free market says, we tried to take advantage of this conjuncture to establish and reaffirm these ties, those of people with people, even in the distance, united this time by the same technology that some, we believed, drove us away. As emphasized by Santos, (2020), in his book, Cruel Pedagogia do Vírus.

The Federal University of Mato Grosso do Sul, which like the entire Federal University, is immense, has in the region of the Pantanal south-Mato Grosso, the Campus of Aquidauana, a small but traditional and welcoming city of this state, which has never before had today, the opportunity to open its doors to the world through these technologies. The Polytechnic of Guarda is a Portuguese higher education institution based in the city of Guarda, the Portuguese highest-altitude town (1056 m) and one of the highest in Europe. Sakarya University, often called SAU, is a public research university located in the city of Serdivan, the capital of the Turkish province of Sakarya and considered one of the largest universities in Turkey. But what unites these three countries? These three cultures?

As we talked about at the beginning of this document, the events worldwide due to the Pandemic of COVID-19 made it clear, regardless of the geographical location, that, as Fonseca et al. (2021) tell us, teachers around the world were not prepared for overnight to turn into YouTubers, recording videos, accessing Zoom, Google Classroom, Google Meet, Microsoft Teams, Jitsi Meet, to mention a few. Our phones and WhatsApp would turn into work tools with expanded hours, and the University, the Schools, and the institutions would come into our homes and mingle with our personal lives.

2. METODOLOGY

We intend to collect information about the degree of satisfaction of higher education students in three countries (Portugal, Brazil and Turkey) located on three continents (Europe, America and Asia), concerning the emergency remote education offered due to the pandemic caused by Covid-19. To evaluate the impact of the measures adopted by the three institutions and verify how they assess the methods used by teachers during this period, we arrived at the following question:

- what are the impacts on higher education students' teaching/learning/motivation relationship in three different countries, Portugal, Brazil and Turkey, resulting from the change in classroom format to remote teaching?

We used a descriptive, exploratory and field study to answer the research question. The data were collected in the confinement period, 2019/2020 and 2020/2021, by the researchers who are part of the study from the three countries. This data collection occurred through an online questionnaire via Google forms. The questionnaire was composed of 20 questions addressed to students' perceptions of both countries. We obtained 566 valid answers in the three countries, divided as follows: Portugal with 140, Turkey with 359 and Brazil with 67 respondents. Thus, the panorama that presented itself leads to a reflection on higher education methodologies, the teaching and learning process, the teacher/student relationship, expanding the debates on these themes, taking as a scenario the social, scientific and cultural transformation in a pandemic context.

3. RESULTS

Table 1 shows the sociodemographic characterisation of the samples under study; 359 students were surveyed on the Turkish campus, 140 on the Portuguese campus and 67 on the Brazilian campus. As for gender, overall, 29.9% (169) are male, and 70.1% (397) are female. It should be noted that in the three samples, the female gender prevails, 64.3% (231) in the sample of Turkish students, 94% (63) in the Brazilian sample and 73.6% (103) related to the Portuguese students. As far as the students' age, it is observed that those who study in Turkey are younger, as they are in the age groups: 18-22 years – 87.2% (313) and 23 – 27 years – 12.8% (46). Brazilian and Portuguese students are distributed among all age groups from 18 to over 37 years. Regarding the academic situation, it is observed that 9.2% (33) of Turkish students and 11.4% (16) of Portuguese students are student workers, while this figure increases substantially in the case of Brazilian students, 34.3% (23). In all three cases, in both groups, most of the students were more than 1000 meters away from the campus and had an internet connection at home; we get from the data values around 90%.

Table 1 Sociodemographic characterisation

Features	Answers	Country			
		Turkey n(%row) %column	**Brazil n(%row) %column**	**Portugal n(%row %column**	**Total n(%row) %column**
Gender	Male	128 (75.7%) 35.7%	4 (2.4%) 6.0%	37 (21.9%) 26.4%	169 (100%) 29.9%
	Female	231 (58.2%) 64.3%	63 (15.9%) 94.0%	103(25.9%) 73.6%	397(100%) 70.1%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%

Features	Answers	Country			
		Turkey n(%row) %column	**Brazil n(%row) %column**	**Portugal n(%row %column**	**Total n(%row) %column**
Age	18 - 22 years old	313 (75.8%) 87.2%	17 (4.1%) 25.4%	83 (20.1%) 59.3%	413 (100%) 73.0%
	23 - 27 years old	46 (46.9%) 12.8%	7 (7.1%) 10.4%	45 (45.9%) 32.1%	98 (100%) 17.3%
	28 - 32 years old	0 (0.0%) 0.0%	11 (91.7%) 16.4%	1 (8.3%) 0.7%	12 (100%) 2.1%
	33 - 37 years old	0 (0.0%) 0.0%	15 (93.8%) 22.4%	1(6.3%) 0.7%	16 (100%) 2.8%
	Over 37 years old	0 (0.0%) 0.0%	17 (63.0%) 11.8%	10 (37.0%) 7.1%	27 (100%) 4.8%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%
Academic situation	Student	326 (66.0%) 90.8%	44(8.9%) 65.7%	124 (25.1%) 88.6%	494 (100%) 87.3%
	Worker-Student	33 (45.8%) 9,2%	23 (31.9%) 34.3%	16(22.2%) 11.4%	72 (100%) 12.7%
	Total	359 (63.4%) 100%	67 (11.8% 100%	140 (24.7%) 100%	566 (100%) 100%
Distance to campus	Less than 500 m	9 (32.1%) 2.5%	8 (13.6%) 11.9%	51 (86.4%) 36.4%	
	Between 501 and 1000 m	43 (60.6%) 12.0%	17 (29.8%) 25.4%	40(70.2%) 28.6%	
	More than 1000 m	307 (83.7%) 85.5%	42 (46.2%) 62.7%	49(53.8%) 35.0%	
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%
Internet connection	House	325 (63.7%) 90.5%	59 (11.6%) 88.1%	126 (24.7%) 90.0%	510 (100%) 90.1%
	Campus	26 (66.7%) 7.2%	4 (10.3%) 6.0%	9 (23.1%) 6.4%	39 (100%) 6.9%
	Other	8 (47.1%) 2.2%	4 (23.5%) 6,0%	5 (59.4%) 3.6%	17 (100%) 3.0%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24,7%) 100%	566(100%) 100%

Source: Material produced by the authors

Table 2 shows the quality of access these students have to the Internet. Access from home values above 92% in the three situations (Turkey, Portugal and Brazil). About having a personal computer, 60.4% (217) of Turkish students do not have a computer, 71.6% (48) of Brazilian students, and 88.6% (124) of Portuguese students have a personal computer. Concerning having a smartphone with internet access, 95.8% (344) of Turkish students have as much as 94.0% (63) of Brazilian students, increasing this number to 100% (140) in the case of Portuguese students. About the opinion on the measures that the three higher education institutions adopted, we have that 95.3% (342) of Turkish students agree, 89.6% (60) of Brazilian students also agree, decreasing to 71.4% (100) in the case of Portuguese students who agree with the measures taken by the institution.

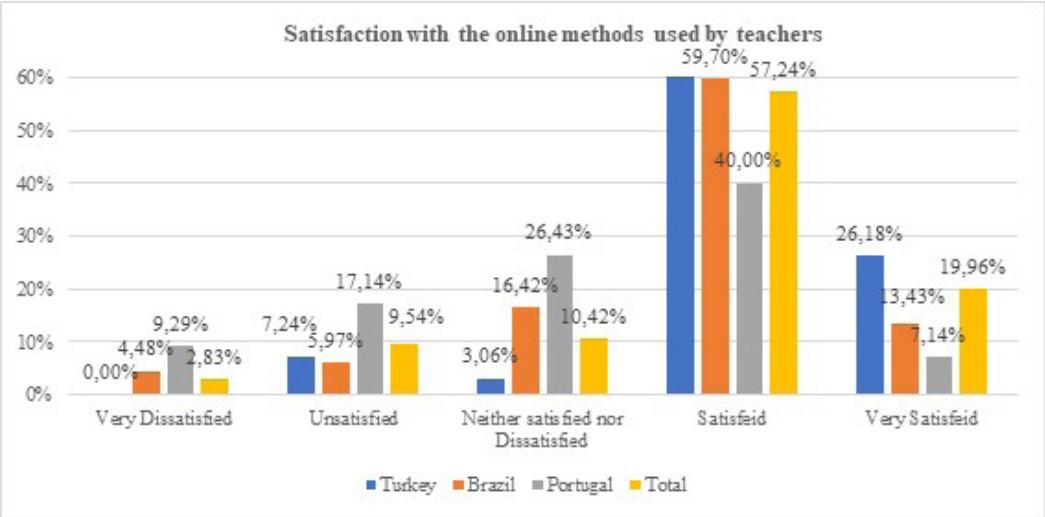
Table 2 Internet access

Features	Answers	Country			
		Turkey n(%row) %column	**Brazil n(%row) %column**	**Portugal n(%row) %column**	**Total n(%row) %column**
Internet access at home	Yes	344 (63.6%) 95.8%	62 (11.4%) 92.5%	136 (25.1%) 97.0%	542 (100%) 95.8%
	No	15 (62.5%) 4.2%	5 (20.8%) 7.5%	4 (16.7%) 2,9%	24 (100%) 4.2%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%
Has personal computer	Yes	142 (45.2%) 39.6%	48 (15.3%) 71.6%	124 (39.5%) 88.6%	314 (100%) 55.5%
	No	217 (86.1%) 60.4%	19 (7.5%) 28.4%	16 (6.3%) 11.4%	252 (100%) 44.5%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%
Has smartphone/ mobile phone with internet access	Yes	344 (62.9%) 95.8%	63 (11.5%) 94.0%	140 (25.6%) 100%	547 (100%) 96.6%
	No	15 (78.9%) 4.2%	4 (21.1%) 6.0%	0 (0.0%) 0.0%	19 (100%) 3.4%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%
The measures adopted by the institution were appropriate to the	Yes	342 (68.1%) 95.3%	60 (12.0%) 89.6%	100 (19.9%) 71,4%	502 (100%) 88.7%
	No	10 (58.8%) 2.8%	1 (5.9%) 1.5%	6 (35.3%) 4.3%	17 (100%) 3.0%
	I'm not sure	7 (14.9%) 1.9%	6 (12.8%) 9.0%	34 (72.3%) 24.3%	47 (100%) 8.3%
	Total	359 (63.4%) 100%	67 (11.8%) 100%	140 (24.7%) 100%	566 (100%) 100%

Source: Material produced by the authors

Figure 1 shows the satisfaction with the methods used by the teachers of the three institutions. A figure of 57.24 % of students from the three countries as satisfied and 19.96 % as very satisfied stands out, representing a very high acceptance value of 76.20 %.

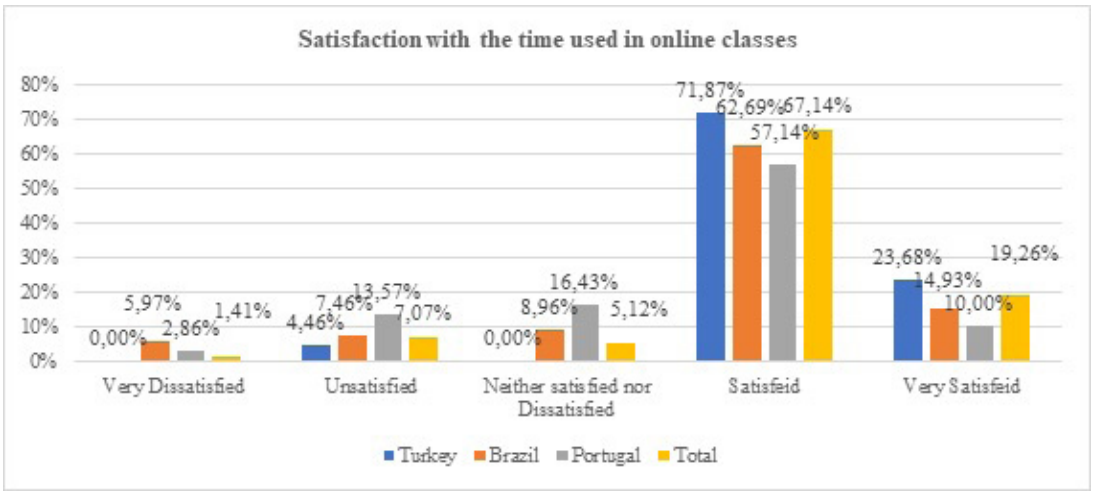
Figure 1 Satisfaction with the methods



Source: Material produced by the authors

Figure 2 highlights the satisfaction with the time used in online classes, where there is an overall value of dissatisfaction on the part of students, 65.55 % of the respondents are very dissatisfied and dissatisfied. A figure of 88.02 % stands out for Turkish students.

Figure 2 Satisfaction with the time



Source: Material produced by the authors

Table 3 shows the average results and dispersion of students from the Turk, Brazilian and Portuguese campuses related to satisfaction presented in the previous graphs. As observed before, Turkish students have higher satisfaction levels than Portuguese-speaking students in the methods used and with the software/platforms used. In the case of Turkish students, the results are high with

satisfaction with the methods used, 4.09±0.759 and satisfaction with the software/platforms used, 4.15±0.628 and are below the expected value with satisfaction with the duration of the online class, 2.14±0.934. The results are statistically different among students who study at various campuses using the Kruskal-Wallis nonparametric test in the three evaluated items. Multiple comparations with Bonferroni correction were used to detect which students the differences were statistically significant. Therefore, it was concluded that students studying on the Turkish campus were significantly more satisfied with the methods used and the platforms used and less comfortable with the duration of the online class. Brazilian students were also significantly more satisfied than the Portuguese with the methods used and the period of online courses. Satisfaction with the platforms used was statistically identical among Portuguese and Brazilian students.

Table 3 Characterization of satisfaction levels related to campus students

Satisfaction	Student	Mean ± standard deviation	H (p-value)
Satisfaction with the methods used.	Turkey	4.09±0.759	146,117 (0.001)
	Brazil	3.72±0,934	
	Portugal	3.19±1.097	
Satisfaction with the duration of the online class.	Turkey	2.14±0.934	54,724 (0.001)
	Brazil	3.66±1.081	
	Portugal	3.04±1,065	
Satisfaction with the software/platforms used.	Turkey	4.15±0.628	24,733 (0.001)
	Brazil	3.73±1.009	
	Portugal	3.58±0.945	

H- Kruskal-Wallis test statistic (p-value - proof value) Source: Material produced by the authors

Table 4 shows the results of the influence of the state of emergency on daily activities; the higher the mean value obtained, the greater the agreement with the affectation of the state of emergency in the activities. The mean values obtained for all activities under analysis are above three (expected value) except for the predisposition to group work of students studying on the Turkish campus, 2.94±1.218. Therefore, it was concluded that all students felt that the state of emergency affected their daily school activities, regardless of the campus where they studied. By applying the Kruskal-Wallis nonparametric test, it was concluded that there are statistically significant differences between the results presented by the students from the different campuses. Multiple comparations concluded that Turkish students felt that the state of emergency affected them more clearly; the results between Brazilian and Portuguese students were statistically identical.

Table 4 Characterization of the influence of the state of emergency on everyday life

How the state of emergency affected:	Students	Mean ± standard deviation	Z (p-value)
Extracurricular activities	Turkey	4.00±0.654	24.733 (0.000)
	Brazil	3.28±1.526	
	Portugal	3.39±1.273	
Concentration level	Turkey	4.02±0.693	9.471 (0.000)
	Brazil	3.31±1.539	
	Portugal	3.66±1.262	
Predisposition to group work	Turkey	2.94±1.218	27.336 (0.032)
	Brazil	3.48±1.511	
	Portugal	3.54±1.208	
Predisposition to study	Turkey	3.92±0.683	11.229 (0.004)
	Brazil	3.19±1.569	
	Portugal	3.57±1.230	
Attention in class	Turkey	4.02±0.699	14.253 (0.001)
	Brazil	3.24±1.577	
	Portugal	3.59±1.275	

Kruskal-Wallis test statistic (p-value - proof value) Source: Material produced by the authors

Table 5 shows the results obtained for the items on the overall functioning of online education. It should be noted that the higher the average value, the greater the agreement with the statement. With the possibility of greater flexibility in the schedules chosen for the classes, it is observed that students who study on the Turkish campus have a higher average value, 4.52±0.500, than students who study on the Portuguese campus 3.28±1.372 and on the Brazilian campus, 3.03±1.414. By applying the Kruskal-Wallis nonparametric test ($H=103.281$; $p<0.01$), the differences are statistically significant between the students from the different campuses. By using multiple comparations with Bonferroni correction, it is concluded that the differences occur between all.

Regarding the preparation of teachers to teach at a distance, it is observed that Turkish students, 3.53±0.974 and Brazilian students, 3.51±1.341, are more in agreement with this statement than Portuguese students 3.02±1.147. The results are statistically different by the Kruskal-Wallis test ($H=20.185$; $p<0.01$), and Portuguese students are significantly distinguished from others. As for the substitution of classroom teaching by distance learning, it is observed that all students are at odds, and Brazilian students manifest more significant disagreement, 1.87±1.358, by the Kruskal-Wallis test, the results are significantly different ($H=43.939$; $p<0.01$), by multiple comparations the results are statistically different between the three campuses.

Regarding the impairment of distance learning in practical/laboratory classes, it was concluded that Turkish students are in greater agreement with the statement than Portuguese and Brazilian students. The results obtained are statistically different ($H=45.524$; $p<0.01$), in this case, the Turkish students are distinguished from the other ones. As for the adoption of the online method

in place of the face-to-face approach, Brazilian students are at odds in contrast to Portuguese and Turkish students. It was concluded that the results of the Brazilian students are significantly different from the others by the multiple comparations with Bonferroni correction.

Table 5 Characterization of the global functioning of online education

Global functioning of online education:	Students	Mean ± standard deviation	H (p-value)
There should be greater flexibility in the times chosen for the classes.	Turkey	4.52±0.500	103.281 (0.000)
	Brazil	3.03±1.414	
	Portugal	3.80±1.158	
Teachers are prepared to teach from a distance.	Turkey	3.53±0.974	20.185 (0,000)
	Brazil	3.51±1.341	
	Portugal	3.02±1.147	
Distance learning can replace in its entirety face-to-face teaching.	Turkey	2.55±0.941	43.939 (0,000)
	Brazil	1.87±1.358	
	Portugal	2.08±1.298	
If you have practical/laboratory classes, you think this teaching method impairs your learning.	Turkey	4.53±0.500	45.524 (0,000)
	Brazil	3.81±1.328	
	Portugal	3.94±1.002	
It considers that the method of online classes could be adopted definitively.	Turkey	3.98±0.720	107.942 (0,000)
	Brazil	2.15±1.504	
	Portugal	3.48±1.274	

H- Kruskal-Wallis test statistic (p-value - proof value) Source: Material produced by the authors

4. CONCLUSIONS

In this paper, we reflected on the distance education faced by Turkish, Brazilian, and Portuguese high education institutions as a consequence of the pandemic, and, besides this, the impacts on higher education students' teaching/learning/motivation relationship were researched in the three countries resulting from the change in classroom format to online teaching and learning. There are studies that tried to approximate the educational impacts of remote learning during the Covid-19 pandemic (Angrist et al., 2020; Azevedo et al., 2020; Engzell et al., 2021; Kuhfeld et al., 2020). Most of those studies use natural variation in school recess across different geographical units or induced by previous epidemics (Percoco, 2016; Amorim et al., (2020). With the quick change in our lives caused by the Covid-19 disease, it is predicted that in the not-too-distant future, digital learning will increase its effectiveness by developing new technologies and systems and may become the main learning structure (Telli & Altun, 2020). Also, there are studies that show that the most important difficulties are the organisation of the time and the necessary preparation of the activities to be performed in online education (Videla et al, 2020); combined with the education there is still a very important side effect, the leisure boredom and the psychological resilience of

students (Dursun et al, 2020). According to the results of the studies in which the opinions of university students about the online education system implemented during the Covid-19 epidemic were obtained, the fact that many students expressed their views about significant progress in online education can be considered an indicator that the students were positively affected by this process (Hill, & Fitzgerald, 2020; Moorhouse, 2020; Borges et al, 2020). In this case, especially students emphasise that they have the opportunity to listen to the lecture again, thus can be counted as one of the advantages of online education versus face-to-face education. Talking about some negative changes despite these benefits, the students stated that they had a focus problem and decreased socialisation due to online training. The fact that some students think that this system cannot meet the face-to-face education system in any way indicates that the system's negative aspects are also seen (Dhawan, 2020; Hodges et al., 2020).

WE DIVIDED THE MAIN CONCLUSIONS IN FOUR ASPECTS:

First result, regarding internet and computer/smartphone access. It has been determined that almost all the students participating in the research from three countries can access the internet from their homes and have a smartphone/mobile phone with internet access. Something that clearly is the rule in the world we live. Although 71.6 % (48) of Brazilian students and 88.6 % (124) of Portuguese students have a personal computer, 60.4 % (217) of Turkish students do not have a computer. In addition, participants stated that their institutions take measures for negative situations in online education activities.

Second result, regarding the characterisation of satisfaction levels of students. Approximately 76 % of the participants stated that they were satisfied with the teaching methods used by their teachers in the online class. Even with these good results, there are issues that need attention from the institutions. When the students' satisfaction in three different countries with the teaching methods used was compared, it was found that the satisfaction of the Turkish students with the teaching methods used was significantly higher than that of the Brazilian and Portuguese students. In addition, when the satisfaction of the Brazilian and Portuguese students with the teaching methods used was compared, it was found in favour of the Brazilian students. Approximately 66 % of the participants stated that they were not satisfied with the time used in online classes. This dissatisfaction rate among Turkish students was found to be 88 %, much superior then. It can be said that the reason for this is that the course content is intense, the courses are taught more theoretically than practically, and the subjects cannot be trained within the specified online classes. When the students' satisfaction from three different countries with the time used in online courses was compared, it was found that the satisfaction of the Brazilian students with the online course time was significantly higher than the Turkish and Portuguese students. In addition, it was found that Portuguese students' satisfaction with their online course duration was considerably higher than Turkish students. Approximately 86 % of the participants stated that they were satisfied with the software/platforms used in the online classes. This result coincides with the answers given by the students regarding the measures taken by their institutions. When the satisfaction of the students in three different countries with the software/platforms used in the online classes was compared, it was found that the satisfaction of the Turkish students with the software/platforms used in the online courses was significantly higher than that of the Brazilian and Portuguese students. In addition, it was found similar satisfaction between Brazilian and Portuguese students with the software/platforms used in the online classes.

Third result, regarding the results of the influence of the state of emergency on daily activities. The results showed the strong impact of the state of emergency on daily activities (extracurricular activities, concentration level, predisposition to study, and attention in class) in three countries. Differently, the satisfaction of the Turkish students on predisposition to group work activity was found to be lower than Brazilian and Portuguese students. When the students in three different countries with the strong influence of the state of emergency on daily activities, except for the predisposition to group work, were compared, Turkish students felt the state of emergency

affected their daily school activities more than Brazilian and Portuguese students. Overall the impact was very strong in all three countries.

Forth result, is research regarding the overall functioning of online education. When the students' statements in three different countries with the overall functioning of online education were compared, it was found that Turkish students have greater flexibility in the times chosen for the classes than Brazilian and Portuguese students. Turkish and Brazilian students stated more positively than Portuguese students regarding the preparation of teachers to teach at a distance. The results obtained from Flores & Gago (2020) research showed the effect of teachers on a positive adaptation to online teaching and learning. Teacher support and availability, and the quality of the material they provided to students, were factors that differentiated students who were well adjusted to online teaching. Conversely, students who did not adapt well to online education sought less support from their teachers. These results showed the importance of the quality of pedagogical practices and interactions, as teacher support is a considerable element in teaching and learning (Metcalfe, 2020; Morris, 2020). Students, who study on three different campuses, expressed negative opinions that distance learning can replace face-to-face teaching. In a study by Flores et al. (2021), most students who claimed to be negatively adapted to the online teaching experience indicated that they would prefer only face-to-face teaching in the next academic year. However, most of the positively adjusted students suggested that they would like a hybrid format. In addition, Turkish students stated more impairment of distance learning in practical/laboratory classes than Brazilian and Portuguese students. Turkish and Portuguese students were more optimistic about adopting online courses than Brazilian students.

In final conclusion, we should say that it is very clear that the ERE is not a definitive solution for all students and institutions. There are still several factors that show the need for adaptions from all the intervenient. We compared three countries on three continents, and the results show the long way that still exists to be explored in the online process. An important and significant number of students continue to prefer the face-to-face process underlining the importance of human contact.

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