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THE RETURN TO IN-PERSON CLASSES AND THE FEELINGS EXPERIENCED BY ACADEMICS DURING THE COVID-19 PANDEMIC

O RETORNO ÀS AULAS PRESENCIAIS E OS SENTIMENTOS VIVIDOS POR ACADÊMICOS DURANTE A PANDEMIA DA COVID-19

EL REGRESO A LAS AULAS Y LOS SENTIMIENTOS VIVIDOS POR LOS ACADÉMICOS DURANTE LA PANDEMIA DEL COVID-19

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Abstract: Considering the global pandemic caused by Covid-19, the world has been affected in various social and educational spheres, changing the formats of classroom classes for online teaching. With that, the return to in-person classes is being studied through the advance of vaccination. In this sense, this work aimed to describe the students' perceptions and feelings most experienced by them through eleven structured questions. A form was created using the *Google forms* application and made available through *WhatsApp* to a population sample of 152 students from two institutions, one public and the other private, in the city of Altamira-Pará-Brasil. The results characterized the occurrence of feelings such as worry, anxiety, fear, stress, and sadness. Furthermore, it was observed that the pandemic affected the emotional aspect of the participants.

Keywords: social isolation; risk group; vaccination; mental illness; undergraduate students.

Resumo: Diante do momento pandêmico causado pela Covid-19, o mundo foi afetado em várias esferas sociais e educacionais, modificando os formatos das aulas presenciais para o ensino *online*. Com isso, mediante o avanço da vacinação, estuda-se o retorno às aulas presenciais. Nesse sentido, o objetivo desse trabalho foi descrever a percepção dos estudantes e os sentimentos mais vivenciados por eles, através de onze perguntas estruturadas. Um formulário foi elaborado através do aplicativo *Google forms* e disponibilizado por meio do *WhatsApp*, a uma amostra populacional de 152 alunos de duas instituições, sendo uma pública e outra privada no município de Altamira-Pará. Os resultados caracterizaram a ocorrência de sentimentos como a preocupação, a ansiedade, o medo, o estresse e tristeza. Observou-se que a pandemia afetou o aspecto emocional dos participantes.

Palavras-chaves: isolamento social; grupo de risco; vacinação; adoecimento mental; alunos de graduação.

Resumen: Ante el momento de pandemia provocado por el Covid-19, el mundo se vio afectado en diversos ámbitos sociales y educativos, cambiando los formatos de clases presenciales por la enseñanza en línea. Con ello, mediante el avance de la vacunación, se estudia la vuelta a las clases presenciales. En ese sentido, el objetivo de este trabajo fue describir la percepción de los estudiantes y los sentimientos más experimentados por ellos, a través de once preguntas estructuradas. Se preparó un formulario a través de la aplicación de formularios de Google y se puso a disposición a través de WhatsApp, para una muestra de población de 152 estudiantes de dos instituciones, una pública y otra privada en el municipio de Altamira-Pará. Los resultados caracterizaron la ocurrencia de sentimientos como preocupación, ansiedad, miedo, estrés y tristeza. Se observó que la pandemia afectó el aspecto emocional de los participantes.

Palabras clave: aislamiento social; grupo de riesgo; vacunación; enfermedad mental; estudiantes de pregrado.

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Introduction

In December 2019, in Wuhan city in China, the first identified cases of the virus (SARS-CoV-2) emerged, with a degree of contagion from one infected to three people (DIAS et al., 2020). With globalization and increasingly faster means of transportation, Covid-19 traveled between continents in first-class cabins. Due to the high proliferation of the disease, the virus quickly reached other nations, countries, states, and cities.

The new virus became uncontrollable without sufficient scientific knowledge of how to fight the virus and without any preparation on the part of the population. With the speed with which it is transmitted, the degree of lethality, and the proportion of people and occurrence on all continents, the disease was considered a pandemic. This situation led the World Health Organization (WHO) to recognize the current scenario as a pandemic state of public calamity on March 11, 2020, Organização Pan-Americana da Saúde (OPAS, 2020).

According to the WHO (2020), the virus in the infected organism undergoes an incubation period between 2 to 14 days after infection. In this aspect, the infected person may have no symptoms and, in some cases, may not show any apparent symptoms even with the evolution of the disease, empowering the carrier to be a transmitting agent. According to Cabrera, Clavel e Román (2020), contamination arises through fluids, coughing, sneezing, and particles released by exhalation, so the proximity between people in closed environments with low free air circulation is also a strong facilitator for the increase in cases.

Among the most observed symptoms in the infected groups are headache, tiredness, conjunctivitis, loss of smell and taste, infected throat, runny nose, nasal congestion, muscle pain, body aches, fatigue, diarrhea, vomiting, nausea, fever, cough, and shortness of breath evolving to thrombotic cases where the evolution of the disease is more severe (CEPEDES/FIOCRUZ, 2020). However, some groups may be asymptomatic, and others have mild conditions that recover more quickly, forming a percentage of 80% who do not need hospitalization. However, some patients with elevated symptoms need help and medical and hospital care. Although the lethality rate of the virus is low, some patients can be led to death (FERREIRA et al., 2020).

Regarding the groups that were most vulnerable to the evolution of the virus, there are patients with comorbidities who have chronic diseases such as high blood pressure, diabetes, heart disease, obesity, lung diseases, patients with kidney problems, liver diseases, people with hematological diseases, people with immunodeficiencies or chromosomal alterations, as well as pregnant women and the indigenous population (BRASIL, 2020a). Given these conditions,

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the elderly are the ones with the most chronic diseases, and, as a result, Covid-19 progresses more quickly to a serious stage.

To care for this population, protection mechanisms were implemented to contain the proliferation of SARS-Cov-2, with social isolation being, at this first moment, extremely important (BRASIL, 2020b). Because the virus is transmitted from person to person, measures to maintain physical distance were mandatory, as observed in previous experiences with the H1N1 virus (2009-2010) and endemic and epidemic diseases already seen in the last century. Therefore, decreasing the number of people circulating is the best way to control the disease (BARATA, 1987; FERREIRA et al., 2020).

In Brazil, the measures of social isolation took place when several cases in Rio de Janeiro and São Paulo emerged, that is, twenty days after the first diagnosis case of a 61-yearold man from Italy. From that moment onwards, collective contagion was declared, and the state of Rio was the first to adopt social isolation (SCHUCHMANN et al., 2020). The procedure was followed throughout the national territory; the main measures adopted were the closing of stores, those considered non-essential, while on the other hand leaving essential activities such as pharmacies, hospitals, and supermarkets open (DIAS et al., 2020).

It can be seen that the governments of countries such as Brazil, Italy, and the United States, did not immediately adhere to social isolation at the beginning of the pandemic as an emergency protection strategy against the virus because they underestimated the disease or believed in herd immunity¹, as a result of this choice, hospitals became overcrowded and overloaded, leading the health system to collapse (FARIAS, 2020).

In the educational context, it was no different, as schools had to be closed, as well as Higher Education Institutions (HEIs), temporarily interrupting educational activities. The suspension of in-person classes was framed in the non-essential activities decree (SCHUCHMANN et al., 2020). Social isolation for control and prevention has led to more than 190 countries temporarily suspending face-to-face classes worldwide, leaving 1.57 billion students worldwide with a considerable pedagogical loss (UNESCO, 2020).

In Brazil, specifically in the city of Altamira in the state of Pará, in this research, the pandemic directly affected the dynamics of the population, implying a change in their life routines since distancing measures were also implemented in this city. They included closing schools and universities, suspending on-site activities, and implementing Emergency Remote Teaching (ERE). By determination of the National Council of Education (CNE), technological



¹ Herd immunity or collective immunity goes beyond the simple sum of individual exemptions: even those individuals who are not immunized in the group will be, in a way, protected by the immunity of the group of individuals (Carvalheiro, 2020). 3 de 15

resources such as online classes were adhered to since the school environment, as a place of agglomeration of students, makes it a potential agent of virus contamination (BRASIL, 2020c);

The ERE became part of the student hours in April 2020, with authorized classes being held in May 2020 with an estimated duration until December 31, 2021, approved under the terms of law 14040/2020 (SOUZA; COSTA; MESSIAS, 2021). As an alternative to the continuity of academic activities, the educational system sought emergency resources for teaching, authorizing classes to take place through other means. Thus, implementing a different learning method in the educational environment, using the internet and electronic devices such as tablets, computers, and cell phones. Within this new teaching context, students were also involved with a new way of learning, with this learning medium being used as an essential teaching tool for the teacher in the online classroom (SOUZA et al., 2021).

With this new educational environment, a crystallized structure in receiving an education was broken in the social relations that this school environment and higher education institutions provide between friends, students, and teachers. With this, students started to have their homes as classrooms (OLIVEIRA, 2020).

Faced with so much insecurity related to the pandemic environment, scientists were preparing to manufacture vaccines developed by countries that invested heavily in containing the disease, such as Coronavac and AstraZeneca. The Fiocruz and Butantã institutes, both Brazilian, were responsible for the means of manufacturing and carried out all the phases before release and application to the population. After the testing process with volunteers showing satisfactory results and later approval and authorization by the National Health Surveillance Agency (ANVISA), the population immunization phase throughout the national territory followed (GUIMARÃES, 2021). Manufacturing vaccines in large quantities is still slow due to the export of input (inputs are chemical components needed).

Therefore, it was necessary, at first, to prioritize the most vulnerable groups, such as those with chronic diseases, elderly people, and workers who play a role in confronting Covid-19, taking care of people affected by the disease (DOMINGUES, 2020; SOUZA et al., 2021). Afterward, the national vaccination system went through several stages until it reached the younger groups.

During the period of this study, the immunization process was still moving slowly due to the small number of vaccines, so the return to classroom classes at the higher level was still fearful, even with the consent of the MEC and the biosafety protocols made available through booklets containing safety instructions and precautions for a possible return to in-person



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classes. However, each government official and institution is responsible for managing the appropriate time to return to classes (BRASIL, 2020b).

Faced with two essential situations for human beings, the preservation of life and the need for socialization, many students feel that online classes become exhausting and the achievement is unsatisfactory. However, there are uncertainties regarding the return of inperson classes, with this big raising concerns about being infected with the virus and being a potential transmitter to their family members.

Having observed many victims affected by this disease in a short period, there was a generalized feeling of impotence. Thus, many scholars characterize the Covid-19 pandemic as the "fear and stress pandemic", and these feelings are linked to the fear of contracting the virus, dying, or being a transmitting agent (ORNELL et al., 2020).

These factors, according to studies carried out (CESPEDES/FIOCRUZ, 2020; ORNELL et al., 2020), affected the mental health of millions of people during the period of the pandemic, with people being more commonly affected by their psychological state as a consequence of the entire social disorder, observing an estimated percentage of one-third of the population who developed some type of emotional illness. Therefore, attention must be paid to the effects that Covid-19 can have on the emotional health of the population in the pandemic and post-pandemic periods.

Due to the level of isolation never experienced before in the modern era, some negative feelings can arise between people, as social distancing changes the routine and activities of individuals, and, as a result, feelings such as anger, fear, and irritability arise. This worry could remain in the daily life of the population, affecting their emotional state for a prolonged time (BROOKS et al., 2020; ORNELL et al., 2020).

In this context, aiming to verify whether the return to in-person classes may be affecting the emotional state of undergraduate students in Altamira, this work aimed to describe the possible feelings experienced by the academic community of two higher education institutions, one public and the other private. The hypothesis supported was that the academic population in the context of a pandemic is affected by negative feelings about contracting or transmitting the virus when returning to face-to-face classes.



Methodology

A mixed-method research design was used to describe a phenomenon without analyzing it. At the Federal University of Pará - Campus Universitário de Altamira-PA, this study was conducted within the Post-pandemic PASES Project (Ordinance No. 18/2021). The participants composed a convenience sample. The period of realization took place between 07/26/2021 to 08/26/2021. Data was collected through an online form with eleven structured questions, ten closed and one open, made by the Google forms software. A total of 152 undergraduate students participated in the research, including students from the Pedagogy, Psychology, and Biological Sciences courses. It was clarified that all academics were invited to participate voluntarily, informed that participation in the research was not related to any benefit of concepts/or grades in subjects (SOUZA et al., 2021). The form was made available through the social network Whatsapp. Data analysis was performed using descriptive statistics and the open question content analysis. Statistical and graphical analyzes were performed using the R statistical software (R CORE TEAM, 2020). Five analysis categories were created: Sample characterization, Immunization; Losses; Return to classroom classes, Feelings lived. The PASES project is linked to the PAEES Project (Student assistance project and pedagogical advice), having been approved by the Ethics Committee in Research with Human Beings under opinion: 3.678.068.

Results and discussion

Sample characterization

Regarding the characteristics of the participants concerning gender, there was a predominance of females. This percentage corroborates studies where women, since the 1970s, have been democratically gaining the right to gender equality to compete for a place in universities (BARROSO; MELLO, 1975; VENTURINI, 2017). This same survey also showed that the majority of graduates are women. According to data extracted from the Higher Education Census released by INEP in 2015, it was indicated that female students represented 59.88% of students who completed on-site undergraduate courses in Brazil (INEP, 2017; VENTURINI, 2017).

About the age group of the participants, only 2% of the interviewed students reported being underage, while 98% were adult academics. Corroborating with studies already carried out on the age of undergraduate students enrolled in Universities in Pará, according to the



Semesp Institute (2020), in face-to-face courses at private institutions 4.7% of undergraduate students are under 18 years of age, while in public schools this percentage is 5.8% of underage students.

In asking about the participants being from a public or private Higher Education Institution (HEI), it was shown that students from the public HEI were the ones who most participated in the survey with 73% of participation, while the private one had a participatory percentage of 27%. Notably, the form was made available to students of this public institution (IES) in Pedagogy and Biology courses. For the private institution, we only obtained the participation of students from the third, fourth, and fifth-period Psychology courses.

Characterization of the sample's immunization profile

At the time of this research, about the vaccination of Covid-19, 36% of the academic population were immunized with both doses or a single dose, and 64% still had an incomplete vaccine cycle (Fig. 1). In these 30 days, vaccination coverage was around 14,842 with the first dose and 15,160 immunized, according to data confirmed by the Municipal Health Department in Altamira (SESMA, 2021). Given this low number of vaccinations, at the time of this research, it is observed that most of the population is still vulnerable to contagion, making safe return difficult. In fact, it was observed in the report of one of the participant's negative perceptions regarding the delay in receiving the immunization:

"We lost several relatives and friends due to a lack of vaccines and a lack of basic health information in our municipality, a shameful and hopeless scenario." (Participant – Public institution).

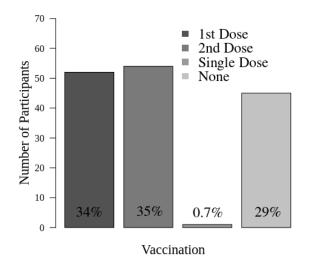
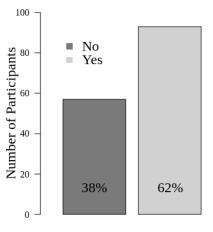


Figure 1 – About Vaccination of Participants Source: Prepared by the authors.



Concerning the safety of the vaccine (Fig. 1), it is observed that the majority of the population interviewed trusts the protection it can offer, while a minority of the population does not believe it. This lack of confidence in the vaccine may be associated with personal beliefs and false news (fake news) widely spread on social media. According to studies carried out by Garcia et al., (2020) on vaccinations with an emphasis on the pandemic period, fake news is the most present cause, followed by misinformation about the side effects that the vaccine can bring. Although the effect has already been demonstrated with satisfactory results by the scientific community, the numbers of those vaccinated in this period may decline due to some groups that do not accept vaccinating, with the anti-vaccination movements being the biggest disseminators of misinformation (DOMINGUES, 2021).

The results obtained where half of the sample of students did not feel safe with the vaccination resemble results similar to the work carried out by Johnson *et al.* (2020) in a survey with Americans, a country with a strong influence of denial and anti-vaccine movements.

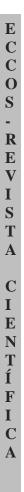


About vaccine safety

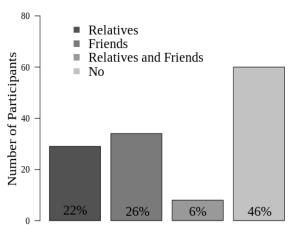
Figure 2 – Question about vaccine safety **Source**: Prepared by the authors.

Loss profile

This issue is reflected in the consequences of Covid 19. It was asked about the loss of a relative or close friend to the disease (Fig. 2). The responses were organized into four subcategories: relatives; friends; relatives and friends; no losses. In the results, the group of relatives appears with the highest occurrence of loss among students at 26%, noting that in the total number of participants, the majority lost a loved one, as observed in the following statement:



"Yes, two aunts, a cousin, and close friends". (Participant – Private Institution)



About Losses during the pandemic

Figure 3 – Question about Losses during the pandemic **Source:** Prepared by the authors.

To complement the data above, some participants exposed the contingencies related to the losses, as observed in the following reports:

"Yes. I lost many close friends and a neighbor too to this virus! And it's something that I still haven't been about to accept the reality that they left. It's sad to believe this, even though it's a reality we live in. Plus the pain of not being able to share moments with that person anymore, and it's inevitable to just want to accept that it happened!" (Participant – Private institution)

Returning to school

Regarding the possibility of returning to in-person classes, 20% reported not knowing how to respond at that time; 31% were against; and the majority of students, 49%, responded favorably (Fig. 3). This last percentage may be related to the difficulties that students encounter in the ERE since this process exposed them to numerous unfavorable contingencies such as external stimuli causing loss of concentration, a lack of a private place in the family environment, including poor internet quality at home, often due to a lack of financial resources (SOUZA et al., 2021).

Another negative point that may favor the idea of returning to face-to-face classes is the difficulty or lack of skill in handling the technologies, mainly because of a lack of agility and frequent contact with digital devices, according to a study carried out with undergraduate students (SOUZA et al., 2021).

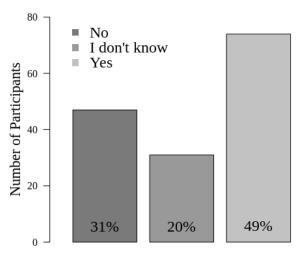
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Those who responded negatively to the return (31%) may have considered this moment very risky since most of the population had not yet been vaccinated at the time of the survey.

About the presence of any comorbidity, 61% of positive responses were identified (Fig. 4). This data confirmed similar results obtained in a survey with students in the city of Natal-Rio Grande do Norte, where around 61.25% showed the occurrence of comorbidities (FERREIRA et al., 2020). The risk factors are aggravating to the evolution of Covid-19. In this sense, even if the students are not vulnerable to the virus, they can be the transmitting agent to close relatives or people they live with daily (ZOU et al., 2020).

It was observed that 56% of family members encouraged the return to in-person classes. This information may be related to the difficulties mentioned by Almeida (2020), who observed the great obstacles that most families have in providing conditions for the development of distance education for their children.



About return to in-person classes

Figure 4 - About return to in-person classes **Source**: Prepared by the authors.

Regarding the need to maintain social distance after the face-to-face return, half of the participants said they would need to maintain social distance from a family member or friend during in-person classes to avoid contagion. This information corroborates studies carried out by Ferreira *et al.* (2020) in Rio Grande do Norte because the student environment is easy to agglomeration and proliferation not only of the Covid-19 virus but also other microorganisms, with most students having relatives with comorbidities or themselves being from the risk group.



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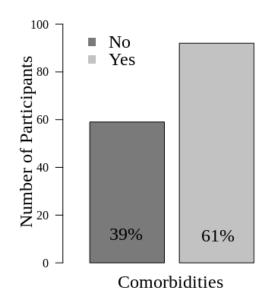


Figure 5 - Question about the presence of groups with comorbidities **Source:** Prepared by the authors.

Feelings experienced by students regarding returning to in-person classes

When asked about the most experienced feelings when they consider returning to inperson classes, 44% of the participants expressed concern, 40% reported anxiety, 9% said they were afraid. Stress (4%) and sadness (3%) were reported less frequently (Fig. 5). This data corroborates research carried out in this period of the pandemic on social isolation. Covid-19 not only impacted the social habits of the population but also brought with it feelings of fear, anxiety, stress, anger, losses, impotence, incapacity, and helplessness, given what has been experienced worldwide (NASCIMENTO *et al.*, 2020).

In a similar study carried out with undergraduate students in the State of Piauí, feelings of fear, impotence, anguish, and concern about their health and their families were reported during the pandemic period (NASCIMENTO et al., 2020).

As a consequence of the Covid-19 pandemic and social isolation, the feelings described above may still influence people's perception of returning to their in-person academic activities for fear of contracting or transmitting the virus to someone. When fear rises to a higher level, it can affect the emotional state, arousing insecurity, anguish, anxiety, impotence, incapacity, and sadness (DALGALARONDO, 2013), which can create pathological characteristics (Fig. 6).



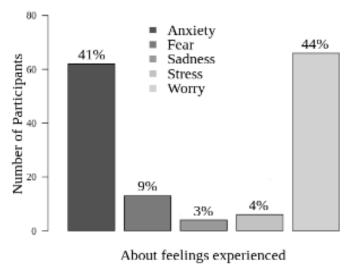


Figure 6 - Question about experienced feelings

Source: Prepared by the authors.

Final considerations

The present article sought, through research carried out with university students, to describe students' perceptions upon returning to in-person classes. Most students who participated in the survey were in favor of returning, even in the face of the risk of contagion, noting that only 34% of students were immunized during this period. In addition, more than sixty percent reported an intention to return even though they needed to keep their distance from relatives and loved ones due to comorbidities. As for the feelings experienced, reports of anxiety, worry, sadness, fear, and stress were recorded, confirming the initial hypothesis. It was observed that most students lost relatives or loved ones. With that, an effective feeling of loss and lack of confidence in the vaccine was perceived. However, students find family support to return to in-person classes. This research may have some limitations regarding the number of participants. Future research must be developed, covering a larger number of respondents to have a representative sample of the investigated population, allowing the data to be generalized. With this study, we hope to show that, even with the end of the pandemic, post-pandemic emotional by-products will need attention and specific public policies in this direction.

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