Exploring the social and emotional representations used by students from the University of the Basque Country to face the first outbreak of COVID-19 pandemic

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Abstract

In 2020, COVID-19, a new Emerging Infectious Disease (EID), was spread throughout the world, including Europe. Spain, in particular, witnessed a significant outbreak of the pandemic. In consequence, all classes were cancelled and the Government declared a state of emergency, ordering the lockdown of the entire population from march to may. The aim of this research is to explore the impact of the COVID-19 outbreak on the representations of young university students from the University of the Basque Country and their emotional response when the crisis started. A free association exercise was completed by 503 students from the University of the Basque Country (UPV/EHU) (Northern Spain). To analyse the content, the Reinert method was used with the Iramuteq software for lexical analysis. The results showed that students placed COVID-19 at a distance from the self, pointing out issues related to social response and disinformation, whilst showing concerns for self-related issues that are linked to negative emotions, academic consequences, and potentially close victims. The students' concerns were categorized at four main levels: the communicative-informative level, health-emotional level, community-social level, and academic level. All of this has created overwhelming feelings of nervousness, along with anger and emotional fatigue. These results indicate the necessity for universities to work from a holistic standpoint, not only in terms of responding to academic needs but also from psychological, communicative, social, health, and well-being perspectives.

Keywords: COVID-19, education, emotions, pandemic, social representation, university

The COVID-19 emerged in December 2019, creating an outbreak of pneumonia in Wuhan (Hubei, China) (Chen et al., 2020). In early 2020, this new Emerging Infectious

Disease (EID) began to spread throughout China (Liu et al., 2020). This rapid increase in confirmed cases and deaths also spread worldwide, with Europe in general and Spain in particular becoming important centres of the pandemic (Linde, 2020).

In the Basque Autonomous Community, a region located in the north of Spain, the coronavirus crisis broke out in March of 2020. In this region of 2167707 inhabitants, the first case was detected on February 28th, but the number of infections increased rapidly. On March 12th, the Basque Government suspended classes in all educational centres, from nurseries to universities, and on March 14th the Spanish Government declared a state of emergency and ordered the entire population to remain in lockdown (Aragó, 2020). Spain in general but the Basque Country in particular was one of the European regions that had been most affected by that "first wave" of COVID-19. Even with a robust public health system, the cases multiplied uncontrollably. Therefore the total lockdown of the population was prolonged until the beginning of May and then began with a phase of de-escalation that lasted until the end of June. At the end of that "first wave" the total number of people infected by COVID-19 in this region was 20963 people and the deaths were 1613.

Beyond the medical risks, the psychological, social and economic impact of this pandemic is indisputable. Several lines of research have previously focused on understanding how society defines the origin and impact of epidemics and how it subsequently deals with them. However, the ways in which people integrate emerging infectious diseases into everyday thinking — and how they internalize them as social phenomena — have yet to be thoroughly researched. Consequently, it is essential to analyse this new COVID-19 epidemic from this perspective, since the collective way in which society understands this pandemic will determine certain social phenomena. For instance, the levels of public awareness, the credibility (or not) of leaders, and the degree

of compliance with health recommendations, all of which serve to define the collective response to the crisis (Bangenter, Green, & Gilles, 2011).

In order to face this challenge, the Theory of Social Representations (TRS) (Moscovici, 1961, 1984, 1988), offers us a perspective from which to understand people's everyday thoughts as well as their ideas in the face of new events. After all, the objective of this framework is to understand how people internalize and explain new events or risks that change the world they have known up until now (as is the case with COVID-19).

With regard to social representations of health epidemics, extensive research (Joffe & Bettega, 2003; Joffe & Haarhoff, 2002; Joffe & Lee, 2004; Washer, 2006; Idoiaga, Gil de Montes, & Valencia., 2017a, 2017b) has shown that the representation of EIDs is often changing during the pandemic process, even though it follows some patterns during that process (Idoiaga el al., 2017b). In fact, worldwide EIDs were firstly viewed as originating from collective actors regarded as out-groups or "others". The problem begins when people such as "ourselves" start to be affected by the new disease. In these cases, representations of local victims, and villains usually appear (Wagner-Egger et al., 2011). It is the mass media that are often portrayed as the villains, being accused of manipulating the communications regarding risk to suit their own agenda, and, perhaps even worse, are perceived as being the puppets of evil powers at the highest level (Idoiaga et al., 2017b). The victims are usually represented by the infected people or by those who are most likely to be infected or have the least resources to prevent it.

Moreover, research in the field of social representations (Smith & Joffe, 2013) and EID highlights the role that the emotional context plays in symbolic thought and its relevance in making a topic recognizable and understandable (Höijer, 2010). In fact, the work carried out so far has revealed that in modern societies there are recurring emotional

patterns that emerge in response to threat of EIDs. In recent studies carried out worldwide (Fagiolini et al., 2020; Moghanibashi, 2020; Qiu et al., 2020; Wang et al., 2020), but also in the Basque Autonomous Country (Ozamiz, Dosil, Picaza, & Idoiaga, 2020; Ozamiz, Idoiaga, Dosil, & Picaza, 2020) it has been found that in the COVID-19 crisis emotions of stress, depression and anxiety have proliferated, because of the fear created by the threat but also by the uncertainty or the unknown. Emotions of anger are also clearly visible, particularly those linked to the blaming process against the villains of the epidemics (Idoiaga, et al., 2017a). Finally, the combination of these emotions usually results in "EID fatigue" (Joffe, 2011), that is, an emotional fatigue, which is the consequence of having been bombarded with a litany of imminent infectious diseases (Joffe, 2011; Sherlaw & Raude, 2013).

However, we cannot think that that emotional response to pandemics is static. It can vary depending on the typology of the population or during the process of the pandemic. For example, recent research on COVID-19 has indicated that gender is a factor that may determine the response to a pandemic. In particular gender could be a variable to be considered in the psychological response to the pandemic as research has shown that women appear to present more severe symptoms of depression, anxiety and distress in comparison with men (Lai et al., 2020; Liu et al., 2020; Qiu et al., 2020).

In a similar vein, social representations are strongly anchored in the group to which each person belongs. In fact, previous research on EID found that university students were not anxious about the pandemic situation nor did they think it was serious, and most likely believed that they were not susceptible to the pandemic, in spite of belonging to the most affected group in some pandemics, for example in H1N1 (Idoiaga, Gil de Montes, & Valencia, 2016; Van, McLaws, Crimmins, MacIntyre, & Seale, 2010). Further, it has been pointed out that universities are a hotspots of infection due to their large young adult

population, high levels of close social contact, and permeable boundaries (Beaton et al., 2007). Therefore, outbreak management in universities is essential for reducing the impact of the disease both in their immediate and surrounding communities (Van et al., 2010).

To sum up, it is essential to know how university students cognitively represent and emotionally interiorize the outbreak of the pandemic in order to be able to implement specific health education strategies, since the awareness of the youth population can be key to stop the spread of the epidemic. Therefore, the main objective of this study was to examine the impact of the COVID-19 outbreak on the largest university of the Basque Autonomous Country. Specifically it aims to examine these university students consciousness and the emotional response that surrounded the crisis at the beginning of it.

Method

Sample. A total of 589 people participated in this study. The sample was recruited from students of the University of the Basque Country (UVP/EHU) .The University of the Basque Country is the eighth largest university in Spain with 40,000 students and also has the eighth position at the state level and 358 international level in the CWUR World University Ranking. It should also be noted that although there are three universities in the region of the Basque country 72% of students are enrolled in the UPV/EHU, being the most important university in the region.

Of the sample, 82% were women and 18% were men. The average age of the participants was 20.47 years (*SD*=2.91) with an age range of 17-45 years. The University of the Basque Country has three campuses, 73.7% of the participants were students from the Bizkaia campus (which is the biggest one), 12.9% from the Gipuzkoa campus and 13.4% from the Araba campus. The grades they studied were very varied, representing a

wide range of grades on each campus (e.g. education, physics, mathematics, journalism, history, nutrition, psychology or law). Also 12.1% of the participants had a chronic disease.

The questionnaires were completed between March 11th and 14th 2020. Of the total respondents, 50.4% answered the questionnaire before university classes were suspended (On March 12th) and 49.6% after this suspension.

Procedure. The first step was to secure permission from the university ethics committee to carry out this study. The approval of the Ethics Committee of the UPV/EHU was obtained [M10/2020/055]. Due to the situation of imminent pandemic, it was decided to carry out an online survey with a convenience sampling. In order to recruit students, a collective email was sent to the corporate emails of university students from the three campuses by the university bulletin board asking them to participate in this research. All the people participated on a voluntary basis, received information about the procedure of the investigation and gave their consent before participating in the study. The response rate was the %1.6 taking account the entire population of 40.000 students. That is a total of 620 students began to complete the questionnaire and 589 of them completed it in its entirety. The 31 incomplete questionnaires were discarded.

Data collection method. To analyse the students' social representations of COVID-19 the Grid Elaboration Method of free association was used, which has been useful for conducting research on social representations of global infectious disease and other issues (Idoiaga et al., 2016; Joffe & Elsey, 2014). Participants were provided with a paper with four boxes and were asked to write down any word or sentence that came to their mind when they thought about the "Coronavirus or COVID-19". They were then asked to

better explain each of those words in order to delve deeper into their associations and to gather further information about the items that they elicited.

The Reinert method using Iramuteq software for lexical analysis (Reinert, 1983, 1990) was employed to analyse the corpus of texts. This method has frequently been used for the study of social representations (Kalampalikis, 2005; Klein & Licata, 2003; Lahlou, 2001), concluding that the results obtained agree with those of other methods used in this field of research (Lahlou, 1996).

Iramuteq software eliminates problems of reliability and validity in qualitative text analysis (Klein & Licata, 2003). By using this method, which follows a descending hierarchical analysis, the software identifies the words and text segments with the highest Chi square values, that is, the words and text segments that best identify each "class" or idea that the participants have repeatedly mentioned. Once these "classes" have been identified, they are associated with "passive" variables (independent variables). In the present case, the passive variables were gender (male or female), and whether the questionnaire was completed before or after suspension of the university classes.

Reinert method operations are statistical, transparent, and reproducible, until the final moment of interpretation, where the analyst assigns a label to each specific "class" or lexical world that was identified by the software on the basis of co-occurrences and distribution patterns (Schonhardt-Bailey, 2013). Finally, as a complementary analysis, Iramuteq also runs a multiple correspondence factor analysis.

Results

The full corpus contained 41359 words, of which 3618 were unique words. Specifically, the descending hierarchical analysis divided the corpus into 494 segments and 6 classes. The results of the analysis are displayed in Figure 1.

INSERT FIGURE 1 HERE

Figure 1. The hierarchical clustering dendrogram of the free association with the most frequent words and the words with the greatest association $\chi2(1)$, $p < 0.001$.

The analysis revealed the main issues surrounding COVID-19 that were considered by the students, through free association. Each issue is represented by a set of typical words (see Figure 1) and segments, which is referred to as a class. The results revealed two main branches or themes (composed of different classes), which are called main clusters. The first main cluster is composed of Classes 3 (Coronavirus), 4 (Social response), and 6 (Disinformation), whilst the second main cluster is composed of Classes 1 (Possible close victims), 2 (Academic consequences), and 5 (Emotional response).

The first main cluster reveals a representation of the COVID-19 that is external to the self, that is, it is not represented as something that will have a direct impact on oneself. This main cluster begins with the third class with a weight of 14.52%, which has been labelled "Coronavirus" because in this class young people try to explain what this disease is, in terms of their own understanding. Figure 1 shows the most representative words of this class. Further, the characteristic text segment or the most repeated discourses of this class are the following: "The virus is spreading to many countries in the world but China is the epicentre of the virus and the virus is supposed to have arrived from there. It creates symptoms similar to the flu, but it affects the lungs much more" (men, after; $\chi^2= 179.51$); "Almost everyone talks about the coronavirus as if it was the flu, but this is becoming

crazy, from China it is spreading all over the world and now we have the problem in Europe" (men, before; χ^2= 161.93). This class was mainly elicited by men (p< 0.02), who represented the disease as a kind of flu linked to China.

The fourth class (18.1%), labelled "Social Response" describes how, with the outbreak of the virus in Spain, society is not keeping calm and has entered into a kind of psychosis that leads people panic buy in the supermarkets or to behave antisocially (see Figure 1). This issue was mentioned most frequently following the suspension of university classes (p< 0.01). Some of the typical segments of this class are: "The collective hysteria is emerging and seems to be growing at times. People are not able to keep calm, it is a virus that is spreading incredibly fast but as far as we know it is not fatal for most of the population" (men, after; χ^2= 256.48); "People are very afraid. They are going crazy buying food as if this was an apocalypse. The masks have run out and the people who need them don't have them. Calm down!" (women, after; χ^2= 243.94). It is striking that this type of social response emerged, along with the fact that since the COVID-19 has become a monotheme, as students point out, this has resulted in the emergence of emotions of fatigue and laziness (see Figure1): "This is a monotheme and we're already tired and fatigued. We were saying yesterday that we're fed up with the coronavirus! What a drag! What laziness!" (women, after; χ^2= 153.50).

In relation to this social response, a sixth class appears (18.1%), which has been labelled as "Disinformation". This class is characterized by criticism of the communication on this subject on the grounds that it is being highly manipulated and sensationalized by both the mass media and by all the fake news that is being spread on social networks (see Figure 1). Some of the typical segments of this class are: "The social panic generated by the fear of the unknown and created by the mass media or social networks is the worst virus" (women, before; χ^2= 296.12); "The media, TV programs, social networks, fake

news etc. speak without adequate information, without evidence and create ignorance and panic. The ones we should listen to are the experts and doctors" (women, after; $\chi^2=$ 264.83); "The media, manipulated by politicians, are causing people to become terrified, even those who don't believe this is so serious" (men, before; $\chi^2= 243.00$).

In the second main cluster, the students bring the disease closer to the self. They assume that it is something that is already among them and reflect on different aspects. In the first class (18.33%) labelled "Possible close victims", they explain the possibility of the disease reaching them. They are particularly worried that it will affect their relatives, especially their grandparents, as can be seen in the following typical segments: "Many people are infected, it's a dangerous virus. A lot of people, especially older people, are dying and I don't want anything to happen to my grandparents" (women, before; $\chi^2=$ 185.43); "I have asthma. This means the disease is dangerous for me. I'm not going to die anyway, but I'm scared. And especially for my family and my grandmother who has always taken care of me" (women, before; $\chi^2= 182.62$). As observed, the emotions of nervousness and fear are clearly evident in this class (see Figure 1).

In the fifth and second class, a self-orientated way of thinking becomes considerably more evident. To begin with, the fifth class (12.62%) deals with the "Academic consequences". The impact of this epidemic is also academic, and this class, which emerged after classes had been suspended ($p< 0.002$) describes a number of potential academic problems (see Figure 1): "I'm afraid that there are consequences that will affect my upcoming academic future. Uncertainty about the measures that will be taken around my field practices, and my academic future, because of how I will be able to continue both with my practices and with my work for the end of my degree" (men, after; $\chi^2=$ 536.48); "What is going to happen with the end of grade work? Once we have done a great job, we would like to know if this year the students of 4th grade will be able to

graduate; however I know that the situation is difficult and that individual problems are of secondary importance" (women, after; χ^2= 520.90).

Finally, the second class (18.33%), emerges, labelled "Emotional response". This class is the most personal of all and the one that reveals most of the emotions students are feeling at this critical moment (see Figure 1). These markedly negative emotions, mostly linked to fear and uncertainty, became significantly more visible among women ($p<0.003$) just before the classes were suspended ($p< 0.04$), and, in some ways, the suspension serves to calm them. The following are some of the most significant segments: "I am overwhelmed by staying locked up at home and by the fact that the classes are going to be cancelled" (women, before; χ^2= 377.46); "I'm afraid to come to the university and to get sick because we've found out that there's more than one case in the school. Little by little, anger is spreading because we can't do anything, just come to the university and be worried" (women, before; χ^2= 324.20); "It overwhelms me to think that I spend the whole day among masses such as in the university or on public transport. I can infect my relatives that have underlying health conditions, and old people. I am all day thinking about the coronavirus and I don't enjoy other things because of the fear of the contagion (women, before; χ^2= 296.77).

The multiple correspondence factor analysis derived from the descending hierarchical cluster analysis (Figure 2) illustrates the previous observations.

INSERT FIGURE 2 HERE

Figure 2. The multiple correspondence factor analysis produced by the descending hierarchical cluster analysis.

The words that most markedly contribute to the factors are projected on the factor plane that intersects factors 1 (Y axis) and 2 (X axis). Factor 1represents the 26.55% of the corpus and it is related with the direct vs indirect implications of the COVID-19. On the bottom of the axis there are represented the direct implications of the COVID-19 (death, symptoms, quarantine, contagiousness, etc.) and on the top of the axis the indirect implications (the closure of university, the alarmist communication, the cancelation of holydays, etc.). Factor 2 represents the 21.77% of the corpus and it is related with the self vs. society consequences. On the left of the axis the communication and the social reactions are represented. In addition, on the right pf the axis the direct consequences for the self on an academic level along with student's emotional response.

These two axes divide the factor analysis into four planes. The first plane (upper-left) is the communicative-informative level, where mass media, social networks and fake news appeared, and students feel furious about their manipulative communication and creation of terror. In the second plane (lower-left) the community or social level is observable, where people are showing an exaggerated response, panic buying in supermarkets as if it were an apocalypse, being guided by fear and anxiety as opposed to staying calm. In the third plane (lower-right), the health and emotional level can be observed, with the appearance of emotions such as a feeling of being overwhelmed and a sense of nervousness linked to the coronavirus. However, risk and danger are primarily represented in relation to the elderly members of the population. Finally, in the fourth plane (upper-right) the academic level can be found, which is linked to feelings of uncertainty about the university.

Discussion

This research has provided relevant information about the impact of COVID-19 on young university students of the northern of Spain at the precise moment that the outbreak broke out in the country, explaining how this crisis has been integrated into their everyday thinking. In fact, understanding the patterns linked to the pandemic on those first moments can provide the tools and guidance needed to respond to the current crisis or future outbreaks in an adequate manner within the university context.

First, the results of this research reveal the main issues considered by students, through free association, which can be categorised into two main themes or clusters. One of these is characterised by issues related to aspects that are external to themselves whilst the other is related to the individual self. Previous studies on social representations have also highlighted the fact that in pandemic situations, students identify the disease as being far removed from their own situation (Hoda, 2016; Idoiaga et al., 2016). This process of placing the risk on "the other" is common in EID representations theory (Joffe, 2011). In this case, the crisis had evolved from being something distant that only affected "others" from China to being something that affects their own country. But although the students assume that the crisis had reached their country, the epidemic is represented as if it could only affect the elderly and not them, the young people (Van et al., 2010). In other words, older people are represented as potential victims, taking the risk away from young people and representing their own situation within an optimistic bias that makes them immune to the pandemic (Idoiaga et al., 2016). The greatest danger of students believing that the disease cannot affect them is that they also become unaware of the fact that they are potential transmitters of COVID-19, which has serious consequences for public health (Morrison & Yardley, 2009; Van et al., 2010).

Second, our results show that in terms of aspects related to the social level (i.e. external to the self) the students identify two villains in this pandemic. In particular, they condemn the fact that communication on this issue was being manipulated by the mass media and by the fake news that were being spread in social networks, as shown in previous studies (Wagner-Egger et al., 2011; Idoiaga et al., 2016). In fact, in Spain, alarming videos on COVID-2019 were circulating freely and were accessible to almost all individuals, particularly young people. This overinformation has been pointed out as a key factor in their apparent psychological vulnerability (Ozamiz et al., 2020). For all of these reasons, it is critical to ensure effective communication transmitting information to the public in an effective and direct manner and not sensationalizing (Idoiaga, Gil de Montes, & Valencia, 2017b; Tran et al., 2020).

Nevertheless, in this COVID-19 crisis there is also a noteworthy and novel villain emerging, the uncivilized citizens who overreact in the crisis or carry out in civic actions. That is to say, in the search for those villains who could no longer be "the others", the villains were represented for the first time within the endo-group itself. People who did not behave "correctly" were judged, although it was not clear to the students exactly how they should behave. Both villains, the mass media and the uncivilized citizens, created emotions of anger but also of fatigue towards a pandemic that had only just begun. Therefore, these emotions must be taken into account, and worked on in order to bring the responsibility for the epidemic closer to the individual level in the youth population.

Third, the aspects that the students identify in relation to their self are linked to the emotional responses, academic consequences, or with the possible direct consequences of this disease for their closer relatives. With respect to emotional responses, negative emotions are primarily marked by fear and uncertainty. Specifically, emotions such as a feeling of being overwhelmed, anxiety, powerlessness, and disgust are particularly

striking. Beside, women express more their emotions when their speak about this topic. These results are in line with those of other studies showing that in EID situations, it is women, as opposed to men, who are more likely to express their emotions (Hoda, 2016; Lai et al., 2020; Liu et al., 2020; Qiu et al., 2020). Further, our results show that there was a transformation of emotions from overwhelm, powerlessness, disgust, uncertainty or anxiety to anger and fatigue.

Finally, the multiple correspondence factor analysis has revealed four main levels that reflect the concerns of the university students: the academic level, communicative-informative level, health and emotional level, and community-social level. These results suggest that it is important to approach to health in a holistic way because from a student perspective the concerns related to de pandemic are not only epidemiological, but are focused on other different aspects, including their psychological situation, academic development, manipulation by the mass-media, and the social situation. In fact, this conception is quite close to what the World Health Organization defines as health, that is, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946, p.1).

In addition, this research exposes new theoretical implications to understand the social representations of EID. One of the main contributions of this research is that it collects university students' own voices at a key moment rarely researched as it is the precise time of the broke out of the pandemic. Moreover, although all the participants were from the same university thus limiting the diversity and representativeness of the sample, collecting that particular moment shows clear relevance. One of the most remarkable aspects of this research is the emotional transformation that is elucidated in it. In fact, some of the key emotions that have been identified in this research (such as anger or fatigue) are not usually analyzed in quantitative health research (Ozamiz et al., 2020).

although previous research in the TSR have pointed out that their importance is noteworthy (Idoiaga et al., 2017a, 2017b; Joffe, 2011) This emotional response indicates the importance of reducing uncertainty by adequately forming people and providing the necessary support and tools to overcome the situation in the best way possible. Nevertheless, information and support should also be clear and concise, because if not, as in this case, it may create anger and fatigue. Education, — particularly university education — holds the power to bring about highly significant change (Pigozzi, 1999) and appropriate decision-making by the relevant institutions can significantly reduce the psychosocial severity of the pandemic within local communities (Lant, Jehn, Christensen, Araz, & Fowler, 2008).

Moreover, another key aspect of this research is that it confirms that, as in previous social representations studies (Idoiaga et al., 2016), young people do not represent themselves as being potentially in danger by the virus. This is why it is essential to systematize a specific health education action for them. This health education will be very important at the beginning of the pandemic but also during it and in the process of returning to normality, since it has been proved that young people have a recurrent tendency to remove the risk of the pandemic from them. Therefore, academic institutions can be key to their development, since their presence guarantees the continuity of health education.

On a practical level, this research also may have direct implications. As observable in the results universities are not immune to disasters — whether these be natural or manmade — and past experience has shown us the importance of educational continuity in health promotion both during and after these events (Beaton et al., 2007; Van et al., 2010). In other words, continuity of classes can be crucial to ensure the health (physical, mental, social and academic) of young people and also to ensure that young people are aware of the risk posed by the pandemic or their own role as transmitters of the disease.

Therefore, universities will have to create and adapt to the processes of pandemics specific resources that respond to the physical, mental, social, communicative and academic needs emerged in the findings of this research. In this regard, the University of the Basque Country (UPV/EHU) developed "EHU edonondik" (*the university from anywhere*) with the aim of creating the conditions for the development of distance teaching in all subjects, which became necessary as a result of the COVID-19 situation. The ultimate goal was to create collaborative and alternative environments that allow the development of teaching subjects that were, up until that moment, carried out in person.

Nevertheless, the involvement of universities with health education cannot be limited to safeguard the academic progress of the students, because as we have already seen on a theoretical level, physical, emotional, communicative or social aspects are also key to cope with this new situation (Klaassen, 2018; Power & Handley, 2017).

Henceforth, this study can serve as a point of departure in an unprecedented situation and in a key historical moment, but we should point out several limitations. First, due to the current changing situation, these data represents a concrete first moment of the pandemic and may not be valid for the whole health crisis. In addition, the major limitation of this study is that this is a non-probabilistic convenience sample and a cross-sectional study that is located in a specific university. Therefore, the results are partly unique to their context, since the impact of COVID-19 is particular to each territory. Likewise, the sample of this study is composed only of university students who are likely to have a medium-high social profile. Perhaps it would be interesting to analyse other types of young people as well, such as those who are in vocational training, in high schools or the unemployed and compare national and international samples in order to have a broader view of youth. Furthermore, of all the students who were able to participate in the study (since it was posted on the university bulletin board) only 1.6% answered, so the response

rate was low. Finally, another limitation may be that the target words COVID-19 and coronavirus are not synonymous at a scientific level, and having used them without distinction may have biased the responses.

In short, the COVID-19 created a health crisis with unprecedented social repercussions. Understanding the patterns linked to this pandemic and knowing how the phenomenon was collectively represented and faced in emotional terms provides us with a tool that offers added value for understanding how pandemics should be addressed within the educational sphere. In this sense, the continuity of teaching and the inter-disciplinary health support (physical, emotional, social, academic and communicative) that the university can offer will be key to support young people and make them aware of pandemics.

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