The lived experience of distance learning of medical students during the CoViD-19 pandemic in Italy: a descriptive phenomenological research

L'esperienza vissuta di didattica a distanza di studenti di medicina durante la pandemia CoViD-19 in Italia: una ricerca di fenomenologia descrittiva

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RIASSUNTO

La pandemia ha costretto le scuole di medicina italiane ad adottare molto rapidamente la formazione a distanza. A questo riguardo, manca ricerca qualitativa sugli effetti dell'adozione improvvisa di questa forma di didattica. Questo studio esplora da una prospettiva fenomenologica l'esperienza vissuta degli studenti di medicina circa la didattica a distanza durante la pandemia CoViD-19. E' stata condotta una ricerca fenomenologica descrittiva di saggi narrativi scritti a proposito di una lezione a distanza. I testi sono stati raccolti attraverso la piattaforma di e-learning e analizzati secondo il metodo di Giorgi. Sono state analizzate diciotto narrazioni. Sono emersi tre temi che descrivono l'esperienza vissuta dei partecipanti: l'apprendimento a distanza non è stata una scelta educativa ma una risposta obbligatoria alla pandemia, che ha sconvolto il normale corso della nostra vita; l'apprendimento a distanza può rendere accogliente la classe; l'apprendimento a distanza ti mette in una "bolla". Questi risultati confermano quanto già noto sull'apprendimento a distanza e aggiungono una nuova visione dell'importanza dei processi sociali e della presenza fisica degli studenti nello sviluppo della loro identità di studente. I nostri risultati sottolineano l'importanza dei programmi di formazione dei docenti sulle questioni dell'apprendimento a distanza.

ORIGINAL ARTICLES

ABSTRACT

Introduction - The pandemic forced the quick adoption of distance education in Italian schools of Medicine. Qualitative research about the sudden adoption of distance education is missing. This study explores from a phenomenological perspective the lived experience of medical students of distance education during the CoViD-19 pandemic.

Methods – A descriptive phenomenological research of written narrative essays about one distance lesson was conducted. Texts were collected through the e-learning platform and analysed according to Giorgi's method

Results – Eighteen narratives were analysed. Three themes emerged, which described the lived experience of the participants: distance learning was not an educational choice but a mandatory answer to the pandemic that disrupted the usual course of our lives; distance learning can make the classroom cozy; distance learning puts you in a "bubble".

Discussion – These findings confirm what is already known in general about distance learning and add a new insight on the importance of the social processes and physical presence of students in the development of their identity as a student. Our findings underline the importance of faculty development on the issues of distance learning.

Keywords. Continuing medical Education, Family Medicine, Antimicrobial Resistance, Antibacterial Drugs, Epidemiology

TAKE HOME MESSAGES

- The sudden transformation of a traditional curriculum into a distance education curriculum is not just a matter of technology, especially if the reason is the reaction to an emergency situation
- The loss of social contacts among students and of the physical presence at the University is perceived as a severe issue
- Special ad hoc programs of faculty development should be designed and implemented

INTRODUCTION

The CoViD-19 pandemic strongly increased the adoption of distance learning all over the world, in its different approaches. A recent Best Evidence in Medical Education (BEME) systematic review (Gordon, 2020) showed that the most common adaptation of medical schools to the control measures

of the pandemic was pivoting teaching activities to online learning, both in synchronous and asynchronous mode. Italian medical schools adopted the same strategy (Consorti, 2021). Distance learning has been widely investigated, as to its efficacy (O'Doherty, 2018; Pei, 2019) and perceived usefulness from students (George, 2014; Gill, 2019; Wong, 2020). Qualitative research also explored from a phenomenological perspective the lived experience of students with distance learning (Koukal, 2002; Murders, 2017) or with discourse analysis the construction of a social space in a virtual classroom (Anagnostopoulos, 2005). This body of research showed that distance learning is as effective as in presence learning for cognitive learning outcomes and that it relies on a rich and complex network of perceptions and relationships. During the critical time period of the CoViD-19 pandemic, in which the usual teaching activities were abruptly transformed into online activities, researchers investigated with quantitative methods students' preferences for distance learning (Lee, 2020; Kim, 2020) but few qualitative research was devoted to describe students' experience of distance learning (Langegård, 2021; Gruenberg, 2020; Khalil, 2020) and - to the author's knowledge - no phenomenological research described the students'

lived experience of this sudden transition in education. Descriptive phenomenology is aimed to seek the essence of a phenomenon through a detailed concrete description of what is "given" to the consciousness of the subject experiencing their own body and environment. In being so fundamental, the phenomenological investigation is helpful in understanding any situation, before any theoretic thematization.

The objective of this study is to describe and understand the lived experience of distance learning of medical students during the CoViD-19 pandemic, with the goal to provide useful indications to drive the process of sudden adoption during a situation of crisis and to inform the decision of what to maintain after the pandemic will resolve. Hence, the investigated phenomenon was the lived experience of medical students of distance learning during the lockdown period, and the research questions were:

- What are the elements that describe the phenomenon?
- What is the awareness of the students of their lived condition?

Is it possible to identify hints of the effect that the sudden interruption of the usual teaching and learning activities due to the pandemic had on students' lived experience of distance learning?

METHODS

This article followed the COnsolidated criteria for REporting Qualitative research (COREQ) (Tong, 2007)

Descriptive phenomenology

The method of descriptive phenomenology derives from the Edmund Husserl philosophical approach (Husserl, 1913/2002). The German philosopher advocated a new approach to knowledge, starting from the subjective experience of the "world-of-life", as it appears to consciousness. One of the main concepts in Husserl's philosophy is the "intuition", intended as the presence of the objects of the world as they are "given" to the consciousness as existents, in space, time and causal regularity. This presence is called a phenomenon. From this premise, the psychologist Amedeo Giorgi developed a procedure of qualitative research (Giorgi,1997) that is articulated in the 5 steps of collection of data, reading of data, breaking of data in parts, organization and expression of data from a disciplinary perspective, and synthesis of data.

The core steps are the reading and breaking of data. In the phenomenological method, data have the format of a text, either collected through interviews and subsequently transcribed or directly recorded as a writing of the subjects of study. The researcher must enter the phenomenological attitude (also called reduction), that is to put aside (bracketing, in technical terms) all previous knowledge or beliefs about the topic of interest. This is not literally possible, but the researcher can achieve this state with the awareness of his/her system of pre-conceptions. After several consecutive readings of the data, aimed to get the global sense, the researcher breaks the text into "meaning units", portions of text in which the researcher perceives a transition in meaning. The meaning is identified concerning a disciplinary perspective that must be declared in advance. The researcher rephrases the units in the disciplinary language, using the "free imaginative variation", to make the meaning more explicit. Finally, the emerging elements of the studied phenomenon are organized in a structure, that is the representation of the essence of the phenomenon.

Researchers' characteristics

FC is an academic general surgeon (MD), with a long-lasting experience of teaching in a medical school, GC is an osteopath (MSc, DO), teaching in a school of osteopathy. Both the researchers followed and delivered programs of faculty development with particular regard to curriculum plan-

ning, assessment methodologies, teaching/learning activities and systemic assessment of the effects of newly introduced educational strategies and had previous experience of phenomenological research. FC organized the task for the data collection as described in the data gathering section. Both researchers identify themselves as males. FC is the teacher of general surgery (6th year) and clinical methods (3rd year) in the participants' medical school, and therefore well known by the students. This could have introduced a possible selection or response bias. On the contrary, students did not know GC. Students were informed of the goal of the research and those who participated, agreed that the final aim was to improve the quality of their experience of distance teaching.

Context, sampling and ethical issues
The context of this research is the medical school of one of the medical Faculties of Sapienza University in Rome. The school completely pivoted in presence teaching to distance teaching at the breakout of the CoViD-19 pandemic, in March 2020. With only a few weeks short return to in presence education in October 2020, distance education continued till February 2021. We invited 3rd and 6th year medical students to contribute to this research with a written

narrative about their experience of a single distance lesson, on their choice. We issued a general invitation through the forum of the e-learning platform, with two recalls after one week each. The sampling was stopped when we reached data saturation. Therefore, the sample has to be considered a consecutive convenience one. Participation was on a voluntary basis, without any reward but formative feedback about their text. The texts were not anonymized for the two researchers, but we granted students' anonymity toward the faculty and the fellow students, as well as in the publication of results. The anonymization process started in parallel with the text analysis. Each text was renamed with a study ID and before the analysis all the information matching the ID with a specific student were deleted (e.g. students' name in the file metadata). The Institutional Review Board (IRB) of the University Hospital of Sapienza University of Rome issued a general authorization for educational studies (CE 297/2020 on May 14th, 2020). Since the anonymity was granted and the participation was voluntary, they did not require IRB review because the study did not meet the definitions of human research by the Italian regulation.

Data collection and units of study

We asked a written narrative to students and provided a set of questions to drive the writing. The questions are reported in Table 1. The instructions stated that they should not answer the questions as if they were being interviewed, but rather consider them as a list of possible topics. It was not mandatory to consider all the questions. The narratives were collected in electronic format (.doc or .pdf) from the e-learning platform and immediately anonymized, as already reported above.

We read and coded all the received 22 narratives, and after the 12th one, the analysis of textual data did not show new codes, so we agreed that the saturation was reached.

Data processing and analysis

The two authors acted independently as coders, with two meetings to share the codes and agree on a coding tree. Themes and categories were derived inductively from data, in a final meeting, after the decision that saturation was reached. The analysis was managed without the use of any specific software, highlighting the units with different colours in the word processing software and then attaching labels with the codes. Finally, participants were asked to provide feedback on the synthesis of data.

Validity and Reliability

We followed Lincoln and Guba (1985) to improve the trustworthiness of qualitative data. To strengthen the data credibility, we conducted frequent debriefings to discuss the meaning units, the categories, the themes and the overarching theme. To ensure dependability, we reported the study processes in detail. Confirmability was achieved through a shared process to confirm that findings were data driven.

Finally, participants' characteristics were reported to enable the transferability of the findings.

RESULTS

We received narratives from 22 participants, including 18 women and 4 men.

Eleven students attended the 3rd year and 11 the 6th year. They were all Italian, 14 of them were off-site students.

Findings

Three main themes emerged, with seven categories (Table 2). The three main themes have been merged in an overarching theme "A cozy bubble in the pandemic". In the following section we describe the themes and related categories. Table 3 reports examples of quotes for each category, translated into English by the authors. Table 4 reports the

original Italian text. The number in parenthesis identifies the participant.

Theme 1 - Distance learning was not an educational choice but a mandatory answer to the pandemic that disrupted the usual course of our lives.

Where were you? In which room? Alone? Briefly describe the furniture, devices and other objects you used. Were you comfortable?

Are you confident in using communication technology?

What was the structure and development of the lesson? At what pace? With what proposed activities?

What did you do during the lesson?

How exhausting was it? Was your attention level constant? Did you have any difficulty with perception?

Did you have any interactions with the teacher? With other students, also through other channels besides the chat line?

Did the time go by quickly or did you feel it "still"?

Do you remember particular emotions? Can you call them back and name them? Associate them with a particular moment of the lesson?

Did your mind ramble and generate thoughts, external to the lesson or associated in any way with it? Had you any other external sources of distraction?

Finally, express your general opinion on the lesson, especially on how "you lived it": did you feel "present"? in the same way you are present in the classroom? What is the difference?

Can you imagine a metaphor to represent this lesson? And a metaphor for distance learning in general?

Table 1. The questions we proposed to participants to drive their narratives.

Overarching theme	A cozy bubble in the pandemic.
Theme 1	Distance learning was not an educational choice but a mandatory answer to the pandemic that disrupted the usual course of our lives.
Theme 2	Distance learning can make the classroom cozy.
Category 2.1	The context in which distance learning takes place.
Category 2.2	Technology has strengths and weaknesses.

Category 2.3	Distance learning can make teaching and learning activities active.
Theme 3	Distance learning puts you in a "bubble".
Category 3.1	Distance learning can put you in a passive mood during teaching and learning activities.
Category 3.2	Distance learning can be strongly demanding from a mental and emotional point of view.
Category 3.3	Distance learning imposes a different kind of social relationship.

Table 2. Overarching theme, themes and categories.

This theme has no categories, it is based on the constant finding that almost all participants at the beginning of their text mentioned that they were forced to stay home and attend the lectures online because of the pandemic. From the point of view of the research questions, this theme expressed the perception that learning activities were usually smoothly integrated in a student's everyday life and the extent to which the pandemic disrupted the usual course of a day in life. Nevertheless, data showed also that distance learning became part of this new, dystopian normality.

Theme 2 - Distance learning can make the classroom cozy.

This theme groups three categories, that in different ways express the perception that the context in which distance learning takes place is more comfortable and more easily integrated in everyday life than in presence learning.

2.1 The context in which distance learning takes place.

This category gathers all the meaning units that describe the context from which the participants accessed distance learning. More often the participants were at home, and this was particularly relevant for those who are off-site. There were also instances of participants accessing from outdoors. The narratives usually highlighted a cozy environment:

the participants joined the lesson in a silent room, on a comfortable seat, with a large table on which they could take notes and look at a textbook or at the mobile phone or tablet. When needed, water to drink, the toilette and the kitchen for a snack were at hand.

2.2 Technology has strengths and weaknesses.

The pros and cons of technology were frequently mentioned. The participants reported both a poor and a good attitude and skill for technology, as well as the issue of the quality of the Internet connection. The most interesting finding was that technology was perceived as a tool that facilitates a cozy environment, in which they could move to stretch their legs or have a cup of tea without losing any part of the lesson. Furthermore, technology allowed them to attend a lesson also when they were ill, or a mishap would prevent them from being present in the lecture hall.

2.3 Distance learning can make teaching and learning activities active.

Participants perceived the educational value of distance learning in a contradictory way. In this theme, we put the category that groups the statement about the positive value of distance learning in facilitating a more active teaching. Many narratives report about the skill of the teacher in involving the class asking questions or seeking feedback. Participants felt more comfortable with the chat line of the teleconference environment as a channel of communication, rather than asking questions on voice. Many participants observed that they had no problems in maintaining the attention and they felt the time flowing quickly. Finally, it was easier to access other sources of knowledge during the lesson or also to interact with fellow students to comment and elaborate.

Theme 3 - Distance learning puts you in a "bubble".

This theme groups three categories and expresses the contradictory perception that students have of distance learning, especially in the difficult time of the CoViD-19 pandemic. The categories are:

3.1 Distance learning can put you in a passive mood during teaching and learning activities.

This category gathers units expressing the opposite perception of the category 2.3. We found instances of unprofessional behaviours of teachers, who were unprepared and unhappy to use the technology or - since they were not limited by the availability of the lecture hall - they suddenly changed the schedule of the lesson. We also found instances of a passive attitude from participants, like a "*spectator*", and the sense of isolation of attending the lectures alone in a room increased this attitude.

3.2 Distance learning can be strongly demanding from a mental and emotional point of view.

Many units expressed the perception of an intense both positive and negative emotional engagement during the activities of distance learning. The positive emotions were mainly associated with the cozy environment that put the participants at ease, and in these instances distance learning enhanced their concentration and ability to follow the lecture. The negative emotions were mainly frustration, due to the feeling of isolation, and anxiety of being called by the teacher to interact during the lesson. In these cases, participants declared that keeping the attention was harder than in presence.

3.3 Distance learning imposes a different kind of social relationship.

This is the richest category in highlighting the interaction between distance learning and the social limitations imposed by the pandemic. Even if participants acknowledged that distance learning was a solution to go on with teaching and to keep in touch with the rest of the classmates, they expressed a sense of strong isolation, "*like in a bubble*", without those social interactions that only could "*disconnect [me] from the endless cycle of breakfast-lesson-lunch-study-dinner-rest that has been going on since March without interruptions*" (P. 12).

The Internet allows a social environment, and it is commonly used by the students, but if the technology is the only mean of social interaction, then the lived experience is "*a bit like trying to look at me in the mirror in the dark*" (P. 1)

1. Distance learning is a mandatory answer to the pandemic	This year has been shocking for everyone: the rapid spread of the virus has forced all schools and universities to activate remote teaching methods (P.8) The lesson for me begins in the morning with the alarm clock, continues in the steps I walk and in the faces I see on the street walking towards the University, then it reaches its peak when the professor begins to explain (P. 6) It was a morning like any other, during the quarantine I didn't even have a clue what day it was. I woke up and passively looked at the schedule of lessons to know what was the subject (P. 4)
2.1 The context in which distance learning takes place	I am an off-site student, I live more than 500 km from Rome. I took advantage of the distance learning to go home. (P. 3) I was late and it was raining, I was on my mobile phone and I connected in the hallway, under the portico (P. 10) My class starts at 2 pm, on a large table in an empty living room. I always have the water bottle, mobile phone, pens and notebook. I think it's very comfortable to have such a large table because it allows me to have everything close at hand. Plus I'm in overalls, essential to be more comfortable! (P. 5)
2.2 Technology has strengths and weaknesses	I always start connecting a little earlier, I have a bad relationship with technology, I am clumsy and inexperienced, I am always afraid of doing something wrong, turning on the camera or activating the audio by mistake (P. 10) Technology allows us to be more present in class, for example for those who have a flu or a commitment that cannot be postponed (it can also be followed via a smartphone) (P. 8) I get up several times to stretch my legs or to have some tea while still listening to the lesson (P. 5)
2.3 Distance learning can make teaching and learning activities active	Every now and then [the teacher] stops to make sure that we are actually following, asks if everything is clear, if we see and hear everything. There is always someone who answers or asks questions by interrupting the teacher (P. 5) Many of my classmates began to interact with the teacher, in reality few dared to turn on the microphone, the chat instead was full of messages. (P. 2)

3.1 Distance learning can make teaching and learning activities passive	[The teacher] also added that online lessons bore him and made him fall asleep. In giving online lectures, teachers sometime seem Don Quijote fighting with windmills (P. 7) If I had to use one word to describe how I felt those two hours, that would be "spectator". (P.2)
3.2 Distance learning can be strongly demanding from the mental and emotional point of view	Emotions then fluctuated from a sense of frustration for not sharing the last moments with people who from simple colleagues have become friends, to a sense of relaxation in order to better understand and follow the lessons and to be able to spend time at home. (P.3)
3.3 Distance learning imposes a different kind of social relationship	It is a bit like trying to look at me in the mirror in the dark" (P. 1) to keep the camera and microphone off allows me to attend the lesson comfortably and without distractions, **like in a bubble**, but on the other hand I feel in an empty room, without friendly faces, exposed to a list of names who can hear everything I say. (P. 10) Face-to-face teaching is also an opportunity to get to know the teacher better, to share your concerns and doubts with other colleagues, to "disconnect" from the endless cycle of breakfast-lesson-lunch-study-dinner-rest that has been going on since March without interruptions. (P. 12)

Table 3. Examples of quotes for themes and categories. The author translated texts into English, the original quotes are reported in Table 4.

1. Distance learning is a mandatory answer to the pandemic	Quest'anno è stato un anno sconvolgente per tutti: la rapida diffusione del virus ha costretto tutte le scuole ed università ad attivare modalità di didattica a distanza (P. 8) La lezione per me inizia la mattina con la sveglia, continua nei passi che percorro ed i volti che scorgo per strada camminando verso l'Università, per raggiungere poi il suo apice nel momento in cui il professore inizia a spiegare (P.6) Era una mattina come un'altra, durante la quarantena nemmeno avevo più idea di che giorno fosse. Mi sveglio e guardo passivamente il calendario delle lezioni per sapere che materia mi avrebbe aspettato (P.4)

2.1 The context in which distance learning takes place	Sono una studentessa fuori sede, abito a più di 500 km da Roma. Ho approfittato della DaD per tornare a casa. (P. 3) Ero in ritardo e pioveva, ero col cellulare e mi sono collegata nell'androne, sotto il porticato (P. 10) a mia lezione inizia alle 14, su un grande tavolo in un soggiorno vuoto. Ho sempre accanto la bottiglia d'acqua, il cellulare, l'astuccio e il blocco degli appunti. Penso sia molto comodo avere un tavolo così grande perché mi permette di avere tutto a portata di mano. Inoltre sono in tuta, essenziale per stare più comodi! (P. 5)
2.2 Technology has strengths and weaknesses	Comincio a collegarmi sempre un po' prima, ho un cattivo rapporto con la tecnologia, sono goffa e inesperta, ho sempre paura di fare danni, di accendere per sbaglio la fotocamera o attivare l'audio (P. 10) La tecnologia ci permette di essere più presenti a lezione, ad esempio chi ha l'influenza o un impegno da non poter rimandare (si può anche seguire con uno smartphone) (P. 8) Mi alzo diverse volte per sgranchirmi le gambe o per farmi un tè continuando a sentire la lezione. (P. 5) mi è stato particolarmente utile seguire la lezione e nel frattempo cercare online approfondimenti riguardo a ciò che nel frattempo il docente spiegava. (P.12)
2.3 Distance learning can make teaching and learning activities more active	Ogni tanto [il docente] si ferma per accertarsi che stiamo effettivamente seguendo, chiede se è tutto chiaro, se si vede e si sente tutto. C'è sempre qualcuno che risponde o fa domande interrompendo il prof. (P.5) Molti dei miei compagni iniziarono a interagire con il docente, in realtà pochi si azzardarono ad accendere il microfono, la chat invece era piena di messaggi (P.2)
3.1 Distance learning can make teaching and learning activities more passive	[il professore] ha anche aggiunto che le lezioni online lo annoiano e lo fanno addormentare [...] i professori, in questa DaD, mi ricordano don Quijote che lotta con i mulini a vento (P. 7) Se dovessi usare una parola per descrivere come mi sono sentita quelle due ore, quella sarebbe "spettatrice". (P.2)

3.2 Distance learning can be strongly demanding from the mental and emotional point of view	Le emozioni quindi altalenavano da un senso di frustrazione per non condividere gli ultimi momenti insieme alle persone che da semplici colleghe sono diventate amiche, ad un senso di rilassamento per poter capire e seguire meglio le lezioni e per poter passare del tempo a casa. (P. 3)
3.3 Distance learning imposes a different kind of social relationship	il poter tenere fotocamera e microfono chiuso, mi permettano di seguire la lezione nel modo più libero possibile e confacente alle mie esigenze, con comodità e senza distrazioni, **come in una bolla**, ma dall'altra mi sento in una stanza vuota, senza facce amiche vicino, esposta ad una lista di nomi che possono ascoltare tutto ciò che dico. (P. 10) Ho registrato alcune note negative quali la mancanza del rapporto diretto e il confronto con le persone (P. 11) La didattica in presenza è anche un'occasione per conoscere meglio il professore, per condividere le tue preoccupazioni e i tuoi dubbi con altri colleghi, "staccare" dal ciclo infinito colazione-lezione-pranzo-studio-cena-riposo che va avanti da Marzo senza interruzioni. (P. 12) Cerco, soprattutto durante un colloquio faccia a faccia, continuamente lo sguardo del mio interlocutore. Questa mancanza l'ho avvertita molto questi mesi ed è la cosa che più recrimino a questa nuova modalità, in cui mi sembra ci sia una distanza incolmabile tra me e l'altro (P. 2)

Table 3. Original Italian quotes.

DISCUSSION

The result of this research offers valuable insight into the experience of students in distance learning. Participants declared to be comfortable with distance learning as an educational environment, although they acknowledge its limitations and the need of specific technological skills either for the student and for the teacher. Moreover, we believe that the most important finding is the participants' perception that all the educational activities in higher education and their role as a student are a building block of their self as a person. All that hampers this status, is perceived as a threat to one's own identity (Campbell, 2018).

These results are coherent with many other findings, showing that students overall were satisfied with distance learning, despite the problems that can arise because of technological failure. Aristovnik et al (2020), in a large international survey on 30.383 students found that students were satisfied with the ways in which their Universities reacted to the pandemic. Nevertheless, many of them expressed concern about their future professional career and studies, while this issue was not present in our data.

The feeling of isolation our students expressed, linked with the perception of a loss of opportunity is coherent with the concern raised by Cullum et al. (2020) about the threat to identity formation. In their commentary, these authors argued that mainly the suspension of clinical placements held the potential to negatively influence identity acquisition. None of our respondents explicitly addressed the issue of professional identity, rather they wrote about their not living the status of students to a full extent, including the social experience of the physical presence in the lecture hall and in the other environments of the university. Identity formation is a dynamic process achieved through socialization (Cruess, 2015) and it is disputable that a student, also at the last year, can display the attributes of a real professional identity. Our data seem rather to point to a developing identity, still strongly focused on the idea of being a medical student. Nevertheless, it will be important to follow up all the cohorts of students of the pandemic era, to detect defects in their professional image at an early stage.

Two studies on Italian medical students showed a rather high prevalence of psychological and mental issues (Meda, 2021; Quintiliani, 2021), mainly perceived stress but also a reduction in attention span and difficulty in studying. We found both the opposite instances of decrease and increase in attention, the latter linked to the cozy domestic environment. In the narratives there were no mention of psychological disorders.

The main limitation of this research, beyond its idiographic value implied in its qualitative nature, is that it relies on written narratives driven by a list of suggested topics. This could have limited the freedom of expression, preventing some themes to emerge, like the fear for their future or psychological issues. The study population is composed of students of the same curriculum, who knew one of the researchers, that is one of their teachers. This could have produced a distortion of some of the narratives in the sense of social desirability.

Our results have some implications for teaching activities. First, they highlight the importance of a focussed program of faculty development addressed not only to the technicalities of online teaching but also to the educational deeper aspects, connected with a virtual classroom. Virtual cannot be considered a synonym of false or fictitious, and it cannot be only the electronic transposition of what a teacher is used to do in a lecture hall. Virtuality is a type of reality (Dillembourg, 2002), with its own rules to be followed to grant an educational outcome. A second important implication, especially while the pandemic is still running, is to grant the students social learning, for example through online small groups activities. When possible, also asking the students to keep the video on can be useful to increase the sense of presence, to avoid the effect of "being in a bubble" (P.10), "in front of a mirror in the dark" (P.1).

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