

Original Article

# Postpandemic virtual tutorials: implications for the learning of occupational therapy students who are doing their professional practices

*Tutorías virtuales postpandemia: implicancias en los aprendizajes de estudiantes de terapia ocupacional que cursan sus prácticas profesionales*

*Tutoriais virtuais pós-pandemia: implicações para a aprendizagem de estudantes de terapia ocupacional que estão realizando suas práticas profissionais*

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## Abstract

**Introduction:** The effects of virtualization on the learning of higher education students are still uncertain, during the year 2022 face-to-face activities returned and others remained in the online format. The latter is the subject of this study.

**Objective:** To identify the scope and challenges of synchronous virtual tutorials, carried out in the post-pandemic period, based on the experience and the opinion of occupational therapy professors, and students from a Chilean university.

**Methodology:** A mixed methodology is used; information is produced through a focus group with 11 professors and through a questionnaire answered by 76 students. Analysis of the thematic content of the qualitative data and descriptive statistics of the quantitative data is carried out. For the integration of the information produced, data triangulation is used. **Results:** Synchronous virtual tutorials are useful for the acquisition of various types of learning such as the ability to articulate theory with practice. They are space that favors emotional support, offers mutual support to students, and allows the development of social thinking, reflection, and situated. Simultaneously, the findings show the preference by the

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students for individual learning over the need to produce learning and knowledge collaboratively in post-pandemic times. **Conclusions:** It is suggested to have a significant number and variety of methodologies in synchronous virtual tutorials and that these consider the contexts in which professional practice is carried out.

**Keywords:** Students, Faculty, Education, Distance, Occupational Therapy.

### ***Resumen***

**Introducción:** Los efectos de la virtualización en los aprendizajes de los/as estudiantes de la educación superior son aún inciertos, durante el año 2022 se retoman las actividades presenciales y otras se mantienen en el formato on-line. Estas últimas son objeto de este estudio. **Objetivo:** Identificar los alcances y desafíos de las tutorías virtuales sincrónicas, realizadas en periodo postpandemia, a partir de la experiencia y opinión de docentes y estudiantes de terapia ocupacional de una universidad chilena. **Metodología:** Metodología de carácter mixto, a través de un grupo focal con 11 docentes y por medio de un cuestionario contestado por 76 estudiantes. Se realiza análisis del contenido temático de los datos cualitativos y estadística descriptiva los datos cuantitativos. Para la integración de la información producida se utiliza la triangulación de datos. **Resultados:** Las tutorías virtuales sincrónicas son útiles para la adquisición de varios aprendizajes como la capacidad de articular la teoría con la práctica, siendo un espacio que favorece la contención emocional, ofrece apoyo mutuo a los/as estudiantes y permite el desarrollo de un pensamiento social, reflexivo y situado. Simultáneamente, los hallazgos dan cuenta de la preferencia por parte de los/as estudiantes por el aprendizaje individual por sobre la necesidad de producir aprendizajes y conocimientos de manera colaborativa en tiempos postpandemia. **Conclusiones:** Se sugiere contar en las tutorías virtuales sincrónicas con un importante número y variedad de metodologías y que éstas consideren los contextos en los que se realiza la práctica profesional.

**Palabras clave:** Estudiantes, Profesores Universitarios, Aprendizaje en Línea, Terapia Ocupacional.

### ***Resumo***

**Introdução:** Os efeitos da virtualização na aprendizagem dos alunos do ensino superior ainda são incertos, durante o ano de 2022 as atividades presenciais foram retomadas e outras permaneceram no formato online. Estas últimas são objeto deste estudo. **Objetivo:** Identificar o alcance e os desafios das tutorias virtuais síncronas, realizadas no período pós-pandemia, com base na experiência e opinião de professores e alunos de curso de graduação em terapia ocupacional de uma universidade chilena. **Metodologia:** Metodologia mista, com informação produzida através de um grupo focal com 11 professores e através de um questionário respondido por 76 alunos. É realizada análise de conteúdo temática dos dados qualitativos e estatística descritiva dos dados quantitativos. Para a integração das informações produzidas, utiliza-se a triangulação de dados. **Resultados:** As tutorias virtuais síncronas são úteis para a aquisição de vários tipos de aprendizagem, como a capacidade de articular a teoria com a prática, caracterizando-se como um espaço que favorece o apoio emocional, oferece apoio mútuo aos alunos e permite o desenvolvimento do pensamento social, reflexivo e

situado. Simultaneamente, os achados mostram a preferência dos alunos pela aprendizagem individual em detrimento da necessidade de produzir aprendizagem e conhecimento de forma colaborativa em tempos pós-pandemia. **Conclusões:** Sugere-se um número significativo e variado de metodologias nas tutorias virtuais síncronas e que estas considerem os contextos em que se desenvolve a prática profissional.

**Palavras-chave:** Estudantes, Professores Universitários, Aprendizagem Online, Terapia Ocupacional.

## Introduction

With the advent of the COVID-19 pandemic in 2020, higher education institutions (HEIs) were forced to virtualize their university programs to give continuity to the training activity committed to students (Baleriola & Contreras-Villalobos, 2021). With the control of the pandemic, as a result of the socio-sanitary measures implemented in the world, the HEIs resumed face-to-face activities in most of their academic activities, integrating virtuality and hybrid or mixed activities in their daily work (Vela, 2021).

In this context, in 2022, an occupational therapy school in Chile resumed its activities, preferably in person, although it maintained virtual activities in the last year of training. At this level, students take the subjects of professional practices I, II, III, and IV, which are developed in 2 modalities: Clinical and tutorials. The first corresponds to the care of individuals, groups, and/or communities by students, in a care center in the area of health, education, social protection, justice, and/or work. This activity during 2022 is presented in telehealth, face-to-face, and mixed modality. Each professional practice lasts 9 weeks with a dedication of 22.5 chronological hours per week. This activity has the support of a guide professor who usually belongs to the practice center that receives the student preparing the student work plan, monitoring and providing feedback on the intervention and administrative activities carried out by the students, and evaluating performance in professional practice.

The second is synchronous virtual tutorials for 3 students, who are accompanied by a tutor supporting students to resolve concerns regarding the approach to problems typical of professional practice. Therefore, they are based on the problem-based learning (ABP) methodology (Rodríguez Martínez et al., 2016). Tutorials are once a week and last 45 min. The teaching accompaniment focuses on the construction of a situational diagnosis that will be presented in the final evaluation (oral exam) of the subject. The professors who carry out the tutorials usually participate in other courses contemplated at other levels in the study plan of the career.

The situational diagnosis is an instrument that seeks the permanent reflection of the practice that is carried out, betting on the ability to include the perspective of all the actors involved in all stages of the intervention process, articulating different knowledge and intervention tools, to solve the most felt problems of the patients (Valderrama et al., 2015). Based on Bianchi & Malfitano (2017), this instrument is a theoretical/methodological proposal that seeks to collaborate in the training of students with solid foundations in a social perspective of occupational therapy, with critical

thinking and an ethical basis supported by human rights. These aspects are in the graduation profile of the career.

To guide the reflection of the practice, this instrument addresses the following topics: intervention perspective, an institution where the practice is developed, design and synthesis of the evaluation of the chosen situation, problematization, intervention proposal, and evaluation of the intervention results.

It is important to indicate that students begin to learn this instrument gradually from the third year of their degree, and are always linked to subjects that contain a clinical component in their structure. In the case of professional practical subjects, this instrument defines the expected learning outcomes in the field of intervention:

- To establish a situational diagnosis, based on the occupational needs of the subjects, groups, and/or communities, and the institutional, social, economic, and cultural conditions that affect the various occupational problems.
- To implement relevant, coherent, and viable individual, family, community, or Institutional intervention strategies according to the situational diagnosis made.

It is important to indicate that there is a third activity contemplated in this subject that corresponds to the supervision of professional practices, in which the tutor monitors the process of professional practice of each student together with the respective guide professor. This activity is carried out at least once during each professional practice and allows us to identify if the process is presented fluidly or requires some adjustments to achieve the learning results of the subject.

### **Theoretical foundations of the subject professional practices**

Professional practices are based on the principles of service learning (*ApS-aprendizaje servicio*) since it facilitates building learning, and implementing actions that solve community problems. At the same time, it develops in the participants a critical and above all ethical attitude and also allows the human dignity of the most vulnerable to be rescued (Zayas Latorre et al., 2018; García Romero & Lalueza, 2019). It also helps to identify occupational injustices to seek alternatives for the exercise of the rights of occupational therapy patients (Hansen, 2013). Therefore, the ApS is a strategy that is characterized by offering social utility (Sandia & Montilva, 2020) since it allows joining forces and solving felt problems collaboratively between those involved and their communities (Uribe Sepúlveda, 2018; Martínez-Abajo et al., 2022).

To achieve the aforementioned purposes, tutorials have been included in this subject since they would offer order and structure to learning within the ApS reference (Jouannet et al., 2012) and they would play an important role in reviewing the ethical issues involved in the intervener-patient relationship (Gezuraga Amundarain & Malik Liévano, 2015). On the other hand, Díaz Camazón & Morrison (2016) propose that they would allow analyzing what has been done in practice, emphasizing that the students are the producers of learning. According to what Páez Sánchez & Puig Rovi (2015) mention, tutorials are a space to promote the reflective, dialoguing, and critical capacity of students. Teixeira et al. (2018) propose that when there are spaces for reflection on professional practice such as synchronous virtual tutorials, the learning expectations of occupational therapy students are met. It is important to highlight that

virtual tutorials are increasingly accepted in training processes since they facilitate learning by adapting to the rhythms and times of the students and to sociodemographic conditions that make access to education difficult (Guerra-Martín et al., 2017).

### **Objective of the study**

Resuming the context of this research, it is necessary to state that most of the students and teachers who participate in this training activity have experienced two years of face-to-face training (2018-2019), then two virtual years (2020-2021). and this last year in a hybrid mode (2022), which accounts for several changes that could affect the learning processes. This tutoring space is considered an opportunity to understand these processes from the perspective of its protagonists. Thus, this study seeks to identify the scope and challenges in the teaching-learning process of synchronous virtual tutorials carried out in the post-pandemic period based on the experience and opinions of occupational therapy professors and students from a Chilean university in its three locations.

### **Methodology**

Based on the proposal of Chaves (2018), a concurrent qualitative-quantitative mixed methodological strategy was used in this study. The qualitative aspects are necessary because it is interesting to know the effects of learning synchronous virtual tutorials from the participants' experience. The quantitative aspects are considered relevant to complement and expand the description of the opinions of the participants with statistical data.

### **Study participants**

For this study, we considered two key actors: professors and students. The participation of the professors was constructed by convenience sampling. The inclusion criteria were professors who have carried out synchronous virtual tutorials during the first professional practice of 2022 and have at least one year of experience in this work. A direct invitation was made via email and phone call. The 11 professors invited participated in the study: 5 of them belonging to the Concepción campus, 3 to Viña del Mar, and 3 to Santiago. Nine are women and two are men. The average period as tutors of the academic activity analyzed is approximately 2 years.

In the case of the students, a simple random sampling was carried out (Otzen & Manterola, 2017), through the following procedure: during July and August of 2022, the questionnaire was sent 2 times to personal and institutional emails to all the students who attended the first rotation and belong to the 2022 cohort study, and all the professors of this activity were asked to allocate time during the tutorials to the students so that they can respond the instrument.

Finally, we had 76 students participate, representing 25% of the possible universe. Of the total responses received, 44.7% correspond to Viña del Mar (n=34), 28.9% to Santiago (n=22), and 26.3% to Concepción (n=20).

We found that 75.7% (n=56) of the students attended between 5 and 9 tutorials during their first professional practice, 11.8% (n=9) attended 4 tutorials, and 14.5% (n=11) attended between 1 and 3 tutorials. All the students have participated in at least one of the tutorials.

The main areas of action where the students carried out their first professional practice were: 30.3% (n=23) in mental health centers and/or units, 21.1% (n=16) in physical health centers and/or units, 21.1% (n=16) in organizations linked to social protection and 9.2% (n=7) in the field of regular and special education

### **Information production instruments**

In the case of the *professors*, one synchronous virtual focus group was held on the Teams platform during August 2022, which lasted 1.5 hours. The instrument used for its development was a thematic script built from the predefined categories of analysis: strengths, weaknesses, and proposals for improvement. This instrument was validated by expert judgment.

In the case of the *students*, an ad-hoc questionnaire was applied for the study, administered online since the subject is taught in 3 campuses located in 3 cities in Chile: Viña del Mar, Santiago, and Concepción. Therefore, this method is decided to facilitate the participation of all the students who take this training activity. The questionnaire was validated by expert judgment in 3 discussion groups made up of 8 people each. It was created on the Google forms platform and consists of 3 parts:

*Part 1.* General identification data of the participants.

*Part 2.* Twenty questions were answered through the Likert scale, distributed as follows: (1) I strongly disagree, (2) I disagree, (3) I don't know, (4) I agree, (5) I strongly agree. The dimensions consulted in part 2 of the questionnaire are made up of items that determine the question asked, which are presented in the following Table 1:

*Part 3.* Consisting of 6 qualitative questions that address the strengths, weaknesses, and proposals for improvement regarding tutoring and supervision.

Since the questions related to the supervision refer to data linked to the practice centers and guide professors whose actions are outside the field of action of what is done in the tutorials, they were not included in the analysis of this study.

### **Analysis procedure**

The analysis of the information was carried out in 3 phases. First, an analysis of the thematic content of the focus group of professors and the qualitative responses to the questionnaire answered by the students were carried out (Díaz Herrera, 2018). The focus group is recorded and transcribed textually. The short answers to the questionnaire are extracted textually from the Google forms platform for processing. A floating reading of the texts is carried out separately, then the texts are codified and categorized together, in a single thematic group. Subsequently, the information was integrated by searching for relationships between categories and examining the contextual relevance of the reports from the questionnaire and the focus group (Gomes Campos & Ribeiro Turato,

**Table 1.** Structure of the dimensions and items of quantitative data of the questionnaire.

<b>Dimension</b>	<b>Items</b>
<b>1. Content</b>	1.1. Topics covered during the tutorials
	1.2. Relationship of topics with professional practice
	1.3. Contents and their relationship with the professional practice exam
<b>2. Methodology</b>	2.1. Ability to analyze the actions carried out in professional practice
	2.2. Contribution to the construction of the situational diagnosis
	2.3. Contribution to the professional practice exam
	2.4. Support material in tutorials
<b>3. Structure and modality</b>	3.1. Quantity of tutorials
	3.2. Duration of each tutorial
	3.3. Organization of tutorials
<b>4. Impact on learning</b>	4.1. Assessment design and professional practice
	4.2. Strategic reference and professional practice
	4.3. Theoretical foundations and professional practices
	4.4. Recognition of errors and opportunity to correct them
	4.5. Learning for professional practices
	4.6. Social and situated thinking
<b>5. Supervision</b>	5.1. Performance in professional practice
	5.2. Strengthening the social perspective of occupational therapy
	5.3. Exchange of knowledge between training received and practice
	5.4. Clarifying doubts of the guiding professor

**Source:** our elaboration

2009). Once these relationships were established, we proceeded to identify the themes that group them. Finally, as a result of this procedure, two central themes are defined: meaningful learning in tutorials and teaching/learning methodologies implemented in tutorials.

The second phase corresponds to a descriptive statistical analysis of the quantitative questions of the questionnaire, focused mainly on the variable frequency and percentage, to identify the magnitude of the assessment that the students make of each item consulted.

In the third phase, a triangulation of the qualitative and quantitative data is carried out to integrate, expand and deepen the different appreciations, especially the differences, and similarities that the participants give to the analyzed experience (Okuda Benavides & Gómez-Restrepo, 2005).

### **Ethical considerations**

All the participants read and accepted an informed consent form with the objectives of the research and declared their free and voluntary participation. It was also informed that participation does not involve any physical risk. Finally, it is indicated that anonymity will be kept. For this reason, the results are anonymized and the name of the HEI in which the study is carried out is omitted.

## Results

The structure of the results was guided by the emerging categories of the qualitative data produced in the analysis process in which the quantitative data were integrated, as long as they were related to the qualitative data. The following Table 2 lists the themes, categories, and subcategories emerging from the analysis and their relationship with the dimension and the respective quantitative data item.

**Table 2.** Structure and integration of qualitative and quantitative data of the results.

Themes	Categories	Subcategories	Dimension	Item
<b>Significant learning</b>	Group learning vs. individual learning	Assessment of group learning	-	-
		Threat in learning	-	-
		Duration of the tutorials	3. Structure and modality	3.2 Duration of each tutorial
	Social thought and its relationship with professional practices	Reflection on practice	4. Impact on learning	4.3 Theoretical foundations and professional practices
		Relationship between tutorials and actions in practice	4. Impact on learning	4.5 Lessons for professional practices 4.4 Acknowledgment of errors and opportunity to correct them
		Continuity of the training received	4. Impact on learning	4.4 Development of social and situated thinking
		Tensions in the appropriation of the situational diagnosis	Domain of situational diagnosis	1. Contents
	4. Impact on learning			4.2 Assessment design and professional practice
	4. Impact on learning			4.3 Strategic reference and professional practice
	Emotional containment space	Negative emotions	-	-
Occupational therapy person		-	-	
<b>Teaching-learning methodologies implemented in tutorials</b>	Grouping students		-	-
		Trigger questions	2. Methodologies	2.2 Contribution to the construction of the situational diagnosis
	Strategies to support learning from the teaching experience	Exam simulation	2. Methodologies	2.3 Contribution to the professional practice exam
		Oral presentation	2. Methodologies	2.1 Ability to analyze the actions carried out
	The teaching function put tension	Material delivery	2. Methodologies	2.4 Support material
		Diversity of opinions	1. Contents	1.3 Contents and their relationship with the professional practice exam
		Experience and specific knowledge of the teacher	-	-
		Objective knowledge of the tutorials	3. Structure and modality	3.3 Organization of tutorials

**Source:** our elaboration.

The results of the analysis are presented through the interpretive description of the qualitative data rescued textually from the reports of the students and



professors, which are defined by the research team as representative and relevant to support the interpretation. The quantitative data is included to complement and strengthen the similarities or differences with the qualitative data. To identify whether the assessment of the item consulted by the students is positive or favorable, the frequency of responses considered to I agree (4) or I strongly agree (5) was added. On the contrary, the sum of the frequencies of the responses that I disagree (2) or I strongly disagree (1) is established as the unfavorable appreciation of the students regarding the item consulted.

To identify the qualitative data, a code is established that accounts for its origin, that is, to which participant it corresponds and to the source in which the information is produced. In the case of professors, the acronym GFP (*grupo focal profesor/teacher focus group*) and a random correlative number are established. In the case of students, we used the acronym CE (*cuestionario de estudiantes-student questionnaire*) and a correlative number that corresponds to the number automatically assigned by the Google forms platform at the time each student answered the questionnaire. Quantitative data is included in frequency values and percentages. The most relevant results of this study are presented below.

### **Significant learning in tutorials**

In this theme, 4 sub-themes linked to the teaching-learning experience are displayed, some favorable aspects and others that stress this process during synchronous virtual tutorials will be noticed.

#### *Group learning vs. individual learning*

Tutorials are seen as a space that allows group learning, in which the exchange of experiences and realities between colleagues is assessed, nourishing their learning processes and professional practice:

*[...] the children are realizing that their classmates are going through similar processes and very interesting spaces are generated in terms of how they advise each other..., on how that exercise is very interesting (GFP5).*

*There are spaces for dialogue, where you can give an opinion, in addition to listening to the experiences of other colleagues (CE21).*

Simultaneously, for some students, group learning is perceived as a threat to individual learning since they would not be able to resolve their doubts and go deeper into resolving them:

*When they are in groups, we cannot elaborate enough and the waiting time is very long and there is no more individual explanation (CE38).*

Faced with this situation, professors comment that the experiences of other classmates would not strengthen their process, especially when students carry out their professional practice in different fields:

*Perhaps the students are in a hurry to resolve their doubts, to know how to resolve what is happening to them in the clinical field, which rescues the experience of the student who was in a similar place, but not in a place that is too different (GFP10).*

The academics and students mention the challenge of the need to install the substantive value that group learning has in the formative processes of the last year:

*[...] there is a huge challenge in us, in which this small and brief space can effectively intention the beauty of the group, I think that one of the risks is that we do not have the ability, the desire, or the tools, to intention this group work (GFP5).*

*I would add more dialogue between colleagues, contribute among ourselves, and accept and give suggestions (CE18).*

The participants perceive that the duration of the virtual tutorials is a critical element since as it is currently proposed it would be limited for the development of collaborative strategies because this distribution is not enough to resolve the concerns of each one and the dedicated time is not enough to achieve the purposes that the participants:

*Being in groups, the same amount of time and attention is not given to each student (E36).*

*The other thing is the issue of time, it is a factor because it is not possible to deepen with all the students at the same level, some are better at explaining and others are not... I think that time is a factor for them to decide to have something individual and not group (GFP10).*

*Now time is short, we should have an objective, I don't think it will allow us to see the diagnosis, and the analysis of the practice, in addition to performance, and developing skills (GFP7).*

We found that 60.5% of the students indicated that the duration of each tutorial is adequate. However, 36.8% consider that the duration of each tutorial is not enough to promote learning.

Group learning is put in tension since apparently, it has not been possible to transmit its value to the students. At the same time, the methodologies used by the academics would not be precisely placing the following as the central axis for this process: interaction between the members of the group, the accumulated experiences of the students, and their exchange in a guided and constructive way.

### ***Social and situated thought in virtual tutorials and its relationship with professional practices.***

Virtual tutorials are identified as a necessary space for reflection and analysis of professional practice:

*[...] reflection and analysis that occur in tutorials, which often do not occur in professional practice spaces, it has been stressed a lot by the kids who have been in tutorial spaces, they take the time to analyze points that may be in the same praxis (GFP1).*

*It is a space for conversation about the experiences in the practice center and the theoretical content of the subject (CE45).*

These data are reinforced by the opinions of the students who 82.4% (n=55) consider that the tutorials facilitate the understanding of the theoretical foundations of the actions they carry out in professional practice.

The participants carry out an enriching relationship between the tutorials and the actions carried out in professional practices:

*[...] tutoring is a space that facilitates this exercise of awareness in which the student is faced with decisions,... herself is taking charge of what herself does in practice (GFP6).*

*The professor who conducts the tutorial has another point of view regarding the practice, so it is in favor, of being able to consider and apply it in practice (CE72).*

The previous reports are complemented by the opinion of the students, who 73.7% (n=56) consider that virtual tutorials strengthen learning in professional practice. At the same time, 82.9% (n=63) of the students indicate that they allow them to recognize and correct errors to improve their performance in professional practice.

The participants identify that virtual tutorials strengthen the development of social and situated thinking. This topic is important since the proposal of a social perspective in occupational therapy is unusual in the practices of the professional practice centers to which the students attend. In this sense, the tutorials become the place that allows to articulate and give continuity to the training received by the students in said scenarios:

*It allows students to understand the difference between what we are transmitting in terms of training projects, with the different realities of the centers (GFP2).*

*To maintain the social perspective that the U has (CE60).*

The newly exposed narratives are reinforced, while 78.9% (n=60) of the students indicate that virtual tutorials help to develop social and situated thinking, while 9.2% (n=7) consider that tutoring would not achieve that purpose.

### *Tensions in the appropriation of the situational diagnosis*

The tutorials would allow the students to master the items of the situational diagnosis that they build during their professional practice:

*I think that it allows the student to review each of the items in preparation for his diagnosis (GFP10).*

*A space to clarify the direction of our Situational Diagnosis, allowing us to have the opportunity to deepen into and search for concepts or understand new perspectives that we were not considering (CE4).*

The foregoing is confirmed by the opinion of the students, who 88.2% (n=67) indicate that the tutorials address the necessary topics for the construction of the situational diagnosis. However, 63.2% (n=48) of the students indicate that virtual tutorials contribute to the construction of the evaluation design and its application in professional practice. However, 27.6% (n=21) indicate that they do not contribute to this purpose, 56.6% (n=43) state that they collaborate adequately in the design of the strategic reference and its application in professional practice and 39.4% (n=30) expressed the opposite.

These data account for the need to order the tutorials based on the structure of the situational diagnosis, especially considering that this instrument proposes the development of situated rationality of the occupational problems that the students address, and for this, a concrete practice on which to reflect is essential. However, it is necessary to deepen the contents and methods associated with the evaluation design and the strategic reference, issues considered sensitive by the students since they would have negative repercussions on their performance in professional practice.

### *Virtual tutoring as a space for emotional support for students*

Tutorials are meant as a containment space for managing negative emotions that sometimes occur in the context of professional practice, including insecurity, anguish, and anxiety. At the same time, it is valued as a space that allows caring for the occupational therapist in training as a human being, to better deal with the intervention processes they carry out:

*The occupation therapist as a person seems important to me, ... this containment, ... I think it is this way of being present, of accompanying (GFP3).*

*It is a new process for us who have performed virtually,... since it generates a lot of anxiety and anguish, which harms mental health, and also the performance of the practice (CE65).*

## **Teaching/learning methodologies implemented in tutorials**

This theme is made up of two sub-themes that allude to the different learning strategies implemented by professors during tutorials and the appreciation that exists around the different participants and roles in this process.

### *Strategies to support learning from the teaching experience*

In general, the virtual tutorials analyzed in this study do not present a uniform thematic structure nor do they have standardized teaching-learning methodologies. In this context, the results account for a variety of learning support strategies. For example, some professors group students according to the field or according to the life cycle of the patients that assist in professional practice, to make the discussions pertinent:

*I try to group them by area, and by life cycle so that the reflections or analysis that I can give to the students are good for the 3 students (GFP9).*

Another strategy used by the professors is trigger questions, to provoke the exchange of experiences and theoretical reflection on practice:

*I feel that what has been good is asking theoretical questions about the process, and addressing the difficulties of each of the students (GFP2).*

The previous data is related to the fact that 75% (n=57) of the students consider that the methodologies used favor the ability to analyze the actions that are developed in practice. In any case, 19.8% (n=15) indicated a contrary opinion.

Along the same lines, some professors use questions that simulate what would happen in the final exam of the subject, guided by each item of the situational diagnosis:

*The tutorials of my first professional practice, it was carried out by a professor in which I explained in detail and gave examples of each point of the diagnosis. I find that this point was fundamental for the performance of the SD (CE56).*

*When we say that they are going to the items of the situational diagnosis, I am referring to reflecting on these themes... I like to do that, almost doing a simulation of the exam (GFP6).*

This data is consistent with the fact that 73.7% (n=56) of the students affirm that the tutorials contribute to the construction of the situational diagnosis. Although 21.1% (n=19) have the opposite impression on this topic. On the other hand, the set of methodologies described in this study seems not to be sufficient for a better performance of the students in the final exam since only 57.9% (n=44) of them believe that the methodologies used in the tutorials contribute to this end, while 32.9% (n=25) believe that they do not.

Other academics include a brief oral presentation of the evaluation processes that take place in professional practice:

*That they make a presentation like in week six or seven, through a table, the evaluations appear, ... and what they prioritize and from there detach the methodological reference (GFP2).*

Finally, several professors deliver material aimed at reinforcing various topics such as public policies, conceptual foundations to justify decisions in the situational diagnosis, the areas in which the practices are developed:

*I also have a folder and I also offer them,... specific models,... paradigms, to justify their situational diagnoses and clear clinical guidelines (GFP8).*

This is a sensitive issue for students who point out that they provide it with material to update and refresh their knowledge:

*To provide the material according to the practice areas,... I think it is important to reinforce the content, with material from professional experts in the area (CE10).*

In addition to the previous story, 90.8% (n=69) of them considered relevant the delivery of support material for the construction of the situational diagnosis during the tutorials.

In summary, the professors use various teaching methodologies, which emerge from their experience, from the type of problems that arise in practice, or that are demanded by the students, who deeply appreciate that the problems can solve the doubts raised.

### *The teaching function put tension*

For the students, the differences of opinion of the different professors involved in the professional practices are considered as hindering learning since it tends to confuse them for decision-making in the intervention and also in the formal evaluative aspects that include this course:

*[...] there are theoretical disagreements in the practice center and what is exposed by the tutoring teacher, which generates confusion and is reflected at the time of taking the exam, in which professors have a different perspective from the one delivered by the professor from the Practice and Tutoring Center (CE55).*

*It is that all the professors have a different strategy to do our tutorials, so it happens to me that they have told me a lot, ok you do it differently (GFP10).*

Regarding this situation, 69.7% (n=53) of the students indicate that the topics covered in the tutorials contribute to a better performance in the professional practice exam and 22.4% (n=17) consider that this is not the case.

In any case, it is important to indicate that for other students the fact of listening and sharing different experiences and knowledge with the professor and classmates involved in this experience is considered an added value:

*That the professor who carries out the tutorial has another point of view regarding what is worked on in practice, so it is a point in favor, of being able to consider and apply it in practice (CE72).*

On the other hand, the students stress the need for each assigned tutor to have experience and specific knowledge of the area in which each student develops their professional practice:

*I feel that each professor should be assigned students who are doing professional practice in the same area that the tutor has specialized in, so that they help, and give tips and solutions more consistent with each area (CE40).*

The role of the professors placed in tension implies that they make a self-criticism around the methodological and style differences that can cause obstacles in the learning process. One of the aspects that are identified as necessary to review and correct is whether all the actors involved know the objectives of the tutorials and reach common minimum agreements regarding the structure and organization of the tutorials:

*A while ago they said the objectives must be clearer for the students, without a doubt, but for us as well and for the guiding professor because I think that there are sometimes tensions regarding the meaning of the tutorials (GFP3).*

*I think our weakness is that we haven't deepened on it, we haven't had a lot of discussion among those of us who do the tutorials, to shape it that allows a better response for the student, but also allows all of us to have the same tools, with the same resources to develop the tutorial (GFP5).*

In this same area, 60.5% of students (n=46) consider that the tutorials are well organized in terms of their content and learning methods, while 34.2% (n=26) indicate that they do not contribute in this sense. These data show the need to review the organization and objectives of virtual tutorials.

## **Discussions**

In this section, we are interested in showing the similarities and differences with previous studies, but above all, offering ideas that allow progress in solving the critical aspects discovered in this study, highlighting the value of virtual tutorials in a post-pandemic context.

## **Tensions on the contribution of tutorials to learning**

The findings of this study, like those presented by Klug & Peralta (2019) and Mayor Paredes (2020), indicate that synchronous virtual tutorials contribute comprehensively to professional training since they collaborate in the articulation of theoretical-practical aspects and encourage the development of students' attitude skills. Similar to Castellanos Ramírez & Niño Carrasco (2020) and Brown et al. (2022), the findings presented reveal that synchronous virtual tutorials favor learning, being a participatory space that allows sharing experiences, favoring mutual support between teachers and students, and managing the emotional aspects involved in the practice. For some participants, virtual tutorials promote values such as solidarity and empathy between colleagues (Valderrama Núñez et al., 2021), and allow self-recognition as social and interdependent beings in their training process (Valderrama Núñez, 2020).

This learning is translated into improving the domain of situational diagnosis, internalizing the foundations of the actions that are carried out in professional practice, and, finally, strengthening the development of a social and situated thinking of the occupational problems that the students address. These aspects are consistent with those indicated by Martínez-Bello & Martínez-Rojas (2016) and Naidoo et al. (2018) when spaces for reflection are offered to students in such a way that this helps them to transfer this learning to their professional practice.

On the other hand, the negative opinions of some participants in this research, regarding the assessment of the individual in learning, the objectives and structure of the tutorials, the diversity of methodologies implemented, the teaching function, and the contribution to the final evaluation of the subject, exemplify what was pointed out by Martínez-Clares et al. (2022) about that tutorials are a controversial academic activity because their purposes are often not clear for both professors and students, and that as an academic activity, sometimes it does not receive the attention or appreciation it deserves from the university world. To advance in a broader and fairer understanding of virtual tutorials, it is essential to communicate to all those involved about its objectives, its structure, and its value in the training process of future professionals.

## **The need to rescue collaborative learning in tutorials**

The results presented stress what was sustained by Rodríguez Martínéz et al. (2016), who indicate that the (ABP) allows for building a sense of cooperation by generating learning with the peer group, and by Lexén et al. (2018) who propose that the combination of PBL and collaborative learning during tutorials would increase motivation and the development of teamwork skills. The results show the need to reinforce that individual learning is strengthened when it is with other actors who have different opinions and perspectives on a particular issue. Above all, when higher education is permeated by neoliberal logic that reproduces individualism, competitiveness, and efficiency (Carrasco-Madariaga & Apablaza-Santis, 2017; Fleet Oyarce et al., 2020; Santos, 2022), to the detriment of the collaborative construction of learning.



Although it is not the purpose of this study to determine the reasons for students' preference for individual learning, we could say that this situation is an unwanted effect of the pandemic since they received 2 years of virtual education in a context of partial and/or total confinement, which hindered collective and interactive teaching experiences and the impossibility of generating contacts with colleagues, professors and university authorities, which would translate into a loss of skills and sense of cooperative learning by the students.

In any case, according to the findings presented and similar to what García-Chitiva (2021) proposes, synchronous virtual tutorials are appreciated for being a space that promotes the development of collaborative skills among them. For this reason, it is important to maintain and deepen the use of interactive methodologies that transform the group into a team willing to learn together (García Zapata & Gaviria Cano, 2021). A concrete example for these purposes would be the construction of capsules by the students that contain their doubts, concerns, and successes to be used as discussion triggers. Another alternative is to make oral presentations of the elements of the situational diagnosis, built with the participation of all the students, based on the case presented by one of them, and then rotate the same exercise with the case of another and so on.

## **Conclusions**

This work has allowed us to review the use of synchronous virtual tutorials in the professional practice process of occupational therapy students, rescuing their value, benefits, and challenges for improvement. It is suggested that, for the optimal development of virtual tutorials, it is essential to have a significant number and variety of methodologies that allow the diversity of teaching/learning styles of students and professors and that adapt as best as possible to the reality of the contexts in which professional practice is carried out. In such a way that the homogeneity and standardization of reflections and learning are avoided because otherwise the analytical and problematizing capacity of practical experiences by teachers and students could be diminished. Therefore, we invite you to investigate and systematize new alternatives and combinations of teaching strategies to improve learning processes in the final stages of professional training, promoting higher quality and socially relevant processes.

Finally, the need to investigate post-pandemic university education in students who have experienced different modalities (face-to-face, virtual and mixed) is outlined, considering the pedagogical, emotional, and relational aspects of the teaching-learning process since the continuous experienced changes encourages to know in greater depth their implications for students and university professors in such a way to make the adjustments so that the training experience is significant and valued by all those involved and obtain the greatest benefit from each of these modalities.

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