FACE-TO-FACE TEACHING: THE OPINION AND THE COMMITMENT OF THE STUDENTS OF PHYSIOLOGY AND PATHOPHYSIOGY III IN THE PHARMACY DEGREE OF THE UNIVERSITY OF BARCELONA

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Abstract

Although university teachers and students made a significant effort to adapt to a virtual scenario during the pandemic, face-to-face teaching is considered the priority system at the University of Barcelona. However, after the pandemic period, the presence of the students in the classroom has been clearly reduced. The teachers of the subject of Physiology and Pathophysiology III of the Pharmacy Degree of the University of Barcelona have designed a survey to capture the degree of satisfaction of the students about the development of face-to-face teaching tuition and to investigate their commitment to attend the classes in the classroom. The students answered this survey on the day of the final exam. The number of students in the course 2022-2023 is 313 and 95 % of them (296 students) answered the survey, which was voluntary and anonymous. In the analysis of the results obtained, we have differentiated between the students who coursed the subject for the first time (242 students) and those who failed in previous academic years and enrolled for the second or the third time (46 students).

Results indicated that the students valued positively face-to-face teaching, as 94% of all the students who answered the poll rated "quiet" or "a lot" this tuition. If we consider only the students who matriculated the subject for the first time, the degree of satisfaction increased to 95% while it decreased to 90% when the students that already coursed the subject before were assessed.

When they were asked about their commitment to assist the lessons at the classroom, with the question "How often have you attended the face-to-face classes?", 77% of the students answered "quite" or "a lot". Again, if we consider the students who coursed the subject for the first time, this value increased to 81% and decreased to 61% for those who were matriculated in the subject after failing it the previous year. The main reasons that they argued for not assisting to the classes were mainly 1) lack of time due to other continuous assessment exams and activities and 2) working hours. Only 1.7% of the students adduced their absence from the classroom to reasons related to the teaching quality.

In conclusion, the students are in line with our university's face-to-face teaching methods, as they continue to positively value classroom teaching, despite having lived through the pandemics, when they took online classes. Their responses to the survey show us that students of the Pharmacy Degree may feel overwhelmed with the activities and exams scheduled during each term, the lack of time the reason for not attending regular face-to-face classes every day.

Keywords: face-to-face classes, survey, teaching methodologies, class attendance, continuous assessment.

1 INTRODUCTION

The subject "Physiology and Pathophysiology III" is taught in the fifth semester of Pharmacy Degree at the University of Barcelona and includes the study of the Anatomy, Physiology and Pathophysiology of the respiratory, urinary, endocrine and reproductive systems. Two previous subjects, "Physiology and Pathophysiology I" and "Physiology and Pathophysiology II", are taught in the third and fourth semesters, respectively, and cover the study of the other systems of the human body, as well as an introduction to the study of these subjects.

Face-to-face teaching is considered the priority system at the University of Barcelona, but during the COVID-19 pandemic, university teachers and students made a significant effort to adapt to a virtual scenario [1, 2]. This fact provided the students with recorded lessons (power-point files with the teacher's voice) and several multimedia resources.

On the other hand, the continuous assessment that is now implemented in European universities degrees encourages the students to study throughout the semester and allows them to assess their

learning progressively [3], but it also involves a high number of activities and exams during each semester, which may in some cases overwhelm them. In the Pharmacy Degree, of 300 ECTS, there are multiple compulsory practical classes in addition to the theoretical ones. Moreover, students have 5-7 midterm exams and several reports or activities to deliver each semester.

The teachers of the subject of Physiology and Pathophysiology III of the Pharmacy Degree of the University of Barcelona, like many others in our Faculty, have realized that the presence of the students in the classroom has been clearly reduced respect to that before the pandemics, both in theory classes and in seminars, which are designed as learning reinforcement activities. In order to know the reasons, the teachers designed a survey to capture the degree of satisfaction of the students about the development of face-to-face teaching tuition and to investigate their commitment to attending the classes and the seminars in the classroom. The students answered this survey on the day of the final exam at the end of the term.

The number of students in the course 2022-2023 is 313 and 95 % of them (296 students) answered the survey, which was voluntary and anonymous. The present study analyses the data collected in the student opinion polls considering the students who coursed the subject for the first time (242 students) and those who failed in previous academic years and enrolled it for the second or the third time (46 students).

2 METHODOLOGY

To assess the commitment of the students of the Pharmacy Degree to attend Physiology and Pathophysiology III classes and seminars in the classroom, the teachers developed a survey that was given to the students at the end of the term (the day of the final exam).

The questions of the poll allowed them to know their opinion about the development of these classes and the reasons why they did not attend the classes if this was the case.

The questions of the poll are shown in Table 1. The students could answer every question on a scale between 0 (nothing) and 3 (a lot). Moreover, they had also free space to indicate their personal reasons for not attending the classes.

Table 1. Questions designed in the opinion poll of Physiology and Pathophysiology III regarding the
attendance to the classes in the classroom

Students survey

- How much do you appreciate the general organization of the course?
- How much do you appreciate the face-to-face classes?
- How often have you attended face-to-face classes?
- What would be your reasons for not attending the classes?
- How often have you attended the seminars?

The results of this survey have been analyzed considering all the students together or separating the students who coursed the subject for the first time from those who failed in previous academic years and enrolled it for the second or the third time, i.e., retakers.

3 RESULTS

3.1 Students' assessment of the general organization of the course

When the students were asked in a survey about the general organization of the course, 97.9% considered it positively (quite or a lot, Figure 1).



Figure 1. Distribution of students according to the assessment they have made about the general organization of the course. The question of the poll was "How much do you appreciate the general organization of the course?". The results are expressed in the percentage of students (n = 288, 2022-2023 academic year) that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

This percentage was maintained when only considering the students that coursed the subject for the first time (98.3%) and slightly decreased when the students considered were those who enrolled for the second or third time (95.3%) (Figure 2).



Figure 2. Distribution of students according to the assessment they have made about the general organization of the course, and separated between the students who enrolled the course for the first time (n=238) and those who enrolled it for the second or third time (n=43). The question of the poll was "How much do you appreciate the general organization of the course?". The results are expressed in the percentage of students that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

3.2 Students' assessment of the face-to-face classes and evaluation of their commitment to assist the classes

The student's answers to the survey indicated that they valued positively face-to-face teaching, as 93.6% of all the students who answered the poll rated "quite" or "a lot" this tuition (Figure 3).



Figure 3. Distribution of students according to the assessment they have made about the face-to-face classes. The question of the poll was "How much do you appreciate the face-to-face classes?". The results are expressed in the percentage of students (n = 283, 2022-2023 academic year) that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

If we consider only the students who matriculated the subject for the first time, the degree of satisfaction slightly increased to 94.5% while it decreased to 90% when the students that already coursed the subject before were assessed (Figure 4).



Figure 4. Distribution of students according to the assessment they have made about the face-to-face classes, and separated between the students who enrolled the course for the first time (n=236) and those who enrolled it for the second or third time (n=40). The question of the poll was "How much do you appreciate the face-to-face classes?". The results are expressed in the percentage of students that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

When they were asked about their commitment to assist the lessons at the classroom, with the question "How often have you attended the face-to-face classes?", 77.3% of all the students answered: "quite" or "a lot" (Figure 5).



Figure 5. Distribution of students according to their commitment to assist the theory classes in the classroom. The question of the poll was "How often have you attended face-to-face classes?". The results are expressed in the percentage of students (n = 291, 2022-2023 academic year) that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

Again, if we consider the students who coursed the subject for the first time, the percentage of students who attended the theory classes "quite" or "a lot" increased to 81.5% and decreased to 60.9% for those who were matriculated in the subject after failing it the previous year (Figure 6).



Figure 6. Distribution of students according to their commitment to assist the theory classes in the classroom, and separated between the students who enrolled on the course for the first time (n=238) and those who enrolled it for the second or third time (n=46). The question of the poll was "How often have you attended face-to-face classes?". The results are expressed in the percentage of students that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

Next, we aimed to investigate the reasons why students did not attend the classes. Based on our analysis of the data, only 40 students, 13.5% of the total, provided a written answer for this (Figure 7A). However, the students that should have answered this question were the ones that had not attended the classes or had attended only a bit, both groups adding up to a 22.7% of the total (Figure 5). This means that more than half of these students expressed their opinion on this subject. Among those who did provide a reason, the findings of this study indicate that an important reason for students not attending lessons is lack of time attributed to exams and other activities of continuous assessment, accounting for 3.7% of the students. Working hours were also identified as a significant barrier, with 3.4% of students indicating this as a reason for not attending. Interestingly, teaching quality was only cited as a factor in 1.7% of cases. Personal issues such as lack of time without specifying the cause, illness, family emergencies, or other personal obligations, including manifold reasons accounted for 4.7% of the total. Considering only the responses of students who did answer the question regarding

why they did not attend lessons (Figure 7B), lack of time due to other continuous assessment exams and activities represented 27.5%. This suggests that these students may have been experiencing a high workload or a lack of time management skills, which can impact their ability to attend classes. Moreover, we should keep in mind that unspecified lack of time was also commented on by some students, which may increase the percentage of students overwhelmed during the course. Working hours were also cited as a reason for not attending classes, with 25% of respondents indicating this as a barrier to attendance. Only 12.5% of the students that did not attend felt that the quality of the teaching was the justification for their absence. Finally, the group of different personal reasons were cited at 35%, with heterogeneous reasons included here as explained above.



Figure 7. Distribution of the reasons argued for not assisting the theory classes in % of the total of the students polled (A) or in % of only the students that specified the reason (B). The question of the poll was "What would be your reasons for not attending the classes?".

Regarding the question about the assistance to the seminars, that was "How often have you attended the seminars?", 60.4% of all the students answered: "quite" or "a lot" (Figure 8), a percentage clearly smaller than that regarding the assistance to the theory classes.



Figure 8. Distribution of students according to their commitment to assist in the seminars in the classroom. The question of the poll was "How often have you attended the seminars?". The results are expressed in the percentage of students (n = 293, 2022-2023 academic year) that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

When we considered the students that coursed the subject for the first time, the percentage of students who attended the seminars "quite" o "a lot" slightly increased to 62.8% and decreased to 48.9% for those who were matriculated in the subject after failing it the previous year (Figure 9).



Figure 9. Distribution of students according to their commitment to assist with the seminars in the classroom, and separated between the students who enrolled on the course for the first time (n=242) and those who enrolled for the second or third time (n=45). The question of the poll was "How often have you attended the seminars?". The results are expressed in the percentage of students that have given their opinion on a scale between 0 (nothing) and 3 (a lot).

4 CONCLUSIONS

The students are in line with our university's face-to-face teaching methods, as they continue to positively value classroom teaching, despite having lived through the pandemics, when they took online classes, and having available recorded classes and several multimedia resources nowadays.

Regarding their commitment to assist the classes, we could observe that the students who enrolled on the course for the second or third time exhibit a lower degree of assistance to the classroom respect to those students who did not fail the subject the previous academic year.

Moreover, the assistance to the seminars, which are designed as learning reinforcement activities, is clearly lower than the assistance to the theory classes.

The responses to the open questions about the reason why they did not attend some classes showed us that students of the Pharmacy Degree may feel overwhelmed with the activities and exams scheduled during each term, being personal reasons and the lack of time to study the main reasons for not attending regularly face-to-face classes.

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REFERENCES

- [1] C. Pelegrí, R. Martín-Venegas, À. Franch, L. Miró, M. Massot-Cladera, M.E. Juan, J. Vilaplana, R. Ferrer. "From face-to-face to adapted online classes due to COVID-19 pandemic: comparison of the evaluative results of Physiology and Pathophysiology III of the Pharmacy Degree of the Universitat de Barcelona". *Edulearn Proceedings*, vol. 1547, pp. 7607-7612, 2021.
- [2] C. Pelegrí, R. Martín-Venegas, À. Franch, L. Miró, M. Massot-Cladera, M.E. Juan, J. Vilaplana, R. Ferrer. "Fisiologia I Fisiopatologia III' del Grau de Farmàcia de la Universitat de Barcelona en temps de pandèmia: valoració dels estudiants sobre l'adaptació de la docència a formats alternatius a la presencialitat". *Revista del CIDUI*, vol. 5, pp. 1-12, 2021.
- [3] A.M. Delgado, R. Oliver. "La evaluación continua en un nuevo escenario docente". RUSC, vol. 3, pp.1, 2006.