

SECOND YEAR STUDENTS' OPINION ON THEIR PERFORMANCE IN A COMPULSORY GROUP PROJECT

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Abstract

Introduction. The distribution of ECTS credits within any subject typically includes three major blocks: theory, practical and projects or seminars. Such three blocks, normally, are taken into account in order of assessing the performance in any subject. In most of the compulsory subjects of the Degree in Physiotherapy at University of Vigo, the completion of a group or individual project is necessary to pass, however the model of such project could vary based upon each subject.

Objective. To analyse second year physiotherapy students' opinion on their performance in a compulsory group project of the subject "General Physiotherapy" at University of Vigo.

Methods. Cross-sectional descriptive study. The questionnaire on group projects assessment by Bourner et al. (2001) was used. The study has been carried out at the end of the first semester of the academic course 2014-2015, and 54 second year physiotherapy students' of the subject "General Physiotherapy" have participated in it (85.71% of the enrolled).

Results. Some results had drawn our attention. In relation to general impressions on the project, the higher scores indicate it was an easy experience. In relation to how they felt at the beginning of the project, most students highlighted the relative unfamiliarity with the theme, but regarding how they felt at the end of the project, most students felt knowledgeable in the subject, high self-confident or highly skilled. Additionally, 92.6% of the participants indicated that group members worked well or very well as a team, 22.2% of them indicated their group had a leadership and 5.6% indicated they would not like to work with the same group in any other project.

Conclusions. The second year physiotherapy students at University of Vigo seem to assess positively their performance in the project included in the subject "General Physiotherapy". However, although most of the groups seemed to have worked in good working atmosphere, few of them had punctual problems.

Keywords: Group projects; High Education; Physiotherapy.

1 INTRODUCTION

Bologna process is the name of the process launched following the Bologna Declaration [1], an agreement signed between Ministers of Education from different European countries in 1999, in the Italian city Bologna. It was a joint declaration (because the European Union, EU, has no competency over Education) that initiated a strategic process of convergence what objective was to promote the exchange of graduated professionals and to adapt the contents of the subjects in the different university studies to social needs. Other objectives were consequently to improve professionals' skills and competitiveness through increased transparency and through a teaching-learning process based on the student, and with every subjects/courses assessed using the European Credit Transfer and Accumulation System (ECTS). Bologna process, although not being a binding treaty, led to the creation of the European Higher Education Area (EHEA), which will be a frame of reference for educational reforms that several countries would be initiated in the first years of the XXI century.

EHEA is, thus, the organization in educational area initiated in 1999 within the Bologna process, done to better harmonise the different educational systems in EU and to offer an effective way of exchanging students, as well as to give a concrete dimension and agility to changing process undertaken by the European universities. In the same line, ECTS is a system used by the European universities to validate foreign subjects and to quantify the amount of the work done by the student. Such credits have an exact equivalence among the European universities, and that is the reason way they have been created, because they promote inclusiveness and interaction of students on a continental framework.

The use of the ECTS not only indicates a way to quantify university education, but also, by focusing in the student active role, requires methodological changes to facilitate the student to be the centre of the teaching-learning process. The principles of this methodology should be consistent with the constructivist principles that are focused on the educational process made by the student, the one who learns, and not the teacher.

The distribution of ECTS credits within any subject typically includes three major blocks: theory, practical and projects or seminars. Such three blocks, normally, are taken into account in order of assessing the performance in any subject. In most of the compulsory subjects of the Degree in Physiotherapy at University of Vigo, the completion of a group or individual project is necessary to pass, however the model of such project could vary based upon each subject.

Based on the above commented, the objective of our study was to analyse second year physiotherapy students' opinion on their performance in a compulsory group project of the subject "General Physiotherapy" at University of Vigo.

2 METHODOLOGY

2.1 Design

A cross-sectional descriptive study was developed. The study has been carried out at the end of the first semester of the academic course 2014-2015 in the Faculty of Physiotherapy, University of Vigo, Spain.

2.2 Subjects

The sample comprised 54 second year Physiotherapy students' enrolled in the subject "General Physiotherapy" (85.71% of the enrolled). The 54 students who had participated in the study were divided in 12 work groups. All the students voluntarily participated in the study.

2.3 Instrument and experimental procedure

The questionnaire used was the Spanish version of the questionnaire on group project work by Bourner, Hughes y Bourner [2], an adapted form on the questionnaire by Garvin et al. [3]. It is a self-completion questionnaire to assess the perception of the students on a group project, and in our study it was used after the compulsory work project of the subject above commented. The questionnaire includes 17 items, and 11 of them are closed questions scored in a four or five-point Likert scale, 5 of them are open-ended questions, and just one is a yes/no question. For the current study, the items 1 to 11 were used, except the open-ended questions (questions 5 and 8).

2.4 Statistical analysis

The descriptive statistical analysis was done using SPSS. Results are expressed in absolute frequencies and proportions or percentages, and in means and standard deviations. To compare variables, the Pearson index and the T-student test were used. Significant differences were calculated for a p value of <0.05.

3 RESULTS

The results provided by the questionnaire are shown in table 1 (on the three first questions), and in the figures 1 (Left: question 4 about if the other participants had worked in group; Right: question 6 about if they would like to work again with the same group), and 2 (Left: question 7 about how they assess the work done; Right: questions 10 and 11 about how much they had learnt from themselves and from the other members of the group).

On the one hand, some results had drawn our attention. In relation to general impressions on the project (question 1), the higher scores indicate it was an easy experience. In relation to how they felt at the beginning of the project (question 3), most students highlighted the relative unfamiliarity with the theme, but regarding how they felt at the end of the project (question 2), most students felt knowledgeable in the subject, high self-confident or highly skilled. Additionally, 92,6% of the participants indicated that group members worked well or very well as a team (question 4), and 5.6% indicated they would not like to work with the same group in any other project (question 6).

On the other hand, in relation to the question 9 about the students' deems that the group had a leader or not, 42/54 considered that there was not (77.8%), while 12/54 considered that there was (22.2%).

A direct correlation was observed about the feelings of the students in the two items "From dependent to independent" ($p < 0.01$) and "From incompetent to competent" ($p < 0.05$) when compared before and at the end of the project.

Table 1 .Descriptive data of the three first questions of the questionnaire.

Question*		N	Minimum	Maximum	Mean	SD
1. Work together on the project was a... experience.	From "not enjoyable" to "enjoyable"	54	1	5	3.87	.802
	From "frustrating" to "satisfying"	54	1	5	3.48	.906
	From "dull" to "stimulating"	54	2	5	3.44	.744
	From "not creative" to "very creative"	54	1	5	3.96	.776
	From "difficult" to "easy"	54	2	5	4.11	.664
	From "poor learning" to "learning"	54	1	5	3.44	.816
2. At the end of the project I felt ...	From "ignorant about topic studied" to "knowledgeable about topic studied"	54	2	5	4.07‡	.696
	From "lacking in confidence" to "confident"	54	3	5	3.93‡	.723
	From "less flexible in thought" to "more flexible in thought"	54	3	5	3.78‡	.691
	From "dependent" to "independent"	54	2	5	3.67‡	.801
	From "Incompetent" to "competent"	54	2	5	3.91‡	.708
	From "unenthusiastic" to "enthusiastic"	54	2	5	3.72†	.685
3. At the beginning of the Project I felt ...	From "ignorant about topic studied" to "knowledgeable about topic studied"	54	1	5	1.96	.971
	From "lacking in confidence" to "confident"	54	1	5	3.19	.913
	From "less flexible in thought" to "more flexible in thought"	54	2	4	3.04	.548
	From "dependent" to "independent"	54	1	5	3.07	.908
	From "Incompetent" to "competent"	54	1	5	3.17	1.042
	From "unenthusiastic" to "enthusiastic"	54	1	5	3.28	.834
	From "less creative" to "more creative"	54	1	4	2.93	.610

* Each question is composed by different aspects which are scored in a five-point Likert scale.

† Significant differences ($p < 0.01$) between the different aspects which integrates question 2 and 3 (Before and at the end of the project).

‡ Significant differences ($p < 0.001$) between the different aspects which integrates question 2 and 3 (Before and at the end of the project).

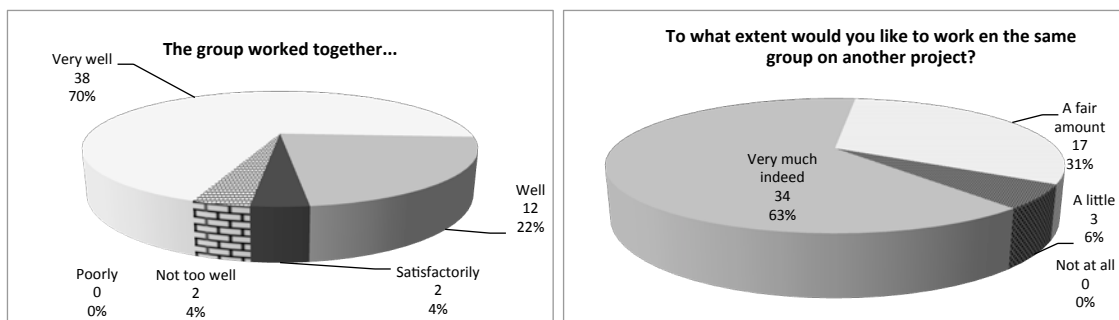


Figure 1. Left - Data related to the question about if the other participants had worked in group. Right - Data related to the question about if they would like to work again with the same group.

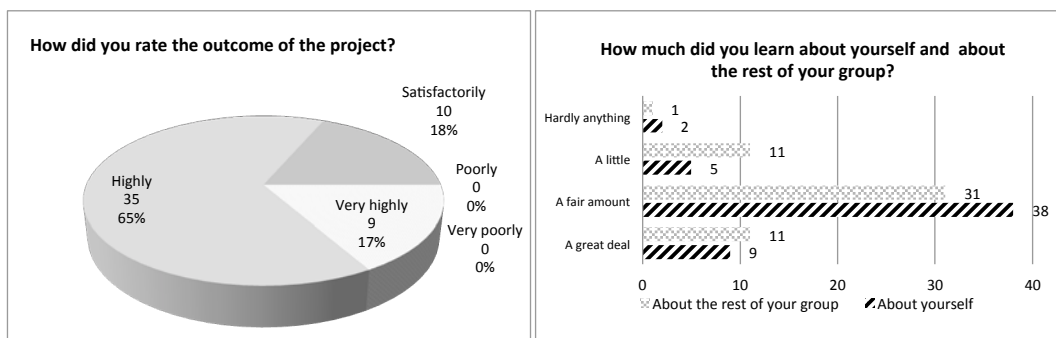


Figure 2. Left - Data related to the question about how they assess the work done; Right - Data related to the question about how much they had learnt from themselves and from the other members of the group at the end of the project.

4 DISCUSSION

As we have seen in the previous section, the students had, in general, a positive perception and opinion after the completion of the compulsory work group project of the subject “General Physiotherapy”. Those could mean detailed data: more than 90% had a good or very good perception of the group working as a team and would work with the same group in other situations, and more than 80% considered the work done excellent or very good. Those data were meritorious than those observed by de Bourner et al. [2], in whose study students in the first academic course of the Degree in Biologic Sciences had participated; than those observed by Mills and Woodall[4], with students in the first and second academic years of the Degree in Veterinary; than those by Gómez, López, Campos y Barriopedro[5], with students in the first year academic course of the Degree in Sports Sciences; or than those by Muniesa y Díaz [6], with students in the second year academic course of the Degree in Sports Sciences and Physical Activity. Possibly, a reason why this occurred would be the type of students in Physiotherapy Degree when compared to those other studied Degrees. The students in Physiotherapy Degree, at our university, are usually, year after year, those with better academic performance for the university admittance.

Moreover, their opinion improved at the end of the project with respect to how they thought in the beginning of it. Thus, at the end of the project, the students referred higher knowledge in the topic studied, better self-confidence, and more competent. Our results are in the line with the observed by other studies [5-8], although the study by Koh, Wang, Tan, Liu and Ee [8] was done with High School students and the questionnaire used was different from the used in the current study.

For the future, it would be interesting to analyse if the positive opinion observed in the current study could be amended by other aspects like type of group work (theoretical or practical, for example), the subject area, the way to present the final work done (orally, practical simulation,...), or the amount or tutor guidance carried out by the teacher. It would be also interesting to research on the encouraged competences developed by the students based on the type of group project done in this situation.

5 CONCLUSION

In conclusion, the second year Physiotherapy students at University of Vigo seem to assess positively their performance in the project included in the subject “General Physiotherapy”. However, although most of the groups seemed to have worked in good working atmosphere, few of them had punctual problems.

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