

Face-to-Face or Online teaching ?

Interdisciplinary research project experience

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Context

The interdisciplinary Health Research Project (HRP) requires students from MBBS, Nursing and BPHM to complete research on humans and write a scientific report.

In previous years, the lectures, tutorials and statistical workshops were face-to-face, but last school year the course was delivered online due to COVID 19 and social unrest.

Our objective was to compare these two modes of teaching.

Intervention

A quantitative study analysed

- 1) students' self-perceived difficulties
- 2) and satisfaction on achieving learning objectives

at the end of face-to face teaching in 2018-2019 and online teaching in 2019-2020.

Data of both years were compared using SPSS software.

Observations

1) Students' experience/ self- perceived difficulties

Compared with face-to-face mode, students felt much easier in most areas of the projects when course was delivered online. These areas included level of difficulty on :

- deciding on topic ($P=0.001$),
- designing approach to study design ($P<0.001$);
- writing protocol ($P<0.001$);
- assessing ethical risks of the proposed study ($P=0.02$);
- preparing questionnaire ($P<0.001$);
- submitting IRB ($P<0.001$);
- data analysis($P<0.001$),
- writing final report ($P<0.001$)
- poster presentation ($P=0.03$);
- meeting the deadline for IRB ($P<0.001$);
- meeting the deadline for report ($P<0.001$);
- meeting the deadline for poster presentation ($P<0.001$).
- Only field work was similar ($P=0.75$).

Overall, students felt the workload was significantly decreased ($P<0.001$).

Figure 1

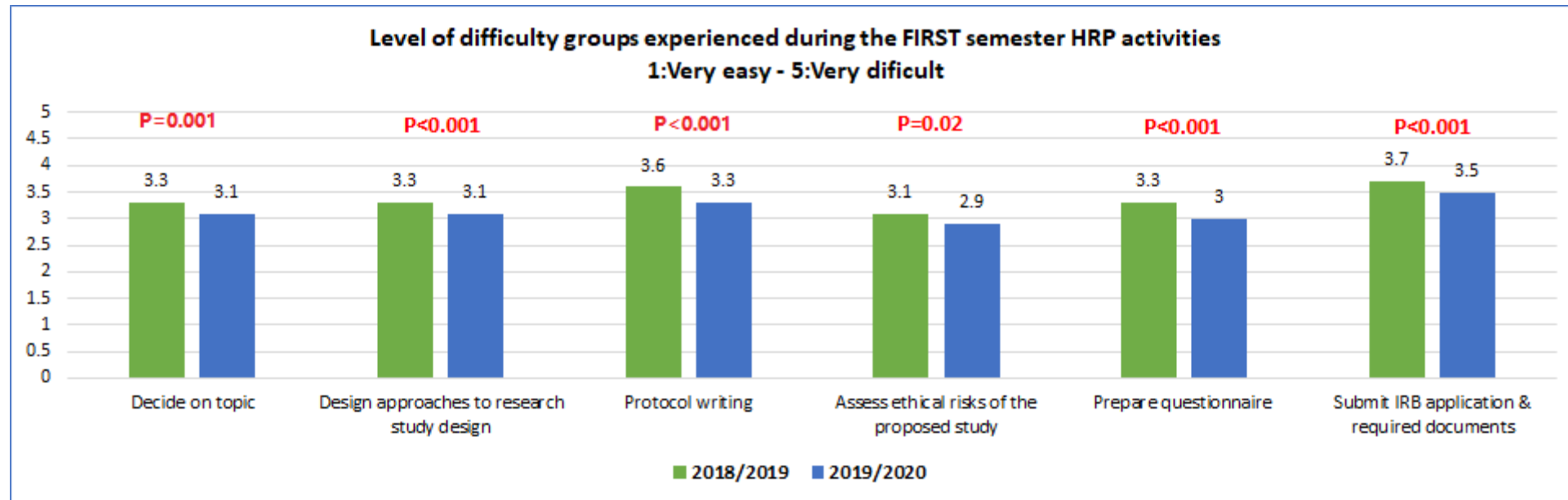
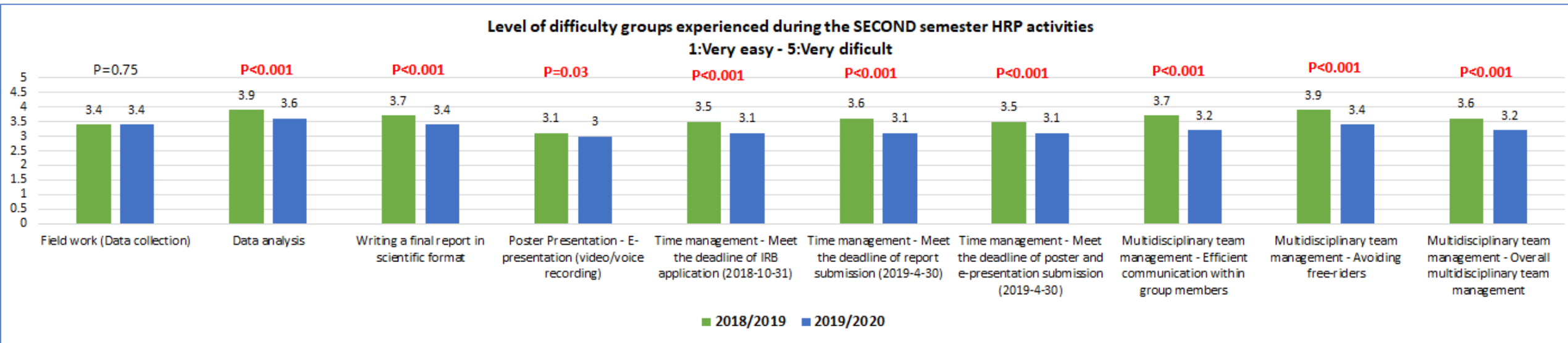


Figure 2



Observations

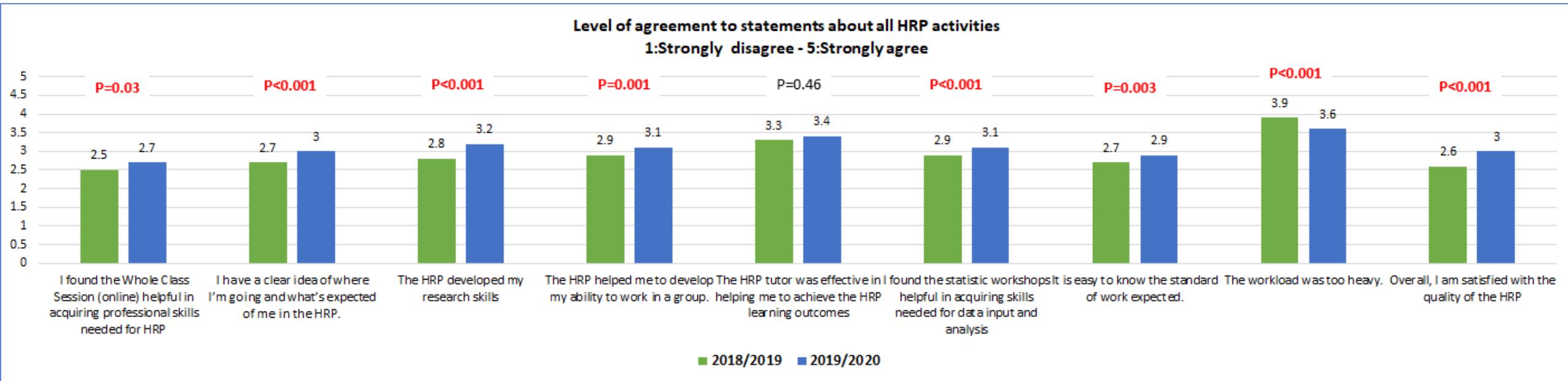
2) Students' satisfaction

Compared with face-to-face mode, when the course was delivered online, students' felt HRP was very helpful in

- acquiring professional skills ($P=0.03$);
- developing their researching skills ($P<0.001$);
- developing skills working in group ($P=0.001$);
- acquiring skills in data input and analysis ($P<0.001$).

Overall, students' satisfaction was significantly increased ($P<0.001$).

Figure 3



Conclusions

Both student's self-perceived difficulties and satisfaction were significantly improved during online teaching compared with face-to-face teaching.