



Still Open During the Covid-19 Lockdown: an Analysis of Online Students' Engagement with the Virtual Campus

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Context

Universitat Oberta de Catalunya

- Fully online open university with a virtual campus
- Educational model based on completing activities, and continual guidance and support
- Undergraduate degrees follow a 14-16 week schedule
- Connection patterns are a proxy for academic performance

Covid-19 global pandemic

- Lockdown started March the 14th, 2020 (24 days after the beginning of the academic semester)
- Flexibility measures were taken to help students get through the semester



Research questions

Main goal: to measure how the pandemic affected the connection habits of students

RQ1: Did students change their *attendance* due to the Covid-19 lockdown?

RQ2: Are there differences in their *weekly and daily connection patterns* during the lockdown period?

RQ3: Regarding *persistence* throughout the semester, are there differences between groups?

Methodology (Data)

Population: all UOC undergraduate students residing in Spain

Three academic semesters:

- **Spring 2018** 27,009 students
- **Spring 2019** 29,428 students
- **Spring 2020** 31,502 students

Students are mostly part-time (\cong 90%), 25 or more years old (\cong 84%), slight majority of women (\cong 54%), not freshmen (\cong 88%)

No data on family or professional situation



Methodology (Measures)

Attendance: percentage of unique students connected to the Virtual Campus per day

$$\text{Attendance} = \frac{\text{Number of students connected}}{\text{Total number of students}}$$

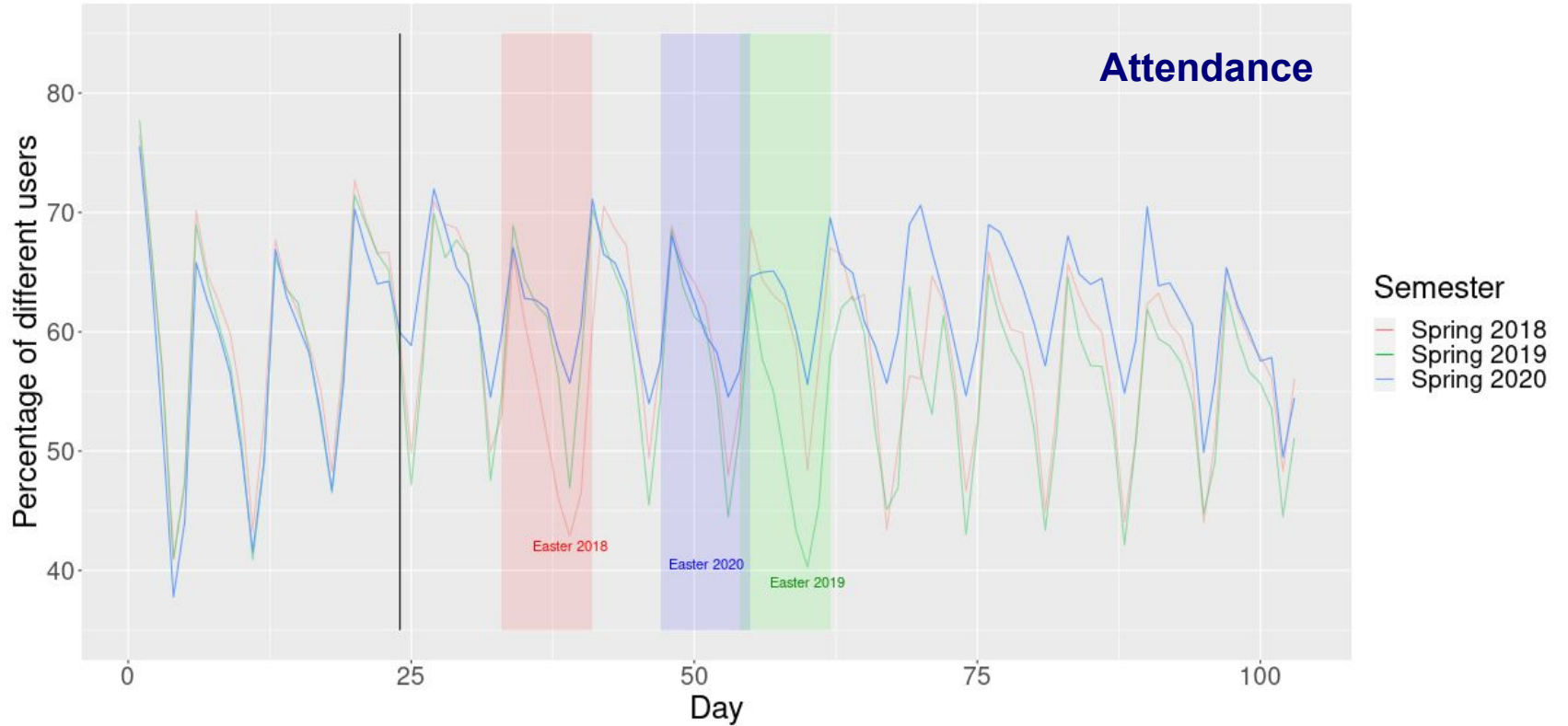
Day of the week / Hour of the day: percentage of connections by day of the week / hour of the day

Persistence: percentage of days connected to the Virtual Campus since the beginning of the semester

$$\text{Persistence} = \frac{\text{Number of days connected in range } [1..i]}{i}$$

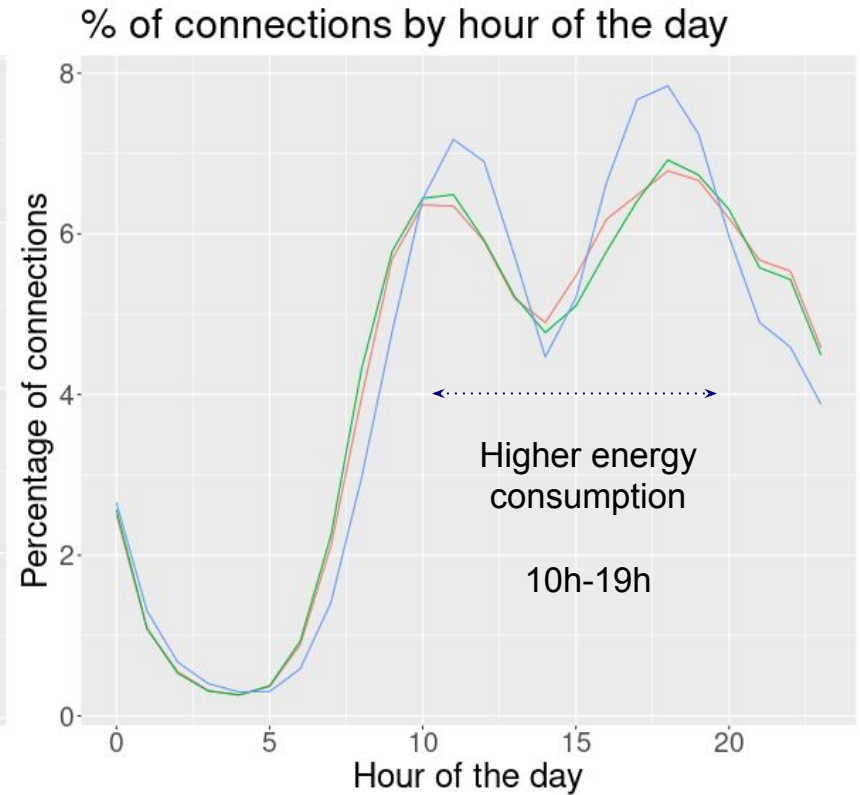
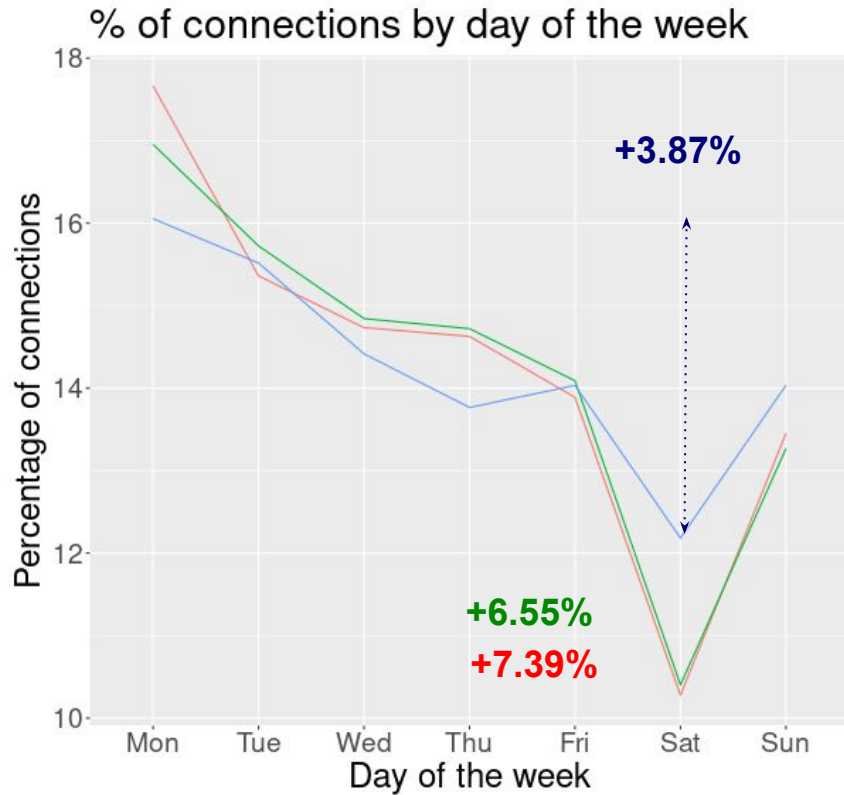


Percentage of different users connected to the Virtual Campus



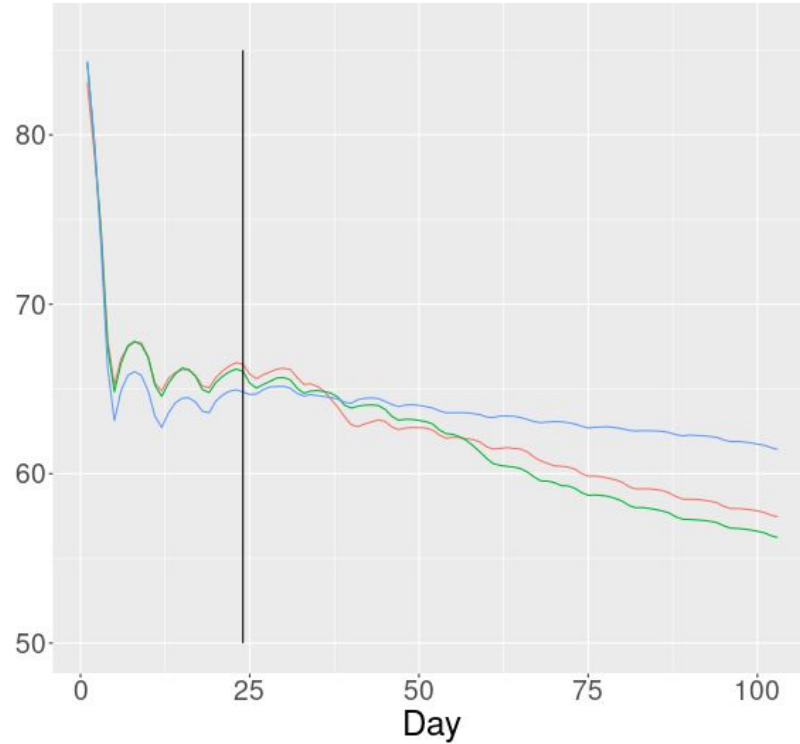


Semester — Spring 2018 — Spring 2019 — Spring 2020

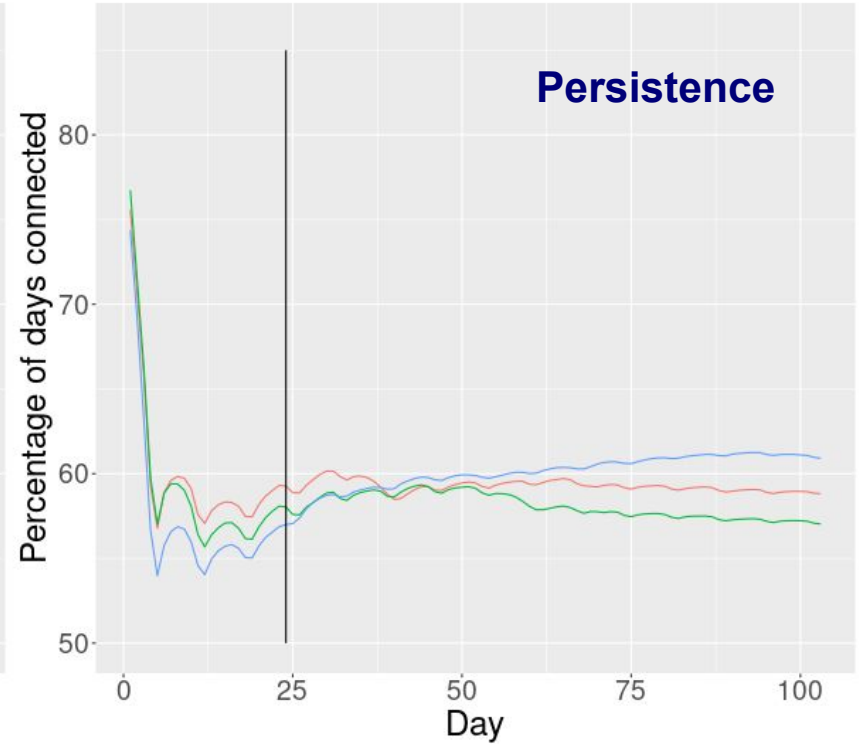


Semester — Spring 2018 — Spring 2019 — Spring 2020

Freshmen



Rest of students





Conclusions

Change in connection patterns

- **RQ1:** Yes, more students connected throughout the academic semester
- **RQ2:** Yes, connection patterns also changed
 - More spread throughout the week (no weekends, no holidays)
 - More concentrated during the day (not early in the morning or late at night)
- **RQ3:** No, lockdown changed connection patterns for all groups. Nevertheless, freshmen were the only group that did not show an increase in persistence

Future research

- Impact on academic performance
- Impact on subsequent semesters

R&I

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