

What time is good for you: To what extent do student perceptions of the time of their activities motivate their attendance behaviours?

Helen Kirby-Hawkins

University of Wolverhampton, Wolverhampton, UK

h.kirby-hawkins@wlv.ac.uk

Abstract A pilot study into student preferences around start times of teaching activities and their tolerance of gaps between activities. This research was based on cohort specific feedback about the teaching timetable expressed in the National Student Survey (NSS) in 2016. The findings around a preferred working day support other research which suggest this preference transcends discipline. The findings also demonstrate that gap tolerance may vary based on the distance from campus a student lives. The aim of this paper is to introduce the concept of gap tolerance as a motivating factor for student's attendance and to encourage further discussion around the influence of the teaching timetable on student attendance.

Keywords. *Student attendance · Timetabling · Student Engagement · Gap Tolerance · Student-centric scheduling · Optimum teaching day · Higher Education Timetabling*

1 Introduction

Due to the emerging links between non-attendance and areas that institutions are benchmarked by, such as attainment, progression and retention; institutions are keen to ensure attendance is maximised as 'weak attendance patterns and poor engagement have implications for Universities' survival' [1]. There is a growing body of literature on this subject, and whilst some research has been undertaken about students' attendance at activities, it takes a somewhat holistic approach in terms of contextualising timings as one factor of many within their motivations to attend. Little appears to have been written specifically on the impact of the teaching timetable on attendance; students' perceptions on the subject of timings of activities or gaps in their schedules affecting their attendance. This research intends to further the knowledge on student favourability for certain starts time and any rationale for this and in addition offer insight on a new phenomenon of gap tolerance.

2 Gap Tolerance

Gap Tolerance is defined as the maximum number of hours between activities in the timetable tolerated before a student modifies their attendance behaviour based on the gap. There does not appear to be any existing literature on this subject so this paper seeks to provide fresh insight in this area. A number of practical recommendations for the furthering of knowledge on gap tolerance in further research and practice are also included.

3 What time is good for you pilot study?

3.1 Rationale

The time at which an activity is scheduled first featured as a factor motivating attendance in Clay and Breslow's [2] 1996 study. They acknowledge that timings are part of a bigger decision-making process and factors are weighted. From this study it is accepted that the time an activity is scheduled is a factor and therefore the teaching timetable has an influence on student attendance. It is also accepted that the influence of the time of an activity is weighted and forms a part of a much more complicated decision-making process of students on their attendance behaviours.

Anecdotal evidence tells timetablers that students dislike early mornings and staying late and there is some truth in this, attendance figures in part support this assumption but the researcher wanted to evidence this. Analysis of the institution's NSS Timetabling feedback from 2016 found that both start times and gap featured as an issue. The latter issue around gaps was a recurrent theme throughout the negative comments which originated from the Computer Science students.

Gap between activities of 4 hours were evident in the Computer Science timetables. The researcher suggest that these gaps arose due to the complexity of the constraints on the activities, staff constraints, activity sequencing and room specification. All factors which were present when the activities were examined. Also, the computer

science timetable construction method in this institution was mixed, with some manually scheduled multigroup activities and some auto scheduled whole group sessions. This may also have been a contributing factor. A small pilot study was proposed to evidence a preferred working day for students and examine how students' attendance behaviours may be influenced by gaps in their teaching timetable. The population was selected as Computer Science students based on the NSS feedback around gaps predominantly arising from this discipline area.

3.2 Methods

The pilot study surveyed 176 finalist Computer Science students at the University of Hull, using an online survey during a two-week period at the start of Semester 2 in February 2017. The survey was promoted by course lecturers, student course representatives and email reminders. The survey yielded a 21% response rate (37 out of 176) of which 81% of the respondents were male.

3.3 Summary Findings

The optimum teaching day for the surveyed population was between 10am and 3pm as illustrated in Figure 1.

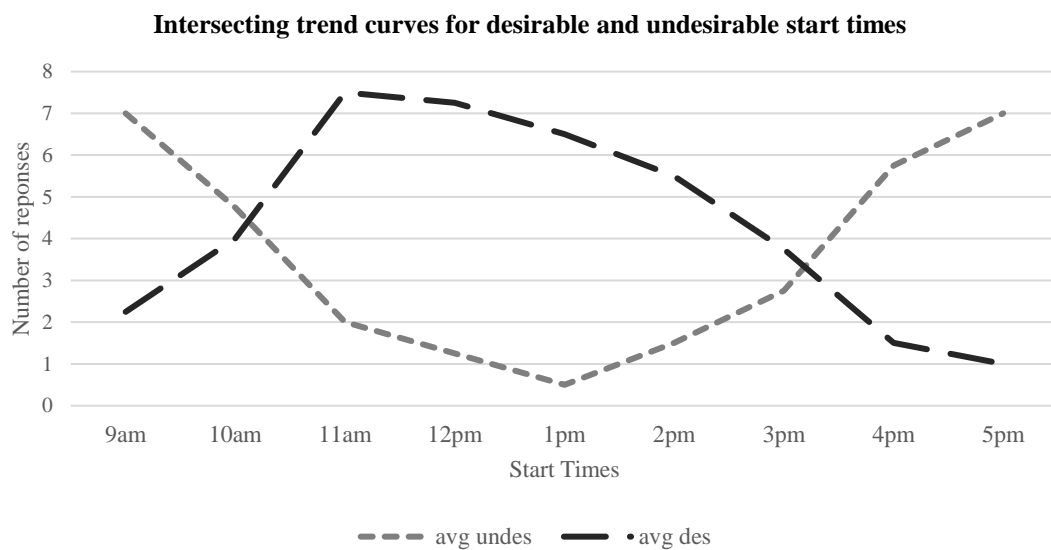


Fig. 1. The intersecting trend curves for desirable and undesirable start times

Comments related to the undesirability of 9am starts focused on alertness and motivation to get up, whereas the comments around 5pm starts centred around the imposition of teaching into their evenings, meal times, social activities and some safety concerns. The findings here support the work of Devadoss and Foltz [3] who found a similar working day was preferred for agriculture students over a decade earlier in America.

3.4 Gap Tolerance Findings

The study also examined the gap tolerated between activities. In Figure 2. we can see that 'it wouldn't affect my attendance, 1 hour and 2 hours all received the same number of responses and demonstrates the challenges faced by small scale study in that results varied and may not be representative of the whole sample.

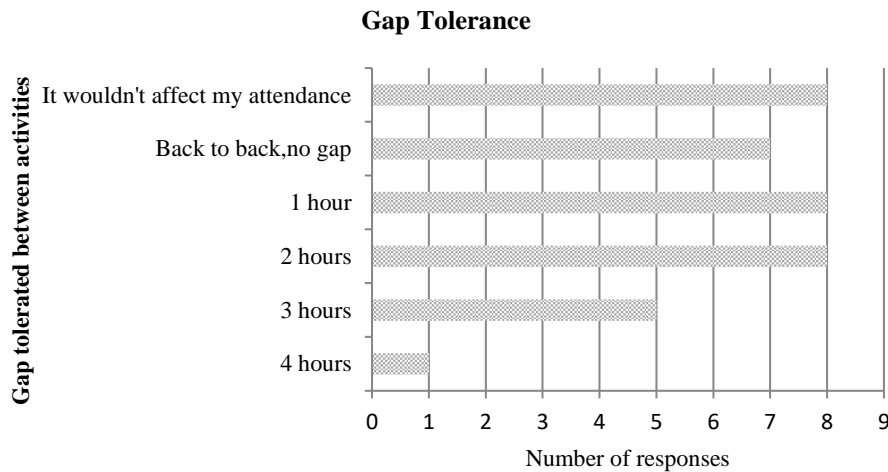


Fig. 2. Gap tolerated in hours

22% of respondents felt gaps between activities would not affect their attendance. This may be due to the fact that these students simply 'awoke' to the importance of their studies in their final years (4) and could utilise the gap for self-directed study or were simply more tolerant to wait. One respondent stated their attendance wouldn't be affected but they would be annoyed by a perceived waste of time.

The results show that 78% of respondents had varying thresholds for gap tolerance where after a certain time their attendance would be affected. Only 3% of respondents would tolerate a gap of 4 hours+ and 40% admitting after a gap of just one 1 hour their behaviour may be affected.

Respondent's comments around this were varied; some linked to the value of an activity, whether attendance was recorded, or prioritisation of other tasks such as coursework. The inclusion of these other factors is indicative that these factors also have a weighting in the decision-making process and the gap was not the only factor students used to make their decision.

The results shown in Figure 3. are gap tolerance by distance a student lives from campus. There does appear to be some divergence in gap tolerance based on this and the findings indicate those students who live closer to University as less tolerant of gaps and less likely to stick around. The commuter students' comments seem to suggest that a practical, financial decision-making process was employed when deciding to travel in/ stay on campus.

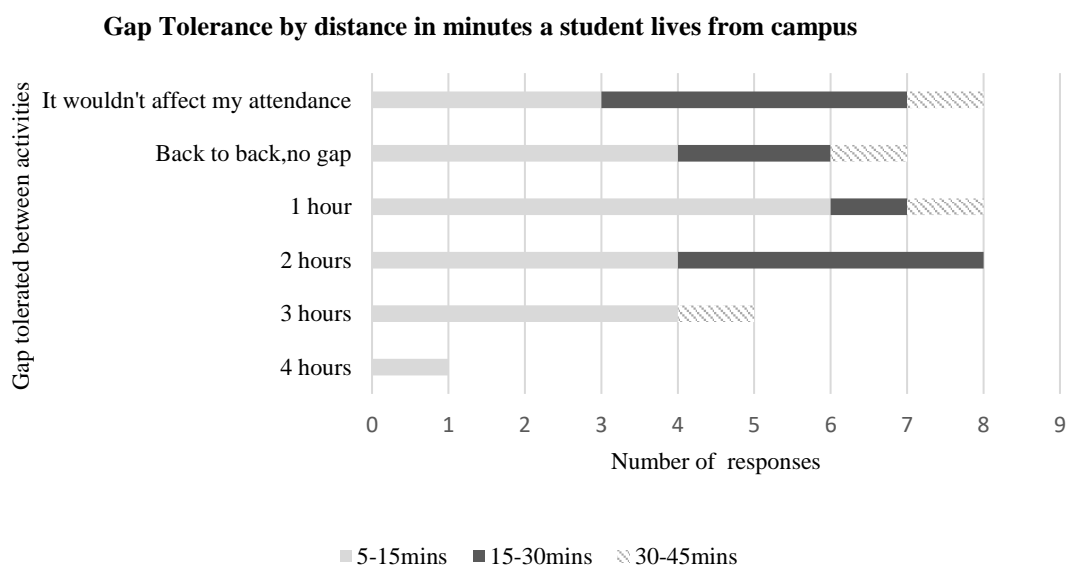


Fig. 3. Gap tolerances by distance in minutes a student lives from campus

The distance from campus that a student lives does appear to have an impact on both preferred working day and gap tolerance but further research would be required to draw more meaningful conclusions.

4 Considerations/Limitations

The major limitations of this study are the small sample size and composition of the sample.

One of the other limitations of this study is that it examines times and gap tolerance in isolation from other factors. The author acknowledges the limitations of this, start time and gaps form part of a much wider decision-making process that is highly individual. It is also evident from student's behaviours as the study results stated 5pm start times were undesirable but in the attendance data examined for the same cohort, practical sessions scheduled at this time were well attended, so time cannot be the only factor influencing a student's decision and this is echoed in the free text comments. The study also examined this phenomenon on a group of students all following the same schedule of activities. Curriculum complexity and module choice also have a large influence on timetable construction and mean that sometimes the workable solution introduces gaps between activities due to the number of pathways for students.

5 Conclusion

McCollum (5) acknowledges that institutions are interested in a timetable that satisfies room utilisation, staff and student satisfaction. Striking a balance between these three things is difficult and rectifying one is often at the detriment of the other two. The importance of student satisfaction together with the information elicited from the external metric of the NSS provided the rationale for this study. The findings suggest that the gaps found in the Computer Science timetable in 2016 were longer than the students surveyed would tolerate and may have impacted on their non-attendance at activities either side of the gap. The author recommends that institutions triangulate the student feedback from the NSS, attendance data and the teaching timetable to evaluate the quality of a timetable from a students' perspective.

Further research is required into different cohorts and year groups to understand if attendance behaviours change over time, vary across cohort and whether gap tolerance varies to better equip timetablers to schedule activities more intelligently to maximise attendance.

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