

Public Abstract

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Title:Academic Achievement and Persistence in Online Self-Paced Courses

This study examined the impact of student and institutional characteristics on achievement and persistence in the self-paced format and extended research in the field. This study focused on building achievement and persistence models of students enrolled in 16-week, 8-week, and 9-month online self-paced courses using AY 2014-15 online self-paced enrollment and completion data from the University of Missouri. Course satisfaction, delivery mode, and student characteristics such as academic level, gender, prior online self-paced course experience, enrollment time, active completion time, and persistence were used to create the achievement and persistence models. Model building and trimming using hierarchical linear modeling occurred in which level-2 units were online self-paced courses and level-1 units were students.

Supplemental analyses of like 8-week, 16-week, and 9-month online self-paced courses that were identical in terms of instructors, assessments, and course materials also occurred.

In terms of persistence using the full dataset, the log-odds of persistence were related to course satisfaction holding constant other predictors. The significant relationship between course satisfaction and persistence is an important finding and may contribute to student success as it suggests that successful interactions between students, instructors, and content in the online self-paced courses may be occurring, maintaining satisfaction, learning, and leading to persistence.

Course satisfaction did not serve as a strong variable at level-2 when analyzing achievement. Enrollment time, active completion time, gender, and academic level had significant effects on student persistence. Enrollment time also had a negative effect on persistence. In terms of achievement for the 11,829 enrollment records, all six student variables – persistence, enrollment time, active completion time, gender, prior self-paced experience, and academic level – had significant effects on student achievement, with enrollment time having a negative effect. Prior self-paced course experience also had a negative effect, which was unexpected. The data indicate that females and upper-division students generally received higher scores than males and lower-division (freshman and sophomore) students. The effect of persistence on achievement was largest by far, as one might logically predict.

These findings, particularly the impact of course satisfaction on persistence, the negative effect of longer enrollment times, and the positive effect of active completion times may be beneficial to student success and optimal self-paced course length, minimum and maximum completion time, and other self-paced course guidelines, with international as well as national implications due to the growth in online self-paced massive open online courses, other forms of flexible delivery and completion, and competency-based education.