Student Perceptions of Advanced Practice Experience Selection Processes: Computer versus Manual Systems

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Background

- As professional experience in pharmacy education expands, the need for and use of computer-based systems for rotation selection and management has increased.
- The ACPE Standards 2007 state, “Colleges and schools should have systems, such as computerized programs, to manage the pharmacy practice experiences.”
- The University of Iowa recently changed methods of advanced pharmacy practice experiences (APPE) selection from a manual, class–cohort, student-controlled, randomized priority process to a computer-based process.

Objectives

1. Describe two methods for rotation selection, a manual and a computer-based selection process
2. Compare student satisfaction for each selection method

Methods

Design: Non-equivalent comparison groups

Subjects: Data from final year students using the manual selection process from classes of 2004, 2005, and 2007 and students using the computer-based process from the class of 2008 were compared.

Data Collection: To compare student’s perceptions of the systems, we used a four-item survey of student satisfaction with the APPE selection processes. Each statement used a six-item Likert scale, “1=agree strongly” to “6=disagree strongly”. The survey statements were:
1. The rotation selection process worked well for me.
2. The rotation selection process provides flexibility for students.
3. The rotation selection process is fair for students.
4. The college should continue using the rotation selection you experienced for rotation scheduling.

Data Analysis: Average ratings and percent agree across three classes of manual selection process were calculated and compared to computer selection process. T-tests compared means. Chi-square compared the percent who agreed with the four statements.

Results

- The mean student responses for worked well provides flexibility and is fair were not statistically different when comparing the computer-based selection method to the manual system.
- Students thought both systems provided flexibility (2.2 ± 1.1, overall mean ± SD). Students regarded both systems as being fair (2.5 ± 1.1). Also, students felt the selection process worked well for them (2.3 ± 1.1)
- Student ratings regarding whether we should continue to use the computer system versus the manual system showed statistically significant differences (Figure 2).

Discussion/Conclusions

- The manual system provided a way for students to select APPE taking into account time the experience was offered and type/site of experience. The computer-based system provided a method for selection taking into account type/site of experience.
- Students generally thought that both systems were acceptable. More students agreed the computer system should be continued.
- There were no known studies with which to compare our results. No data were collected about student, faculty & staff time for both systems.
- Results support the use of a computer-based process compared to our manual process for APPE selection.

Figure 1: Description and Timeline of Manual Versus Computer-based Selection Process

Figure 2: Student Responses