Grades, Graduation, and Orientation: A Longitudinal Study of How New Student Programs Relate to Grade Point Averages and Graduation

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Many colleges and universities provide freshmen with the opportunity to attend a brief two or three-day orientation prior to the beginning of classes in the fall. In many cases, the orientation program of an institution is the initial introduction a student has to the college community. As a result, a comprehensive orientation program is a necessity in order to enhance the overall perception of the institution.

The broad goal of an orientation program is to serve as a transition structure between a student's past and future learning experiences. An orientation program should familiarize new students with campus procedures and administrative regulations, acquaint students with student services, provide an opportunity to meet faculty and staff, and introduce students to campus organizations. Overall, most orientation programs focus on the specific goal of encouraging the academic success of first year college students. A successful program is one that promotes the academic mission of the institution and helps students make the difficult transition to the new world of college life.

Orientation programs are designed to teach incoming freshmen about campus procedures and college life. This process emphasizes academic achievement and campus awareness and is structured to encourage student retention and overall academic success. For years college administrators have struggled to find ways to decrease student problems and increase student persistence. One of the most popular methods toward increasing retention is to help facilitate student success through freshmen orientation programs (Forrest, 1982). Previous research has shown that orientation is a key factor in a multifaceted approach to retention (Beal & Noel, 1980). Research has also reflected that orientation can improve student grade point average (GPA) and re-enrollment (Beal & Noel, 1980).

How does the research provide a background for the current study? Previous research supports the promising benefits of freshmen orientation programs (Forrest, 1982). Orientation programs have been shown to improve retention, academic program completion, and the level of academic achievement (Green, 1998). Academic achievement, in this current study, can be defined through first semester GPA and graduation rates. Results from the American College Testing Program (ACT) College Outcome Measures Program (COMP) reported that the presence of formal orientation

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has a positive effect on student persistence towards graduation (Beal, 1980).

This longitudinal study assessed the orientation program by means of freshmen first semester GPA, and graduation rates. The issue was "does Orientation at Stephen F. Austin State University have any demonstrable relationship to the academic success of students?" The mission of the Orientation program at Stephen F. Austin State University is to provide sessions for all new students and their parents that will aid families in the transition process; that will inform students of educational opportunities; and that will integrate students and families into the life of the University.

Method

The average GPAs of the students for the years 1986-1994 were collapsed into a grand mean each year, thus defining the dependent variable. An independent t-test was conducted to see if there would be a difference between the two groups. An independent t-test was conducted to see if there would be a difference between the two matched groups. A chi-square was conducted to measure the frequency of graduation rates of the two groups.

Participants

The freshmen classes of Stephen F. Austin State University between the years of 1986-1994 were the participants of this study. The student body annually consisted of approximately 11,500 students. Of that enrollment 28% of the students have typically been from the Houston, Texas region, 25% from the Dallas, Texas region, and 98% overall have been from Texas. Approximately, 14% of the students were African American and 6% were Hispanic. In recent years almost 95% of freshmen students attended orientation. Prior to 1995 approximately 80% of freshmen attended orientation.

Results

The results of data analysis indicated a significant difference between the college freshmen who attended orientation and the college freshmen who did not attend in terms of first semester GPA [t (16)=11.88, p<.01]. The average GPA of the college freshmen who attended orientation between the years 1986-1994 was 2.11 on a 4.0 scale with a standard deviation of .059. The average GPA of the college freshmen who did not attend orientation between the years 1986-1994 was 1.73 on a 4.0 scale with a standard deviation of .077.

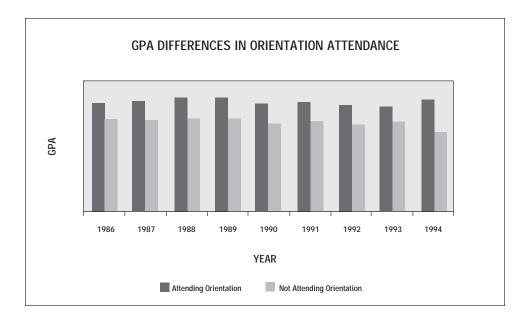


FIGURE 1. First semester fall GPA comparison of college freshmen students attending orientation versus students that did not.

An independent t-test for matched samples was conducted on the orientation attendance group and the non-orientation attendance students. The freshmen students were matched according to gender and standardized test scores. Those who did not have a match were eliminated from the t-test to ensure the groups were evenly distributed. The average GPAs for the students for the years 1986-1994 were collapsed into a grand mean for each year. The results indicated a significant difference between the college freshmen who attended orientation and the college freshmen who did not attend orientation in terms of first semester GPA for the matched samples [t (16) = 6.67, p < .01]. The average first semester GPA of the matched college freshmen who did attend orientation between the years 1986-1994 was 2.06 on a 4.0 scale with a standard deviation of .076. The average first semester GPA of the matched college freshmen who did not attend orientation between the years 1986-1994 was 1.76 on a 4.0 scale with a standard deviation of .115.

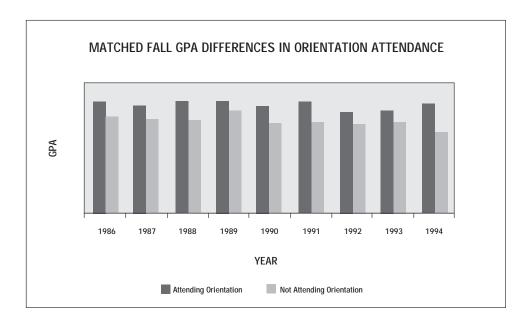


FIGURE 2. First semester fall GPA comparison of the matched group of college freshmen students attending orientation versus students that did not.

In addition, it was also hypothesized that there would be an unequal number of college freshmen who graduated from Stephen F. Austin State University who attended orientation in comparison to those who did not between the years of 1986-1992. Each group was allowed 5 years to complete their degree to qualify for the graduation rate. The graduation rate for each year was recorded. A chi-square was conducted on the observed frequencies for each year. The test yielded significant results for each year [1986 year, c2 (4, N = 1855) = 15.48, p < .0001; 1987 year, c2 (4, N = 1871) = 12.43, p < .001; 1988 year, c2 = (4, N = 1948) 21.81, p < .001; 1989 year, c2 (4, N = 1852) = 39.51. p < .001; 1990 year, c2 (4, N = 1802) = 10.05, p < .005; 1991 year, c2 (4, N = 1808) = 24.09, p < .01; 1992 year, c2 (4, N = 1869) = 22.52, p < .01]. Statistically, there is a significantly higher graduation rate of college freshmen that attended orientation between the years of 1986-1992 in comparison to the freshmen who did not attend orientation during the same years.

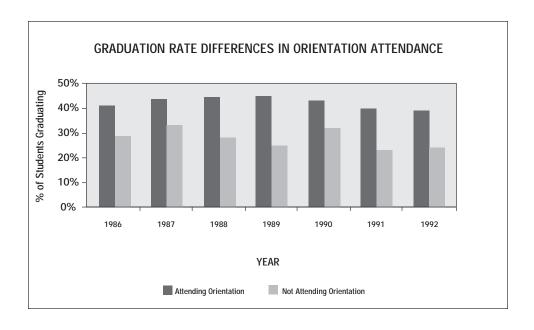


FIGURE 3. The graduation rate differences in college students who attended orientation versus those that did not attend.

Discussion

The findings of this study indicate that there is a strong correlation between freshmen orientation attendance and first semester grade point averages and a student's persistence toward graduation. Although a causal relationship can not be concluded, there is statistical indication to suggest a positive correlation between the factors. When orientation attendees and non-attendees were matched on test scores and gender, the same positive relationship held constant. By controlling for these two variables, the study suggests that the two matched groups were similar before orientation. Consequently, the Orientation program at Stephen F. Austin State University may play a positive role in freshmen first semester grade point average and persistence to graduation. Clearly, this study provides positive feedback for the Orientation program at Stephen F. Austin State University.

Similar studies at other institutions also stress the important contributions a comprehensive orientation program has for students. Findings from this current study are limited to the researched institution, Stephen F. Austin State University. The different orientation procedures at individual institutions vary; thus generalizing the findings to other institutions is limited. Future studies are advised to create measures

to assess their program's success. Also, it is recommended for future studies to assess the motivational levels of freshmen orientation attendees verses non-attendees in order to extract this variable from the study's conclusions.

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