A STUDY TO INVESTIGATE THE GENDER AND RISK VARIABLES OF NONTRADITIONAL STUDENTS HOW THEY RELATE TO ENROLLMENT IN COLLEGE DISTANT EDUCATION

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ABSTRACT

The purpose of this dissertation is to provide a response to the issue of if and how nontraditional student risk factors, such as gender, age, and the existence of such traits, predict enrollment in online college courses. The data used in this research came from the 2012 National Postsecondary Student Aid Study (NPSAS:12), which surveyed more than 95,000 first-year college students during the 2011-2012 academic year. Indicators of unconventional students' risk, such as their age and gender, have been shown to serve as significant indicators of enrollment in distant education. It is hoped that this research would provide support for the hypothesis that leaders of educational institutions may achieve their aim of shortening the time required to earn a degree by offering more courses online. In order to provide a more in-depth analysis of indicators of enrollment in online courses or better data collection for separation schooling retention or success, more research is needed to dissect the unconventional student risk index outlined via the National Centre over Educational Statistics while looking at other factors such as ethnicity and GPA.

Keywords: Distance education, Online courses, Nontraditional students, Female students, Higher education, Colleges, Universities, Community college, Degree completion.

INTRODUCTION

Educators were among the first to embrace this innovative method of teaching and learning as the new millennium began (Harasim, 2000). Online education has changed the face of education and society, claims Harasim (2000). The U.S. government's Web-Based Education Commission recognised the ramifications of distance education in its 2000 report. The study applauded e-learning in particular, but it also suggested that the government take measures to support and promote alternative forms of distance learning.

As long as demand outstrips supply, online education is likely to be one of the most rapidly growing subsectors of the higher education market in the United States (Moloney & Oakley, 2010). Sloan Consortium studies (Allen & Seaman, 2010) show that online education is now an integral part of the long-term strategies of many

educational institutions. Since 2006, the number of undergraduates taking a minimum of one online course has grown annually, as reported by Cochran, Campbell, Baker, and Leeds (2014). Although overall growth in enrollment had slowed, Allen and Seaman (2013) reported on page 15 that "the number of pupils taking at least 1 online course continued to rise at a more robust rate." Another study (Allen & Seaman, 2014) found that in the fall of 2012, a record-breaking 7.1 million persons enrolled in at least one online course. Over a third of all undergraduates are represented here. The number of people taking at least one course via the internet has increased by almost 411,000 since 2015. Previous study by Allen and Seaman (2010) demonstrates that one of the most striking changes to higher education over the previous decade is the proliferation of distant education via different types of online course work.

Those who support online learning hope that more people will decide to register in college as a result. On the sixth page of Wickersham and McElhany (2010) according to "the rise, fall, and finally the rise again in fuel costs in combination with the prospect of a rapid or affordable associate's, bachelor's, graduate or even doctoral degree offered online with no getting organisational costs or the ability to finish course work in the privacy of their own living, provides an excellent incentive over learners to seek various possibilities for higher education." Students benefit from asynchronous online classes because they may engage in learning when it is most practical for them, rather than waiting until the teacher is accessible (Jaggars, 2011). According to Paul & Cochran (2013), the need for flexible course schedules is driving the expansion of the online education business. According to Pontes and Pontes (2012), distance learners benefit from more scheduling freedom and convenience.

BACKGROUND OF THE STUDY

Perseverance is becoming more vital as the proportion of non-traditional students enrolled in graduate and undergraduate programmes continues to rise. In 2014, 38% of undergraduates and 43% of graduate students were enrolled part-time. These numbers show that the number of Americans who are not first-generation college students is rising. The United States Ministry of Education has provided financial incentives for student retention initiatives since 2002. Reasons for this trend include (a) the increasing number of nontraditional students who have lower retention rates and (b) the popularity of online degree programmes that often admit nontraditional students. Fewer than half of the population holds a degree, despite efforts to increase postsecondary student retention as well as graduation (Kim, 2002).

As a result, the United States may have a problem with a lack of postsecondary degree completion among nontraditional students. Students who do not fit the stereotype of a "typical" college student often have to juggle a full-time job with their studies, a family, or a significant other. These students may confront obstacles that influence their health, stress, and happiness, as well as their ability to stay in school and get a degree. There are several obstacles to continuing education beyond

high school. According to research (Giancola et al., 2009), the ability of educational programmes to satisfy the needs of adults is significantly connected with postsecondary persistence rates. Additional factors include the institution of higher learning, personal factors both internal and external, access to technology, time management, and the backing of both the employer and the family (Rovai, 2003). The motivation to finish a course is correlated with how long an adult student stays enrolled. Determination to complete a task despite difficulties is an example of persistence (Rovai, 2002, p.1). This study evaluates persistence by monitoring students' adherence to their agreed-upon course completion deadlines. Successful students will be awarded a passing grade. People who did not finish a course either (a) did not enrol in it, (b) dropped it, or (c) had a failing mark. Therefore, a passing mark represents successful course completion, whereas a failing grade represents unsuccessful course completion.

Internal factors influencing nontraditional students' programme persistence are of particular interest to the researchers. Internal factors include things like college readiness, socialising, programme quality, current GPA, & self-directed learning. Students' ability to adjust to the academic environment of a school may be gauged by their grade point average. To become fully integrated into society, students must develop relationships with faculty and staff. There is a connection between campus involvement and this prerequisite. Peer and teacher interactions, as well as involvement in extracurricular activities, are crucial to a student's success in being socially integrated. Self-directed learning may be described as "a process where people identify their requirements for learning, develop objectives for learning, identify resources for learning, choose and carry through learning strategies, or rate learning outcomes". A 24-item survey based on the work of Pfordresher (2016), and Stockdale (2003) is used to quantify the extent to which students' study on their own.

PROBLEM STATEMENT

There seems to be a gap between the administration of online classes & the pupils who are the most reliant on the flexibility that these programmes may provide, despite knowing that the number of students participating in online courses is expanding at a pace that is unprecedented. Non-traditional student risk variables, such as gender or the implications of registering in remote education, could be examined to improve support for students in this setting. It could also convince decision-makers to adopt online degree programmes as a way to reduce the amount of time it takes to complete higher education.

LITERATURE REVIEW

Several studies have shown that students retain less information from online courses than they would from face-to-face instruction. According to Cochran et al. (2014),

online course retention has been the subject of much academic study. This is because colleges and universities are under increasing amounts of pressure to shorten the time it takes for students to get from enrolling to graduating. There is a dearth of research on the participation of adult students in distance education (Yoo & Huang, 2013). Cochran et al. (2014) intended to find students at danger of dropping out of their online courses and assist them out. This study sheds light on the state of online education for nontraditional students and women. This literature review focuses on female unusual pupils pursuing online education, as well as the process over online education and the readiness of unconventional students, as well as adult learning theory and its application to online education.

The literature review for this project won't just be a jumble of random stuff. As a precursor to the practical application and assessment, the appropriate chapters will investigate crucial research for separate subjects. In order to give a framework for this argument, this chapter analyses three different approaches to ISD. This thesis will be based on the conceptual model. In the next chapter, we'll do some empirical analysis of this as part of an educational management information system (EMIS). It is the job of information systems to produce actionable data. It is fundamental to the management and development of any business. "Information technologies has chance to provide business with a very cost-effective asset if they are developed, dealt with & used in a fit manner." An information system is often defined as "a collection of people, processes, and resources that collects, transforms, and disseminates data or knowledge within an organisation." An "information system" is a set-up that "can include many integrated technologies for data with organisational setup & upkeep practices that together form a socio-technical phenomena."

Information architecture is defined in this study as the combination of hardware, software, procedures, and data. Information systems development (ISD) is clearly justified and accurate. It makes it possible to describe the world outside of what can be grasped with the senses and the mind (Tinto, 2012). In this section, researchers will develop a model for the creation of information systems in order to provide a theoretical basis for the many steps and components involved in this process. The core parts or functionalities of the conceptual framework can't be defined or presented without first doing literature research on system development approaches. There is a body of work devoted to the topic of information systems development approaches. Methods for constructing information systems are the subject of this study. Reading up on the history of information systems development will provide light on the ways in which emerging technologies have influenced the evolution of these systems throughout time. Based on the research conducted, a theoretical framework was developed to analyse the impact of technological progress on the development of information systems via the lenses of spontaneity, bricolage, & sensemaking (Tinto, 2012). This building was erected to highlight the role that technology plays in the creation of information systems.

RESEARCH QUESTIONS

i. To identify the difference between the numbers of conventional and nontraditional students taking online classes.

ii. To find out the difference in the number of conventional and nontraditional female students taking online classes.

iii. To explore the difference in the ages of unconventional female students who engage in distant learning programmes.

iv. To determine the correlation between the presence of non-traditional risk factors and the likelihood of a student enrolling in online classes.

v. To examine the correlation between the presence of non-traditional risk factors and a female student's propensity to register in online courses.

METHODS

Previous studies have shown that nontraditional students, and particularly women, are drawn to the flexibility of distance learning for their pursuit of a college degree. This research sought to answer the question, "are there particular subgroups of students who are more likely to take advantage of this educational option?" by using a database that is nationally representative and gathers data on students' engagement in distance education. This is important because it suggests that the research may be used to justify specific policy changes that will benefit students who enroll in distance learning by providing them with more efficient support. One of the benefits of employing a large, preexisting database with an adequate number of samples is that it increases the study's overall efficacy and allows for more generalizable statistical findings. A considerable number of kids (123,600 in total), as noted before, were found to be eligible for the npsas:12 survey. Questions regarding the student's 2011-2012 academic achievement, demographics, family situation, education and employment experiences, and online course participation were included in the survey.

SAMPLING

As was previously mentioned, the samples utilised in this study were drawn from a pool of about 95,000 students who completed the NPSAS:12 survey. As becomes evident in a minute, the sample size varies among the different hypotheses. The sample sizes employed in this work are considered large since the smallest data set studied had 11,600 observations (N >= 100).

DATA AND MEASUREMENT

Primary data for the research study was collected through a questionnaire survey. The questionnaire was divided into two parts – (A) Demographic information (B) Factor responses in 5-point Likert Scale for both the online and non-online channels. Secondary data was collected from multiple sources, primarily internet resources.

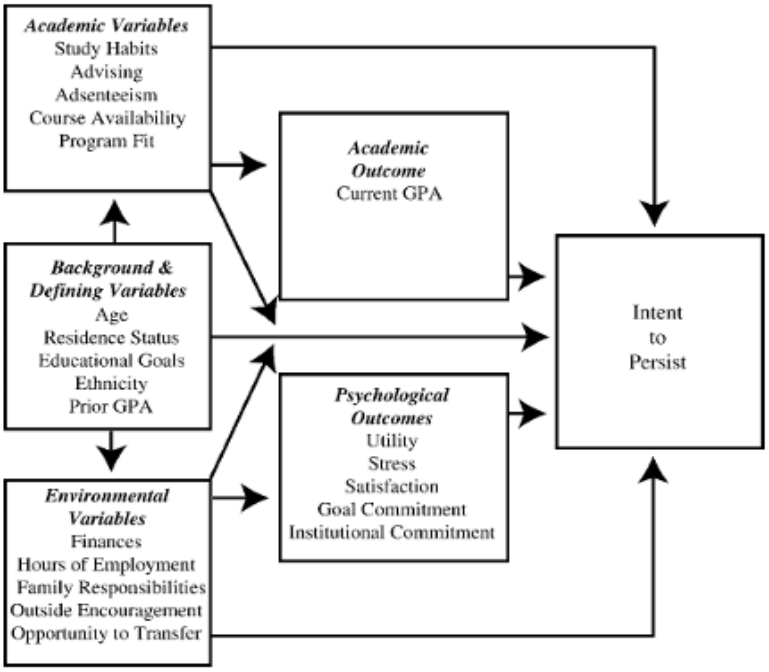
STATISTICAL SOFTWARE

MS-Excel and SPSS 25 were used for Statistical analysis.

STATISTICAL TOOLS

Descriptive analysis was applied to understand the basic nature of the data. The researcher applies coding schema and regression.

CONCEPTUAL FRAMEWORK



RESULTS

H1 - THERE ARE MORE UNCONVENTIONAL STUDENTS THAN TRADITIONAL STUDENTS PARTICIPATING IN ONLINE DEGREE PROGRAMMES

The results lend credibility to the theory. Students of atypical ages who participate in online courses enjoyed an odds ratio of 1.348, according to a binary logistic regression model based on data from a simplified sample of 46,000 undergraduates. This result was interpreted as suggesting that students of non-traditional ages were 35% more likely to register in distance learning programmes than students of

traditional ages. These results are statistically significant at the 95% level of confidence, since the p-value for the statistically significant test was 0.000, which implies that p is less than 0.05, & the t-value was 8.337, which indicates that t is larger than 1.96.

Table 1. Coding schema

Variable	Abbreviation	Measurement	Coding Schema
Online course enrollment	ALTONL	Categorical	Online (0); No Online (1)
Nontraditional status	AGEGRP	Categorical	Traditional (0); Nontraditional (1)
Gender	GENDER	Categorical	Male (0); Female (1)
Ethnicity	Race/Ethnicity (with multiple)	Categorical	White (0); Nonwhite (1)

Table 2. Stage 1. Bivariate logistic regression results

Variable	Odds Ratio	95% Confidence Interval	t-statistic	p-value*
Nontraditional status	0.742	(0.691–0.796)	-8.337	0.000
Gender	0.772	(0.729–0.817)	-8.886	0.000
Ethnicity	1.214	(1.148–1.284)	6.832	0.000

* NOTE: *The p*-values of .000 in this regression do not imply a zero likelihood that the coefficients were due to sampling error, but instead represent very small positive values less than 0.0005 that are rounded to 0.000.

Table 3. Stage 2. Multivariate logistic regression results

Variable	Odds Ratio	95% Confidence Interval	t-statistic	p-value*
Nontraditional status	0.742	(0.691–0.797)	-8.263	0.000
Gender	0.772	(0.728–0.818)	-8.845	0.000
Ethnicity	1.240	(1.172–1.312)	7.501	0.000

* NOTE: *The p*-values of .000 in this regression do not imply a zero likelihood that the coefficients were due to sampling error, but instead represent very small positive values less than 0.0005 that are rounded to 0.000.

Table 4. Age as of 12/31/2011 by gender

	18 or younger (%)	19-23 (%)	24-29 (%)	30-39 (%)	40 or older (%)	Total
Male	8.9	50.4	19.0	12.6	9.1	100%
Female	9.0	44.8	18.0	15.1	13.0	100%
Total	9.0	47.2	18.4	14.0	11.4	100%

Table 5. Age group as of 12/31/2011 by gender

	Traditional (%)	Nontraditional (%)	Total
Male	59.3	40.7	100%
Female	53.8	46.2	100%
Total	56.2	43.8	100%

When the number of risk factors for nontraditional students grows from two to four, the results of the odds ratio calculations reveal that this hypothesis obtains some partial support. The results, however, do not support this theory, since the number of instances of atypical student risk factors decrease rather than increase from one to two and from five to seven. Therefore, researchers cannot claim that the evidence supports the hypothesis.

The fact that the t-value for the seven risk factors associated with atypical students is 0.773, which is less than 1.96, and the p-value for these factors is 0.452, which is more than 0.05, indicates the finding isn't statistically significant at the 95% confidence level. The odds ratios with the counts None to Six are statistically significant at the 95% confidence level, since all p-values are less than 0.0000 (p 0.05) and all t-values are more than the critical value of 1.96.

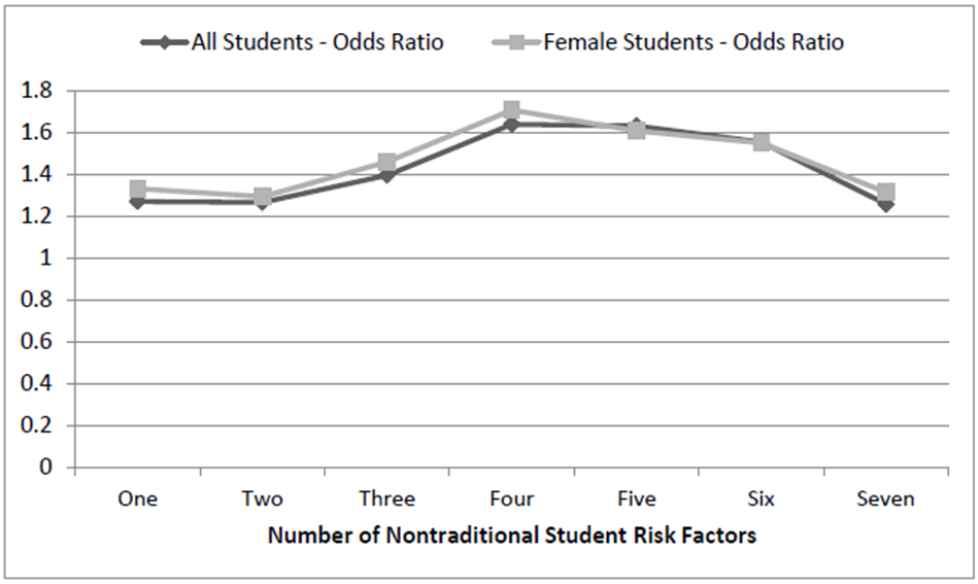


Figure 1. Odds ratio results for all students and female students

CONCLUSION

Nontraditional student age, female gender, & risk characteristics as indications for distant education enrollment may trigger policy and practise changes that encourage nontraditional or female students. Helping nontraditional and online students achieve a solid education is vital as they grow. This research found that unconventional student traits were major determinants of distance education enrollment, which could help distance education faculty improve online course content and professional development. This dissertation demonstrated that unique student traits substantially influenced remote education attendance, boosting optimism. The goal of my dissertation is to increase non-traditional student access and equity. A primary strength of this research was data analysis using a broad and representative national database. This dissertation's big dataset & statistically significant results allow it to generalise to all educational institutions. Quantitative approaches were utilised to analyse the data, using logistical analysis using ratios of odds as the end measure made the conclusions clear. This boosted research. Strength: One of the only studies that address atypical student risk characteristics and gender as predictors of distance education enrollment. Finally, researching unusual pupils supports this notion. Nontraditional students dominate postsecondary enrollment. This research may influence President Obama's 2020 goal of increasing college enrollment. Schools may remove barriers for unconventional students via distance education.

LIMITATION

Measuring quantitative variables is the main focus of this kind of study. Quantitative studies often use big samples. However, there is not enough money to do such a comprehensive investigation. This might be achieved in the future with a bigger sample size and an extended period of time for this study. In quantitative studies, a predetermined questionnaire is used, which may provide biased results that don't accurately portray the full scope of the problem. Furthermore, quantitative research is time-consuming, expensive, and arduous to carry out. Future studies will elaborate on the reasons why those subjects were left out of this examination. Call attention to any problems that could prevent future researchers from replicating your findings. This will help in determining the scope, goal, and methodologies of an effective or relevant research approach. While there has been a clear and substantial rise in online programming, several challenges are still ignored in the process of creating online offerings. Online courses are becoming more common at universities, yet problems like these persist. Thus, courses taken online may not be meeting the needs of their students, which might lead to lower retention rates. It is the responsibility of administrators and educators to design online learning environments that motivate students to finish their courses and programmes. This problem is becoming more pressing for administrators and teachers of online courses as participation increases. Managers at educational institutions should also have some familiarity with the characteristics of distance learners. This will make it possible to improve online courses and hence student performance.

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