

Prince of Songkla University
Pattani Campus

Appendix

การโอนย้ายสาขาวิชาของนักศึกษาปริญญาตรีภายในมหาวิทยาลัยสงขลานครินทร์ วิทยาเขตปัตตานี:
ปีการศึกษา 2542-2548

Transferred Major among Students at Prince of Songkla University, Pattani Campus
during 1999 to 2005

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บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างการโอนย้ายสาขาวิชากับปัจจัยพื้นฐานของนักศึกษาหลักสูตร 4 ปี มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตปัตตานี ที่เข้าศึกษาตั้งแต่ปีการศึกษา 2542-2548 จำนวน 4 คณะคือ คณะศึกษาศาสตร์ คณะมนุษยศาสตร์และสังคมศาสตร์ คณะวิทยาศาสตร์และเทคโนโลยี และวิทยาลัยอิสลามศึกษา โดยใช้ข้อมูลการโอนย้ายสาขาวิชาจากปีการศึกษาจากงานทะเบียนและสถิตินักศึกษา

มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตปัตตานี ทั้งหมดจำนวน 9,221 คน มีนักศึกษาโอนย้ายสาขาวิชาจำนวน 463 คน ตัวแปรที่สนใจคือนักศึกษาโอนย้ายสาขาวิชา ตัวแปรอิสระคือ กลุ่มเพศ-ศาสนา-คณะ และชั้นปีที่ศึกษา วิเคราะห์ความสัมพันธ์ระหว่างการโอนย้ายสาขาวิชากับตัวแปรปัจจัยด้วย odds ratio ผลการศึกษาพบว่า นักศึกษาเพศชายคณะมนุษยศาสตร์และสังคมศาสตร์ และ นักศึกษามุสลิมเพศชาย ของวิทยาลัยอิสลามศึกษา มีการโอนย้ายสาขาวิชามากกว่ากลุ่มอื่นๆ และนักศึกษาตั้งแต่ชั้นปี 4 มีการโอนย้ายสาขาวิชามากกว่ากลุ่มอื่น ๆ

คำสำคัญ: การโอนย้ายสาขาวิชา อัตราส่วนโอกาส มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตปัตตานี

Abstract

The objective of this study was to investigate the association between students transferring into other majors and their demographic factors at Prince of Songkla University, Pattani campus. A study of students admitted between 1999 and 2005. There were 9,221 students enrolled in a 4-year program in one of 4 the faculties, namely Education, Humanities and Social Sciences, Science and Technology and College of Islamic studies. Of these, 463 transferred their majors. Data were obtained from the Registration Office at Prince of Songkla University, Pattani campus. The odds ratio was used to investigate the association between the students transferring their majors and their demographic factors. The results indicate that the male students in the Faculty of Humanities and Social Sciences and Muslim male students in the college of Islamic studies were more likely to transfer their majors than any other students. Students who were enrolled for four years or more were more likely to transfer than students who were enrolled for less time.

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Key words: transfer major, odd ratio, Prince of Songkla University, Pattani campus

Introduction

Students who transfer their major is a serious issue in many universities because it can increase their retention time. In North Carolina State University, USA, approximately half of all engineering and computer science students did not graduate in their fields (Felder *et al.*, 1998, p.469-480; Budny *et al.*, p.1100-1106). Laing *et al.* (1986, p.198-205) reported that changing majors would cause longer degree-completion times. In 1986, 65% of new undergraduate students in Michigan State University changed their majors, about 33% of students at Long Island University in 2005 (Stanek, 2005), 35% of student at University of Purdue in 2007 (Counseling staffs, 2009). Approximately 70% of students changed their majors at least once in the course and graduated from University of Wisconsin-La Crosse between 1990 and 2000 within 4 years, 4-5 years and 5-6 years had their majors changed on average 1.2, 1.4 and 1.6 times, respectively (Thill, 2007, p.1-2). The office of Institutional Research (2004) reported that 73.4% 610 students of Langara College in the University of Victoria, who transferred between 1998 and 2003 were females and Serge (2004, p.1-53) found that males were less likely to transfer than females.

In Thailand, there have been only a few studies that have investigated student transferrals in universities although many students transfer their majors every year. Students who transfer their major subjects take longer to graduate than those who don't transfer.

Admitted Year	Number of transferred students in PSU Pattani campus					Total
	Graduated		continuing	Not graduated		
	4 years	>4 years		1-4 years	>4 years	
1999	25	10				35
2000	23	6		1		30
2001	25	20	1	4	1	51
2002	64	31		8	4	107
2003	32	21		2		55
2004	71	7	17	8	1	104
2005	3		65	13		81
Total	243	95	83	36	6	463
(%)	(52.5)	(20.5)	(17.9)	(7.8)	(1.3)	

Table 1: Number of transferred students graduated, continuing and not graduated

Prince of Songkla University (PSU), Pattani campus, is located in a multicultural area and contains a variety of ethnic students. Between 1999 and 2005 students enrolling in four faculties, namely Education, Humanities and Social Sciences, Science and Technology, and College of Islamic Studies, were selected. Table 1 shows the numbers of

students in each year who transferred their majors. Of the 9,221 students enrolled, 463 (5%) transferred to other majors. Of these, 338 (73%) successfully graduated (52.5% within 4 years and 20.5% longer than 4 years). 42 (9.1%) did not graduate and 83 (17.9%) were still studying at the time of our analysis.

The objective of this study is to investigate the association between transferred students's demographic and enrollment factors at PSU, Pattani campus.

Methods

1. Study design and variables

This is a cross-sectional study of undergraduate students who had enrolled in one of the four selected faculties at PSU, Pattani campus between 1999 and 2005. The Faculty of Education contains 16 subjects which students can major in, while the faculties of Humanities and Social Sciences, Science and Technology and College of Islamic Studies have 21, 9 and 6 subjects, respectively. Between 1999 and 2005, 9,221 undergraduate students enrolled in 4-year programmes of the selected faculties and of these, 463 students transferred to other majors. Students can transfer their current majors into a new major after getting permission from parents, advisors, and the dean of the faculty. The criteria to approve of transferring into the new major depend on each faculty. Some common criteria such as the transfers of current majors require students to study at least one semester in their old majors.

2. Statistical methods

Since the outcome and determinant variables were all categorical, the odds ratio and Pearson's chi-squared tests are used to assess the strength of the association between the outcome and determinants.

The odds ratio is defined as

$$w = \frac{p_1 / (1 - p_1)}{p_2 / (1 - p_2)}, \quad (1)$$

where p_1 is the proportion of students transfer in the specific faculty-gender-religion group (or study year group) and p_2 is the proportion of the student transfer in other groups. The standard error of the logarithm of odds ratio is

$$SE[\ln(w)] = \sqrt{\frac{1}{a_1} + \frac{1}{b_1} + \frac{1}{a_2} + \frac{1}{b_2}}, \quad (2)$$

where a_1 and b_1 are the respective numbers of transferred students and not transferred students in the specific faculty-gender-religion groups (or study year groups) and a_2 and b_2 are the corresponding numbers in other groups. If the odds ratio is less than 1, it indicates a *protective effect* of the predictor. While the odds ratio is greater than 1, it indicates a positive association of the exposure with the outcome and if the odds ratio is equal to 1, the predictor has no association. A 95% confidence interval is thus

$$95\% \text{ CI} = \text{OR} \times \exp(\pm 1.96 \text{ SE} [\ln \text{OR}]) \quad (3)$$

Results

The overall rate of transferring majors for students at PSU, Pattani campus between 1999 and 2005 was 5%. Table 2 shows numbers of transferred students and not transferred students separated by faculty-gender-religion group. The Faculty of Humanities and Social Sciences has the highest number of transferring students with 109 of other female students, 60 Muslim female students and 55 Muslim male students. 107 transferred student are admitted in 2002, followed by 104 in the year 2004 and 81 in the year 2005. Most of students (432) transfer when their study in 4 years or more.

<i>Determinants</i>	<i>Category</i>	<i>Transfer</i>	<i>No Transfer</i>
		463	9,221
Faculty-Gender- Religion Groups	EduMuslimMale	3	116
	EduOtherMale	8	289
	EduMuslimFemale	15	527
	EduOtherFemale	46	1,156
	HumMuslimMale	55	356
	HumOtherMale	47	490
	HumMuslimFemale	60	1,049
	HumOtherFemale	109	1,804
	SciMuslimMale	9	161
	SciOtherMale	11	424
	SciMuslimFemale	11	295
	SciOtherFemale	17	709
	IslMuslimMale	32	383
	IslMuslimFemale	40	999
Admitted Year	1999	35	831
	2000	30	856
	2001	51	1,208
	2002	107	1,584
	2003	55	1,563
	2004	104	1,287
	2005	81	1,429
Study Year groups	2-3 years	31	1,117
	4-5 years	432	7,641

Table 2: Numbers of students transfer and not transfer from 4-year bachelor degrees at PSU Pattani campus by faculty-religion-gender groups, year of admission, and year study group

Note: Edu – Faculty of Education, Hum – Faculty of Humanities and Social Sciences, Sci – Faculty of Science and Technology, Isl – College of Islamic studies

Figure 1 shows plots of 95% confidence intervals of odds ratios between transferring and 14 faculty-gender-religion groups using natural logarithmic scale. The Muslim male and other male students from the Faculty of Humanities and Social Sciences and the Muslim male students from the College of Islamic Studies were more likely to transfer than the other groups.

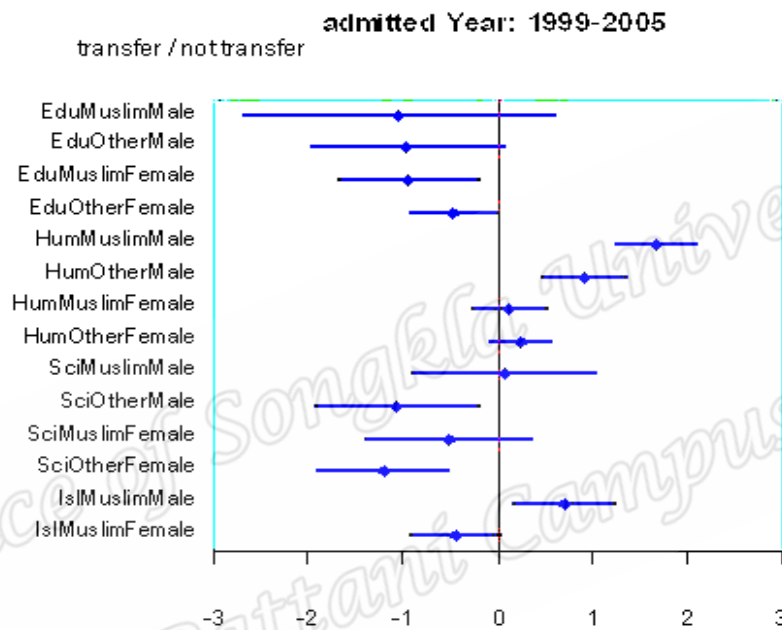


Figure 1: Logarithm of odds ratio Plot by faculty-gender-religion group and outcome

Figure 2 shows plots of 95% confidence intervals of odds ratios between transferring students and study year using natural logarithmic scale. The student study in 4 years or more were more likely to transfer than the other groups. It is noted that, 95% confidence intervals are too wide, because the data contains the value of zero.

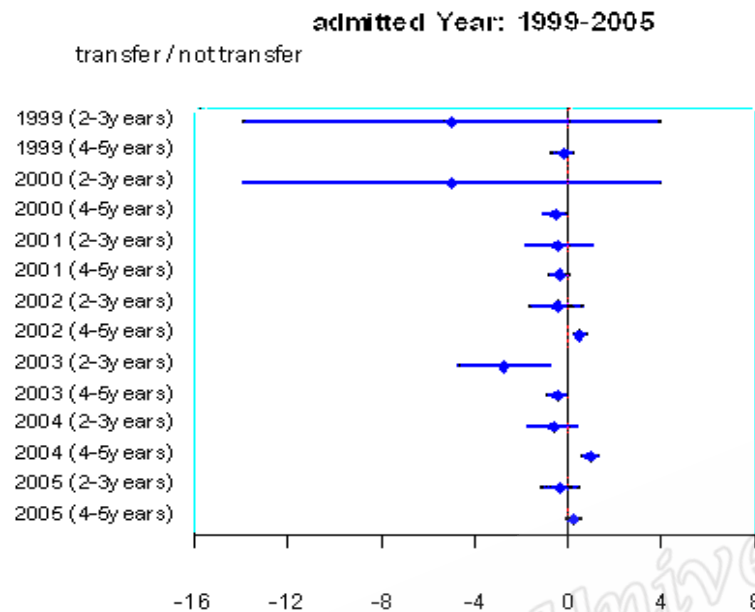


Figure 2: Logarithm of odds ratio Plot by study years and outcome

Conclusions and Discussions

This study was to investigate the relationship between transferring of students and their demographic and enrolment factors at Prince of Songkla University in Pattani campus between 1999 and 2005. We found that male students were more likely to transfer than female students, which was contradictory to the study of Serge (2004, p.1-53) and the Office of Institutional Research (2004) found that female students were more likely to transfer than males. Students who were enrolled for four years or more were more likely to transfer than students who were enrolled for less time.

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