# FACTORS AFFECTING DECISION MAKING TO STUDY MATHEMATICS MAJOR OF STUDENTS AT SUAN SUNANDHA RAJABHAT UNIVERSITY.

Asst. Prof. Poonyapon Chanfoy $^*$ , Asst. Dr. Thanatyod Jampawai $^{**}$  & Wariya Puttapatimok $^{***}$ 

\*\*\*\*\*\*\*\*\*Faculty of Education, Suan Sunandha Rajabhat University, Bangkok, Thailand E-mail: \*poonyapon.ch@ssru.ac.th, \*\*thanatyod.ja@ssru.ac.th, \*\*\*wariya.pu@ssru.ac.th

### **ABSTRACT**

This research found that Factors, which affect students' making decision to study in mathematics major at Suan Sunandha Rajabhat University, depend on factors as follows, curriculums, students' interest, admission fee, parents' aim, experience and degree of lecturers, and most students who finished from the mathematics major were able to pass the selected examination to be government officers.

**Keywords:** Factors Affecting, Decision Making, Mathematics

### INTRODUCTION

According to the National Education Act B.E. 2542, everyone has the equal right of a basic education. They will receive education that state provides from the pre-school level to the end of high school which after graduating from high school most students look forward to attend university. Thailand has a high competitive rate of enrollment for the higher education. Moreover, an education system in Thailand has developed several forms of application such as the competition examination system for entrance (entrance), admission examination system. Currently a competitive examination system for TCAS is provided and it offers each university can open an examination directly. Since the factors that occur at the present time such as Thai society begins to enter the elderly society and the population in Thailand has been greatly reduced. As a result, immense universities must be closed because of the inability to accept students to study in educational institutions.

From the recruitment of Suan Sunandha Rajabhat University in the year 2018, it was found that a large number of students, who applied in the university, were ranked in top five universities nationwide. Moreover, the mathematics major at the faculty of education was popular because the number of applicants in the fourth-round of TCAS system was ranked top ten universities across the country. A competitive rate of 1:49 shown that the mathematics major in the faculty of education gained reputation by students considerably. The students' score, who applied in mathematics major, was an average of 20,254.10 which was the seventh mean score in Thailand. Therefore, the researcher interested in studying factors that students' decision to study in the mathematics field, and the results were able to be evidence into the course quality assessment (TQF 7). It can improve the system of quality assessment of the curriculum further.

#### **OBJECTIVES**

The objectives of the article as follows:

- 1. To study the personal information of mathematics students at the faculty of education.
- 2. To study factors that affect their making decisions to study at mathematics major in the faculty of education, Suan Sunandha Rajabhat University.

### **METHODOLOGY**

The research aim to study personal information of mathematics students at the faculty of education and study factors that affect their making decisions to study at mathematics major in the faculty of education, Suan Sunandha Rajabhat University. The target group is 262 mathematics students who registered in the semester of the 2018. The research tool is a questionnaire which is divided into three parts such as a close-ended part, a close-ended part and open-ended part. The check list is used in the first part, and the Likert rating scale is applied in the second part as well as the open-ended is implemented in the third part.

## **RESULTS**

The research results are as follows:

# Section 1: The personal information of mathematics students at the faculty of education

Female students are the most proportion of mathematics major of 73.66 percent and their age is more than 20 years old. Moreover, they come from central region of 31.30 percent and they most live in a dormitory of 85.88 percent. Most of the parents' career is agriculture of 29.39 percent.

Table 1
The Sexual Information of Mathematics Major Student

		U
Sex	Number	Percentage
MALE	69	26.34
FEMALE	193	73.66 ***
Total	262	100.00

Table 2
The Age Information of Mathematics Major Student

Age	Number	Percentage
18 years	10	3.82
19 years	40	15.27
20 years	43	16.41
More than 20 years	169	64.50 ***
Total	262	100.00

Table 3
The Years Class of Mathematics Major Student

Years	Number	Percentage
1	55	20.99
2	37	14.12
3	50	19.08
4	77	29.39
5	43	16.41
Total	262	100.00

Table 4
The Region Information of Mathematics Major Student

Region	Number	Percentage
North	11	4.20
Central Region	82	31.30 ***
Northeast	71	27.10
East	22	8.40
Southern Region	76	29.01
Total	262	100.00

Table 5
The Habitat Information of Mathematics Major Student

The Hubitut Information of Muthematics Major Student									
List	Number	Percentage							
Dormitory	225	85.88 ***							
House	33	12.60							
Else	4	1.52							
Total	262	100.00							

Table 6
The Parents' Occupation Information of Mathematics Major Student

<b>_</b>		y
List	Number	Percentage
Official	68	25.95
Private/State Enterprise	12	4.58
Private Business	64	24.43
Agriculture	77	29.39 ***
Else	41	15.65
Total	262	100.00

# Section 2: The factors that affect students' decisions to study at mathematics major, at faculty of education, Suan Sunandha Rajabhat University

Individual factors, which are influential in students' decision to study in mathematics major at faculty of education, are that the curriculum and mathematics majors are matched with students' need and their parents could finance the fee of registration. Parents' expectation has also an impact on students' decision because they believe that mathematics teachers are high demand of the currently market. Furthermore, reputation of institution and experienced instructors are influential on students' making decision. Finally, success cases of students who finished the university from the mathematics major. Most of them can pass the select examination to be government officers.

Table 7
The Personal Factors that affect students' decisions to select study

	The Factors that affect		The	Opinion S	Scale			
	students' decisions to select	5	4	3	2	1	$\overline{x}$	S.D
	study							
Perso	onal Factors							
1	There are courses and programs that matched the needs of students.	107 (40.8%)	115 (43.9%)	36 (13.7%)	3 (1.1%)	1 (0.4%)	4.24	.756
2	Have close friends to study in this field.	22 (8.4%)	42 (16.0%)	41 (15.6%)	34 (13.0%)	123 (46.9%)	2.26	1.401
3	Parents of students graduate from this field.	15 (5.7%)	28 (10.7%)	30 (11.5%)	30 (11.5%)	159 (60.7%)	1.89	1.288
4	Parents of students recommend choosing to study in this field.	41 (15.6%)	53 (20.2%)	67 (25.6%)	39 (14.9%)	62 (23.7%)	2.89	1.385
5	The advisor teacher recommended to choose to study in this field.	25 (9.5%)	49 (18.7%)	73 (27.9%)	43 (16.4%)	72 (27.5%)	2.66	1.314
6	Guidance teachers recommended to choose to study in this field.	17 (6.5%)	51 (19.5%)	70 (26.7%)	49 (18.7%)	75 (28.6%)	2.56	1.266
7	Teachers who are impressed by students are alumni of this field.	44 (16.8%)	43 (16.4%)	57 (21.8%)	27 (10.3%)	91 (34.7%)	2.70	1.499
8	Students choose to study because they do not know which program to choose from.	16 (6.1%)	34 (13.0%)	43 (16.4%)	43 (16.4%)	126 (48.1%)	2.13	1.306
9	Students want to study to learn about living abroad.	41 (15.6%)	72 (27.5%)	64 (24.4%)	28 (10.7%)	57 (21.8%)	3.05	1.372

Table 8
The Financial Factors that affect students' decisions to select study

	The Factors that affect		The	Opinion S	Scale			
	students' decisions to select study	5	4	3	2	1	$\overline{x}$	S.D
Fina	ncial Factors							
10	can afford to pay for education fee.	70 (26.7%)	98 (37.4%)	75 (28.6%)	10 (3.8%)	9 (3.4%)	3.80	.990
11	Students have the right to borrow money for education.	70 (26.7%)	41 (15.6%)	33 (12.6%)	18 (6.9%)	100 (38.2%)	2.86	1.677
12	Save traveling expenses to study	29 (11.1%)	45 (17.2%)	82 (31.3%)	40 (15.3%)	66 (25.2%)	2.74	1.308
13	There are scholarships for students who come to study.	27 (10.3%)	43 (16.4%)	57 (21.8%)	33 (12.6%)	102 (38.9%)	2.47	1.408
14	There is an installment payment system for students who come to study.	16 (6.1%)	44 (16.8%)	60 (22.9%)	35 (13.4%)	107 (40.8%)	2.34	1.323
15	The material cost is within the acceptable range.	29 (11.1%)	90 (34.4%)	84 (32.1%)	32 (12.2%)	27 (10.3%)	3.24	1.127
16	Food costs in schools are reasonable.	36 (13.7%)	101 (38.5%)	77 (29.4%)	28 (10.7%)	20 (7.6%)	3.40	1.091
17	There is a collection of education fees that are not complicated.	26 (9.9%)	73 (27.9%)	90 (34.4%)	30 (11.5%)	43 (16.4%)	3.03	1.205

Table 9
The Parent Factors that affect students' decisions to select study

	The Factors that affect		The Opinion Scale					
	students' decisions to select	5	4	3	2	1	$\overline{x}$	S.D
	study							
Parei	nt Factors							
18	Parents support tuition fees for students.	159 (60.7%)	66 (25.2%)	29 (11.1%)	2 (0.8%)	6 (2.3%)	4.41	.887
19	Parents set their hopes on student learning.	122 (46.6%)	90 (34.4%)	41 (15.6%)	5 (1.9%)	4 (1.5%)	4.23	.888
20	Parents consider the students' intelligence whether they can study or not.	81 (30.9%)	102 (38.9%)	62 (23.7%)	8 (3.1%)	9 (3.4%)	3.91	.986
21	Parents are interested in student education.	120 (45.8%)	91 (34.7%)	42 (16.0%)	6 (2.3%)	3 (1.1%)	4.22	.877
22	Parents want students to graduate at least a bachelor's degree.	159 (60.7%)	67 (25.6%)	25 (9.5%)	6 (2.3%)	5 (1.9%)	4.41	.896
23	Parents wanted the graduates get a stable job.	187 (71.4%)	55 (21.0%)	18 (6.9%)	2 (0.8%)	-	4.63	.646

Table 10
The Educational Institution Factors that affect students' decisions to select study

	The Factors that affect	The Opinion Scale						
	students' decisions to select	5	4	3	2	1	$\overline{x}$	S.D
	study							
Educ	ational Institution Factors							
24	Is the number one Rajabhat Institute in Thailand	106 (40.5%)	79 (30.2%)	56 (21.4%)	6 (2.3%)	15 (5.7%)	3.97	1.109
25	The institution has a beautiful environment.	60 (22.9%)	93 (35.5%)	76 (29.0%)	18 (6.9%)	15 (5.7%)	3.63	1.085
26	Is an educational institution that is convenient to travel to further study	66 (25.2%)	93 (35.5%)	64 (24.4%)	25 (9.5%)	14 (5.3%)	3.66	1.116
27	Is an educational institution that has standardized teaching and learning	72 (27.5%)	120 (45.8%)	60 (22.9%)	4 (1.5%)	6 (2.3%)	3.95	.878
28	Is an educational institution in which personnel have knowledge and expertise in the teaching field	107 (40.8%)	103 (39.3%)	44 (16.8%)	7 (2.7%)	1 (0.4%)	4.18	.830
29	Is an educational institution with thorough care for students	73 (27.9%)	100 (38.2%)	65 (24.8%)	17 (6.5%)	7 (2.7%)	3.82	.999
30	The institution has been accredited courses.	102 (38.9%)	114 (43.5%)	38 (14.5%)	5 (1.9%)	3 (1.1%)	4.17	.829
31	The institution is well equipped in the classroom and teaching.	67 (25.6%)	105 (40.1%)	72 (27.5%)	13 (5.0%)	5 (1.9%)	3.82	.934
32	Personnel in the field of teaching using innovation and technology according to the era	91 (34.7%)	111 (42.4%)	51 (19.5%)	5 (1.9%)	4 (1.5%)	4.07	.868

Table 11
The Social Factors that affect students' decisions to select study

	The Factors that affect		The Opinion Scale					
	students' decisions to select study	5	4	3	2	1	$\overline{x}$	S.D
Socia	l Factors							
33	Graduates from disciplines recognized by the profession.	113 (43.1%)	99 (37.8%)	43 (16.4%)	5 (1.9%)	2 (0.8%)	4.21	.837
34	Graduates from this majors can pass the select examination to be government officer.	119 (45.4%)	95 (36.3%)	41 (15.6%)	6 (2.3%)	1 (0.4%)	4.24	.825
35	Branch graduates can continue their education at a level higher.	102 (38.9%)	101 (38.5%)	51 (19.5%)	7 (2.7%)	1 (0.4%)	4.13	.843
36	Students receive modern knowledge.	103 (39.3%)	107 (40.8%)	45 (17.2%)	6 (2.3%)	1 (0.4%)	4.16	.816
37	Branch graduates can apply their knowledge to practical applications.	112 (42.7%)	95 (36.3%)	47 (17.9%)	6 (2.3%)	2 (0.8%)	4.18	.859

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	The Factors that affect		The	Opinion S	cale			
	students' decisions to select	5	4	3	2	1	$\overline{x}$	S.D
	study							
38	Graduates from							
	disciplines can be a leader in	75	110	62	10	5	3.92	.918
	bringing students to compete	(28.6%)	(42.0%)	(23.7%)	(3.8%)	(1.9%)	3.92	.918
	at national level.							
39	Graduates from disciplines	02	122	20	4			
	can discuss and exchange	92 (35.1%)	122 (46.6%)	38 (14.5%)	4 (1.5%)	6 (2.3%)	4.11	.869
	knowledge to others.	(33.170)	(40.0%)	(14.5%)	(1.5%)	(2.370)		
40	Graduates from disciplines							
	can attend research	86	94	67	11	4	3.94	.943
	presentations at national and	(32.8%)	(35.9%)	(25.6%)	(4.2%)	(1.5%)	3.94	.943
	international.							

### **CONCLUSION AND FUTURE WORK**

Factors affecting the decision to study in the field of mathematics, faculty of education at Suan Sunandha Rajabhat University. It was found that the personal factors, which affect the decision to study in the field of mathematics, are the curriculum and the field meets the students' need. The family's expectation affects the students' decision since they want their children having a stable work and the mathematics teachers is a high demand of the current career demand. Financial is also effect the decision to study in the field of mathematics because the registration fee is not beyond their parents' power. Moreover, the reputation of institution and the expertise of the instructors are the most significant when students make the decision. The number of successful graduating students, who were able to pass the examination of Thai government, attract students' interest to acquire the degree in the field of mathematics. Consistent with relevant research Pharatsakorn, Thanasuwit and Sukhonth. (2017) said that the ranking plays the most important role in student's making decision and they indicated the following factors can impact on students' decision 1) factor on the role of professor and faculty explained variance were 15.7 percent of the total variance, 2) factor on curriculum explained variance were 10.4 percent of the total variance, 3) factor on value of social explained variance 10.2 percent of the total variance, 4) factor on percent economic explained variance were 9.9 percent of the total, 5) factor on famous of institute explained variance were 9.6 percent of the total Varian, and 6) factor on motivating influence from people explained variance were 7.1 percent of the total variance. Nawaporn T. and Runglaksamee R. (2017) said that Factors affect decision making to study in major accounting, Faculty of Management Science at Suan Sunandha Rajabhat University. The result found that the majority factor that affect of decision making of students who study in accounting major are ranking of University No. 1 and to create pride for themselves and their parents. In addition we found the students piority of the factors that affect of decision to study in major accounting in the top five by in descending order of importance are as follows: the expectation Professional, the intention Profile, the image of the university, the location and the teaching and learning.

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