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Motivation for Major Choice in Relation to College Major Satisfaction

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Abstract: Major satisfaction is a critical factor to evaluate a student's overall college experience. Although much research has been carried out to study the major satisfaction, few studies investigate its association with motivation for major choice. In past years, students have been blindly chasing some "popular majors". In most cases, these students select the major not according to their own will but motivated by other factors like parents' command and social trend, which could lead to dissatisfaction with the major in future study. The objective of this research is to investigate whether the motivation for major choice relates to major satisfaction. A survey was conducted among students in certain majors in Fudan University and the results indicated that the independence degree of major-choice does make a difference to major satisfaction.

key words: *motivation; Major satisfaction; Major Choice*

Introduction

The academic performance of a student depends largely on the interest and passion for what he/she is learning. However, due to the current college enrollment mechanism and the prevailing perception that the higher score a major requires, the better major it is, students in China have little access and interest to know about the majors when they make their decisions entering college. Indeed When deciding on their future university major, most of Chinese high school graduates are influenced by some external factors, including their social class, parents' expectations and the college entrance exam score. In contrast, most of the top universities in the West provide the students with abundant information about major with the assistance of academic counselors and a series of orientation talks. And a majority of Western students base their major decision-making mostly on their own interests or they can delay their decision after a year's study in college(Jiang et al, 2010).

In China, the computer science major was well-received as the hot major in 2000. Since then, people have been blindly chasing some "popular majors", which have recently been the business majors. students rarely consider their strong points and interests, instead, they only care about the rankings of the universities and the vocational prospects. According to the data from the admission office of Fudan university, the economics and management majors have been two of the most popular

majors in these years, of which the admission score is among the highest. Students who are enrolled by this major must be top students in their home province, and once they got enrolled, they become the pride of their families and schools. Whereas, the reality might not meet their expectations after they enter university and start their study, which is likely to cause depression and lower their satisfaction with the major. The importance of satisfaction with one's major can be seen from several different perspectives. For instance, a study found a positive relationship between major satisfaction and collegiate grade point average (GPA) (Guan, Shiye, Liu, & Yum, 2006), and thus helps them to obtain a good job and leads to overall level of well-being and life satisfaction (Feldman & Newcomb, 1970; Lounsbury & Gibson, 2006). Also, students tend to switch major because they are dissatisfied with the current major, which is a tiring and time-consuming process that requires great efforts (Christen et al, 2007).

The purpose of this research is to investigate whether the motivation for major choice relates to major satisfaction. And before conducting the research, I assume that students in so-called "hot majors", such as economics and management major, are more likely to make the choices based on the social trend or parent's command rather than following their heart and interest. And I would like to offer some guidance to prospective college students to find a major that fits them and thus increase their academic motivation for their majors.

Literature review

Motivation For Major Choice

Studies have analyzed the factors that influence student's decision-making with regard to the college major. There have been a variety of academic advising models applied by western universities to advice student on choosing a major.

The academic advising theory holds that students' choice of academic major depends significantly on their career interests. Wanberg and Muchinsky (1992) suggested that a large proportion of business major students have made the choice based on the perception that such majors could provide a guaranteed but open-ended path to employment upon graduation. Horhota (2004) also argued that decision-making variables were composed of career decidedness, self-knowledge, career-knowledge, decisiveness, career-salience, and comfort with career decision status. Later, O'Banion (1972) developed new understandings on academic advising model in terms of 5 items: 1) exploration of life goals, 2) exploration of career/educational goals, 3) selection of an educational program, 4) selection of courses, and 5) scheduling of courses. Steps 2) and 3) also presume that the exploration of career goals could lead to selection of a major.

Some studies show that cultural differences also make a difference in the major decision. In South Korea, where the exam-oriented education is quite similar to the situation in China, prestige of majors, grade, and implications of parents reflecting more "dependent decision-making style" are more relevant for understanding choices of major among college students (Leong 1991).

Wu (2006) later concluded a more comprehensive result that involved 11 most influencing factors when filling in the intention of university major, including the achievement, matriculating mark, personal preferences, employment conditions, universities' reputation, major, tuition, national needs, university location, parents' opinions, and the university's advertisements.

Besides, Chinese students also focus on the popularity of the major, and they always

make choices by jumping on the bandwagon effect instead of rational thinking. Chen (2008) has argued that there is no major that is absolutely “hot or cold”, it is the demand of certain talents that sets the trend of hot majors. If everyone chose the same major in the same year, then there would be fierce competition in the job market in that field and the “hot” major students might not be able to find a job as they expected.

Major Satisfaction

Job satisfaction has been the most investigated source of satisfaction among adults in the well-being studies (Pavot and Diener 2004). However, the existing scale of job satisfaction is not appropriate for the study of major satisfaction of college students, the new concept was then defined as ‘enjoyment of one’s role or experiences as a student’ to better evaluate its implied meanings (Lent et al. 2007, p. 87).

Many higher education institutions have overlooked the degree to which student satisfaction can influence the overall college experience. Students’ satisfaction with their academic major could affect their future academic performance and career development (Aitkens 1982) and further relates to the overall level of well-being and life satisfaction of college students (Feldman & Newcomb, 1970)

What’s more, evidence indicates that a student’s level of academic satisfaction is related to student’s ability, motivational goals as well as their perceptions of the quality of their academic programs and study requirements (Levitz & Noel, 2000a). Personality is another factor in studies on the conceptual lens of Holland(1985), whose central thesis was that people would flourish in environments where there was a good fit between the individual’s personality and the environment in which the person functioned. A good fit can lead to satisfaction, while a lack of fit could leads to dissatisfaction.

In the study of major satisfaction of Chinese students, Li summarized the existing major satisfaction models, which involved economic factors, education quality, social interaction, career expectation (Table 1). She also develops her scale which consists of 3 dimensions -- major products 专业产品满意satisfaction, major service satisfaction and major social satisfaction, each dimension contains several specific categories of assessment. (Table 2)

表1 大学生专业满意现有研究概念化模型

研究者	研究手段	概念化模型	
		第一位阶	第二位阶
Rodney Arambe wela&John Hall 2008	基于国际学生 满意的实证模型	迁移成本、生活费用、临时工作	经济考虑
		教育质量、教育获取、教育反馈	教育因素
		技术获取、技术革新	技术因素
		社会活动、社会关系、任职培训、咨询服务	社会因素
		住宿费用、住宿标准	住宿因素
		个人安全、生活方式	安全因素
		当地形象、国际形象	形象声誉
周敏 2008	基于农科大学生专业满意度调查	喜爱程度、了解程度、自主性、适合期望、对口期望、专业稳定	
陈立梅 2008	基于电子商务专业学 生满意度的实证研究	专业引导形式、专业课程设置、专业就业前景	
张 业 徐智博 洪纳娜 2010	基于商学院本科学 生专业选择动因与 专业满意度研究	自我素质与能力锻炼机会、理想志向匹配、专业能力培养、个人 兴趣匹配、就业前景、师资资源、父母意见、同学朋友选择影响	远期因素
		专业氛围、专业内竞争压力、专业热门程度、专业难度、时间安排自主性	现期因素

Table 1 Existing models on college student’s major satisfaction scale

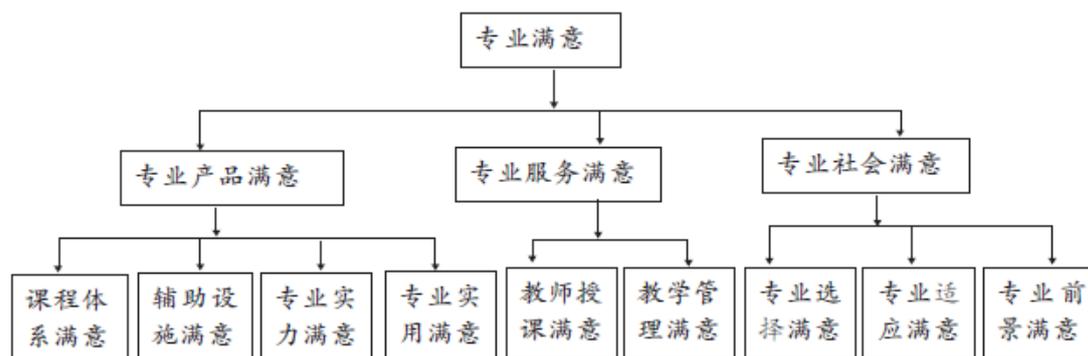


Table 2 Li's major satisfaction scale model

Relationship between Motivation and Major Satisfaction

Nonetheless, among the existing studies on major satisfaction scale, there is little research on the relationship between motivation for major choice and the student's major satisfaction. According to Wigfield (2004), students who are intrinsically motivated are more likely to engage in the task willingly as well as work to improve their skills, and thus increase their capabilities. Therefore, I assume that if a student make the major choice on his/her own, it means that he/she is intrinsically motivated. And I suppose that students with better capabilities have more confidence in themselves, which could help increase their satisfaction with the major. The hypothesis of this study is that students who choose their major according to their own will have higher satisfaction than students motivated by other reasons.

Methodology

Participants

Undergraduate students at Fudan university who majored in Economics and Management were recruited as participants of this study because these students are most likely to be influenced by external factors such as parents' will and social trend. A non-probability sampling was adopted to ensure larger sampling size. 85 questionnaires have been distributed at the site of the dorm buildings of the target participants and 78 valid questionnaires were collected. The participants consisted of 27 first-year students (35%), 47 second-year students (60%) and 4 third-year students (5%). There were 37 males and 41 females. No incentive was given for participation, and approximately 80% of the people who were approached agreed to participate.

Questionnaire design

The questionnaire consists of 15 questions, which can be divided into 3 sections. The first section (question 1-7) features various introductory questions including questions about gender, grade, major, native place, registered household category, subjects they chose in college entrance exam and whether they were enrolled according to their scores or through other ways. The question about major was designed to exclude students of other majors. Some questions were designed based on the fact that different provinces in China differ in the policy on when and how students fill their intended majors, since students in some provinces like Shanghai fill them before they know the exam results, while students from other provinces decide the major study after they know the score, which might influence their choices. In addition, whether the student took liberal arts or science subjects in the college entrance exam might also affect their major satisfaction owing to the mathematical ability or other academic skills.

The second section (question 8, 10) is aimed to know about the students' motivation of the major-choice and the degree of independence on choosing major. The multiple choice question about the motivation for major-choice was designed to find out what the most influencing factor in their major choice was. And the interval scale of the independence degree was to examine whether it corresponds to the former question.

The third section (question 9) provides an overall evaluation of the major satisfaction. The scale is based on *the professional adaptability scale of college students* (Tang,2007). It consists of 15 items, with a 5-point Likert-type scale from 1 "strongly agree" to 5 "strongly disagree". And the scale is composed of two dimensions of academic learning and social interaction in the current major by asking questions like major interests and the opinions of the tutors and professors.

Data Analysis

According to the statistics of the basic information of the respondents, 27 (about 35% of the sample size) respondents were in their first year, 47 in their second year (about 60%) and 4 of them were third-year students (about 5%). More than 50% of them entered the current major by achieving the required score in the college entrance exam and around 15% by passing the independent entrance exam.

Besides the introductory information, the statistical analysis results also consider the respondents' independence degree on major-choice, the social-related and academic-related major satisfaction and general satisfaction with their current major. The data were analyzed by making several correlation analyses among several factors to support the proposed hypothesis.

1. Correlation between major-choice motivation and the independence degree on major-choice

Table 1 indicates that students who choose their major according to their own will have the highest degree of independence (Mean=8.33), while those whose choices have been affected by their parents' will or constrained by their exam scores got the lowest independence degree, which verifies the reliability of our data .

reason	N	mean	sd	min	max	p50	iqr
其它	4	6.75	2.872281	3	10	7	3.5
家长的决定	12	5.083333	1.831955	3	8	5	3
自己的决定	45	8.333333	1.167748	5	10	8	1
大家都说好	12	7.833333	.7177406	7	9	8	1
受限于考分	4	5.5	2.380476	2	7	6.5	3
受限于本省招生专	1	6	.	6	6	6	0
Total	78	7.5	1.863874	2	10	8	2

Table 1

2. Correlation between major-choice motivation and general major satisfaction

Students who choose their major according to their own showed the highest general satisfaction with the current major, which to a certain extent proves the hypothesis (Table 2). Table 3 further approved it since both academic-related and social-related major satisfaction are relatively higher among these students.

reason	N	mean	sd	min	max	p50	iqr
其它	4	52	4.242641	48	58	51	5
家长的决定	12	51.58333	7.025387	40	61	50.5	12
自己的决定	45	53.84444	5.418636	43	64	54	7
大家都说好	12	51.58333	5.759709	41	59	50.5	9.5
受限于考分	4	48.75	6.020797	43	57	47.5	8.5
受限于本省招生专	1	52	.	52	52	52	0
Total	78	52.76923	5.716059	40	64	52	8

Table 2

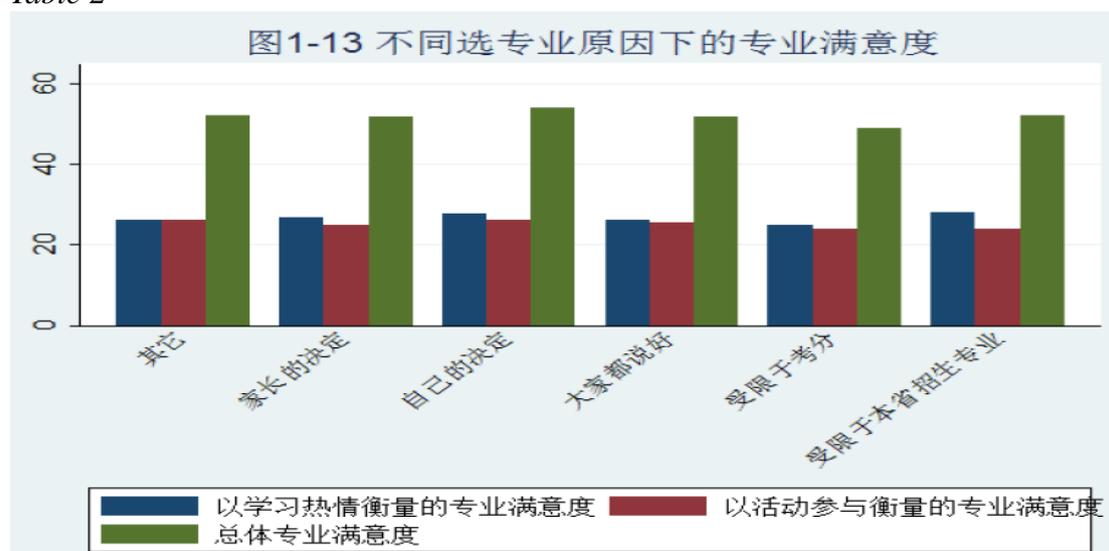


Table 3

3. Correlation between the independence degree on major-choice and major satisfaction

Statistical results indicate that the major satisfaction is higher at both sides of the degree of independence and lower in the moderate degree (see table 4 and table 5), which implies that students who have the highest and lowest independence degree on major-choice are both relatively more satisfied with their major. The result is different from the hypothesis in that the major satisfaction also scores higher among students with lowest independence degree.

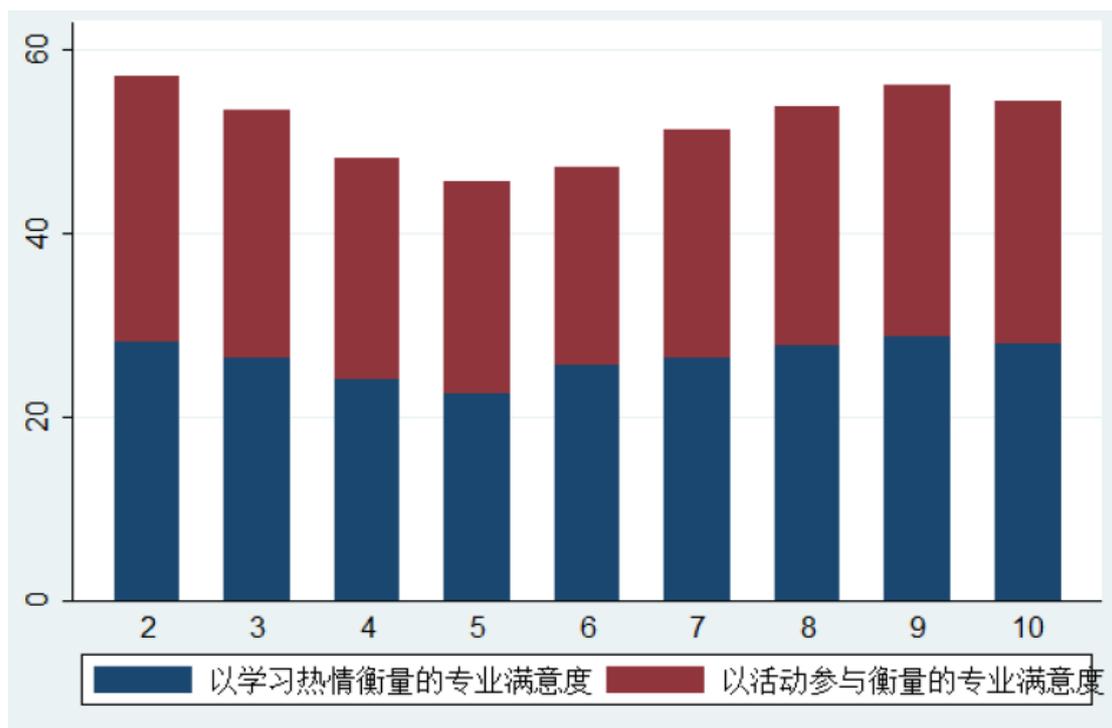


Table 4

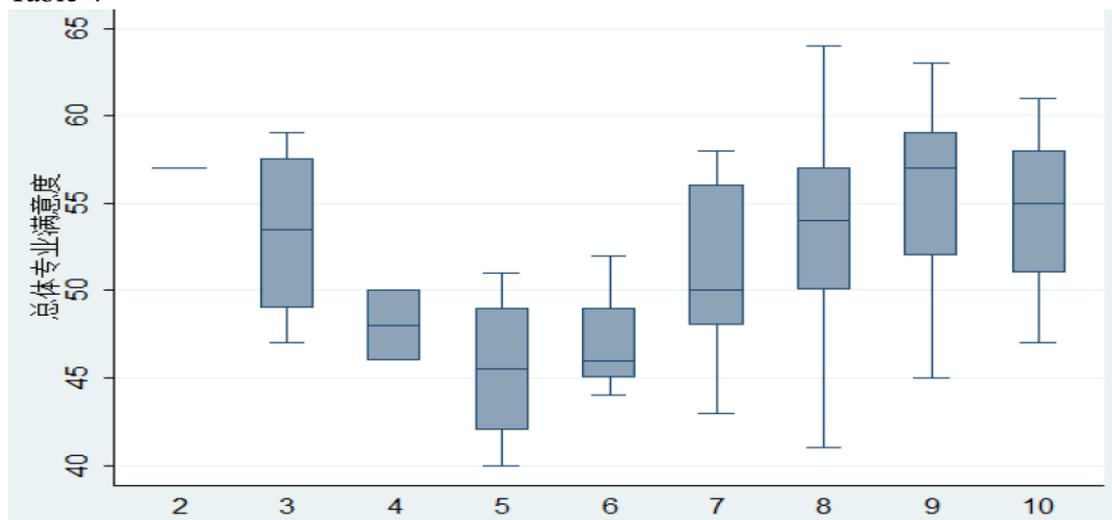


Table 5

4. Multiple regression analysis of the independence degree on major-choice and general major satisfaction

In table 6 and 7, we can see the existence of correlation between the independence degree on major-choice and general major satisfaction ($p < 0.05$), and the regression coefficient is 0.094. But the independence degree just account for 8% of the variation on major satisfaction ($r\text{-squared} = 0.0835$), which means that there are other factors that influence the major choice such as the academic environment of the school and the student's personality.

Source	SS	df	MS	Number of obs = 78		
Model	22.326087	1	22.326087	F(1, 76) =	6.92	
Residual	245.173913	76	3.22597254	Prob > F =	0.0103	
Total	267.5	77	3.47402597	R-squared =	0.0835	
				Adj R-squared =	0.0714	
				Root MSE =	1.7961	

mark	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
q9_total	.0942029	.0358087	2.63	0.010	.0228837	.1655221
_cons	2.528986	1.900509	1.33	0.187	-1.256206	6.314177

Table 6

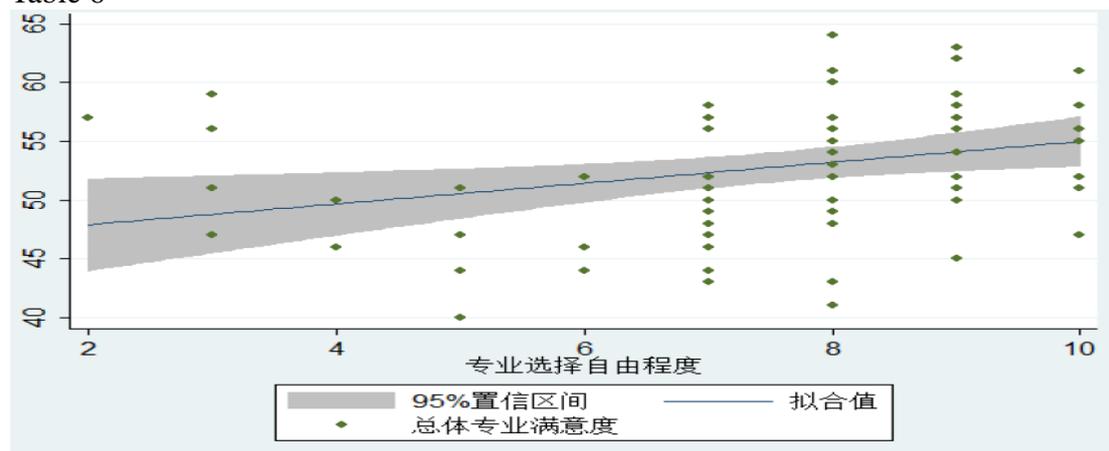


Table 7

5. Multiple regression analysis of the independence degree on major-choice and academic-related and social-related major satisfaction

Table 8 further supports the correlation between the independence degree on major-choice and academic-related major satisfaction ($p < 0.05$). The regression coefficient is 0.158. Therefore, the higher independence degree the student has, the higher academic enthusiasm he or she shows ($R\text{-squared} = 0.0892$).

Source	SS	df	MS	Number of obs = 78		
Model	23.8516979	1	23.8516979	F(1, 76) =	7.44	
Residual	243.648302	76	3.20589871	Prob > F =	0.0079	
Total	267.5	77	3.47402597	R-squared =	0.0892	
				Adj R-squared =	0.0772	
				Root MSE =	1.7905	

mark	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
q9_study	.1579583	.0579105	2.73	0.008	.0426194	.2732971
_cons	3.231077	1.578146	2.05	0.044	.0879273	6.374226

Table 8

On the other hand, the relationship between the independence degree and social-related major satisfaction shows insignificant signs ($p = 0.136 > 0.05$).

Source	SS	df	MS			
Model	7.74554243	1	7.74554243	Number of obs =	78	
Residual	259.754458	76	3.41782181	F(1, 76) =	2.27	
Total	267.5	77	3.47402597	Prob > F =	0.1364	
				R-squared =	0.0290	
				Adj R-squared =	0.0162	
				Root MSE =	1.8487	

mark	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
q9_class	.0900644	.0598277	1.51	0.136	-.0290927	.2092216
_cons	5.181418	1.554339	3.33	0.001	2.085683	8.277153

Table 9

Discussion

The objective of this research is to examine whether the motivation for major choice is related to major satisfaction by assuming that the major choice of those students in “popular majors”, such as economics and management majors, has been influenced by social trend or parent’s command rather than their interest and strength.

The results of statistical analysis indicate that:

1. The survey results verified the presumption in that most students in economics and management major made their decision according to their own will instead of being affected by other factors like parents’ command.
2. The independence degree on major-choice has a positive correlation with students’ major satisfaction. Indeed students who make major choice on their own show higher satisfaction with the current major as compared to others in both academic-related and social-related satisfaction.
3. Some students who reported low independence degree also have relatively high major satisfaction, which can be explained by some other factors such as campus environment and personality.

These three results verified the hypothesis that major satisfaction is related to motivation behind major choice and led to the conclusion that student’s major satisfaction will be higher if they have a say in choosing major, which implies that if the student’s major choice is limited and affected by parents’ will or social trend, they tend to be less satisfied with the major in aspects of both academic studies and social interaction with classmates.

More research, however, should be conducted since part of the research hypothesis is refuted. A possible explanation for those findings could be that the students with low independence degree on major-choice changed their mind after they entered the major. Another reason to account for it is that they did not have specific dream major when they were doing the major choice, so someone make the decision based on their strength and potential that fit them.

This research proved Wigfield’s argument (2004) that students who are intrinsically motivated are more likely to engage in the task willingly as well as work to improve their skills, and thus increase their capabilities. And the findings also proved that the factor of independence of major-choice could make a difference to student’s major satisfaction.

It did however only look at a narrow range of major and university- only the two majors in Fudan University. The sampling size was relatively small and simple, which could not represent the whole student population in general. What’s more, since the questionnaire was simplified from the university major satisfaction scale in Tang’s

study (2007), the questions and items were quite general and even ambiguous to some extent. Further studies can improve the sampling design and adopt more measurement tools to get a comprehensive understanding of this research question. Indeed qualitative survey be conducted to provide a deeper understanding of the individual thoughts.

The university major can make a great difference in a person's future career and life, and the major satisfaction can decide whether a student enjoy the important four years in the university or not. The conclusion of this study hence suggests that students should be more independent in make their own choice when choosing a major. Parents in China have been always worried about their only child and tried to make every decision that they regarded as the best for them, and it is time to let him stand on his own feet to pursue a bright future.

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