

# Factors Affecting International Students' Perception of Their Academic Learning Experiences at Northeast Normal University China

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## Abstract

With the increasing number of international students travelling to well-developed countries for higher education, such as the China, there has been a growing interest in exploring the factors that influence their academic performance and academic learning experiences during their overseas studies. This study aims to give an insight into international students' perceptions of academic learning experiences.

A quantitative approach was employed to gain a better understanding of international graduate students' perceptions of their academic learning experiences at Northeast Normal University.

The sample comprised 87 international students, 44 Master and 43 doctoral from four schools:

Education 32, Life Sciences 29, Economics 15 and Chemistry 11. A structured questionnaire, the Dundee Ready Education Environment Measure (DREEM) served as the main instrument for quantitative data collection. Three (3) sampling techniques were used in this study: purposive sampling, stratified sampling and simple random sampling. A five-point Likert scale (1= Strongly disagree; 2= Disagree; 3= Unsure; 4= Agree; 5= Strongly agree) was involved in the questionnaire instrument. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20.0. Findings indicate that students rate most aspects of their programs positively, although few respondents give the highest ratings, indicating that there is substantial room for improvement. International students' majors and length of stay in China influenced perceptions about the learning environment.

**Keywords:** Factors Affecting, International students, perceptions, Academic learning experience.

## 1. Introduction

This study sought to examine the factors which affect international students' perception of their academic learning experiences at the university, whether there were significant differences among the factors which affect international students' perception of their academic learning experiences at the university. According to the Institute of International Education (2013), China is ranked fifth in admitting international students behind USA, UK, France and Germany. By the mid April, 2015 there were 397,635 international students from 202 countries around the world studying in China (MOE China, 2015).

Higgins et al (2005) describe the learning environment as the diverse physical settings, cultures and contexts in which students learn; the term includes the culture of the class or school and presiding ethos and characteristics including how students interact with and treat one another, and the ways in which teachers can organize an educational environment. The learning environment encompasses a range of elements including teachers and teaching process, societal, edifying, and psychosomatic essentials and the physical environs, a warm, helpful and exigent learning environment is usually considered an indispensable pre-requisite for finest erudition.

Numerous approaches have been adopted to assess the students' perception on their learning environment (Seabrook, 2004; Sobral, 2004; Audinet al 2003; Roff et al, 1997). Studies have shown that the learning environment has an important influence on the teaching- learning process in that it affects students' learning outcomes, motivation, behavior, sense of well-being and success (Bakhshialiabad et al., 2015; Audinet al, 2003; Genn, 2001; Pimparyonet al, 2000). Jonassen & Land (2002) emphasize that higher education is expected to create a high quality learning environment.

Higher education in a multicultural environment has become an overwhelming phenomenon in many nations. Well-developed countries in higher education, led by the USA, the UK, Australia, Canada and New Zealand, have been receiving increasing numbers of international students in the past two decades. According to research conducted recently by the British Council in collaboration with Universities UK and IDF Education Australia (Böhm et al 2004, cited by Asteris 2006), global flows of students will increase from 2.1 million in

2003 to approximately 5.8 million by 2020. About 45% of these international students (i.e., 2.6 million) will choose to study in the above five major English speaking destination countries. The Asian countries such as China, India and Malaysia dominate the demand for overseas education. The United Kingdom, in its attempt to re-establish and maintain its credential as a world class provider of education and training, has declared a formal international education policy designed to attract international students. The government and the British Council developed a programme known as “The UK Education Brand” in 1999. In addition to aggressive marketing strategies, the former Prime Minister Tony Blair proposed a four-point programme in 1999 to increase their market share from 16 percent to 25 percent by 2005. As a result, the number of international students (including EU students) has increased from about 122 thousand in 1996 to 318 thousand in 2006, and the figure is estimated to exceed 800 thousand by 2020 (Taylor, 2005). International students accounted 13.4% of the total UK Higher Education Institutions (HEI) population according to the statistics in 2006, among which the biggest share (12%) came from China (Taylor 2005).

The demand of Chinese students is expected to increase by 50% annually compared to a 10% growth rate of non-EU international students.

Studying in a different country can be an exciting and challenging experience for international students who have to experience many adjustment problems, particularly those relating to academic, socio-cultural and psychological adjustment (Ward & Kenney 1993). Studies suggest that problems can arise from differences in the linguistically determined discourse of intercultural and interpersonal communication, and the cultural distance of the communication patterns of the participants (Ward, Bochner, & Furnham 2001). In other words, the closer the student culture is to that of the host community, the easier the interaction and adjustment will be (Mehdizadeh & Scott 2005). While engaging in cultural learning they have to try to make academic adjustments in a new territory where there are different patterns of teacher-student interactions, classroom cultures, academic requirements and expectations, and different concepts and definitions of what constitutes good teaching and learning (Ward, Bochner, & Furnham 2001).

Asian students have difficulties adjusting to the unfamiliar Western culture of learning where Socratic dialogical practices are the norm featuring questioning, criticizing, refuting, arguing, debating and persuading (Major 2005, p. 85). There are many factors that influence Asian student cultural adaptation, such as English language skills, prior learning experiences, beliefs, cultural values, conceptions of learning, personal traits, and motivations (Berno & Ward 2004). Byrne’s (2001) study of learning experiences of Asian and Caucasian students indicates that Asians were more depressed, had more fears of loss of face, held more negative beliefs about the self and the world, and they perceived to have received less social support when compared to Caucasians.

Due to disciplinary differences, it is possible that the nature and extent of students’ curricular concerns vary across fields of study, although the research cited above did not focus on this question. In particular, whether a discipline is ‘hard’ or ‘soft’ may influence students’ level of academic satisfaction. ‘Hard’ or ‘consensus’ disciplines have consensus on appropriate theoretical orientation and proper research methods and more agreement on standards for scholarship than low consensus or ‘soft’ fields. Engineering, Biology, and the Physical Sciences are categorized as hard fields, while the Humanities and Business are categorized as soft fields (Biglan, 1973a, 1973b; Braxton and Hargens, 1996).

Faculty in soft disciplines are more likely to discuss issues not addressed in course readings and tend to assess students’ knowledge using analysis and synthesis questions, while faculty in hard disciplines are more likely to ask memorization and application questions (Braxton and Hargens, 1996). Thus, international students in soft fields may be encouraged more often by their professors to think divergently and to view subject knowledge through their own cultural lens. They may also find that scholarship in their field more readily accommodates different perspectives and backgrounds. These differences may, in turn, result in higher levels of academic satisfaction for students in soft fields compared to students in hard fields.

## 2. Research Objectives

This study addressed following two objectives:

Identify the factors which affect international students’ perception of their academic learning experiences at the university.

Explore whether there were significant differences among the factors which affect international students’ perception of their academic learning experiences at the university.

## 3. Methodology

A quantitative approach was employed to gain a better understanding of international graduate students’ perceptions of their academic learning experiences at Northeast Normal University

The sample comprised 87 international students, 44 Master and 43 doctoral from four schools: Education 32, Life Sciences 29, Economics 15 and Chemistry 11. A structured questionnaire, the Dundee Ready Education

Environment Measure (DREEM) served as the main instrument for quantitative data collection. The study was carried out at one normal university located in Jilin province, China. The university was a recipient of the project 211, which was initiated by the Ministry of Education, China.

The Dundee Ready Education Environment Measure (DREEM) questionnaire and semi-structured interviews were used for data collection. The English version of the Dundee Ready Education Environment Measure (DREEM) questionnaire was used to collect quantitative data, semi structured interviews were used to collect qualitative data. Since 1997, this instrument (DREEM) has been translated in many languages and used in several educational settings (Education, Medicine, Dentistry, Chiropractic) around the world (Riga et al, 2015; Kossioni et al, 2011; Roff, 2005). The DREEM questionnaire consists of 50 items measuring the specific aspects of the educational environment as five sub-scales based on students' perception, which include which have been categorized into 5 major aspects of students' perception of learning; students' perception of teachers; students' academic self perception; students' perception of atmosphere; students' social self perception.

Participants were asked to indicate their perception. A five-point Likert scale (1= Strongly disagree; 2= Disagree; 3= Unsure; 4= Agree; 5= Strongly agree) was involved in the questionnaire instrument. The negative items found in the questionnaire were treated accordingly whereby the reverse was made. Data analysis was done by using SPSS whereby independent sample T-test and one-way ANOVA were employed. In this view, students' perception in relation to gender and level of education were subject to T-test while variables such as school, continent, length of stay in China and age of participants were analyzed through ANOVA. Bonferroni Test was employed to determine the actual significant differences among the factors.

#### 4. Results and Discussion:

##### International Students' Perceptions of their Learning

In this study, the overall DREEM mean score for the participants was 87 out of a possible maximum of 110. School or program related factors have influence on the students' perception of their learning environment. This finding concurs with Trice & Yoo (2007) who noted that academic discipline is one of the factors which greatly influence students' perception of their learning environment.

This finding is similar to what Bakhshialiabad et al (2015) found that student' perceptions of their learning were more positive than negative. It was also consistent with the findings of Brown, et al, (2011) in that the overall scores of their study indicated that students had positive perceptions about their learning environment.

It is concluded that International students' perception of their academic learning experiences at the university is influenced by various factors. However, there is no statistically significant influence among most of the factors with exception of school related factors (table 1).

\*. The mean difference is significant at the 0.05 level

There were significant differences between the international students' perceptions based on school related factors, result indicates there is significant difference between school of life sciences and chemistry ( $p=0.035$ ). (Table 2)

The result show that there is statistically significant differences among the school related factors on SPT at the university [ $F(3,83)=2.767, p=0.047$ ](Table 3)

The result show that there is statistically significant differences among the school related factors on SASP at the university [ $F(3,259,83)=3.259, p=0.026$ ](Table 5)

\*. The mean difference is significant at the 0.05 level

There were no significant differences between the international students' perceptions based on school related factors, result indicates there is no significant difference between schools. (Table 6)

The result show that there is statistically significant differences among the school related factors on SASP at the university [ $F(3,189,83)=2.839, p=0.028$ ](Table 7)

\*. The mean difference is significant at the 0.05 level

There were no significant differences between the international students' perceptions based on school related factors, result indicates there is no significant difference between schools. (Table 8)

#### 5. Conclusions

Based on the findings of the study, it is concluded that International students' perception of their academic learning experiences at the university is influenced by various factors. Students Perception of learning, Perceptions of their teachers, Students Academic Self Perception of their learning experiences based on their school factors and student self-perception. However, there is no statistically significant influence among most of the factors with exception of school related factors.

#### 6. Limitations

The study was a small scale survey and hence the findings cannot be generalized to all international students in China. A similar study should be carried out in other universities across China (which have international

students) to establish whether international students hold the same perceptions about the academic learning environment.

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## Tables:

**Table1: ANOVA Results on students’ Perception of Learning(SPL) based on school related factors**

	Sum of Squares	df	Mean Squares	F	Sig (P Value)
<b>Between Groups</b>	3.652	3	1.217	3.217	0.27
<b>Within Groups</b>	31.402	83	0.378		
<b>Total</b>	35.054	86			

**Table 1: ANOVA Results on Students’ Perception of Learning (SPL) based on School related factors**

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	3.652	3	1.217	3.217	.027
Within Groups	31.402	83	.378		
Total	35.054	86			

**Table2: Results of Bonferroni Post Hoc Test for Students' Perception of Learning (SPL) based on School related factors**

School (I)	School (J)	Mean Difference (I-J)	P
Education	Life Science	-.29975	.365
	Economics	.08797	1.000
	Chemistry	.31676	.867
Life Science	Education	.29975	.365
	Economics	.38772	.305
	Chemistry	.61651*	.035
Economics	Education	-.08797	1.000
	Life Science	-.38772	.305
	Chemistry	.22879	1.000
Chemistry	Education	-.31676	.867
	Life Science	-.61651*	.035
	Economics	-.22879	1.000

**Table 3: ANOVA Results on Students' Perception of their Teachers (SPT) based on School related factors**

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	2.305	3	.768	2.767	.047
Within Groups	23.050	83	.278		
Total	25.355	86			

**Table 5: ANOVA Results on Students' Academic Self Perception (SASP) of their learning experiences based on School related factors**

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	5.060	3	1.687	3.259	.026
Within Groups	42.956	83	.518		
Total	48.016	86			

**Table 6: Results of Bonferroni Post Hoc Test for Students' Academic Self Perception (SASP) based on School related factors**

School (I)	School (J)	Mean Difference (I-J)	P
Education	Life Science	-.39513	.211
	Economics	.10052	1.000
	Chemistry	.28764	1.000
Life Science	Education	.39513	.211
	Economics	.49565	.199
	Chemistry	.68277	.053
Economics	Education	-.10052	1.000
	Life Science	-.49565	.199
	Chemistry	.18712	1.000
Chemistry	Education	-.28764	1.000
	Life Science	-.68277	.053
	Economics	-.18712	1.000

**Table 7: ANOVA Results on Students' Social Self Perception (SSSP) based on School related factors**

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	2.839	3	.946	3.189	.028
Within Groups	24.631	83	.297		
Total	27.471	86			

**Table 8: Results of Bonferroni Post Hoc Test for Students' Social Self Perception (SSSP) based on School related factors**

School (I)	School (J)	Mean Difference (I-J)	P
Education	Life Science	.09129	1.000
	Economics	-.25387	.841
	Chemistry	.39894	.235
Life Science	Education	-.09129	1.000
	Economics	-.34516	.298
	Chemistry	.30766	.687
Economics	Education	.25387	.841
	Life Science	.34516	.298
	Chemistry	.65281*	.020
Chemistry	Education	-.39894	.235
	Life Science	-.30766	.687
	Economics	-.65281*	.020