Labour market consideration as course selection criteria in a Malaysian university

Labour market consideration as course selection criteria

Thirunaukarasu Subramaniam
Hanizah Idris
Mohammad Raduan Mohd Ariff

Department of Southeast Asian Studies, Faculty of Arts and Social Sciences, University of Malaya, Kuala Lumpur, Malaysia

Corresponding Author:

Thirunaukarasu Subramaniam, PhD
Department of Southeast Asian Studies
Faculty of Arts and Social Sciences
University of Malaya
50603 Kuala Lumpur
Malaysia
Email: stkarasu@um.edu.my

ABSTRACT

This paper aims to identify factors that are considered by the first year undergraduate students from Faculty of Arts and Social Sciences (FASS), University of Malaya in course selection process in two different stages namely pre-entry and post-entry. Findings from this study reveals that in pre-entry selection criteria, 'teacher' and 'family' factors appears to be more important. 'Labour market consideration' only appears to be the third important factor in this stage. These three factors collectively explains approximately 54 percent of the variation in pre-entry selection criteria. In post-entry selection criteria, 'peers influence' , 'orientation week' and 'limited choices' factors emerged as important dimensions. These three factors in turn collectively explains approximately 49 percent of the variation in post-entry selection criteria. 'Labour market consideration' emerges only as the second last important factor in post-entry selection criteria.

Keywords: pre-entry; post-entry; selection criteria; labour market consideration; Malaysia

Introduction

Faculty of Arts and Social Sciences (FASS) of University of Malaya is unique because it is the only faculty that takes the first year student under the umbrella of FASS and eventually redistribute the students among 11 departments and three programmes that are available in the Faculty according to the choices made by the students. The code of entry into FASS, University of Malaya is given as MA00. So, all the fourteen options/majors available (under 11 departments and 3 programmes) are jumbled up under one single code of entry. In contrast, other public universities in Malaysia allows students to directly apply to the specific degree program that they intend to major. University Kebangsaan Malaysia (National University of Malaysia) for example allows the students to directly apply into the majors that the students intend to pursue. For example, entry code KA14 is given to students who intend to study Social Sciences (Anthropology and Sociology), entry code KA15 for Social Sciences (International Relations), KA18 for Social Sciences (Geography), KA24 for Arts (History) etc. Absence of separate entry codes for various programmes in FASS causes student that chooses FASS of University of Malaya to make decision twice namely at pre-entry stage and post-entry stage. Pre-entry stage involves choosing eight options or programmes that are being offered in Malaysian public universities. Once the students are admitted into FASS, they will be involved in the second stage of selection known as post-entry stage. Post-entry selection stage involves FASS students only where they are required to choose two set of courses which will eventually be their major and minor in their second year.

With the recent shift in the emphasis of Malaysia to focus more on science-based subjects, the intake into arts-based courses in Malaysian public universities has

declined tremendously. In the 2009/2010 session, only 405 students were taken into FASS. This is in line with the Ministry of Higher Education Malaysia's policy of having the ratio of 60:40 for Sciences and Arts. FASS use to be the largest faculty in University Malaya in the 1990s with students intake for any academic year reaching approximately 1,000 students. Currently there are 11 departments and three programmes in FASS that offer majors and minors as in Table 1. With 11 departments and three programmes competing for approximately 405 students, there is possibility for uneven distribution of students in various departments and programmes. Traditional departments such as History and Geography are likely to attract more students compared to newly established departments such as International Relations and Strategic Studies, Southeast Asian Studies, East Asian Studies etc.

'INSERT TABLE 1 HERE'

Students that enter FASS of University of Malaya will not decide upon their major and minor in the first year. They will only start to major and minor in the second year of their studies. Thus, choosing the right course is important as it is associated with employability of the students once they get into the labour market. Data on graduate unemployment in Malaysia displays an increasing trend. In 2005, the Malaysian government announced that there were 67,000 unemployed graduates, many of whom had graduated between 2000 and 2004 and approximately 92.6% of these unemployed graduates were from public universities, as opposed to only 5.3% from private institutions (Devadason, Thirunaukarasu and Daniel, 2010). In 2008, there were 54,100 unemployed graduates in Malaysia (Malaysia Department of Statistics, 2009).

One of the issues that is often raised is mismatch between the availability of the skills and the job openings in the labour market (Mansor and Tan, 2009). Thus, choosing the right major and minor based on the demand in the labour market is very crucial for the students to ensure that they are employed once they get into the labour market. During the decision making process to choose two set of courses, individuals that interact most with these students are more likely to play a major role in their decision making. As time given to make this post-entry selection is only limited to two weeks at the beginning of the first semester, the students tend to be influenced by many parties in their decision making process.

The objectives of this study are twofold. Firstly this study aims to identify factors that determine course choosing among first year undergraduate students during pre-entry and post-entry stage. Secondly, this study aims to rank the importance of labour market aspect as one of the factor that is considered in course choosing among first year undergraduate students.

This rest of the paper is organised as follows. The second section explores some related theories and literature, the third section looks at the data and method, the fourth section discusses the results in two stages namely pre-entry and post-entry stages and the final section concludes.

Theory and related literature

Course selection criteria involves a decision making process. Moogan et al. (1999) used Kotler's (1997) consumer buying decision process model to analyse the

decision making process in course selection criteria adopted by candidates hoping to gain entry into higher education. The five stage model is as follows: problem recognition, information search, evaluation of alternatives, purchase and post-purchase evaluation. As course selected will determine the competitiveness of the graduates in the labour market, courses that have high demand in the labour market will benefit the graduates in terms of reducing the period of being unemployed and obtaining a job and commanding a higher wage in the labour market. Human Capital Model on the other hand proposes that an individual invests in human capital with anticipation of getting higher return in the future (Becker 1993; Mincer 1958). This portrays that the labour market consideration should be one of the main criteria in making course choice decision among tertiary level students. Thus, labour market consideration should be the major determinant in course selection criteria as this factor will determine whether one will be employed upon completion of his or her studies in tertiary level. Does students that enter the FASS in University of Malaya, Kuala Lumpur considers this factor or are there any other factors that are considered in course choosing?

Selection criteria into tertiary education in the context of our study involve two stages namely pre-entry and post-entry selection criteria. Pre-entry selection criteria comprise university and/or course selection criteria (Bratti 2003; Brown, Varley and Pal 2009; Yamamoto 2006) and student selection criteria (Harman, 1994). Pre-entry selection criteria is associated to criteria considered before a prospective tertiary student makes a decision to enter any university or course. From the perspective of students, common factors that are considered before choosing any university and course include demand in the labour market or opportunity for career advancement

(Moogan, 2010). Labour market consideration involves whether the course selected will enable the students to get a job in the labour market. Other factor considered include family's influence (McDonough 1997; Yamamoto 2006). Teacher's advice is also an important factor in course selection. As prospective tertiary students, teachers are more likely to be their role models especially for students from rural areas. The chances of them following their teachers footsteps are very high. Beside parents, teachers and counsellors, peers are also likely to influence pre-entry selection criteria (Perez and McDonough, 2008).

On the other hand, student selection criteria are criteria set by the public institutions of higher learning to choose their students based on merit from some pre-university courses. In the Malaysian context, common pre-university courses used to give entry into first year by public institutions of higher learning include *Sijil Tinggi Persekolahan Malaysia* (Malaysian Higher School Certificate), Malaysia Ministry of Education matriculation examination, A-level, diploma or certificate qualification. The central unit that coordinates the entry into Malaysia public university is known as Student Admission Management Section or *Bahagian Pengurusan Kemasukan Pelajar* (BPKP) under the jurisdiction of Department of Higher Education.

Post-entry selection criteria on the other hand comprise major selection criteria (Strasser et al. 2002) and/or minor selection criteria and subject or course selection criteria (DellaGioia 2008). This criteria is used by students to select their majors or minors in the institutions of higher learning. FASS is unique in the sense that prospective students when submitting their application to enter university will only be able to state FASS as one of their option and not exactly the major that they intend

to do. In Malaysia, FASS is the only faculty that uses a single code of entry for all its fourteen programmes. Post-entry selection criteria can be determined by peers, seniors, parents and labour market considerations or job availability (Kaynama and Smith 1996). Seniors being their role model in the university setting are also very likely to influence their post-entry selection criteria. As researches on course selection criteria from the perspective of students are very limited in Malaysia, this study intends to explore it in order to add more knowledge to the existing body of literature on course selection criteria. Furthermore, selection criteria involving two stages in the FASS context warrants an investigation.

The data and the method

Sampling procedure

Currently there are 405 first year students that were taken into FASS. This study employs Simple Random Sampling where 280 students were selected as respondents.

Data collection

A questionnaire that comprise four sections were administered to the students. First part of the questionnaire identifies the respondents background, second part looks at the family background of the respondents, third party identifies the educational attainment of the respondents, fourth part focuses on the department/programme selection criteria in two stages namely pre-entry and post-entry. A five stage Likert Scale options was given for questions in the fourth section. The options given are 1-

Strongly disagree, 2-Disagree, 3-Neutral, 4- Agree and 5- Strongly agree. The fieldwork was done for a week from the 19th to the 23rd of October 2009 at the Faculty of Arts and Social Sciences, University of Malaya, Kuala Lumpur involving first year students.

Data analysis

The data is analysed using factor analysis to identify the pre-entry and post-entry course selection criteria. Reliability tests were also conducted for both the overall data as well as individual factors by generating Cronbach Alpha value.

The results

Exploratory factor analysis(EFA) was done to ensure items with low factor loadings are removed from further analysis. Kolmogorov-Smirnov Test was also done to test for normality, and the data is found to be not normally distributed. This indicates that a non-parametric analysis should be performed. Table 2 and 3 displays the descriptive statistics for pre-entry and post-entry stage.

'INSERT TABLE 2 HERE'

'INSERT TABLE 3 HERE'

Pre-entry selection criteria

Pre-entry factors that were identified include 'teacher' , 'family' , 'labour market' , 'less competition' and 'previous exposure' (Table 4). These five factors that were

extracted have an eigenvalue of more than 1 (Figure 1). These five factors were also subjected to a reliability test and the corresponding Cronbach alpha values obtained ranges from 0.600 to 0.829. 'Teacher' factor plays an important role in pre-entry selection criteria as teachers are always regarded as role models and the advice of teachers are often regarded as valuable. As more than 50 percent of the respondents surveyed in this study came from less developed states such as Kelantan, Terengganu, Sabah and Sarawak, they would rely on teachers to advise them to select courses or university. Probably they enter FASS, University of Malaya with the idea of becoming a teacher in their native state as more opportunities are available to become teachers in those states. If the person that they came into contact have some kind of attachment with University of Malaya, they are more likely to choose FASS, University of Malaya. In contrast, Yamamoto (2006) said that advising guidance teachers are not very important for candidates who would like to make their own decisions.

'INSERT TABLE 4 HERE'

'INSERT FIGURE 1 HERE'

Secondly, 'family' factor also plays an important role but it is only found to be second important factor. Parents and siblings can also contribute towards decision-making process. Close family members such as father, mother and sister or brothers can influence the decision making process of the students by giving valuable insights in the decision-making process (Yamamoto 2006). 'Labour market consideration' is found to be the third important factor for these new students in their decision making process to enter university. Krone et al. (1981) also highlighted the

importance of career prospect and progression into decent employment as the most important factor in decision-making criteria. Similarly, 52 percent of respondents in Moogan's (2010) study stated that ambition and career opportunities as important in choosing particular subject area to study at degree level. The fourth factor is identified as 'less competition' factor. The last factor is identified as 'previous exposure' factor. Even though this factor emerged as the least important factor, it is still an important factor in the course selection process. Bratti (2003) also highlighted that performance in A-levels appear to be more important in degree subject enrolment in United Kingdom. Similarly, Stearns et al. (2010) also highlighted that in making college attendance decision, students may also take into consideration prior experiences with formal educational system. Majority of pupils in Moogan's (2010) study also stated that they would select a subject that they are currently studying in school. These five factors collectively explains 72 percent of the variation in pre-entry selection criteria.

Post-entry selection criteria

For post-entry selection criteria, six factors were extracted with an eigenvalue of more than 1 (Table 5 and Figure 2). The corresponding Cronbach alpha values for these six factors range from 0.600 to 0.800. The first factor is identified as 'peers' factor. Once in the university, the closest person to these new students will be their seniors where these seniors will play a role in influencing the new students. Riggs and Lewis (1980) pointed out the strong influence of friends in making choices compared to factors such as school teachers and parents. Significant roles of friends and peers in course selection was also highlighted by Roberts and Allen (1997).

‘INSERT TABLE 5 HERE’

‘INSERT FIGURE 2 HERE’

The second factor is identified as ‘orientation week’ factor. This factor is also important as during the first week students will be given briefing on the options to major and minor that are available at the Faculty. This is also a formal selling point for academic staffs at FASS. If the academic staffs are able to impress the new students with their program, then they stand a better chance of attracting a large number of student to choose their department/programme. During the orientation week, students are also normally exposed with the career opportunities that are available to graduates in the chosen major and minor. The role of orientation week in this study is quite similar to post-application visit day experience suggested by Moogan at al. (1999) and Brown, Varley and Pal (2008) as they are more likely to be influenced by academic staff and other students during the orientation week. Thus, it is not suprising that orientation week emerges as the second important factor in post-entry course selection criteria as more information becomes available. It is also important to note that Malaysian public universities do not organise any post-application visit day as British universities do. Mansor and Tan (2009) also suggested that undergraduates with higher academic achievement also feel a greater need for career information. This information is made available during orientation week for new students. The third factor is identified as ‘limited choices’ factor. Clashes in timetable and comfort are also considered by students in their decision-making. Labour market consideration fare much worse in post-entry stage compared to pre-entry stage. It emerged as the second last important factor in course selection criteria

among first year students in FASS. These six factors collectively explains 68 percent of the variation in post-entry selection criteria.

Conclusion

This study brings to fore several interesting findings. Firstly, 'teacher' factor plays an important role in pre-entry course selection criteria as teachers are found to be the closest mentors for these students. As most of the students that enter FASS at undergraduate level come from rural areas, school teachers will be their main role model. Also in situations where parents are less or not educated, teachers advice are normally considered very valuable. Secondly, 'peers' factor play the most important role in post-entry selection criteria as the new students tend to spend more time with their friends and seniors either in dormitory or library and they are more likely to influence the decision-making process of these new students. Finally, labour market consideration is found to be more important in pre-entry selection criteria compared to post-entry selection criteria. Teachers and parents are more likely to stress the importance of labour market outcomes in pre-entry stage. But, in post-entry stage, labour market consideration appears to be less important. The strong influence of external factors such as 'peers', 'orientation week' and other unexpected factors such as timetable clashes outweighs the importance of labour market consideration in post entry stage. Efforts need to be made to ensure students choose the right course so that the problem of unemployment among graduates can be minimised. More exposure to programme of study and career opportunities at high school level will ensure that student chooses the suitable programme of study at tertiary level.

Acknowledgements

This authors wish to thank University of Malaya for providing the research grant under University Malaya Research Grant Scheme (RG062/09HNE) .

References

Becker G.S. (1993). *Human Capital: A theoretical and empirical analysis, with special reference to education.* 3rd. ed. Chicago: University of Chicago Press.

Bratti, M. (2003). Socio-economic status and field of study at the undergraduate Level in the UK. Unpublished paper.

Bratti, M. (2006). Social class and undergraduate degree subject in the UK. IZA Discussion Paper No. 1979.

Brown, C., Varley, P. & Pal, J. (2009). University course selection and services marketing. *Marketing Intelligence and Planning* 27, no. 3: 310-325.

DellaGioia, M. (2008). Student opinion and student course selection. *Journal of Undergradute Psychology Research* 3:20-25.

Devadason, E.S., Thirunaukarasu, S. & Daniel, E.G.S. (2010). Final year undergraduates' perceptions of the integration of soft skills in the formal curriculum: a survey of Malaysian public universities. *Asia Pacific Education Review*. Online First Articles, 1-28.

Harman, G. (1994). Student selection and admission to higher education: Policies and practices in the Asian region. *Higher Education* 27: 313–339.

Kaynama S.A., & Smith, L.W. (1996). Using consumer behaviour and decision models to aid students in choosing a major. *Journal of Marketing for Higher Education* 7, no. 2, 57-73.

Krone, F.,.Gilly, M., Zeithaml, V., & Lamb. C.W. (1981). Factors influencing the Graduate Business School decision. *American Marketing Services Proceedings*, 453-456.

Malaysia Department of Statistics. (2009). Unpublished data.

Mansor A.T. & Tan. K.A., (2009). Predictors of career indecision among Malaysian undergraduate students. *European Journal of Social Sciences* 8, no. 2:

Mincer, J. (1958). Investment in human capital and personal income distribution. *The Journal of Political Economy* 66, no. 4 : 281-302.

Moogan, Y.J., Baron, S. & Harris, K. (1999). Decision-making behaviour of potential higher education students. *Higher Education Quarterly* 53, no. 3, 211-228.

Moogan, Y.J. (2010). An analysis of school pupils' (with low social economic status) perceptions of university, regarding programmes of study. *Educational Studies,* iFirst Article:1-14.

McDonough, P.M. (1997). *Choosing colleges: How social class and schools structure opportunity.* Albany: State University of New York Press.

Perez, P.A & McDonough, P. M. (2008). Understanding Latina and Latino college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education 7, no. 3: 249-265.*

Riggs, R.O., & Lewis, W.L. (1980). Applicability of marketing research to student recruitment. *Journal of College Student Personnel* 21, 467-468.

Roberts, D., & Allen, A. (1997). Young applicant's perceptions of higher education. Leeds, UK: Heist.

Stearns, E., Potochnick, S., Moller, S. & Southworth, S. (2010). High school course-taking and post-secondary institutional selectivity. *Research in Higher Education* 51, no. 4: 366-395.

Strasser S., Ozgur, C. & Schroeder, D.L. (2002). Selecting a business college major. *Mid-American Journal of Business* 17, no. 2: 47-56.

Yamamoto, G.T. (2006). University evaluation-selection: a Turkish case. *International Journal of Educational Management* 20, no. 7: 559-569.

Table 1: Majors and minors available at Faculty of Arts and Social Sciences, University of Malaya, Kuala Lumpur.

Departments	**Options Available**
Anthropology and Sociology	Major and minor
Geography	Major and minor
English	Major and minor
International and Strategic Studies	Major and minor
Southeast Asian Studies	Major and minor
East Asian Studies	Major and minor
Indian Studies	Major and minor
History	Major and minor
Chinese Studies	Major and minor
Social Justice and Administration	Major only
Media Studies	Major only
Programmes	
Environmental Studies	Major and minor
Urban Studies and Planning	Major and minor
Gender Studies	Minor only
Other Faculties	
Islamic Studies, Academy of Islamic Studies	Minor only
Cultural Studies, Cultural Centre	Minor only
Malay Studies, Academy of Malay Studies	Minor only
Economics, Faculty of Economics and Administration	Minor only
Mathematics, Faculty of Science	Minor only

Table 2: Descriptive statistics for pre-entry variables

Variables	N	Minimum	Maximum	Mean	SD
Courses offered in these Departments are related to the subjects that I did well in the STPM exam.	280	1.00	5.00	3.964	1.132
Courses that I'm taking currently are related subjects taken in my STPM exam	280	1.00	5.00	3.346	1.113
Wide exposure to new fields of study	280	1.00	5.00	3.407	0.819
My parents decided that I should take these courses	280	1.00	5.00	2.407	1.070
Influence of my siblings	280	1.00	5.00	2.100	0.910
Influence of my relatives	280	1.00	5.00	2.132	0.931
Broader career prospects	280	1.00	5.00	3.771	0.823
High demand for graduates in these areas	280	1.00	5.00	3.489	0.785
Less competition	280	1.00	5.00	2.825	0.876
Courses offered are not available in other universities	280	1.00	5.00	2.775	1.035
Motivation from my teachers	280	1.00	5.00	3.046	1.055
Information provided about these courses/programmes by my teachers	280	1.00	5.00	3.103	0.976
Wanting to follow the footstep of my teachers	280	1.00	5.00	2.885	1.091

Table 3: Descriptive statistics for post-entry variables

Variables	N	Minimum	Maximum	Mean	SD
I chose these Departments because I am interested in the courses offered in these Departments	280	1.00	5.00	4.085	0.812
I chose these Departments because I want to explore some new areas	280	1.00	5.00	3.768	0.859
I chose these Departments because I want to try some challenging areas	280	1.00	5.00	3.689	0.879
I chose these Departments because I want to learn a foreign language	280	1.00	5.00	2.982	1.149
Influence of my peers	280	1.00	5.00	2.211	0.943
Influence of my seniors	280	1.00	5.00	2.096	0.864
Previous students did very well in these Departments	280	1.00	5.00	2.382	0.972
I have to	280	1.00	5.00	1.764	0.876
I have limited choices and lack of variety	280	1.00	5.00	2.036	0.953
I can arrange my timetable according to my comfort	280	1.00	5.00	2.411	1.103
Detailed information I obtained during the Orientation week	280	1.00	5.00	2.989	1.028
Most of the staffs in the Department are from the same race as I am	280	1.00	5.00	1.936	0.865
Credibility and ability of the academic and non-academic staff in the Department	280	1.00	5.00	2.875	1.162
Explanation provided during the Orientation week	280	1.00	5.00	2.807	1.053
Broader career prospects	280	1.00	5.00	3.754	0.821
High demand for graduates in these areas	280	1.00	5.00	3.489	0.790
Less competition	280	1.00	5.00	2.811	0.865
Courses offered are not available in other universities	280	1.00	5.00	2.754	1.005

Table 4: Pre-entry course selection criteria

Factors	Factor loads	Eigenvalue	% Variance explained	Cumulative Per cent	Cronbach Alpha
Teacher Factor		3.119	23.993	23.993	0.829
Information provided about these courses/programmes by my teachers	0.890				
Motivation from my teachers	0.830				
Wanting to follow the footstep of my teachers	0.815				
Family Factor		2.045	15.731	39.723	0.829
Influence of my siblings	0.915				
Influence of my relatives	0.838				
My parents decided that I should take these courses	0.827				
Labour Market Factor		1.826	14.048	53.772	0.705
High demand for graduates in these areas	0.869				
Broader career prospects	0.851				
Wide exposure to new fields of study	0.638				
Less Competition		1.327	10.210	63.982	0.600
Less competition	0.842				
Courses offered are not available in other universities	0.839				
Previous exposure		1.097	8.436	72.418	0.605
Courses offered in these Departments are related to the subjects that I did well in the STPM exam.	0.896				
Courses that I'm taking currently are related subjects taken in my STPM exam	0.728				

Notes: Principal components factor analysis with varimax rotation
K-M-O Measure of sampling adequacy = 0.683 ; Bartlett test of spherecity=1129.816; p<0.0000

Figure 1: Scree plot for pre-entry course selection crietria

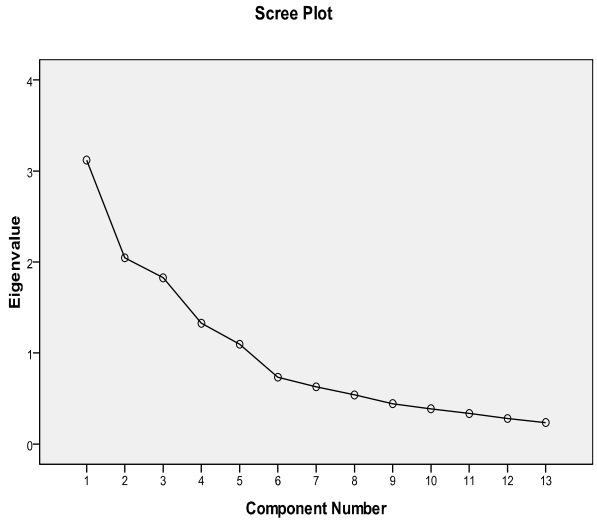

Table 5: Post-entry course selection criteria

Factors	Factor loads	Eigenvalue	% Variance explained	Cumulative Per cent	Cronbach Alpha
Peers		3.894	21.635	21.635	0.800
Influence of my seniors	0.860				
Influence of my peers	0.801				
Previous students did very well in these Departments.	0.762				
Orientation Week Factor		3.327	18.481	40.116	0.729
Detailed information I obtained during the Orientation week.	0.852				
Explanation provided during the Orientation week.	0.823				
Credibility and ability of the academic and non-academic staff in the Department	0.622				
Most of the staffs in the Department are from the same race as I am	0.453				
Limited Choices		1.508	8.377	48.493	0.721
I have limited choices and lack of variety.	0.810				
I have to.	0.755				
I can arrange my timetable according to my comfort.	0.737				
New challenges		1.333	7.408	55.900	0.656
I chose these Departments because I want to try some challenging areas	0.777				
I chose these Departments because I want to explore some new areas	0.763				
I chose these Departments because I want to learn a foreign language	0.5923				
I chose these Departments because I am interested in the courses offered in these Departments	0.494				
Labour Market Factor		1.159	6.441	62.341	0.779
High demand for graduates in these areas	0.852				
Broader career prospects	0.816				
Less Competition		1.018	5.657	67.998	0.600
Less competition	0.868				
Courses offered are not available in other universities	0.731				

Notes: Principal components factor analysis with varimax rotation
K-M-O Measure of sampling adequacy = 0.736; Bartlett test of spherecity=1759.369; p<0.0000

Figure 2: Scree plot for post-entry course selection crietria