

# FACTORS AFFECTING SELECTION OF SPECIALIZATION BY BUSINESS GRADUATES

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**ABSTRACT:** *The goal of this study is to provide insight for the phenomena of specialization selection and suggest ways and means for those involved for the improvement of related policies and practices. This cross-sectional study was conducted by collecting data from 300 undergraduate business students from 10 different business schools of Lahore (including private, semi-government and government universities). Exploratory Factor Analysis identified six factors contributing 47% of the decision making by students while selecting their specialization. These factors include academic factors, social capital factors, future prospect factors, human capital factors, market demand factors and finally job prospect factors. The result of the analysis revealed career development and personal abilities of the business graduates as the most influential factors in selection of specialization while competition in the field and parents as the least influential factors. This study also found an association between specialization selected by the students and their demographic characteristics.*

**Key Words:** Specialization, Academics, Social Capital, Human Capital, Future Prospects, Market Demand, Job Prospects, Business Graduate

## INTRODUCTION

Selection of a particular specialization area is not only important in one's academic life but also in the future personal life because it has an influence on the academics continuity, student's satisfaction, career and employment opportunities, financial compensation and finally the social status. Beggs, Bantham [1] defined a "good" selection of business specialization as "the major best capable of helping the student to achieve their educational and post-education goals, and the one which provides a match between the students' abilities and interest". But this selection of the major could be a stressful and pressurizing job because students don't make this decision in vacuum; there are numerous factors that are influencing this decision. Making informed choices regarding business specialization helps students in their future. These abreast of the fact decisions increase students' satisfaction, influence their career opportunities and also improve their academic results [2].

## LITERATURE REVIEW

Specialization selection is a very complex task as it takes into account multiple considerations. These considerations or determinants that relates to student's choice of specialization are somewhat overlapping. Students are affected by their personal goals, their aptitude level and most importantly their interest [3]. On the other hand, the academic part is also very important which includes the quality of course content, difficulty level of the subject and the workload. Some other dimensions are related to future which may include career development and employment opportunities. But in the end, students do not take the decision regarding choice of their specialization selection alone; they are normally affected by the advice of their parents, friends and teachers [4].

Based on the theory of reasoned action, a research by Downey divided the influential factors into two broad categories that might be overlapping and these categories are external and internal influences. External influences include the influences that are directly related to the specialization and career development. These include employment opportunities, job availability, job security, prestige of the degree and the institution, work load and finally the influences of other that is of friends, family and teachers. While internal factors are the beliefs, personality and the image of a person, although they are affected by the external

influences but they mainly represent the personal attitude, image, interest, aptitude and influence of the others [5], [6]

According to Enhanced Cognitive Engagement theory, students when allowed to choose their subjects and specialization area freely creates motivation and a sense of independence in the students which in turn surges their cognitive and reasoning abilities, aptitude and performance [7] e. Under this theory there are different considerations related to the selection of specialization. These include:

### Academic Consideration

The factors that come under academic consideration are the course content quality, workload, difficulty level of the subject, knowledge gained and the experience and competency of the instructor. And an ideal situation would be when all these needs of students are fulfilled. Obviously ideal situation is not possible so the student will choose the specialization which fulfills his/her need to the maximum [8]. The counseling and advising services provided by the university is considered as the least important factor when students are making decisions about their specialization but different resources deployed by the teachers and professionals to help students select and understand their specialization is important and critical [1] & [9].

### Personal Consideration

The effect of factors related to personal conditions has normally larger impact on the student's decision making process regarding his/her selection of specialization. Each student thinks of each specialization field differently and makes decision about it on the basis of his/her personal beliefs. Personal considerations include a student's needs and interest, his/her mental ability level, his goals and motivations etc. [8]. The development theories like Maslow's theory of hierarchical needs and Bandura's social cognitive theory could be used to understand how students make decisions regarding their academics and course selection.

### Social Consideration

Family, peers and other salient individuals play an important role in the choice of specialization of a student. Elder siblings in a particular specialization may act as a role model and mentor for their younger siblings and may impress them to go for that specialization or major [4]. Similarly, families especially parents normally encourage or even force their children to pursue a specific degree. Friends are also an

important influential factor; students are attracted towards those fields in which their friends had specialized. In some cases, students did not decide to take in a particular specialization until his/her friend informed him that he is going to take that specialization. Finally, the charismatic, caring and impressive faculty; both in the initial years of university and at the college level affect the students' choice of area of specialization [10].

### Future Prospect Consideration

The market demand, job availability & future prospect considerations include many factors including career development, employment opportunities, compensation, job options, job security and occupational prestige. According to Al-Rfou [11], the most important factors among all considerations are the job opportunities, job security and earning potential of the job.

All the above mentioned factors are as important and influential as the others. For the administration of the university, all these considerations are very important. But they need to explore the priorities of the students and then work on it. Using this information, the university would be able to meet the needs of the students which will in turn increase the enrollment which is the ultimate goal of any institution. Another advantage of this information is that when the needs of the students are fulfilled, this increases student's satisfaction which in turn increases their engagement and comprehension of the subject which is an ultimate goal of any teacher [7].

If this information is properly used, it can result in effective lectures and students' satisfaction. Through these studies, university administration can get knowledge about the needs and wants of the students and their parents and then design the course and class execution accordingly. This would increase the retention, satisfaction and enjoyment of the students in class. This will also help them gain more knowledge in a good mood and atmosphere, and this will urge them to recommend that course to the other students which will increase enrollment which in turn will be better for the university administration [12].

Studies revealed that the academic advisors are the under-utilized and under-considered resource that have the least or negligible amount of influence on the student's specialization choice. There is a need to build a meaningful student-advisor relationship so that the advisors reinforce the self-concept in the students and hence boost their confidence in making the choice of their specialization [13].

### OBJECTIVES

- To explore how various dimensions affect business graduates' choice of specialization
- To help universities and parents to provide better counseling to students and make their institution more competitive
- To identify the effect of gender and academic result of students and their parents' education, profession and other factors on students' choice of specialization.

### RESEARCH METHODOLOGY

The purpose of the study is to investigate different factors that influence the selection of area of specialization made by business students with the aim to ascertain and explore that why a student choose a particular specialization and which

factors influenced him/her regarding this decision. This study can be considered as descriptive and co-relational research because we are interested in identifying important factors and variables associated with the problem. Considering the time dimension, it was a cross sectional study as the survey was not supposed to be repeated at any other time.

A target population for data collection was business graduates of different private, semi-government and government universities of Lahore, Pakistan. It included students from different business specialization. In this study, 10 universities including government, semi-government and private university students was taken as a sample through non-probability convenience sampling technique. Data from 300 students was gathered.

Questionnaire was used as a tool for observation. A five (5) point Likert Scale has been used for this research with the weighed Mean of 3. The first portion of the questionnaire was for collecting personal information about the business students. The second portion of the questionnaire is for measuring the variable.

### DATA ANALYSIS & RESULTS

#### Reliability Analysis

Cronbach alpha reliability analysis was performed to check the internal consistency of the scale items as shown in table 1. The value 0.845 of Cronbach's Alpha indicates a high level of internal consistency for our scale with this specific sample.

**Table 1: Cronbach's Alpha Results**

Cronbach's Alpha	No of Items
.845	31

#### Descriptive Statistics

Table 2 contains the details of data which was gathered from 300 students. The analysis of demographics data represents the analysis of different characteristics of the participants of the study.

The total sample size was 300 from which 141 respondents (47%) were male and 159 (53%) respondents were female. Similarly, 10 institutions were selected and from each university, data from 30 (10%) respondents was collected. 69 respondents (23%) were from the rural background while 231 (77%) respondents were from urban background. 24 respondents (8%) had CGPA between 2.00-2.50, 94 of them (31%) had CGPA between 2.51-3.00, while 103 students had their CGPA between 3.01-3.50 and 79 (26%) respondents' CGPA was between 3.51-4.00. 109 respondent (36%) belonged from the Finance discipline, 117 respondents (39%) were from Marketing group, 36 students (12%) were from Management specialization, 26 students (9%) were from HR while only 12 respondents (4%) were from IT specialization. Finally, 53 respondents (18%) had an income less than fifty thousand rupee, 95 respondents (32%) had an income ranging between 50,001 to 100,000, 89 respondents (30%) had an income between a range of 100,001-300,000, 46 respondents (15%) had income ranging between 300,000-500,000 while 17 respondents (6%) had the income level above 500,000.

**Table 2: Demographic Profile of Respondents**

Demographics	Categories	Frequency (%)
Gender	Male	141 (47)
	Female	159 (53)
Institution	COMSATS	30 (10)
	FAST	30 (10)

Demographics	Categories	Frequency (%)
	FCCU	30 (10)
	IBA-PU	30 (10)
	LCWU	30 (10)
	LSE	30 (10)
	UCP	30 (10)
	UET	30 (10)
	UMT	30 (10)
	UOL	30 (10)
Intermediate Subjects	F.A	21 (7)
	F.Sc	106 (35.3)
	I.Com	97 (32.3)
	ICS	46 (15.3)
	A-Levels	30 (10)
Cumulative GPA	2.00-2.50	24 (8)
	2.51-3.00	94 (31.3)
	3.01-3.50	103 (34.3)
	3.50-4.00	79 (26.3)
Specialization	Finance	109 (36.3)
	Marketing	117 (39)
	Management	36 (12)
	HR	26 (8.7)
Family Background	IT	12 (4)
	Rural	69 (23)
Father's Education	Urban	231 (77)
	Illiterate	6 (2)
	Under Matric	26 (8.7)
	Intermediate	59 (19.7)
	Graduation	90 (30)
	Post-Graduation	101 (33.7)
Mother's Education	Ph.D. or Above	18 (6)
	Illiterate	13 (4.3)
	Under Matric	60 (20)
	Intermediate	63 (21)
	Graduation	108 (36)
	Post-Graduation	48 (16)
Father's Occupation	Ph.D or Above	8(2.7)
	Businessman/Self employed	136 (45.3)
	Government employee	55 (18.3)
	Private employee	77 (25.7)
	Professional	15 (5)
Mother's Occupation	Other	17 (5.7)
	Businesswoman/Self employed	9 (3)
	Government employee	34 (11.3)
	Private employee	22 (7.3)
	Housewife	234 (78)
Income	Other	1 (0.3)
	Below 50,000	53 (17.7)
	50,001-100,000	95 (31.7)
	100,001-300,000	89 (29.7)
	300,001-500,000	46 (15.3)
Above 500,000	17 (5.7)	

**Factor Analysis**

In order to find the specific factors which are the main reason behind most of the variation in the variable; factor analysis was performed.

Table 3 shows the Kaiser-Meyer-Olin and Bartlett's test statistics. KMO measures the adequacy of sampling and it was found to be equal to 0.811 which should be greater than 0.50 to indicate the goodness of sample. Bartlett's test of Sphericity needs to have a sigma value less than 0.05 in order to be significant. In this case it is 0.00 which supports the validity of the data.

**Table 3: KMO & Bartlett's Test**

Bartlett's Test of Sphericity	0.000
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.811

The six factors selected are responsible for more than 47% of the total variation and have been given the most importance by the students for the selection of their specialization. The higher the absolute value of the loading, the more the factor contributes to the variable. The gap on the table represent loadings that are less than 0.4, this makes reading the table easier. The idea of rotation is to reduce the number factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier.

Factor Loading and Total Variance Explained:

Factor Analysis provided information on the influential factors affecting selection of specialization area by business graduates.

1. Component One: Academic Factors

The first dimension deals with the academic considerations such as course content, instructors, effect of introductory courses and workload. This factor contributes 8.845 % variation.

2. Component Two: Social Capital Factors

The second component deals with the influential sources a student may listen to including their family and peers. This factor contributes 8.506 % variation.

3. Component Three: Future Prospect Factors

The third and important dimension is the future prospect which covers career development and structuring, scope of the field in future and the research work in the pipeline. This factor contributes 8.222 % variation.

4. Component Four: Human Capital Factors

Fourth, factor deals with human capital that takes into consideration their own personal interests, preferences, capabilities, aptitude and affordability. This factor contributes 8.076 % variation.

5. Component Five: Market Demand Factors

Market demand is the fifth component which includes reputation, competition and appropriateness of the field in the modern days. This factor contributes 7.633 % variation.

6. Component Six: Job Prospect Factors

A factor of employment opportunities and financial compensation comes under the final dimension of job prospect. This factor contributes 5.612 % variation.

**Table 4: Rotated Component (Factor) Matrix**

Factor Analysis	Components					
	Academic	Social Capital	Future Prospect	Human Capital	Market Demand	Job Prospect
I am well aware of the challenges and difficulty level of my specialization	0.456					
I found the introductory course of my specialization very easy and interesting	0.514					
I found the introductory course according to my aptitude and skills	0.486					
I found the projects I did in my introductory course very interesting and challenging as well	0.540					
I found the introductory course instructor very encouraging and helping and gave me confidence that I can excel in this field.	0.511					
The course content of this specialization is very authentic and is prepared by a qualified team of professionals	0.555					
This specialization is considered as one of the best field in this university because of its experienced faculty	0.476					
I think new technology and new research in the pipeline will make work in this field more Interesting	0.500					
One of my sibling/friend/relative is doing job in this field			0.558			
I had strong encouragement by my parents to choose this subject			0.762			
One or both of my parents are in this field			0.656			
My parents think this field is most suitable in modern days			0.788			
My previous college/university subject matches my specialization subjects				0.447		
I think my extra knowledge about this subject will help me in research work later on				0.514		
I think I have great career development opportunities in this field				0.703		
If I want to go abroad for further studies, I think this field would be the most suitable with respect to my career				0.713		
Although this field is not acknowledged nowadays but I think it has more scope in future				0.559		
My parents can easily afford my study in this discipline					0.557	
I think this field polishes my attitude and behavior more than any other discipline because of my interest in the field					0.672	
I think I can improve my skills through studying the courses related to my specialization					0.560	
This field has made me more critical in thinking					0.521	
The merit of this specialization is very high, that's why I consider it as highly reputed						0.454
My teacher asked me to specialize in this field as it is the most appropriate one these days						0.679
I selected this specialty because I think there is lesser competition in this field as compared to other fields						0.530
I believe I will get a job in this field as soon as I complete my degree because number of job in this field are more		0.553				
I expect good income and pay increment with time in this specialization		0.672				
My dream job matches the job of this field		0.516				
This specialization option was the best among the other options available to me		0.500				
I think professionals in this field help make my country develop		0.703				
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 9 iterations.						

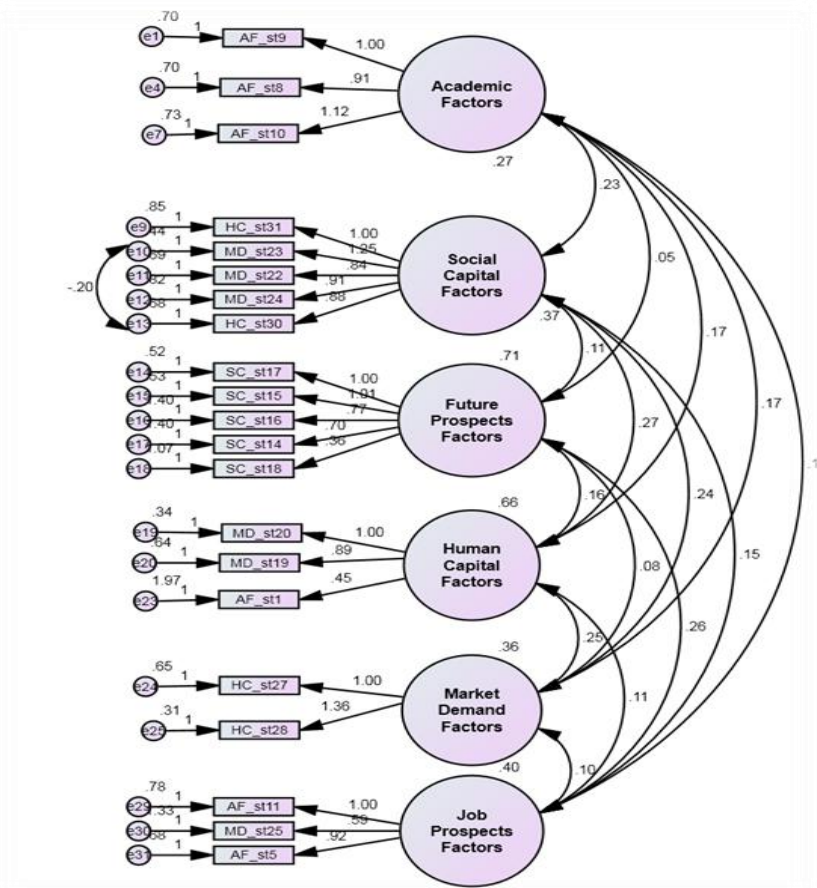
Exploratory Factor Analysis results can be further substantiated using Confirmatory Factor Analysis as shown in Table 5 and Figure. 1.

Given below are the values for the goodness of fit of the model.

**Confirmatory Factor Analysis (Structure Equation Modeling)**

**Table 5: Goodness of Fit (Confirmatory Factor Analysis)**

Model	GFI	NFI Delta1	IFI Delta2	TLI rho2	CFI	RMR	RMSE A	CMIN/DF
Default Model	0.906	0.890	0.896	0.873	0.893	0.077	0.046	1.642



**Figure: 1: (Confirmatory Factor Analysis Using AMOS)**

**a. Hypotheses Testing**

Table 6 shows the results of T-test & ANOVA that were applied to test a number of hypotheses between different elements of profile of respondents and collective impact of different factors on selection of specialization.

**Hypothesis 1:** As  $p > 0.05$ , so it is statistically insignificant. Thus  $H_{01}$  is accepted which means collective impact of factors is same on specialization selection among males and females.

**Hypothesis 2:** As  $p$ -value is lesser than 0.05, hence providing a strong evidence to reject  $H_{02}$  portraying that student's institution has a relationship with all factors in selection of specialization.

**Hypothesis 3:** As  $p$ -value is greater than 0.05, hence providing a strong evidence to accept  $H_{03}$  portraying that student's intermediate subjects has no relationship with all factors in selection of specialization.

**Hypothesis 4:** As  $p$ -value is lesser than 0.05, hence providing a strong evidence to reject  $H_{04}$  portraying that student's CGPA has a relationship with all factors in selection of specialization.

**Hypothesis 5:** As  $p$ -value is greater than 0.05, hence providing a strong evidence to accept  $H_{05}$  portraying that student's chosen specialization has no relationship with all factors in selection of specialization.

**Hypothesis 6:** As  $p > 0.05$ , so it is statistically insignificant. Thus  $H_{06}$  is accepted which means that

collective impact of all factors have the same impact in specialization selection among rural and urban students.

**Hypothesis 7:** As p-value is greater than 0.05, hence providing a strong evidence to accept HO7 portraying that

father's education has no relationship with all factors in selection of specialization

.Table 6: Summary of the Results of ANOVA & T-Test

Dependent Variable	Hypothesis	Grouping Variable	Test Applied	P*	Result
All Factors having Impact on Selection of Specialization	H <sub>01</sub> All factors collectively have the same impact on specialization selection between males and females	Gender	t-test	0.658*	Failed to Reject
	H <sub>02</sub> There is no relationship between institution and all factors in the selection of specialization	Institutions	ANOVA	0.038*	Rejected
	H <sub>03</sub> There is no relationship between intermediate subjects and all factors in the selection of specialization.	Intermediate Subjects	ANOVA	0.893*	Failed to Reject
	H <sub>04</sub> There is no relationship between CGPA and all factors in the selection of specialization	CGPA	ANOVA	0.049*	Rejected
	H <sub>05</sub> There is no relationship between selected specialization and all factors in the selection of specialization	Specialization	ANOVA	0.897*	Failed to Reject
	H <sub>06</sub> All factors collectively have the same impact on specialization selection among rural and urban students.	Family Background	t-test	0.146*	Failed to Reject
	H <sub>07</sub> There is no relationship between father's education and all factors in the selection of specialization.	Father's Education	ANOVA	0.226*	Failed to Reject
	H <sub>08</sub> There is no relationship between mother's education and all factors in the selection of specialization	Mother's Education	ANOVA	0.299*	Failed to Reject
	H <sub>09</sub> There is no relationship between father's education and all factors in the selection of specialization.	Father's Occupation	ANOVA	0.302*	Failed to Reject
	H <sub>010</sub> : There is no relationship between mother's occupation and all factors in the selection of specialization.	Mother's Occupation	ANOVA	0.254*	Failed to Reject
	H <sub>011</sub> There is no relationship between family income and all factors in the selection of specialization.	Family Income	ANOVA	0.420*	Failed to Reject

\*Significance Level is 0.05

**Hypothesis 8:** As p-value is greater than 0.05, hence providing a strong evidence to accept HO8 portraying that mother's education has no relationship with all factors in selection of specialization.

**Hypothesis 9:** Effect of all factors depicts p-value is greater than 0.05, hence providing a strong evidence to accept HO9 portraying that father's occupation has no relationship with all factors in selection of specialization.

**Hypothesis 10:** Effect of all factors depicts p-value is greater than 0.05, hence providing a strong evidence to accept H<sub>010</sub> portraying that mother's occupation has no relationship with all factors in selection of specialization.

**Hypothesis 11:** Effect of all factors depicts p-value is greater than 0.05, hence providing a strong evidence to accept HO11 portraying that student's family income has no relationship with all factors in selection of specialization

## CONCLUSION

The purpose of this study was to determine some of the underlying factors that affect the selection of specialization by business graduates. Students' specialization choices are influenced by numerous factors including employment opportunities, financial compensation, career development, individual variants such as gender, personal interests and aptitude, affordability, family, peers, instructors and the workload, course content and introductory courses of that specialization etc.

A quantitative, descriptive and correlational research was conducted. Primary data was gathered through questionnaire, the internal consistency of which was good as given by Cronbach's value. And the samples were collected through convenience sampling.

Biological information of the respondents was also gathered which include gender, current institution, intermediate subjects, CGPA, selected specialization, family background, parents' education and occupation and family income.

Data was gathered from 10 business schools of Lahore which include government, semi-government and private universities. These institutions were COMSATS, FCCU, FAST, IBA (Punjab University), LCWU, LSE, UCP, UET, UMT and UOL. The total sample size was 300 from which 141 respondents (47%) were male and 159 (53%) respondents were female.

Factor analysis extracted six important components which are academic, social capital, future prospect, human capital, market demand and job prospect factors. The result of the analysis revealed career development and personal abilities of the business graduates as the most influential factors in selection of specialization while competition in the field and parents as the least influential factors.

Study revealed that all factors collectively have the same impact on specialization selection between males and females. There is no relationship between father's education, mother's education, father's occupation, mother's occupation and family income and all factors in the selection of specialization. There is relationship between institution, CGPA and all factors in the selection of specialization. It was also revealed that all the factors collectively have the same impact on specialization selection between the students having urban and rural background.

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