

## **Impact of Demographic Variables on Student's Choice of Higher Education Institutions**

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### **Abstract**

Future of nation is dependent on the effectiveness of its education system. A failure in maintenance of effectiveness by institutions can impact the long term growth of whole nation. The study highlighted the major issue which most of the institutions of higher educational were facing. It highlighted the problem of student attraction and retention in the institutions. The study was aimed at examining the impact of demographic variables on the various factors of choice. A sample of 203 students from the population of all those students who have completed their secondary education (Class 12Th) in the year 2020, were taken using simple random sampling. The data was analysed using descriptive analysis tools. The main factors highlighted from the literature were as social and financial influences, Institutional characteristics and support factors, psychological and personal factors. It was found that there was no significant relationship between the demographic variables and these factors. The study recommended that the marketing strategy of the institutional brand should be made considering the satisfaction of these factors.

### **Key Words**

Higher Education Institution, Student's Choice, Factors Affecting, Institutional Competitiveness, Institutional Brand Image.

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## **INTRODUCTION**

One step ahead means one step closer to competitiveness. Majority of the higher education institutions in Punjab are struggling to fill the seats of graduate and postgraduate programmes. For which they are developing various types of enrolment management strategies to attract students towards their institutions. Nowadays marketing is not only the part of business organizations but higher educational institutions are also opting for various types of marketing strategies. Role and importance of promotional strategies have been felt by these institutions that are the reason why educational institutions are spending more on their brand positioning in the society to the various stakeholders. These marketing strategies work as a helping tool for winning the battle for each student. (Mazzarol, 1998) Aggressive force has pushed the larger academic institutions to consider more aggressive advertising techniques to be able to contend for pupils within their particular markets.

As the marketing's basic function starts with knowing about the customer needs and then designing the various strategies to achieve those needs. Higher education institutions must also be aware of the changing needs and wants of the stakeholders before designing a promotional strategy. Comprehensive knowledge of consumer behaviour allows institutions to become more effective at making good strategic marketing decisions and to better respond to customers' needs (Rika, Roze & Sennikova, 2016). But it seems that most of the institutions in Punjab neglect this part of marketing. They design strategies according to their own thoughts and assumptions. The case is not left with only placements of jobs, but various other factors that impact the student's choice of institutions. Higher educational institutions must be aware of the fact that what the students seek or want from their institution. How they want an institution to be. If they are able to know about these things, only then they could be able to achieve the desired goals. Research shows that HEIs should use a marketing framework and should satisfy the need of their customers by adding value to achieve a sustainable competitive advantage and survive (Hoyt and Brown, 2003; Kotler and Fox, 1995). Higher education institutions need to make a difference from other institutions to be competitive.

Declining student enrolment and the shifting of students towards other countries have become a major problem for the state and the institutions. Considering the adjoining states enrolment has shown negative trends in all the five states being compared. The enrolment fell by 16%, 3%, 54%, 13% and 24% in states of Haryana, HP, Punjab, J&K and Rajasthan respectively (from 2010-11 to 2015-16) of which Punjab has highest enrolment decline as 54% (Singh, J.,

2018). It has also been stated that the highest drop of 15.6% in admission was witnessed in GNDU (Guru Nanak Dev University, Amritsar) where the number of students declined from 143,507 in 2016-17 to 121,074 in 2018-19. The drop in admissions at Panjab University for the same period was 11.4%. Against 2, 10,169 students enrolled in 2016-17, PU had 186,208 students in 2018-19. Punjabi University witnessed a decline of 5.8% in student strength from 69,867 in 2016-17 to 65,796 in 2018-19 (Singh, 2020). The situation has affected colleges more severely as compared to university campuses. For instance, GTB College in Malout town of Muktsar has no student in the second semester in four different trades of engineering. CJM College in the district has 564 students against more than 1,800 seats. This problem has to be addressed very seriously.

The institutions should be prepared to attract and retain the students in the state. This can only be possible if the needs they have are satisfied locally. The need for shifting to other areas originates when we see no means of development in the local area. The present study is aimed to identify the impact of gender and locale (demographic variables) of the students towards the various factors which are important in the attraction and retention of the students by the institutions.

## **FACTORS AFFECTING STUDENTS CHOICE OF HEIs**

There are many studies highlighting the factors affecting student's choice of higher education institutions. Mainly the decisions are taken keeping in mind these overlapping variables of student's choice. This review of literature will help in creating a base for the related factors affecting student's choice. It is divided into factor wise categories as follows.

### **Social and Financial Influences**

There are various social influences which impacts the decision of the students of higher learning. Selection of an institution is identified as a life changing decision and it has been shown that students do not make this in isolation. Familial groups such as parents and relatives along with those with influential significance such as teachers and friends all have an impact on institution selection (Oosterbeek, *et al.*, 1992; Hossler, *et al.*, 1999); (Chaubey, Subramanian, & Joshi, 2011). The past studies are of the view that as a customer, students also seek the approval of their opinion from the various reference groups which support or disapprove the choice made. HE sector is not different from other industrial sectors and consequently, similar social influences are likely to impact on students as they do on customers Krezel & Krezel (2017). Hemsley-Brown & Oplatka (2015) has identified distinct groups of student related factors:

family income, parental education, gender, age and racial group, socioeconomic status, geographical considerations and price sensitivity that cover costs, availability of financial aid and affordability. In many cases family structure and the culture also impacts the choice. Most of the decisions are taken by screening the cultural similarity. The cultural complexity entails the dissatisfaction of students with the quality of education due to the significant number of courses being unrelated to the subject area of the programme and theoretical orientation of the study Hladchenko & Vossensteyn (2019).

### **Institutional Characteristics and Support Factors**

However, along with these influences there are various institutional characteristics which affect these decisions. Agrey & Lampadan (2014) showed that learning environment as well as the potential of good job prospects was the strongest factor for university selection among the respondents. Hagel and Shaw (2008) academic reputation, course availability, location, tuition costs as well as campus amenities with the most important three attributes being study mode, tuition fees and the university itself. Kusumwati *et al.* (2010) also suggested that the reputation of the institution is the most important factor in attracting the students. Further academic quality of institution, facilities, campus surroundings, location and personal characteristics all are important for student's selection criteria of institutions Sidin (2003), Ancheh *et al.* (2007), Veloutsou *et al.* (2010). Gill & Malhotra (2020) found that students' choice of management institute of Punjab is affected by academics and least important was faculty and staff support, however personal and social factors, placement and career development assistance were also given due importance by the students. Quality of physical infrastructure, transitional support and word of mouth are also important factors Rughoobur-Seetah (2019). Expectation of good library and laboratory facilities, co-curricular activities also play important role in selection, while simplicity of the screening process is one of the main considerations for choosing the course of studies Chaubey, Subramanian & Joshi (2011). Agrey & Lampadan (2014) indicated that students favour those institutions which provide for an updated learning environment and modern facilities as well as pleasing aesthetics of the campus. It was found that support factors such as easiness in getting admission and the support facilities given to students during the course also play an important role in attracting and retaining students.

### **Psychological and Personal Factors**

Rika, Roze, & Sennikova (2016) In predicting the plans of prospective students to enter HEI (the dependent variable), the regression analysis indicated

psychological factors as the most significant independent variable. These factors are related with the future expectation of the students from institutions. One of the most important factors which is career development and assistance in getting a future job is also found to be given concern by almost all of the students. Ilgan (2018), Azzone (2019) found that the most important factors affecting students' preferences were job opportunity and future expectation for career. The studies also state that students also prefer their personal factors to be important while selecting institutions. Agrey & Lampadan (2014) showed that the interest of students and the activities for physical and social growth are given importance by the students. Feedback from 120 students undertaking higher education courses in different discipline areas at different stages of study was taken; it found that student perception; access and opportunity; learning environments; quality of teachers; course design; and graduate success all are important factors influencing student choice Shah, M. *et al.* (2013). It was found that personal factors and psychology about the value of the institutions, its working and the assumption about the will of the institution to keep its promises also a major factor which affects the satisfaction level of the students and can impact their retention. As Leng (2010) identified that students of Cambodia private universities are dissatisfied with the weak policies governing the behaviour of students. Additionally, the research revealed that the students were dissatisfied with how the universities responded to their needs. Communication by the institutions about courses and the previous work are also included in these psychological factors

## **METHODOLOGY**

### **Quantitative Study**

The study was concerned at examining the impact of demographic variables on student's choice of higher education institutions in Punjab. As a result the study adopted a quantitative approach which emphasises objective measurement and numerical analysis of data collected through questionnaire and generalizes it across group of people Babbie (2010), Rudhambu (2014).

### **Population and Sampling**

A sample of 203 respondents were taken from the students who have passed the secondary education (class 12th), and is about to take admissions in the higher education institution. The participants were selected using purposive sampling technique, as the study is concerned for the assessment of factors, students consider before joining a college.

## Data Collection

Structured questionnaire was used for collecting the primary data on five-point Likert scale.

## Method of Data Analysis

Descriptive statistical tools were used to assist in the presentation and analysis of data.

## RESULTS

The Shapiro-Wilk test of normality for one variable showed that  $w = 0.98$  and  $p\text{-value} = 0.06257$  which is greater than  $p\text{-value} 0.05$ . This implied that the distribution of the data of variable social influence is distributed normally at 5% level of significance. The Kurtosis coefficient (2.79) is lesser than 3 and coefficient of skewness (0.02), which means that the data can be considered as normal. The coefficient of kurtosis is slightly lesser than 3, hence we can say that it is platykurtic.

**Table 1**

Measures	SI	FI	IC	SF	PF	Master
N	203	203	203	203	203	203
Minimum	6.0	3.0	6.0	6.0	7.0	30.0
Maximum	30.0	15.0	30.0	30.0	35.0	140.0
Mean	17.45	11.99	21.86	23.90	28.16	103.4
SD	4.99	1.85	3.64	2.93	3.71	12.39
Variance	24.93	3.45	13.30	8.63	13.77	153.57
Skewness	0.02	-0.09	-0.05	-0.09	-1.02	-0.67
Kurtosis	2.79	5.95	4.02	8.72	7.21	8.47

Based on Primary Data Collected by the Researcher

## Hypothesis Testing Gender vs. Social Influence

H0 = For Taking decisions about admission male and Female have the same social influence.

H1 = For Taking decisions about admission male and Female have different social influences.

When Welch two sample t-test is applied between gender and Social Influence the absolute t-value is 0.025 (df = 192.56) and mean of male and female

are 17.45 and 17.43 respectively. The  $p$ -value is 0.97 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of male and female groups for variable Social Influence.

We have a chi-squared value of 33.809 at 23 degrees of freedom and  $p$ -value 0.06 which is more than the standard value. Since we get a  $p$ -Value (0.06) is more than the Standard  $p$ -value so we conclude that Social influence and Gender are not related to each other that is they are independent variables.

### Hypothesis Testing Locale Vs. Social Influence

**Table 2**

	Locale	SI	FI	IC	SF	PF	Master
Mean	Urban	17.96	11.99	21.73	24.15	28.59	104.41
	Rural	17.1	11.99	21.95	23.73	27.88	102.6

Based on Primary Data Collected by the Researcher

H0 = For Taking decisions about admission Rural and Urban students have the same social influence.

H1 = For Taking decisions about admission Rural and Urban students have different social influences.

When Welch two sample  $t$ -test is applied between locale and Social Influence the absolute  $t$ -value is 1.2382 ( $df = 186.36$ ) and mean of Urban and rural are 17.96 and 17.09 respectively. The  $p$ -value is 0.217 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable Social Influence.

We have a chi-squared value of 28.446 at 23 degree of freedom and  $p$ -value 0.19 which is more than the standard value. Since we get a  $p$ -Value(0.19) is more than the Standard  $p$ -value so we conclude that variable Social influence and locale are related to each other that is they are dependent variables.

The Shapiro-Wilk test of normality for one variable showed that  $w = 0.90$  and  $p$ -value = 0.000 which is less than  $p$ -value 0.05. The implied that the distribution of the data of variable social influence is not normally distributed at 5% level of significance.

The Kurtosis coefficient (5.94) is greater than 3 and coefficient of skewness (-0.96), which means that the data is negatively skewed. The coefficient of kurtosis is greater than 3, hence we can say that it is leptokurtic in nature.

### **Hypothesis Testing For Locale Vs Financial Influence**

H0 = For Taking decisions about admission Rural and Urban students have the same financial influence.

H1 = For Taking decisions about admission Rural and Urban students have different financial influences.

When Welch two sample t-test is applied between locale and financial Influence the absolute t-value is -0.04 (df=170.65) and mean of Urban and rural are 11.98 and 11.99 respectively. The *p*-value is 0.98 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable financial influence.

We have a chi-squared value of 10.106 at 10 degree of freedom and *p*-value 0.43 which is more than the standard value. Since we get a *p*-value (0.43) is more than the Standard *p*-value so we conclude that variable financial influence and locale are related to each other that is they are dependent variables.

### **Hypothesis Testing Gender Vs Institutional Characteristics**

H0 = For Taking decisions about admission male and female students have the same perceptions about institutional characteristics.

H1 = For Taking decisions about admission male and female students have different perceptions about institutional characteristics.

When Welch two sample t-test is applied between gender and Institutional characteristics the absolute t-value is 78.703 (df = 209.61) and mean of male and female are 18.4 and 17.2 respectively. The *p*-value is 0.22 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable financial influence

We have a chi-squared value of 12.804 at 18 degree of freedom and *p*-value 0.80 which is more than the standard value. Since we get a *p*-Value (0.80) is more than the Standard *p*-value so we conclude that Institutional



characteristics and Gender are not related to each other i.e. they are independent variables.

### **Hypothesis Testing Locale Vs. Institutional Characteristics**

H0 = For Taking decisions about admission Rural and Urban students have the same institutional characteristics.

H1 = For Taking decisions about admission Rural and Urban students have different institutional characteristics.

When Welch two sample t-test is applied between locale and Institutional Characteristics the absolute t-value is 78.443 (df = 209.34) and mean of Urban and rural are 21.73 and 21.95 respectively. The *p*-value is 0.22 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable institutional characteristics.

We have a chi-squared value of 8.574 at 18 degree of freedom and *p*-value 0.96 which is more than the standard value. Since we get a *p*-value (0.96) is more than the Standard *p*-value so we conclude that variable institutional characteristics and locale are related to each other that is they are dependent variables.

### **Hypothesis Testing Gender Vs. Support Factors**

H0 = For Taking decisions about admission male and female students have the same perceptions about support factors.

H1 = For Taking decisions about admission male and female students have different perceptions about support factors.

The Shapiro-Wilk test of normality for one variable showed that  $w = 0.92$  and *p*-value = 1.508 which is greater than *p*-value 0.05. This implied that the distribution of the data of variable support factor is distributed normally at 5% level of significance.

When Welch two sample t-test is applied between gender and support factors the absolute t-value is 1.05 (df = 198.36) and mean of male and female are 24.14 and 23.72 respectively. The *p*-value is 0.295 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of male and female respondents about the variable support factors.

We have a chi-squared value of 14.57 at 13 degree of freedom and p-value 0.335 which is more than the standard value. Since we get a p-Value (0.335) is more than the Standard p-value so we conclude that support and Gender are not related to each other that is they are independent variables.

### **Hypothesis Testing Locale Vs. Support Factors**

H0 = For Taking decisions about admission Rural and Urban students have the same support factors.

H1 = For Taking decisions about admission Rural and Urban students have different support factors.

When Welch two sample t-test is applied between locale and support factors the absolute t-value is 106.63 (df = 213.31) and mean of Urban and rural are 24.15 and 23.73 respectively. The *p*-value is 0.22 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable support factors.

We have a chi-squared value of 15.215 at 13 degree of freedom and p-value 0.2941 which is more than the standard value. Since we get a p-value (0.2941) is more than the Standard p-value so we conclude that variable support factor and locale are related to each other that is they are dependent variables.

### **Hypothesis Testing Gender Vs Psychological Factors**

H0 = For Taking decisions about admission Male and Female students have the same psychological factors.

H1 = For Taking decisions about admission Male and Female students have different psychological factors.

When Welch two sample t-test is applied between Gender and Psychological factors the absolute t-value is 1.75 (df = 178.36), and mean of male and female are 28.62 and 27.73 respectively. The *p*-value is 0.081 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of male and female respondents about the variable psychological factors.

We have a chi-squared value of 32.48 at 25 degree of freedom and

p-value is more than the standard value  $p\text{-value} < 2.2e-16$ . Since we get a p-Value is more than the Standard p-value so we conclude that psychological factors and Gender are not related to each other that is they are independent variables.

### **Hypothesis Testing Locale Vs. Psychological Factors**

H0 = For Taking decisions about admission Rural and Urban students have the same psychological factors.

H1 = For Taking decisions about admission Rural and Urban students have different psychological factors.

When Welch two sample t-test is applied between locale and psychological factors the absolute t-value is 1.4201, (df = 199.83) and mean of Urban and rural are 28.58 and 27.87 respectively. The  $p$ -value is 0.15 and so the null hypothesis is accepted. The alternate hypothesis that the true difference in means is not equal to 0 is rejected. This means that the true difference in means of both the groups is equal to 0. Thus, there is no significant difference in the perception of rural and urban respondents about the variable support factors.

We have a chi-squared value of 24.045, at 16 degree of freedom and p-value 0.08 which is more than the standard value. Since we get a p-value (0.08) is more than the Standard p-value so we conclude that variable psychological factors and locale are related to each other that is they are dependent variables.

### **CONCLUSION**

It can therefore be concluded from the above findings that the entire null hypothesis were supported and stated that there is no significant difference between the factors of choice and the demographic variables (locale and gender). However, it was also found that demographic variable Locale and the factors of choice are dependent on each other whereas the variable Gender is independent variable. For attaining the competitive advantage in the present economy the institutions must take some important measures to attract and retain the students. It can be recommended from the study that institution must take the steps toward creating awareness about the various facilities to both rural and urban areas. The marketing strategy for the institutional brand should be made considering the satisfaction of all these factors. The important thing to note here is that the people are aware about the role of effective education, whether

male or female living in urban or rural, the educational factors have same impact. Thus the institutions must take some necessary measures so that students are motivated and attracted towards the particular institution.

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