ANALYSIS

52(242), February 1, 2016

ISSN 2278–5469 EISSN 2278–5450

Discovery

Popularity of internet services in Raipur: comparatives drawn from engineering and management students

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Article History
Received: 20 December 2015
Accepted: 26 January 2016
Published: 1 February 2016

Citation
Gayathri Band, Rajesh Timane, Prashant Suddalwar. Popularity of internet services in Raipur: comparatives drawn from engineering and management students. *Discovery*, 2016, 52(242), 333-341

1. INTRODUCTION

The present age students spend lot of their time on internet. Students use internet for exploration, communication, shopping and entertainment. Raipur is fast catching up with its counterparts in terms of giving quality education. The education scenario in Raipur is dominated by flourishing of Engineering and Management Institutes in last few years. The students taking these professional courses do spend long hours on internet daily for either academic purpose or otherwise. In this context, it makes sense to compare the internet services used by the Engineering vis-à-vis Management students. Few of the internet services which would be compared in this research are search engines, operating systems, browsers, social networking sites, shopping portals, e-mail / communication, internet service providers, games etc.

2. METHODOLOGY

Research Design : Exploratory and Descriptive Research
Sample Size : 350 Students
Sampling Method: Simple Random Sampling

Sampling Tool : Questionnaire
Research Objective : To compare popularity amongst engineering and management students

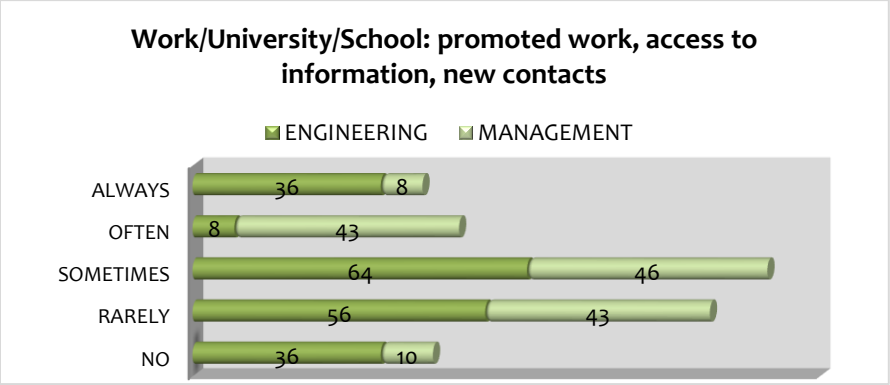
The various parameters analysed during this research study are analyzed hereinafter for the responses so obtained from the target sample.

A1. Positive Influence of Internet Usage

Work/University/School (e.g. promoted work, access to information, new contacts). From the table below the column percentage (%) presents the number respondents using internet for college work (in the count column) as a percentage of the total number of respondents in each respectively. Most of the engineering students rarely or sometimes use internet for their work related and assignments related things. Whereas, it is found that the management students sometimes or often use internet for their work related issues.

WORK * DISCIPLINE Cross-tabulation

			DISCIPLINE		Total
			ENGINEERING	MANAGEMENT	
WORK	NO	Count	36	10	46
		%	18.00%	6.70%	13.14%
	RARELY	Count	56	43	99
		%	28.00%	28.70%	28.29%
	SOMETIMES	Count	64	46	110
		%	32.00%	30.70%	31.43%
	OFTEN	Count	8	43	51
		%	4.00%	28.70%	14.57%
	ALWAYS	Count	36	8	44
		%	18.00%	5.30%	12.57%
Total		Count	200	150	350
		%	100.00%	100.00%	100.00%



The chi square value is 13.093 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the use of internet for work related issues and the discipline of education of the students as the table given below.

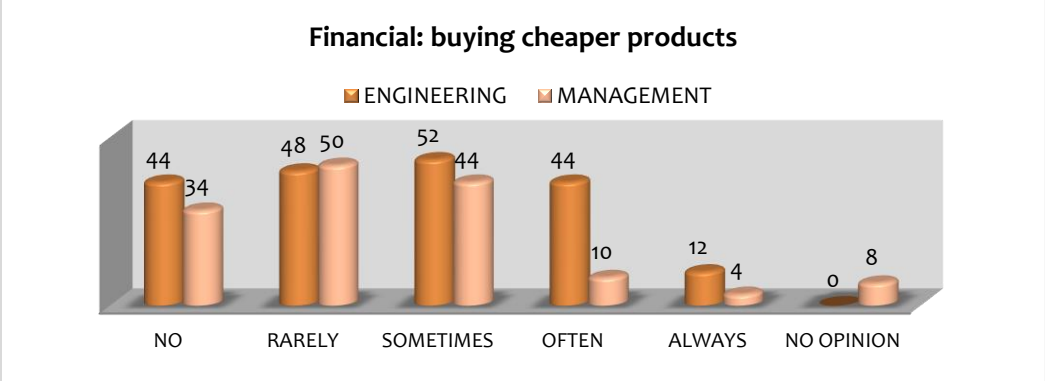
Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.093[a]	4	.011
Likelihood Ratio	13.724	4	.008
Linear-by-Linear Association	.961	1	.327
N of Valid Cases	350		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.86.

There is a significant degree of difference of opinion in using 'internet for work' amongst engineering and management students.

A2. FINANCIAL BEHAVIOUR IN BUYING CHEAPER PRODUCTS

FINANCIAL * DISCIPLINE Cross-tabulation					
			DISCIPLINE		Total
			ENGINEERING	MANAGEMENT	
FINANCIAL	NO	Count	44	34	78
		%	22.0%	22.7%	22.3%
	RARELY	Count	48	50	98
		%	24.0%	33.3%	28.0%
	SOMETIMES	Count	52	44	96
		%	26.0%	29.3%	27.4%
	OFTEN	Count	44	10	54
		%	22.0%	6.7%	15.4%
	ALWAYS	Count	12	4	16
		%	6.0%	2.7%	4.6%
	NO OPINION	Count	0	8	8
		%	.0%	5.3%	2.3%
Total		Count	200	150	350
		%	100.0%	100.0%	100.0%



From the table above the column percentage (%) presents the number respondents using internet for buying cheaper products as a *percentage* of the total number of respondents in each respectively. Most of the engineering students sometimes or rarely use internet for buying cheaper products whereas the management students rarely use internet for buying cheaper products. We can say that engineering students may sometime use internet for buying cheaper products as compared to the management students. The chi square value is 28.843 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the use of internet for buying cheaper products and the discipline of education of the students as the table given below.

Chi-Square Tests

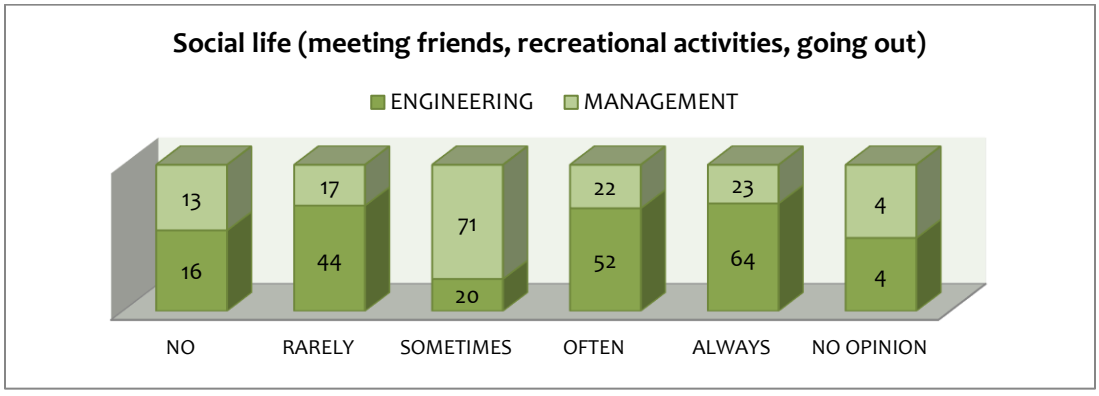
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.843[a]	5	.000
Likelihood Ratio	33.213	5	.000
Linear-by-Linear Association	3.605	1	.058
N of Valid Cases	350		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.43.

A3. SOCIAL LIFE: MEETING FRIENDS, RECREATIONAL ACTIVITIES, GOING OUT

SOCIAL_LIFE * DISCIPLINE Cross-tabulation

			DISCIPLINE		Total
			ENGINEERING	MANAGEMENT	
SOCIAL_LIFE	NO	Count	16	13	29
		%	8.0%	8.7%	8.3%
	RARELY	Count	44	17	61
		%	22.0%	11.3%	17.4%
	SOMETIMES	Count	20	71	91
		%	10.0%	47.3%	26.0%
	OFTEN	Count	52	22	74
		%	26.0%	14.7%	21.1%
	ALWAYS	Count	64	23	87
		%	32.0%	15.3%	24.9%
	NO OPINION	Count	4	4	8
		%	2.0%	2.7%	2.3%
Total		Count	200	150	350
		%	100.0%	100.0%	100.0%



From the table above the column percentage (%) presents the number respondents using internet for buying cheaper products as a *percentage* of the total number of respondents in each respectively. Maximum percentage of the engineering students (58%) always or often use internet for their social life connecting to friends etc. whereas the management students sometimes use internet for their social life. We can say that engineering students use internet for their social life more than as compared to the management students. The chi square value is 28.043 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the use of internet for social life and the discipline of education of the students as the table given below.

Chi-Square Tests

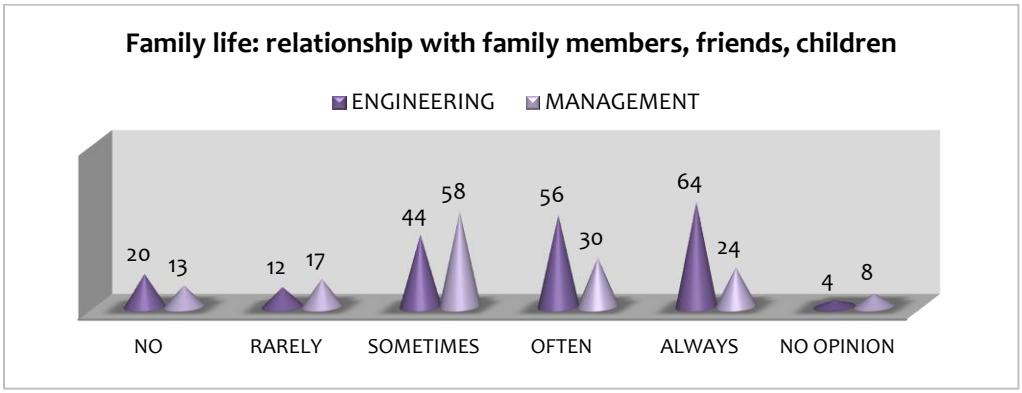
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.043[a]	5	.000
Likelihood Ratio	28.670	5	.000
Linear-by-Linear Association	1.505	1	.220
N of Valid Cases	350		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.43.

A4. FAMILY LIFE: RELATIONSHIP WITH FAMILY MEMBERS, FRIENDS, CHILDREN

FAMILY_LIFE * DISCIPLINE Cross-tabulation

			DISCIPLINE		
			ENGINEERING	MANAGEMENT	Total
FAMILY_LIFE	NO	Count	20	13	33
		%	10.0%	8.7%	9.4%
	RARELY	Count	12	17	29
		%	6.0%	11.3%	8.3%
	SOMETIMES	Count	44	58	102
		%	22.0%	38.7%	29.1%
	OFTEN	Count	56	30	86
		%	28.0%	20.0%	24.6%
	ALWAYS	Count	64	24	88
		%	32.0%	16.0%	25.1%
	NO OPINION	Count	4	8	12
		%	2.0%	5.3%	3.4%
Total		Count	200	150	350
		%	100.0%	100.0%	100.0%



From the table above the column percentage (%) presents the number respondents using internet for buying cheaper products as a *percentage* of the total number of respondents in each respectively. maximum percentage of the engineering students (60%) always or often use internet for their family life connecting to family and friends whereas the management students (59%) sometimes or often use internet for family life for connecting to family and friends. We can say that engineering students use internet for their family life more frequently as compared to the management students. The chi square value is 35.454 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the use of internet for family life and the discipline of education of the students as the table given below.

Chi-Square Tests

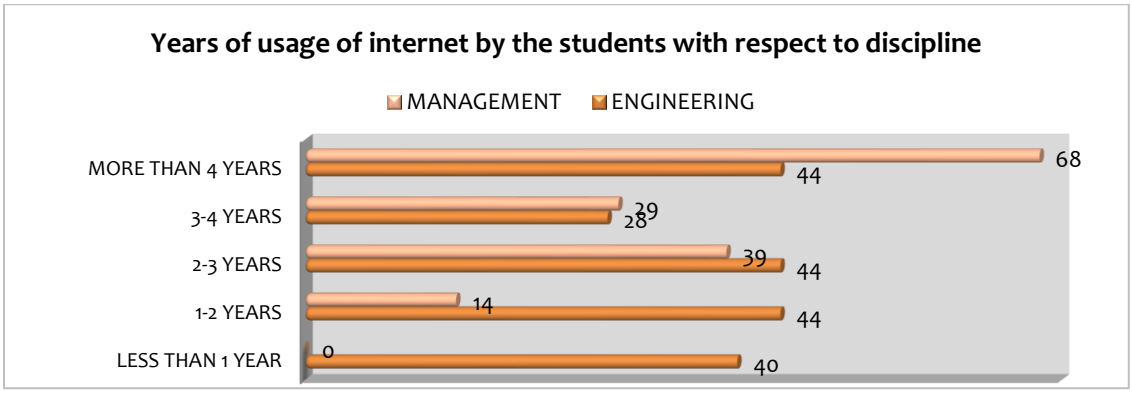
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.454[a]	5	.000
Likelihood Ratio	36.235	5	.000
Linear-by-Linear Association	1.029	1	.310
N of Valid Cases	350		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.14.

B. YEARS OF USAGE OF INTERNET AMONG STUDENTS BY DISCIPLINE

TIME * DISCIPLINE Cross-tabulation

			DISCIPLINE		Total
			ENGINEERING	MANAGEMENT	
TIME	LESS THAN 1 YEAR	Count	40	0	40
		%	20.0%	.0%	11.4%
	1-2 YEARS	Count	44	14	58
		%	22.0%	9.3%	16.6%
	2-3 YEARS	Count	44	39	83
		%	22.0%	26.0%	23.7%
	3-4 YEARS	Count	28	29	57
		%	14.0%	19.3%	16.3%
	MORE THAN 4 YEARS	Count	44	68	112
		%	22.0%	45.3%	32.0%
Total		Count	200	150	350
		%	100.0%	100.0%	100.0%



From the table above the Column percentage (%) presents the number of years of using the internet as a *percentage* of the total number of respondents in each respectively. The years of usage of internet for the engineering students are 1 to 3 years whereas the management students have been using the internet for more than 4 years. The management students being post graduate have been using internet for longer period as compared to the engineering students. The chi square value is 54.958 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the years of usage of internet and the discipline of education of the students as the table given below.

Chi-Square Tests

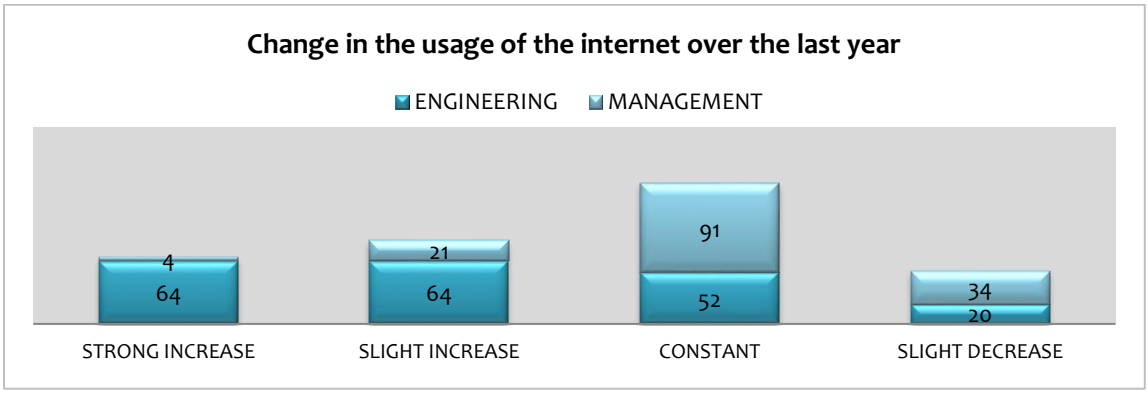
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54.958[a]	4	.000
Likelihood Ratio	70.082	4	.000
Linear-by-Linear Association	49.312	1	.000
N of Valid Cases	350		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.14.

C. CHANGE IN THE USAGE OF THE INTERNET OVER THE LAST YEAR

CHANGE_USAGE * DISCIPLINE Cross tabulation

			DISCIPLINE		Total
			ENGINEERING	MANAGEMENT	
CHANGE_USAGE	STRONG INCREASE	Count	64	4	68
		%	32.0%	2.7%	19.4%
	SLIGHT INCREASE	Count	64	21	85
		%	32.0%	14.0%	24.3%
	CONSTANT	Count	52	91	143
		%	26.0%	60.7%	40.9%
	SLIGHT DECREASE	Count	20	34	54
		%	10.0%	22.7%	15.4%
Total		Count	200	150	350
		%	100.0%	100.0%	100.0%



From the table above the Column percentage (%) presents the change in the usage of the internet as a *percentage* of the total number of respondents in each respectively. With respect to the change in the usage pattern we find that among the engineering students there is a slight and strong increase in the change of usage of internet pattern whereas it is almost constant or slight decrease for the management students. The chi square value is 46.036 and is significant as the sig value is less than 0.05. Hence there is significant difference with respect to the change pattern in the usage of internet and the discipline of education of the students as the table given below.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.036[a]	3	.000
Likelihood Ratio	47.373	3	.000
Linear-by-Linear Association	8.242	1	.004
N of Valid Cases	350		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.29.

D. TIME SPENT ON VARIOUS INTERNET SERVICES

The Mann-Whitney U-test is a statistical comparison of the mean. The U-test is a member of the bigger group of dependence tests. Dependence tests assume that the variables in the analysis can be split into independent and dependent variables. A dependence tests that compares the mean scores of an independent and a dependent variable assumes that differences in the mean score of the dependent variable are caused by the independent variable. In most analyses the independent variable is also called factor, because the factor splits the sample in two or more groups, also called factor steps. The aim is to find if there is any statistical difference between the gender and the time spent on various internet services.

Ranks

	GENDER	N	Mean Rank	Sum of Ranks
SURFING	MALE	122	177.20	21619.00
	FEMALE	228	174.59	39806.00
	Total	350		
POSTING_NEWS	MALE	122	177.07	21603.00
	FEMALE	228	174.66	39822.00
	Total	350		
EMAIL	MALE	122	167.01	20375.00
	FEMALE	228	180.04	41050.00
	Total	350		
CHATTING	MALE	122	175.60	21423.00
	FEMALE	228	175.45	40002.00
	Total	350		
GAMES	MALE	122	207.09	25265.00
	FEMALE	228	158.60	36160.00
	Total	350		
OTHER_SERVICES	MALE	122	185.17	22591.00

FEMALE	228	170.32	38834.00
Total	350		

With respect to test statistic we can conclude there is only one internet service that is online games; there is a difference in the usage with respect to gender, where the male students use online games more than the females. For all other services provided in the internet there is no major difference with respect to the gender. But we do find the males use surfing, posting news and online games more where as the females use it more for E-mail and chatting.

Test Statistics[a]

	SURFING	POSTING_NEWS	EMAIL	CHATTING	GAMES	OTHER_SERVICES
Mann-Whitney U	13700.00	13716.000	12872.00	13896.000	10054.000	12728.000
Wilcoxon W	39806.00	39822.000	20375.00	40002.000	36160.000	38834.000
Z	-.246	-.235	-1.275	-.014	-5.026	-1.599
Asymp. Sig. (2-tailed)	.806	.814	.202	.989	.000	.110

a. Grouping Variable: GENDER

3. CONCLUSION

Maximum percentage of the engineering students always or often use internet for their social life connecting to friends etc. whereas the management students sometimes use internet for their social life. We can say that engineering students use internet for their social life more than as compared to the management students. Maximum percentage of the engineering students always or often use internet for their family life connecting to family and friends whereas the management students sometimes or often use internet for family life for connecting to family and friends. We can say that engineering students use internet for their family life more frequently as compared to the management students. The years of usage of internet for the engineering students are 1 to 3 years whereas the management students have been using the internet for more than 4 years. The management students being post graduate have been using internet for longer period as compared to the engineering students. With respect to the change in the usage pattern we find that among the engineering students there is a slight and strong increase in the change of usage of internet pattern whereas it is almost constant or slight decrease for the management students. We can conclude there is only one internet service that is online games where is a difference in the usage with respect to gender, where the male students use online games more than the females. For all other services provided in the internet there is no major difference with respect to the gender. But we do find the males use surfing, posting news and online games more where as the females use it more for E-mail and chatting.

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