Available online at http://www.ijims.com

ISSN: 2348 – 0343

Skill mapping towards enhancing employability among final year Graduate and Post graduate students
(A case study of some selected instututions in Sambalpur and Shillong)

Phrangstone Khongji, Asstt Prof. in Statistics,
Department of Basic Sciences and Social Sciences,
North Eastern Hill University, Meghalaya, India.

Abstract

By 2020, India is set to become the world's youngest country with 64 per cent of its population in the working age group. Recognizing this as a challenge as well an opportunity, the Twelfth Plan strategy in India hinges on improving the employability of young labor force through skill development and creating high value employment in primary and secondary sectors.The main objective of the present study is to skill map final year graduate and post graduate students towards enhancing employability, who are studying in some selected institutions in Sambalpur and Shillong. Two institutions each are selected opportunistically from Sambalpur and Shillong town respectively which are offering Graduates and Post graduates courses. Within each selected institution respondents are selected by purposive sampling and information regarding enhancing employability is collected through semi structure Questionnaire and Free listing.Findings reveal that 70% of the total respondent from Sambalpur and 60% from Shillong have the desire for Govt executive's jobs. About 91% of the respondent from Shillong and 80% from Sambalpur expressed about the need of skill enhancement courses for securing a good job. Only 23.5% of the respondent mentioned to have attended skill enhancement trainings and more females has attended such training. Economic status of the respondents can be a detrimental factor in the enhancement of skill. In conclusion, in order to enhance the employability of the youths, concreted efforts have to be made to enhance the skill development infrastructure in the manner that all those who enter the labour force acquire relevant skills beforehand.

Keywords: Skill Mapping, Employability, Graduates and Post Graduates, Logistic regression, Free listing.

Introduction

By 2020, India is set to become the world's youngest country with 64 per cent of its population in the working age group. Recognizing this as a challenge as well an opportunity, the **Twelfth Plan**[7] strategy hinges on improving the employability of young labour force through skill development and creating high value employment in primary and secondary sectors.

The expansion of higher education in recent decades has resulted in an extremely diverse student population. Together with a labour market that increasingly expects graduates to be operational immediately after employment. Today, universities are expected to produce graduates not only with subject knowledge but also with

a wide range of practical skills, including information technology capabilities and foreign language proficiency, to carry out their jobs effectively in the workplace.

As per the **report on the 11th five year plan**[2] , it is estimated that only 2% persons in the age group 15 - 29 have receive formal vocational training and around 8% reported to have received non formal vocational training, indicating thereby that higher proportion of youth population actually enters the world of work without formal vocational training. In order to enhance the employability of the youths, concreted efforts have to be made to enhance the skill development infrastructure in the manner that all those who enter the labor force acquire relevant skills beforehand.

Third **Annual Employment-Unemployment Survey (2012-2013)**[4] report publish by the Ministry of Labor and Employment reveals that the unemployment rate among youth is significantly high as compared to the adult population and educated youth who is finding it difficult to get employment opportunities. Every 1 person out of 3 persons who are graduate and above is found to be unemployed under the age group of 15-29 years. Skills mismatch on youth labor markets has become a persistent and growing trend. Over-education and over-skilling coexist with under-education and under-skilling.

Jun, O (2007)[3] illustrates that in Japan, many universities have proceeded with educational reforms to adapt their programmes to the needs of the labour market. They have also multiplied services to students to enhance their employability, including development of placement services and career education for the first and second grade students, and have developed partnership with industry. In addition, the paper also states that some universities developed significant career development services, and often transformed the placement service into a career development centre, offering placement service and relevant educational activities for improving the employability of their students and aid them with finding jobs.

Chithra. R(2013)[1] in her study revealed that there is significant difference between the perception of students and their employers. It is this disparity makes the students unemployable

Need and importance of the Research Problem.

In Enhancing Employability the Planning Commission (12th year plan report) envistigated that " there is a need for a clear focus on improving the employability of graduates. Graduates now require the skills beyond the basics of reading, writing and arithmetic (the '3Rs'). Skills such as critical thinking, communication, collaboration and creativity (the '4Cs') are now important in more and more jobs.

Final year Graduates and Post Graduates are sections of the population that are most likely to enter the labor force. In this connection, the present study aims to explore the perception and participation of these sections of youths in skill trainings towards enhancement of employability, for ensuring that they get gainful employment.

Objectives

To explore the perception and participation of final year Graduates and Post graduates in Sambalpur and Shillong.

- In understanding the type of preferential professional desire.
- In understanding the need about skill enhancement courses in the survey areas.

- In studying the proportion of students attended Skill enhancement courses.
- Comparative study among Graduates and Post Graduates of Sambalpur and Shillong towards employability skills.

Methodology

The present study is undertaken with the primary objectives of identifying, defining and justifying research problems and carrying out studies of national importance in an area of secondary and higher education and employment in India and relevance to Kusuma's strategic priorities.

Kusuma foundation prioritise in Sambalpur district in Orrisa. Shillong, the capital city of the state of Meghalaya in the North Eastern part of the country which is the region that is lagging far behind the rest of the country in most of the important development parameters of growth is selected as study area for which field work is undertaken during the month of April in 2014. Institutions is identify opportunistically by which Sambalpur University(SU) offering courses leading to Post graduates degrees and Gangadhar Meher College(GMC), offering Graduates and Post Graduates degrees courses from Sambalpur. North Eastern Hill University(NEHU) offering courses leading to Post graduates degrees and St Anthony College(SAC), offering Graduates and Post Graduates degrees courses is purposively selected from Shillong.

Final year students from these institutions were selected by purposive sampling and a sample of 318 numbers of respondents were obtained based on resources (Time, Money and manpower). In connection with the collection of information from the students, Self administered semi open ended questionnaire and Free listing exercises were used.

Ethical guidelines are strictly followed to secure the actual permission and interests of all participants involved in the study. In the analysis of the data Cross tabs and percentages and. Logistic regression were employed.

Interpretation of the Data analysis.

The data collection, is non probabilistic as the respondents is chosen through purposive sampling in both the sampling area of Sambalpur and Shillong and Table 1 shows the distribution of the samples by background characteristic.

Apart from information on background characteristics, question was also asked about the preferential professional desire when studies are completed. Data shows that 64% of the total respondent prefers Government Executives jobs. When data were segregated by sample region, then 70% of the total respondent from Sambalpur and 60% from Shillong have the desire for Govt executives jobs.

By stream of study, the preferential professional desire, Figure 1 shows that most of the respondents from both Sambalpur and Shillong who belonging to Arts and Science stream prefer Government Executives jobs.

Further, the figure also reveals that 60% of the respondent from Sambalpur and 37% from Shillong belonging to commerce stream prefer working in Corporate and Banking sector.

As a proxy to measure the economical status of the respondents, an indicator was constructed according to NFHS-1 called the standard of living index (SLI). This index was constructed taking into account the house type, toilet facility, main fuel for cooking, source of drinking water, separate room for cooking, ownership of house, land, livestock and durable goods. Out of the 155 who respond the complete set of questions for SLI, 142 of them respond to the question regarding preferential professional desire after the completion of studies. By standard of living, Figure 2 shows that majority of the respondents across SLI from both Sambalpur and Shillong prefer Government executives jobs.

Data by institution as given in Table 2 shows that Govt Executives is the first most preferred choice of job as express by the respondents. Further the table reveals that more than 76% respondent from Post graduates institutions of SU and NEHU preferred Govt executives jobs. However this preference is 51.5% in graduates institutions of SAC and 65.4% in GMC.

When the respondents were ask about the need of additional skill enhancement courses for securing a good job, 91% of the respondent from Shillong and 80% from Sambalpur express their desire to such training

In addition to the perceptional questions on the skill enhancement mention above, queries were also sought from the respondents about the actual attendance on the skill training during any period. Table 3 shows that out of the 318 respondents, 75(23.5%) of them mentioned to have attended specialized skill trainings. It is worth noting that within each categorical standard of living, table 5 shows that the percentages of respondents attending skill courses increases from Low SLI (at 14.3% in Sambalpur and 12.5% in Shillong) to High SLI (to 50% in each of the cities). Table 5 further reveals that More Graduates respondents have attended skill courses compared to Post graduates.

In connection to the type of courses, Table 4 reveals that more respondents from Sambalpur attended IT related training and couching for competitive exams , whereas more respondents from Shillong attended training on communication skills and personality development. Out of the 75 respondents who attended the trainings, only 28 respondents prefer to provide information on the course fee in connection with skill enhancements trainings. Among these respondents only 6 (21.4%) mentioned that the course is free and one mentioned that the course is sponsor and 67% of them paid the skill trainings fees above Rs 2500/-.

Among the respondent who responded to the query on the attended of career counseling at any point of time, 209 out of 314 mentioned that they have not participated in any such counseling. However by institution, Table 6 reveals that only 20% males respondents have attended career counseling in Sambalpur University compare to 80% females whereas in NEHU females outnumber their counterparts by more than half. Interestingly in SAC, more males respondents attends career counseling programs.

Logistic regression

The dependent variable considered in the logistic regression is the question on the need of skill enhancement courses for which the respondents reply is 'yes' or 'No'. The predictors characteristic considered in this analysis is gender, SLI and streams of study. The result of the analysis is given in table 7a and reveals that gender is a significant characteristic at 0.05 level of significant. Further with reference to females, the odds ratio for males is 2.6 times higher , showing that more proportion of males are expressing their need of skill enhan cement courses.

A second logistic regression is run base on the indicator on attended any training for enhancement of skill, for which the respondents reply is 'yes' or 'No' The predictors characteristic considered in this analysis is gender, SLI and streams of study. The results as given in table 7b show that SLI is a significant characteristic that determines the indicator. With reference to respondent from low standard of living, the odds ratio respondents from medium SLI are 1.22 and 7.5 for respondents from High SLI. This shows that significant number of respondent who have attended skill enhancement courses belong to High SLI is highest followed by those from Medium SLI and least attended by those from Low SLI.

Freelisting

The present study is in connection with the skill mapping on the enhancement of employability among final year undergraduate and post graduate students. In this regard, the researcher felt that it is necessary to also collect the information from the respondents can provide a free list of the kind and type of skill courses desire to undergo. In this connection, a list of twenty high growth sectors as mentioned in XI Five Year Plan of the Planning Commission and the report of the NSDC is use to carry out this free listing exercise of the present study. Masters Degree, M.Phil, PhD is included in these sectors as it is thought that many of the respondents would pursue higher studies as an objective to for the enhancement of their skill. This free listing is carried out by supplying at the end of the questionnaire, the list of the above mentioned high growth sector to every respondents.

Out of the total of 318 respondents, 209 respondents participated in the free listing exercises and provide their options from among the above list in order of importance, in the light of enhancement of skills for the increase in employability. In the exercise, almost all the respondents mentioned to about five to six numbers of choices from among the sectors mentioned above and this is provided by order of importance.

The analysis of the above free listing is carried out using the Anthropac software. The result from the analysis, as shown in Table 8 shows that **Masters Degree/ M.Phil/ PhD** is one of the sector with highest salience of 0.503 as expressed by 36 number of respondents and this was on the average mentioned between the second and the third best choices **. Educational & Skill Development Services** with the salience of 0.470 as expressed by 33 number of respondents and this was on the average mentioned between the second and the third best choices. **Banking/Insurance & Finance Services** with the salience of 0.409 as expressed by 24 number of respondents and this was on the average mentioned between the first and the second choices**. ITS or Software Services/Products**

with the salience of 0.127 as expressed by 13 number of respondents and this was on the average mentioned between the third and the forth choices.

In providing the list of 21 high growth sector to the respondents in the free listing exercises may restrict the students in mentioning their individual opinion regarding their best choices of skill enhancement courses. As a result 109 respondents from St Anthony college, Shillong were allowed to provide freely any of the courses and field of training consider best by them.

The result from the analysis, as shown in table 9 shows that **Communication skills** is one of the sector with highest salience of 0.287 as expressed by 20 number of respondents and this was on the average mentioned between the first and the second best choices **. Career counseling** with the salience of 0.228 as expressed by 15 number of respondents and this was on the average mentioned between the first and the second best choices. **Personality development courses** with the salience of 0.140 as expressed by 12 numbers of respondents and this was on the average mentioned between the second and the third choices**. Computer courses** with the salience of 0.081 as expressed by 6 number of respondents and this was on the average mentioned between the second and the third choices. **Coaching for Jobs in Public and Banking sectors** with the salience of 0.090 as expressed by 6 number of respondents and this was on the average mentioned between the first and second choices. It is worth noting that very few respondents express their willingness to further continue their studies.

Conclusion

It is a fact that employers in the Indian labor market expect students to be employable immediately after their Graduations and Post graduations. Though a number of these cohort of students do get employment after the completion of their studies in various sectors according to their educational profile, but past studies shows that a significant proportion of these group of students finds difficulty in finding jobs to fit their profile and becomes educated unemployed or underemployed and this is due to a mismatch between the aspirations of graduates and employment opportunities available to them.

However due to high degree of diversity and specialization of the labor market, it becomes difficult for a simple graduates to find employment without appropriate specialize skills. As a result the present study reveals that 91% of the respondent from Shillong and 80% from Sambalpur express their desire to additional skill enhancement training.

The present study also reveals a huge gap between met and unmet need for skill enhancement, as only 23% of the respondent out of the total of 318, get a chance to attend such trainings. Gender differential exist in expression of need and also in the attending of additional skill enhancement trainings among the respondents as observed in the study both in Sambalpur and Shillong. Such laidback attitude among males respondents on the issue of skill enhancement to increase employability needs further research.

Economic status of the respondents as seen from the present study seems to be a detrimental factor in the attending of skill enhancement trainings, as within each categorical standard of living, the percentages of

respondents attending skill courses increases from Low SLI (at 14.3% in Sambalpur and 12.5% in Shillong) to High SLI (to 50% in each of the cities). It is also established statistically by logistic regression in this study that SLI is a significant characteristics that determine the attendance to skill enhancement trainings. Hence, providing scholarship, financial assistance or funding will definitely increase the number of students attending skill trainings.

Sector wise, 70% of the total respondent from Sambalpur and 60% from Shillong have the desire for Govt executives jobs. Such choices maybe be driven mainly because of economic and social security, more benefit and allowances and easier working environment.

In the above connections, it is clear that majority of the respondents expressed the need of skill enhancement trainings and as a result interventions is necessary to addressed this need in the form of policies at every level to revolve around availability, accessibility, affordability and employability so as to enable the students obtained the required Skills during their graduations and post graduations.

References

1. Chithra, R.(2013).Employability Skills -A Study on the Perception of the Engineering Students and their Prospective Employers, Global Journal of Management and Business Studies. Volume 3, Number 5 , pp. 525-534, ISSN 2248-9878.
2. Eleventh Five Year Plan (2007 – 2012), Vol I, Planning Commission , Gov of India.
3. Jun, O. (2007) Enhancement of the employability of Graduates, University Studies No. 35, pp 51-65, ISSN0916-0264.
4. Report on Youth Employment-Unemployment Scenario (2012-13) volume III Government of India, Ministry of Labour & Employment labour Bureau Chandigarh.
5. Skill gap assessment for the state of Odisha(2012): A District wise analysis, Ernst and Young, nsdcindia.org_pdf_odisha skill gap report.pdf_2012.
6. Skill Gap Study of the North East – Meghalaya, 2012, A District wise analysis , NSDC, IMaCS, nsdcindia.org_meghalaya_ skill gap report.pdf_2012
7. Twelfth Five Year Plan, (2012–2017) Social Sectors, Volume III, Planning commission, Govt of India.

Table 1 : Number of Respondents by selected background characteristics

Background	Number of Number of Respondents	
	Sambalpur	**Shillong**
Age		
< 20 years	8	7
20 – 24 years	104	186
24+	6	4
Gender		
Male	71	98
Female	48	101
Institution		
Sam Univ(SU)	63	-
NEHU	-	64
GMC	56	-
SAC	-	135
Educational Level		
Post Graduates	82	79
Graduates	37	120
Subjects/Streams		
Arts	53	95
Science	50	85
Commerce	16	19
Economic Status (SLI)		
Low	14	8
Medium	72	51
High	6	4
Religion		
Hindu	118	78
Muslim	1	3
Christian	0	118

***Source**:* Computed from Surveyed data.

Figure 1: Percentage on the preferential Professional desire as expressed by the respondents by Streams of Study.

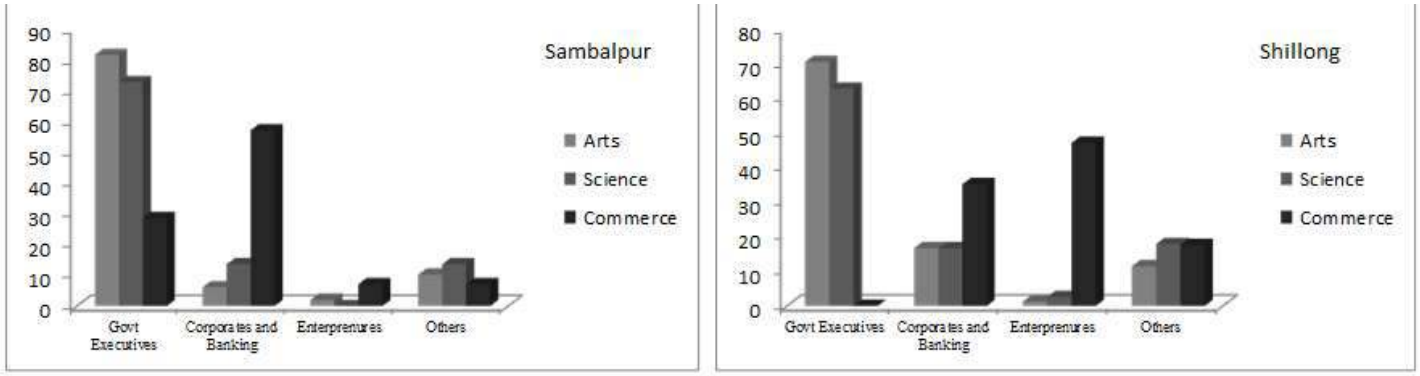

Figure 2: Percentage on the preferential Professional desire as expressed by the respondents by SLI.

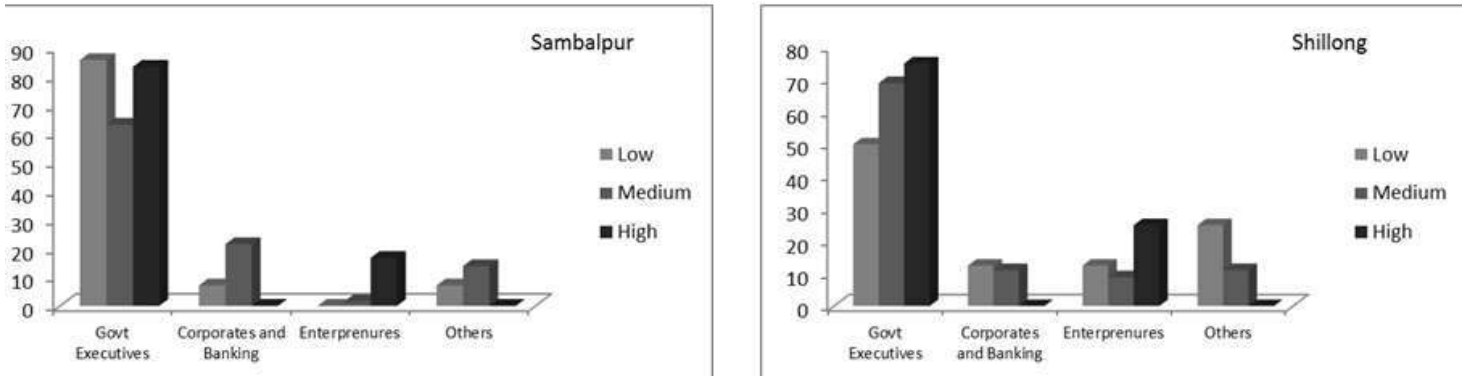

Table 2: Percentage on the preferential Professional desire among the Respondents by Gender and Institutions.

Institutions	Gender	Govt Executives	Corporate and Banking	Entrepreneurs	Others	Total(100%)
SU	Male	76.9%	15.4%	.0%	7.7%	13
	Female	76.2%	7.1%	2.4%	14.3%	42
NEHU	Male	77.8%	.0%	.0%	22.2%	18
	Female	76.3%	5.3%	2.6%	15.8%	38
GMC	Male	65.4%	23.1%	1.9%	9.6%	52
SAC	Male	53.8%	18.5%	13.8%	13.8%	65
	Female	50.0%	34.6%	1.9%	13.5%	52

Table 3. Percentage of respondent who had attended Skill Enhancement courses by Stream of Study.

Stream of Study	Have you ever gone or going for job oriented coaching classes to enhance your skill?	
	No	yes
Science	45.7%	49.3%
Arts	42.4%	42.6%
Commerce	11.9%	8%
Total (in absolute numbers)	243	75

Table 4. Percentage of respondent by the type of skill enhancement Courses attended.

Course Type	Sambalpur	Shillong	Total
IT related training	55.0%	49.0%	50.7%
Life Skills	0.0%	21.6%	15.5%
Communication skills and personality dev	15.0%	27.5%	23.9%
Coaching for competitive exams	30.0%	2.0%	9.9%
Total(in absolute numbers)	20	51	71

Table 5 : Percentage of respondent who had attended Skill enhancement Courses by SLI and Level of Education in Sambalpur and Shillong.

SLI	Yes	14.3%	12.5%
Low	No	85.7%	87.5%
No of Respondents		**14**	**8**
	Yes	15.3%	19.6%
Medium	No	84.7%	80.4%
No of Respondents		**72**	**51**
	Yes	50%	50%
High	No	50%	50%
No of Respondents		**6**	**4**

Post Graduate	Yes	11%	24.1%
	No	89%	75.9%
No of Respondents		**82**	**79**
Under Graduate	Yes	27%	30.8%
	No	73%	69.2%
No of Respondents		**37**	**120**

Table 6. Percentage of respondent attended Career Counseling by Institution.

Institutions		Have you ever gone for careeer counceling?		Total
		yes	no	
SU	Male	20.0%	25.5%	24.2%
	Female	80.0%	74.5%	75.8%
	Total	15	47	62
NEHU	Male	36.4%	34.6%	34.9%
	Female	63.6%	65.4%	65.1%
	Total	11	52	63
GMC	Male	22%	78%	55
	Total	12	43	55
SAC	Male	58.2%	52.2%	55.2%
	Female	41.8%	47.8%	44.8%
	Total	67	67	134

Table 7a. Logistic Regression on the need of skill enhancement courses by background Characteristics.

	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper
Gender					
Female®					
Male	.966	.055*	2.626	.981	7.031
Stream of Study					
Commerce®		.425			
Science	.889	.225	2.432	.579	10.227
Arts	.454	.527	1.574	.386	6.411
SLI					
Low	1.140	.333	3.127	.311	31.407
Medium	.728	.511	2.071	.237	18.112
High®		.580			
Constant	-3.509	.009	.030		

® Reference category , *0.055 Significant level

Table 7b. Logistic Regression on the attended of skill enhancement courses by ackground Characteristics.

	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper
Gender					
Female®					
Male	-.264	.570	.768	.309	1.909
Stream of Study					
Commerce®		.155			
Science	-1.211	.072*	.298	.080	1.113
Arts	-.406	.489	.667	.211	2.103
SLI					
Low ®		.031**			
Medium	.198	.779	1.219	.306	4.849
High	2.019	.029**	7.527	1.233	45.957
Constant	-1.092	.216	.336		

®Reference category , **0.05 Significant level, *0.10 Significant

Table 8. Result through free listing of the Average rank and Salience when list of high growth sectors was given.

SORTED BY FREQ

	ITEM	FREQUENCY	RESP PCT	AVG RANK	Smith's S
1	MASTER DEGREE/M.PHIL/PHD	36	72	2.278	0.503
2	EDUCATIONAL AND SKILL DEVELOPMENT SERVICES	33	66	2.303	0.470
3	BANKING/INSURANCE AND FINANCE SERVICES	24	48	1.708	0.409
4	ITS OR SOFTWARE SERVICES/PRODUCTS	13	26	3.462	0.127
5	CHEMICALS AND PHARMACEUTICALS	13	26	2.692	0.170
6	HEALTH CARE SERVICES	13	26	2.846	0.153
7	FOOD PROCESSING/COLD CHAIN/REFRIGERATION	10	20	2.200	0.145
8	ITES	9	18	3.444	0.090
9	MEDIA	8	16	3.375	0.084
10	ORGANISED RETAIL	7	14	3.429	0.072
11	REAL ESTATE SERVICES	5	10	4.400	0.029
12	TOURISM/HOSPITALITY/TRAVEL TRADE	5	10	3.800	0.044
13	ELECTRONICS HARDWARE	4	8	5.000	0.016
14	AUTOMOBILE AND AUTO-COMPONENTS	2	4	4.000	0.018
15	LEATHER AND LEATHER GOODS	2	4	3.000	0.022
16	OTHERS	25			
	Total/Average:	209	4.180		

Table 9. Result through free listing of the Average rank and Salience when list of high growth sectors was not given.

SORTED BY FREQ

	ITEM	FREQUENCY	RESP PCT	AVG RANK	Smith's S
1	COMMUNICATION SKILLS	20	40	1.800	0.287
2	CAREER COUNCELLING	15	30	1.867	0.228
3	PERSONALITY DEVELOPMENT COURSES	12	24	2.750	0.140
4	COMPUTER TRAINING/COURSES	6	12	2.167	0.081
5	COACHING FOR OTHER JOBS(GOVT.JOBS)	6	12	1.833	0.090
6	WORKSHOP ON MUSIC	4	8	1.750	0.050
7	VOCATIONAL PROGRAMS/COURSES	4	8	1.250	0.070
8	RESEARCH FELLOSHIP PROGRAMMES	3	6	2.000	0.042
9	JOB ORIENTATION PROGRAMMES	3	6	3.667	0.024
10	PHOTOGRAPHY	2	4	2.500	0.030
11	WORKSHOP	2	4	1.500	0.033
12	NATIONAL SIMINARS	2	4	1.500	0.036
13	INVESTIGATING SKILLS	2	4	5.000	0.013
14	VIDEOGRAPHY	2	4	4.000	0.020
15	ANALYSING SKILLS	2	4	6.000	0.007
16	OTHERS	24			
	TOTAL	109	3.20		