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PERCEPTIONS AND ASPIRATIONS OF FUTURE KNOWLEDGE WORKERS: A Case of USM's Students¹

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Abstract

In line with the nation's Vision 2020, pools of knowledge workers are needed to make this country an industrialized nation. Hence, local universities are entrusted to produce future knowledge workers who will realize this vision. This paper focuses on the perception and aspiration of potential knowledge workers toward their first employment. A survey was done on final year students of USM prior to their graduation. The result of the study can be used by the potential employers in attracting and retaining the knowledge workers with their organizations, as they are aware of knowledge workers' perception and aspiration.

INTRODUCTION

Prime Minister's vision towards Malaysia becoming an industrialize nation by the year 2020 can be the impetus for local universities and colleges to produce pools of knowledge workers. Based on McGinn and Raymond (1998), they indicated that knowledge workers were those highly educated. Therefore, the graduates of USM can be considered as knowledge workers due to their formal education through the university education system.

Volatility of business environment has urged organizations in attracting and retaining knowledge workers to work with their organizations. Organizations that are able to recruit, motivate, and retain knowledge workers are going to have a competitive advantage. Therefore, companies that offer comprehensive training with planned, on-the-job experience, complemented by enlightened supervision and opportunities for ongoing professional development, will be more successful in retaining their valued and highly skilled people (Zidle, 1998). Moreover, human resource managers of organizations need to find ways in their effort of luring potential knowledge workers to work with them. Therefore, organizations are continuously advertising various vacancies in for right candidates or knowledge workers.

This study explores perception and aspiration factors of future knowledge workers towards their future employment. Further, as Malaysia moves towards the year 2020, organizations need to gauge themselves toward knowledge workers' perception and aspiration.

LITERATURE REVIEW

Knowledge Workers

The word 'knowledge worker' was introduced in the mid 90s. Further, the drive to strengthen American competitiveness has resulted in new interest in finding training and development programs that support improvement in worker productivity at all business levels. Capital expenditures for the latest in high-tech equipment need to be accompanied by providing education for more so called "knowledge workers" (Gordon, 1997).

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Knowledge workers have been the fastest-growing type of workers in Canada. Today, one in every eight workers in Canada is a "knowledge worker" (HRDC, 1997). According to Peter Drucker, knowledge workers are those whose work primarily requires the use of "mental power rather than muscle power." Further, knowledge workers are involved in analyzing information and applying specialized expertise to solve problems, to generate ideas, or to create new products and services (Zidle, 1998).

McGinn and Raymond (1998) indicated that knowledge workers as those highly educated, and high-earning professionals. Those are the people who thrive in the new economy. Further, a study indicated that knowledge workers are required to have a good deal more formal education and continuous learning than their predecessors, the blue-collar worker (Anonymous, 1996). Moreover, 20% of the jobs by the run of the century would be unfilled unless many present industrial workers are retrained to be knowledge workers.

In summary, knowledge workers are those who are highly educated and continuously learning new tasks and gathering information in their career. They are considered the source of information and the expert in their area for solving business problems.

Perceptions and Aspirations of Workers

Devlin and Peterson (1994) focused part of their study on factors perceived to be important in entry-level jobs by graduates in the US and New Zealand. They discovered that students' focus and perceptions change as time passes. Their findings revealed that the US students, opportunity for advancement and opportunity for self-development were ranked the highest, followed by challenge and responsibility, working conditions, and type of work. On the other hand, job title, company reputation, and locations of work obtained low scores. Meanwhile, the New Zealand students also highly rated opportunity for advancement and opportunity for self-development. These were followed by challenge and responsibility, type of work, and training. On the other hand, job title, job location, and reputation were the lowest rate value (Devlin and Peterson, 1994).

The same study of Devlin and Peterson was replicated over the USM's final year business undergraduate students at the School of Management (Asaari, 1995). It was discovered that top five important factors were opportunity for self-development, opportunity for career development, feeling of achievement/recognition, working conditions, and employer that provide training. Meanwhile, least important factors were job title, location of work place, company reputation, flextime, and use of skills. Further analysis by academic majors discovered that opportunity for self development and opportunity for career development were regarded as the most important factors for all academic majors: Accounting/finance, human resource management, and marketing. Those findings were consistent with the finding by Devlin and Peterson (1994).

Anderson et al. (1991) study discovered the basis for developing strategies to attract students to pursue marketing careers. Moreover, they discovered that students' perceived a particular career must be meaningful, prestigious, socially relevant, and provided an opportunity for creativity. Further, students' perceptions of marketing as a career and were interested in clarifying how students view what marketing has to offer them and how educators can use this information to influence their students' choice of marketing as a major and as career field. They discovered that the students grouped by major (human resource management, marketing, and accounting/finance) had different perceptions from the marketing major. Marketing students responded positively on whether to pursue a career in marketing. The non-business students responded neutral. On the other hand, accounting/finance students responded with low means as they had declared their choices.

Chacko (1991) reported that students perceive a variety of reasons that attracted them in pursing a career including money, prestige, aptitude, lifestyle, and the working environment. Further, the students perceived that education was the means toward the goal of obtaining a job in the profession that they found attractive.

Holland (1985) discovered that people often choose professions with environments that will match their interest, likes and dislikes. He also discovered that students major in accounting because they perceived work environment and lifestyle of the professional accountant match their own abilities and interests.

Further, Chacko (1991) confirmed the study by Holland (1985) that students who decide to major in accounting seem to have matched their interests, competencies, and preferences with the perceived environment of the accounting profession.

The Olsten College seniors found that the graduating class was pragmatic, directed, and concerned with future financial and professional growth. The graduates also stressed power, money, and rapid promotion in evaluating their career success (Anonymous, 1989).

Morovec and Wheeler (1989) discovered that while students look for long-term values, such as professional growth and promotion, many employers provide only limited information about such opportunities to job candidates. However, Parmley et al. (1987) at Southwest Missouri State University revealed that student's choice of employer was based on potential for future earnings, promotion opportunities, and employer location.

A study on Japanese students, Lutfy (1988) indicated that they were making new demands on companies in Japan on factors such as job satisfaction and high wages. The newly hired were pushing for more responsibility and opportunity to prove them while they were still at their junior executive level.

Keehan (1985) discovered that students indicated preferences for career opportunities, training facilities, free education, evening training, and job security. Moravec, Kevin, and Brandon (1989) found that a peak performer's characteristics were found to be a strong emphasis on improvement, a high degree of risk taking and initiative, and solid team building or networking skills.

Gooding (1988) discovered that values are changing and so are attitude about work. People want more than security and money, and they are voicing up their desire for opportunity growth in their careers, ability to learn from work experiences, and expanding their knowledge and skills. Meanwhile, Fitz-enz (1990) indicated that foundations on which career development systems are built: company need and employee need. Moreover, career development programs used training as tool to retrain and develop people.

In summary, several observations can be made from a review of the relevant literature. First, there are many factors that future knowledge workers perceive to be important in seeking jobs such as money, prestige, aptitude, lifestyle, work environment, power, financial growth, professional growth, promotion, employer location, job satisfaction, higher wages, and the list is not exhaustive. Second, research also indicates that these perception change over time. And finally, the selection of major also plays an important role in the future knowledge workers choice of career.

METHODOLOGY

The purpose of this study is to identify factors that determine the future knowledge workers' perception and aspiration in determining their career choice. The studies by Devlin and Peterson (1994) were reviewed to provide guidance in determining the factors that affect undergraduate student perceptions and aspirations about their potential employer of which also could be considered as knowledge workers.

Further, the study attempted question to answered the following: What factors are perceived to be important by the future knowledge workers in pursuing their career? This will be explored from the perspective of gender and ethnic groups. Further, this finding will be compared with the earlier study by Asaari (1995).

Variables

Independent variables for this study are identified as gender and ethnic group. Meanwhile, the factors used for measuring future knowledge workers perception and aspiration in selecting their career choice were adopted from Devlin and Peterson (1994). The factors of dependent variables are as follows:

- 1. Opportunity for career development.
- 2. Opportunity for self-development.

- 3. Job that can provide challenge.
- 4. Job that gives responsibility.
- 5. Working conditions.
- 6. Nature of work assigned.
- 7. Employer that provide training.
- 8. Job that provide security.
- 9. Interpersonal relationship.
- 10. Freedom on the job.
- 11. Location of work place.
- 12. Company reputation.
- 13. Job title.
- 14. Salary.
- 15. Use of skills.
- 16. Feeling of achievement or recognition.
- 17. Flextime.

Other demographic factors are also collected such as age, gender, major, hometown, choice of employment sector, and family background.

Sample and Questionnaire

The sample for the study was taken from final year business undergraduate students at the School of Management, Universiti Sains Malaysia. A questionnaire was administered randomly to 200 students, but only 164 responded; thus representing 82% participation from the graduating class of 1999.

The questionnaire was divided into 2 parts that sought demographic information, and perceptions and aspirations on important factors. The measuring instrument contained 17 factors based on Devlin and Peterson (1994) studies. Students were asked to rate the factors that they desire on a Likert 5-point scale ranging from most unimportant (1) to most important (5).

RESULTS

The majority of the respondents were female (81.1%) as compared to male (18.9%). By ethnic group, Malay was represented by 64%, Chinese was 27.4%, Indian was 3.7%, and others by 4.9%. Meanwhile, the respondents were grouped into 3 categories according to their age as depicted in Table 1.

Table 1: Age Group

Age	N	%
20 - 22	103	62.8
23 – 25	56	34.1
26 – 29	1	0.6

Based on academic major, Finance/Accounting was represented by 38.4%, HRM was 37.2%, Marketing was 18.3%, and Operations Management was 6.7%.

Further based on home town of students, they indicated that 40.9% was from Northern Region, 26.8% from Eastern, 14.6% from Southern, 9.1% from Central, and 8.5% from Sabah and Sarawak.

Moreover on choice of employment sector, 87.3% preferred to work in private sector, and 12.3% preferred in government sector.

As for background of students' family occupation, the result was depicted in Table 2.

Table 2: Father's and Mother's Occupation

Occupation	Sector	N	Percent
	Farmer	49	29.9
	Private	33	20.1
Father	Government	32	19.5
	Businessman	19	12.0
	Pensioner	19	11.6
	Housewife	131	79.9
	Government	16	9.8
Mother	Private	7	4.3
	Businesswoman	4	2.4
	Pensioner	2	1.2

Choice of working sector by students, they preferred to work in the private sector (86.6%), meanwhile 12.2% in the private sector. Further based on working environment, Table 3 indicated students' choices.

Table 3: Working Environment Preference

Working Environment	N	Percent
Manufacturing	65	39.6
Finance/Banking	59	36.0
Corporate	16	9.8
Telecommunication	5	3.0
Services	3	1.8
Marketing	2	1.2
Administration	1	0.6
Transportation	1	0.6
Human Resource	1	0.6
Information Technology	1	0.6

Students also were asked on their working and company location preferences. Table 4 depicted the above results.

Table 4: Preference of Working and Company Locations

Location Preference		N	Percent
	Northern	63	38.4
	Central	50	30.5
Working	Southern	19	11.6
	Eastern	19	11.6
	Sabah & Sarawak	12	7.3
	City	98	59.8
Company	Capital City	61	37.2
	Town	1	0.6

DISCUSSION

Future knowledge workers of embarking their career with private sectors were supported by the overwhelming vacancies within that sector. Moreover, the selection of industry by the future knowledge workers was concentrated in the manufacturing and finance/banking industries. Future knowledge workers' major that mostly were in Finance/Accounting supported this.

Moreover, future knowledge workers intention to work in the private sector had shown that they are keen to go for the challenges by the sector. On the other hand, their father and mother's occupation indirectly influence their decision in pursing their careers as majority of the parents were equally distributed in the public and private sectors.

Based on selection of the work place, future knowledge workers were considering of working in the city as compared to capital city. This can be considered that future knowledge workers were taking into consideration of their quality of life. The result indicated that future knowledge workers were originated from northern and eastern regions, as both regions were considered as not as hectic as compared to the capital city.

Responses of seventeen factors were ranked based on the perception and aspiration of future knowledge workers. Their responses were ranked and analyzed based on the mean. The result shown that the top five important were:

		<u>Mean</u>
1.	Job that provide challenge	2.2561
2.	Job title	2.1402
3.	Location of work place	2.0061
4.	Nature of work assigned	1.9634
5.	Freedom on the job	1.9329

On the other hand, the least important factors of future knowledge workers were:

		Mean
1.	Job that provide security	1.3780
2.	Opportunity for self-development	1.3963
3.	Opportunity for career development	1.4085
4.	Working conditions	1.4878
5.	Interpersonal relationship	1.5183

Further, both finding of factors, most important and least important were compared with the findings in 1995 (Asaari, 1995), as depicted in Table 5 and 6.

Table 5: Comparison of Most Important Factors

Rank	Study in 1995	Study in 1999
1	Opportunity for self-development	Job that provide challenge
2	Opportunity for career development	Job title
3	Feeling of achievement/recognition	Location of work place
4	Working conditions	Nature of work assigned
5	Employer that provide training	Freedom on the job

Table 6: Comparison of Least Important Factors

Rank	Study in 1995	Study in 1999
1	Job title	Job that provide security
2	Location of work place	Opportunity for self-development
3	Company reputation	Opportunity for career development
4	Flextime	Working conditions
5	Use of skills	Interpersonal relationship

From the above comparisons, we discovered that the differences of perception and aspiration of 1995 and 1999 were due to the nation's economic condition. Whereby in 1995, economic downturn, future

knowledge workers were not concern on the job title, location of wok place, and company reputation as they need the job badly. Therefore, future knowledge workers were willing to take any vacant jobs at that time.

Meanwhile in 1999, future knowledge workers' perspectives were changed, as the nation's economy was on the recovery. Further supported by the numerous job availabilities, they were looking at job that provides challenge, and freedom on the job. Moreover, future knowledge workers were no longer stressing on the job that provide security, opportunity for self and career developments, and working conditions. This was caused by their decision in pursing their own career path rather than determined by their employers. Thus, future knowledge workers were concluded of looking after their own quality of work-life as they are stressing on the location of work place, nature of work assigned, and freedom on the job.

CONCLUSION

As the nation move towards the year of 2020 - the vision of the Malaysian Prime Minister in making Malaysia as an industrialize nation, future knowledge workers need to be prepared and equipped with knowledge and expertise through formal education at university level. Moreover, they need to be ready and willing to long life learning in facing the globalization era.

Moreover the change in the perception and aspiration of future knowledge workers need to be taken into consideration, as they will affect the Nation's Planning. A versatile future knowledge workers need to be prepared in facing the challenge of globalization.

FUTURE RESEARCH

A longitudinal study needs to be carried out as to monitor the perceptions and aspirations of future knowledge workers toward preparing an industrialized nation by the year 2020.

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