Educational Research and Review Vol. 3 (8), pp. 262-274, August 2008
Available online at http://www.academicjournals.org/ERR
ISSN 1990-3839 © 2008 Academic Journals

Full Length Research Paper

Transition from higher education to employment: A case study of graduates of faculty of social sciences University of Botswana

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Accepted 23 July, 2008

This study presents the opinions of a stratified sample of 542 graduates of the Faculty of Social Sciences, University of Botswana on their transition from higher education to employment and the extent to which the job held are appropriate to the level of education attained. The study revealed that the mean transition time for all the graduates was 4.6 months with a standard deviation of 0.19 months while they made an average of 13.5 contacts with employers before getting their first employment. The results of the analysis further showed a downward trend in the percentage of graduates whose transition times were less than 4 months over the study period. In addition the study revealed that over 72% of the graduates felt strongly that their jobs were appropriate to their level of education and relevant to the courses taken in the university and the public sector was still the highest employer. Based on the findings, the study recommends among other things, that the Botswana Government should sensitise and boost private sector involvement in the employment of graduates into their services in order to reduce the full burden of employment of graduates.

Key words: Transition, University of Botswana, higher education, employment, faculty of social sciences.

INTRODUCTION

This study surveyed and obtained the opinions of graduates from the Faculty of Social Sciences, University of Botswana on their job experiences since after graduation. This was with a view to understanding how changes in the graduate employment policy by the Government of Botswana has affected their employability, the waiting time to secure their first employment and the utility of their training to the type of job they were doing.

The paper has been arranged in six sections. Section 2 immediately following this introduction is background to the study. Section 3 is on materials and methods, while section four shows the results. In section 5 the findings are discussed and recommendations are presented in section six.

Background

The University of Botswana was founded on 1st July 1982 by an Act of Parliament and has been the major producer of high and medium level person power for the Botswana nation. Its main functions include: (a) National development through improving the quality and quantity of the human resources needed for development, and (b) To act as the repository of collective knowledge and experience of the nation and the world (University of Botswana Calendar, 2003/2004).

The University has seven faculties, namely Business, Education, Humanities, Social Sciences, Science, Engineering and postgraduate school. The greatest numbers of graduates turned out from the University are from the Faculties of Education, Humanities and Social Sciences. For instance, of the 3021 graduates in 2006/2007, 14.3% were from Education, 22.7% from Humanities and 13.5% from Social Science, whereas only 3.9% graduated in Science (2007 Graduation Programme, University of Botswana)

It is common knowledge that higher level of development of any country's economy lies in the general educational achievement of the country's citizens. Educational attainment is one thing and the right preparation for the world of work is quite another. It is important that students are provided with tools that will improve their ability to think, learn and communicate (Harvey, 1999). Knowledge and skills do affect a stu dent's ability to eventually

succeed in the labour market. The quality and relevance of what the students learnt are necessary for acceptance into the labour market, not necessarily the degrees earned or the number of years spent at school (UNESCO, 1998). The onus is therefore on a University to ensure that mismatch between what is learnt at school and what is required by the world of work is reduced to the barest minimum. This can be accomplished by the universities reviewing how the institutions will interact externally with employers, employer organisations and other agencies, and the extent to which partnerships with employers can be enhanced and developed. University programmes will need to ensure that employability elements are explicit parts of undergraduate programmes.

Until 1995, the Government of Botswana guaranteed employment to all graduates in various public departments and private sectors (Directorate of Public Service Management, 1994), without attention to the quality of the graduates. Graduate unemployment was rare and the waiting time between graduation and employment was short. However, a study conducted by Adeyemi (1997) on unemployment of 1993 and 1994 graduates in Botswana, revealed that the average waiting times were 4 and 6 months, with unemployment rates as 6 and 10%, respecttively. Those mostly affected by unemployment were from Agriculture, Science and Social Sciences. The reasons given for this unemployment were (a) the economic recession in Botswana and (b) non relevance of the degrees to labor market situation. Adeyemi (1997) recommended that future studies examine the transition process of graduates from education to work and their job experiences, over a period of 5 to 10 years after graduation, to monitor the trend in time between graduation and employment. Since the abolition of the guaranteed employment by government, undocumented cases of graduates seen walking from one office to another almost one year after graduation has become common in Botswana. For a country that is landlocked, with limited resources and industries, and whose growing graduate population has not known or experienced unemployment, any drastic change in unemployment needs to be carefully monitored.

A study in Zambia (Psacharopoulos, 1982) showed that the percentage unemployed declined from 20%, one month after graduation, to less than 3%, six months after graduation. Also, Teichler's (2000) studies on the employment and work of university graduates in eleven European countries showed that the graduates' average search period for the first regular employment was 6 months while the average unemployment rate was 4%.

In Botswana, reasons given for lack of employment of the graduates range from lack of experience, communication skills, creative, analytical and critical thinking skills to job mismatch, issue of education and versatility of the graduates and therefore culminates in employers' dissatisfaction with the job quality and performance of UB graduates. For instance, Kelly (1999) showed that firms prefer to do on-the-job training for their artisans rather than employ graduates from vocational training schools. A trend which seems to emerge in Botswana as well as in most other countries is that workers are accepting jobs that were previously occupied by people who had lower education levels than them. Education certificates are devalued in the labour market (Siphambe n.d). In many countries, because of economic squeeze and lack of employment opportunities, graduates find themselves accepting employment in positions and areas that are inadequate and unrelated to their disciplines. For example, it is a common feature to find university graduates selling flowers on the street corners or waitressing in restaurants. In Malawi, for instance, thousands of university graduates roam the streets without employment. Their agenda in doing this is nothing, but to raise money through begging from their comparatively successful former schoolmates. Parents and guardians who had previously struggled to finance their education in anticipation of lucrative returns are now very much disappointed with such investments (Ligo-meka, 2000). Iheanacho (2007) reported such common scenes as finding university graduates in Nigeria taking up such jobs as 'Motor cycle-courier' commonly referred to as 'Okada' while waiting endlessly for opportunity to get into government employment. The extent to which these scenarios apply to the Faculty of Social Sciences' Graduates is not yet known. Questions which have remained unanswered are "Does the Faculty of Social Sciences, University of Botswana, adequately equip its graduates for the increasing demand of the world of work? Are the programs (curricula) structured so as to provide graduates with skills necessary to meet the challenges of the labor market? These questions, which point to the strength and adequacy of the institutions' academic programs (Harvey, 1999), can be answered by both the graduates who are going through the serious work experiences or are yet to be employed, and their employers who know what they expect from the graduates in the places of work. This study has addressed some of these issues through the opinions of the Faculty of Social Sciences graduates from the University of Botswana.

Above all, ten years after abolishing the automatic employment policy, it is important that the trend in transition of UB graduates from higher education to employment and particularly those from the Faculty of Social Sciences be examined through graduate opinion survey. This is the focus of this study.

The 2001 Census report showed that unemployment rate in Botswana stood at 19.6% of the total labour force. When broken down by type of training, the unemployment rate among holders of University certificate, University Diploma and University degree were 8.1, 4.4 and 3.2%, respectively (Siphambe n.d; Ministry of Finance and Development Planning 2003). This paper is based on the results of a study of the Faculty of Social

Sciences, University of Botswana graduates between 1997/1998-2003/2004 and a small percentage of graduates between 1986-1996 when the turn out of graduates from the faculty was also low (Ama et al., 2006). The study provided the opinion of these past graduates, which will provide in addition clues to some of the concerns raised by Siphambe (n.d), namely (i) how long the University of Botswana Graduates stayed unemployed and (ii) whether graduate unemployment has become a significant problem in Botswana.

The Faculty of Social Sciences is one of the faculties that produces the highest number of graduates at UB and a study, involving experiences of graduates of social sciences is therefore desirable as it can sound a warning on the state of unemployment in other subject areas and in Botswana. Moreover, increasingly, graduate attributes are now more important in the recruitment process than the graduates' degree subject. A degree which may once have been a passport into graduate employment is today now seen as indicative of the level of knowledge and intellectual ability. Subject-specific knowledge is no longer the primary determinant of suitability for employment of most graduate recruitment as most people will be required to have developed personal and intellectual attributes beyond those traditionally acquired in the programmes of study in higher education institutes (Harvey, 1999). The Faculty of Social Sciences, University of Botswana is home for the Departments of Economics, Law, Political and Administrative Studies, Population Studies, Psychology, Social Work, Sociology and Statistics. The faculty has one of the largest student populations and graduates of the university.

Social science graduate

The University of Botswana graduates students with Bachelors Degree in Social Sciences (BASS) with majors in Economics, Sociology, Political and Administrative Studies, Social Work, Psychology or Statistics, or a combination of these subject areas. Adeyemi (1997) found that graduates of the social sciences were the highest affected in unemployment among University of Botswana graduates. While a good proportion of Social Science graduates find employment in areas of research and development (including other business activities), public administration and defense, health and social work, manufacturing, others pursue higher degrees and subsequently find employment in the higher education sector. The proportion of social scientists who go on to study for PhD is about the same as for those from education, medicine, arts and humanities (Purcell and Elias 2006). Studies of the destinations of social science research students have indicated that for the majority, acquiring a PhD has provided entry to an academic career (Elias et al., 1997; OST, 1997)

A survey of social science graduates who completed PhDs between 1998 and 2002, carried out in United kingdom in 2005 (Purcell and Elias, 2006), showed among other things that majority of social science PhD graduates took jobs that they enjoyed and they felt were appropriate to someone with their qualifications. Second, those who took jobs outside academia tended to be more satisfied with their jobs, apart from the flexibility of their working arrangements. Third, the graduates felt that their doctoral training had equipped them with many of the relevant skills they needed to succeed in the job market, although some of those skills were not acquired through formal training. Fourth, quantitative skills and interpersonal skills were some of the areas recognized by the graduates and employers for further attention in the development of the graduates. Fifth, those in non-academic jobs reported significantly higher salaries, other conditions of employment which they found attractive, better job security and the fact that those jobs offered them a chance to develop new skills compared with those in academic jobs.

Theoretical framework

Students, irrespective of discipline of study usually have certain expectations concerning employment opportunities. They look forward to their graduation and subsequently employment. Some of those expectations include: the likely duration of their job search, their initial earnings, the rate of growth of their earnings, and job security. Although these expectations are unreasonably inaccurate as pointed out by research results (Psacharopoulos, 1987; Teichler et al., 1999) the students are very aware of where demand is very strong, differences in initial earning as a result of differences in disciplines of study and higher rates of growth of earnings for higher degree levels. Students, therefore, tend to move to those fields and degree levels where demand is high and where continuous growth is expected.

The implication for planning of educational systems using expectations of students is to concentrate efforts in the development and expansion to those fields where demand and expected rates of return are high. For instance, at the University of Botswana, while Science and Engineering students are given bursaries by Government of Botswana for their study, support to students in other disciplines for their study are usually given to them as loans to be refunded on completion of their studies. This would lead to a decentralized educational system which is responding well to the needs of the society without an overly detailed manpower planning. Second, collection of information on student labour market expectations will provide educational planners warnings of what students and families desire. This would facilitate advance planning.

The job search theory

The standard job search theory (McMahon, 1987), sug-

gests that the problem of the potential worker is to chose an acceptance wage or salary that assure an income greater than that which the potential worker might have received by continued search. The individual's expectation of what might yet be received is the reservation wage, making the passing up of lesser offers and continuation of the search the most reasonable choice where the remaining period of unemployment is thought to be temporary. As more time passes, the cost of the search (mostly in terms of foregone earnings) increases, forcing a re-evaluation of the reservation wage, especially if this had been based on active past full-time employment experience. This theory explains in part why graduates can accept certain jobs after a long job search, even when the conditions attached to the offer including financial benefits may be far below expectations.

The factors that influence the expectation of employment or of unemployment are therefore duration of job search, expected earnings, field of study, level of education, sex, and the linkage between content of study and work assignments.

The duration of unemployment or time spent in job search has been shown to lengthen when there is slack aggregate demand for the type of skill or discipline. For instance in the Phillipines, Psacharopoulos and Sanyal (1981) showed students expected an average job time search of 4 months while the graduates experienced an average unemployment or search time of 6.3 months (Psacharopoulos, 1982).

The field of study is also an important determinant of employability of graduates. There is usually a high demand for graduates in such fields as engineering, sciences, agriculture and business administration, although this is country specific. A follow-up study of University of Illinois graduates (University of Illinois Career Development and Placement Office, Urban Champaign, Illinois, 1978), showed that 95% of engineering graduates were employed by graduation, whereas only 14% from Education were employed by same period. Engineering graduates also received significantly higher salaries compared to those from Business Administration and far less in Liberal Arts and Education. Psacharopolos (1982) on the other hand, reported that for the Philippines, law, physical science, liberal arts and business graduates had the higher absorption rate in excess of 90%, whereas engineering and agriculture graduates have lower absorption rates.

While in the developed countries, unemployment rates are highest among the less well-educated, decreasing sharply as the level of education increases, in the developing countries, unemployment is low among those who had 1-4 years of schooling peaking up among the school leavers and college dropouts (McMahon, 1987). Teichler (2000) in his study of higher education and work in Europe concluded that while graduates appreciate their study and believe that learning in higher education is useful in coping with the job tasks they undertake, the graduates were of the view that higher education should prepare students to be better able to apply knowledge to work environment and to the job tasks they are confronted with. Thus to the graduates acquisitions of necessary work skills is as important as education.

Today many women are pursuing higher education on the realization that higher education will qualify them for higher paid jobs. Ama et al. (2006) showed that the percentage of females employed (58%) was more than that of men (54%). Women are still being paid significantly less than men and discrimination in certain jobs still exists (McMahon, 1987).

This study will, using the graduates' responses determine: (1) the average number of contacts the graduates made before their first time employment; (2) the transition time between graduation and employment for the Faculty of Social Science graduates for the period 1997 to 2004; and (3) the appropriateness of graduates' jobs to their level of education and relevance to courses taken

MATERIALS AND METHODS

Target population

The study targeted the 1253 graduates from the Faculty of Social Sciences, University of Botswana between 1997/1998 and 2003/2004 academic sessions currently employed or unemployed. This period represented eight years after the government's withdrawal of the automatic employment for graduates from tertiary institutions in Botswana. The population was stratified according to the six departments in the faculty: Economics, Law, Political and Administrative Studies, Population Studies, Social Work, Sociology and Statistics. Psychology (only a year old at the time of this study) was not included in the study as it was yet to turn out its first batch of graduates.

Sample size

A sample size of 550 graduates was selected. This sample size is higher than 406 recommended by The Survey Systems (2003), which allows one to attain a 95% certainty that the result obtained from the sample would be the same as what it would have been if the entire population were to be surveyed, allowing a 4% error margin (Krejcie and Morgan (1970)). The additional sample was substituted for those on the primary list who might decline to participate or could not be located during the period of study and a sample from those who graduated in an earlier period (1986-1995/1996) to the study period.

Sampling design

The proportionate stratified random sampling method was employed in this study (Cochran, 1977). Stratification was necessary to ensure better representation of all programmes into the sample and more statistical precision than simple random sampling. The population was stratified by the programme of study. The total sample of graduates was allocated among the programmes according to the population and distribution of graduates from each programme. The simple random sampling was then used in selecting the number of allocated graduates for the study from the programmes. (The structure of studies at the Faculty of Social Sciences is usually by programmes as only in few cases do students belong to a particular department).

Table 1. Employment status of past graduates by gender (male/female).

Current employment status	Gender				Total	
	Male		Female		Count	%
	Count	%	Count	%		
Employed	164	30.3	138	25.4	302	55.7
Professional training	58	10.7	29	5.4	87	16.1
Advanced academic study	12	2.2	13	2.4	25	4.6
Unemployed, but seeking employment	5	0.9	11	2.0	16	2.9
Unemployed, but not seeking employment	2	0.4	1	0.2	3	0.6
Military / Community service	18	3.3	9	1.7	27	5.0
Other:	4	0.7	2	0.4	6	1.1
Not stated	39	7.2	37	6.8	76	14.0
Total	**302**	**55.7**	**240**	**44.3**	**542**	**100.0**

Participants

The participants represented graduates of the Faculty of Social Sciences, University of Botswana between 1986 and 2004. Table 9 shows the distribution of the sampled graduates according to their programme of study. Majority had worked between 5 and 8 years. While 55.7% were males, 44.3% were females.

Research instruments

This study used three instruments for data collection, namely, documentary analysis, snow ball techniques and questionnaires. Documentary sources which contained information on the graduates were obtained from the database in the UB Foundation and Institutional Planning. These were analysed to get information on where the graduates were currently working, their contact telephone numbers and physical addresses. The questionnaires were administered on the respondents (graduates) in their places of work or homes by trained research assistants. For those who did not have time to sit with the research assistants to answer the questions, the research assistants left the questionnaire with the graduates and returned to them after two days to collect back the completed questionnaires. The questionnaires collected personal information on the graduates' employment, job satisfaction, relevance of training to the work they were doing, lapses in the faculty programmes and suggestions on areas of improvement. All questionnaires were tested on representative population as those being studied for content, clarity, data quality and time needed for the survey before the main study and later reviewed by Statisticians. The 'snow ball' technique, whereby identified graduates were asked if they knew any other graduates from the Faculty of Social Sciences, was employed to augment the search for the graduates. The number of returned and properly completed questionnaires was 542, giving a response rate of 98.5%.

Analysis

Data were analysed using descriptive statistics to determine the percentage of graduates that were employed, unemployed or underemployed; mean time to secure employment and mean number of contacts made with employers; and inferential statistics using chi-square to test association between gender and number of contacts made, gender and time to secure first employment, etc. and trend analysis to show the relative trend in graduate employment. The SPSS Software programme was use in the analysis.

RESULTS

Demographic characteristics

The studied sample was made up of 302 (56%) males and 240 (44%) females. However, because of nature of undergraduate programmes in the Faculty of Social Sciences, graduates are identified by programmes of study, and not by departments, and this is shown in Table 9. Twenty eight graduates of the studied sample were from the 1986-1996 cohort while 357 were of the 1997-2004 cohort. One hundred and fifty seven of the sample did not indicate their period of graduation.

Employment status of graduates

The graduates were asked to indicate whether they were currently employed, unemployed but seeking employment, unemployed but not seeking any employment, undergoing professional training or advanced training, in the military /community service or any other form of employment. The graduates' responses classified by gender (male and female) categories (Table 1), reveal that 56% of the graduates were currently employed while 16% were undergoing some professional training. The percentage of sampled graduates that were unemployed within the period under study was 3.5. Of the employed graduates, 30% were males, while 26% were females. The unemployment rate among the males estimated as percentage of total number of unemployed males to the number of males sampled was 2.3%, while for the females, it was 5%.

Having ascertained the employment status of the graduates, they were asked to indicate whether they were employed by the public sector, private sector or were self-employed. This is discussed in the next section.

Current employer of graduates

The graduates' responses classified by type of employer

Table 2. Graduates classified by type of employer and year of obtaining Bachelor's degree.

Type of employer	Year of obtaining bachelor's degree						Total	
	1986-1996		1997-2004		Not indicated		Row %	Col %
	Row %	Col %	Row %	Col %	Row %	Col %		
Public employer	(6.3)	(89.3)	(66.8)	(74.8)	(27.0)	(68.8)	(100.0)	(73.8)
Private employer	(5.4)	(7.1)	(86.5)	(9.0)	(8.1)	(1.9)	(100.0)	(6.8)
Self employed	(0.0)	(0.0)	(50.0)	(0.3)	(50.0)	(0.6)	(100.0)	(0.4)
Other	(0.0)	(0.0)	(73.7)	(3.9)	(26.3)	(3.2)	(100.0)	(3.5)
Not indicated	(1.2)	(3.6)	(51.2)	(11.8)	(47.6)	(24.8)	(100.0)	(15.1)
Not applicable	(0.0)	(0.0)	(50.0)	(0.3)	(50.0)	(0.6)	(100.0)	(0.4)
Total	**(5.2)**	**(100.0)**	**(65.9)**	**(100.0)**	**(29.0)**	**(100.0)**	**(100.0)**	**(100.0)**

Table 3. Number of contacts with employers by graduates with year of graduation

Number of Employees contacted before getting the first job	Year of obtaining Bachelor's degree						Total	
	1986-1996		1997-2004		Not indicated			
	Number	%	Number	%	Number	%	Number	%
0-4	16	57.1	133	37.3	55	35.0	204	37.6
5-9	5	17.9	54	15.1	21	13.4	80	14.8
10-14	2	7.1	56	15.7	17	10.8	75	13.8
15-19	2	7.1	14	3.9	0	0.0	16	3.0
20-24	0	0.0	12	3.3	3	1.9	15	2.8
25-29	0	0.0	1	0.3	0	0.0	1	0.2
Over 30	3	10.7	87	24.4	61	38.9	151	27.9
Total	**28**	**100.0**	**357**	**100.0**	**157**	**100.0**	**542**	**100.0**

and period of graduation are shown in Table 2 and reveal that for 1986-1996 and 1997-2004 cohorts of graduates, the public sector (Government of Botswana) was the main employer of the graduates employing 89% of the 1986-1996 cohort and 75% of the 1997-2004 cohort. Overall, the public sector employed 73.8% of the graduates, while the private sector employed 6.8% of the graduates and 0.4% were self employed. Thus, although automatic employment of graduates had been abolished, the Government (public sector) continued to be the major employer of the graduates.

Objective 1: Determination of the average number of contacts the graduates made before their first time employment

Some of the ways that people have used in securing employment has been through responding to advertised positions, informally contacting employers through personal visits or recommendations to employers by relatives and friends. Unlike before the abolishment of automatic employment when graduates completed only one application form from the public sector for allocation of employment positions to their preferential departments, the period after abolishing automatic employment saw the graduates contacting employers to determine if they were vacant positions. They subsequently applied for those vacant or advertised positions and were subjected to interviews.

The responses of the graduates to the question on how many contacts they made to employers through responding to advertised positions or other forms of contacts before their first employment showed that 37.6% of them got their first employment after at most four contacts with employers while 14.8% of them made between 5 and 9 contacts before securing their first employment. The mean number of contacts made by the graduates was 13.5 with a standard deviation of 0.53.

When the number of contacts the graduates made before getting their first employment was tabulated against the cohort of graduates (Table 3), it was observed that 57.1% of the 1986-1996 cohort of graduates and 37.3% of the 1997 - 2004 cohort made at most four contacts with employers before their first employment. Overall only 37.6% made between zero and four contacts and 48% of the graduates made over 10 contacts before securing first appoints.

Table 4 shows the percentage of the males and female

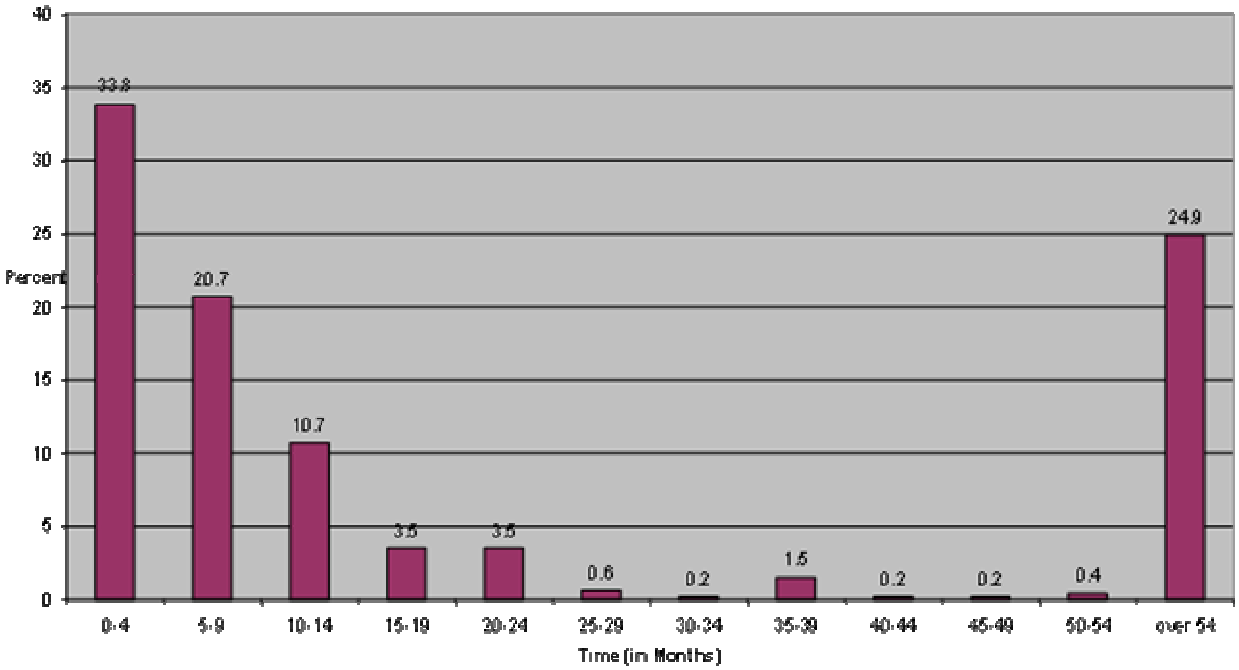

Figure 1. Percentage of graduates that got employed within the specified number of months after graduation.

Table 4. Graduates' number of contacts classified by sex.

Number of contacts	Male (n = 302)	Female (n = 240)
0-4	38.1	37.1
5-9	16.2	12.9
10-14	14.2	13.3
15-19	3.0	2.9
20-24	2.3	3.3
25-29	0.0	0.4
Over 30	26.2	30.1
Total	**100.0**	**100.0**

graduates who made different number of contacts with employers before securing their first employment. On the average, the males made fewer contacts (mean = 13 with standard deviation of 0.7) than females (mean = 14 with standard deviation of 0.8) before getting their first employment. There was no significant relationship between the number of contacts and the gender of the graduates (Chi-square = 3.573; $p > 0.05$; with contingency coefficient of 0.081, which measures the degree of association between the criteria of classification) Thus the number of contacts made before getting a job does not depend on being male or female.

Knowing the number of contacts the graduates made before securing the first employment is important in alerting would-be graduates to start their contacts with employers before graduation or to start applying for jobs after graduation. For instance, Ama et al. (2006) found out that more male graduates than female started theirjob search while still in the university. Also informative is the time that elapsed between graduation and first time employments of the graduates. This is discussed in the next section and will provide an answer to objective 2.

Objective 2: To determine the transition time between graduation and employment for the Faculty of Social Science graduates for the period 1997 to 2004

The graduates were asked to state how many months that elapsed between their graduation and first time employment. The responses by the graduates which have been summarized in Figure 1 shows that 33.8% of the graduates got their first employment within the first 4 months while 20.7% of them took between 5 and 9 months. A little over half of the graduates got their first employment within the first 9 months after graduation. The mean time to secure the first appointment by the graduates was 4.62 months with a standard deviation of 0.19 months.

An analysis of the time to get the first employment for the two of cohorts of graduates (1986-1996 and 1997-2004) shows that there are internal variations in the time to get first employment. The percentages of the 1986-1996 and 1997-2004 cohorts of graduates that got their first employment in the first four months were 42.9 and 33.9, respectively, The mean time to get first employment by the 1986-1996 cohort was 3.2 months with standard error of 0.6 months while those of 1997-2004 cohort was

Table 5. Graduates' transition time (months) to get first employment with gender.

Time to get job (months)	Gender				Total	
	Male		Female			
	Count	Col %	Count	Col %	Count	Col %
0-4	117	38.7	66	27.5	183	33.8
5-9	61	20.2	51	21.3	112	20.7
10-14	36	11.9	22	9.2	58	10.7
15-19	10	3.3	9	3.8	19	3.5
20-24	7	2.3	12	5.0	19	3.5
25-29	2	0.7	1	0.4	3	0.6
30-34	1	0.3	0	0.0	1	0.2
35-39	4	1.3	4	1.7	8	1.5
40-44	0	0.0	1	0.4	1	0.2
45-49	0	0.0	1	0.4	1	0.2
50-54	2	0.7	0	0.0	2	0.4
over 54	62	20.5	73	30.4	135	24.9
Total	**302**	**100.0**	**240**	**100.0**	**542**	**100.0**

Table 6. Percentage of graduates employed within first 4 months of graduation

Year of graduation	1986	1990	1991	1993	1994	1995	1996	1997
% employed within 0 - 4 months	0.0	66.7	50.0	50.0	42.9	50.0	40.0	33.3

Year of graduation	1998	1999	2000	2001	2002	2003	2004
% employed within 0 - 4 months	40.4	44.7	38.9	38.6	32.6	21.7	33.3

4.3 months with standard error 0.2 months. There is a significant relationship between the time of graduation and time of securing first appointment ($p < 0.05$), with contingency coefficient of 0.254 which is also significant ($p < 0.05$).

The gender classification of graduates' time to get their first employment shows that more males (38.7%) than females (27.5%) got their first employment within the first 4 months (Table 5). Overall, about three in every five males and half of the females got their first employment within the first 9 months after graduation. A chi-square test of the any association between gender and time taken to secure first employment by the graduates shows that there is no significant relationship between the two criteria ($p > 0.05$) with contingency coefficient of 0.185 which is not significant ($p > 0.05$). The mean time to secure first employment by the males was 4.1 months with standard error of 0.3 while that of females was 5.3 months with standard error of 0.3 months.

The distribution of graduates who secured their first employment within the first 4 months after graduation (Table 6) was further analysed to see if there is any observed pattern in the percentages over the periods under study.

The study further revealed a downward trend in the rate of graduates' absorption in available jobs over the study period as shown in the Figure 2. For instance in 1997, two years after abolishing automatic graduate employment, the percentage of those who got their first employment within the first 4 months dropped to 33 from 40% in the previous year. It rose to 45% in 1999 and started dropping astronomically in the following years till 2004 when it rose slightly to a level of 33% from the previous year's value of 22%. The figure also shows that excluding the year 1994, the period 1986-1995 saw slightly over half of the graduates employed within the first 4 months, while in the rest of the years, over 60% of the graduates took longer time, sometimes over 54 months, to get their first employment. A linear trend fitted to the data showed a significant fit with R^2 value of 0.71 indicating that the years explained 71% of the variation in the time lag between graduation and first employment (Figure 2).

The mismatch between university degree and skills required for certain jobs have been said to be the major cause of unemployment of university graduates (UNESCO 1998). There was need, therefore, to determine from the graduates views the appropriateness of their jobs to their levels of education and the relevance of the courses they took at the university to the type of jobs and skills required in those jobs. This is considered in the next

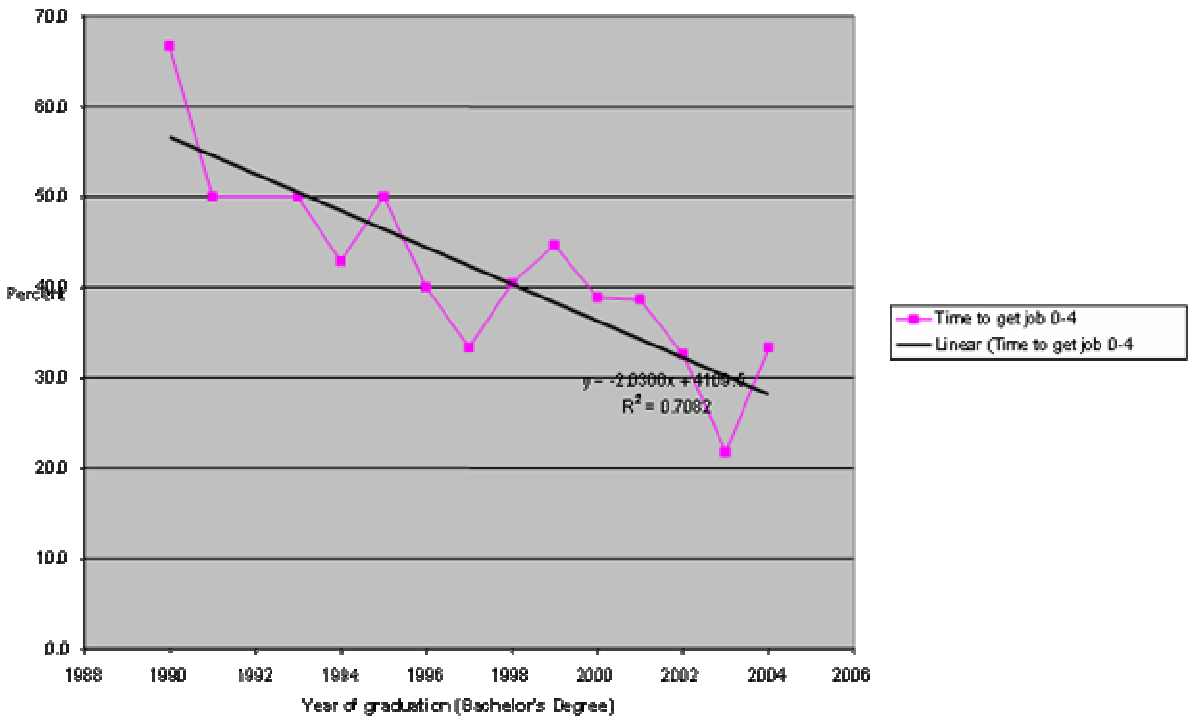

Figure 2. Graph showing percentage of graduate who got first employment within 0-4 months

Table 7. Graduates' classified by extent to which position and status are appropriate to level of education

Extent to which position and status are appropriate to level of education	Gender				Total	
	Male		Female			
	Count	Col %	Count	Col %	Count	Col %
Not at all appropriate	14	(4.6)	10	(4.2)	24	(4.4)
Slightly appropriate	48	(15.9)	24	(10.0)	72	(13.3)
Appropriate	75	(24.8)	87	(36.3)	162	(29.9)
Very Appropriate	97	(32.1)	58	(24.2)	155	(28.6)
Completely Appropriate	42	(13.9)	34	(14.2)	76	(14.0)
Not indicated	26	(8.6)	27	(11.3)	53	(9.8)
Total	**302**	**(100.0)**	**240**	**(100.0)**	**542**	**(100.0)**

next section and provides answers to objective 3.

Objective 3: To determine the appropriateness of graduates' jobs to their level of education and relevance to courses taken

The graduates were asked to indicate whether the jobs and positions they were occupying were appropriate with their level of education and relevant to their course of study. Their responses were based on a five-point scale of 1 = Not at all appropriate; 2 = Slightly appropriate; 3 = Appropriate; 4 = Very appropriate; 5 = Completely appropriate. The responses which are classified by gender are shown in the Table 7.

The results show that 72.5% of the graduates felt that the positions and job types were appropriate, very appropriate or completely appropriate with their level of education. The percentages of males and females who had the same opinion were 70.8 and 74.7%, respectively.

A chi-square test of any association between gender and opinions of the graduates showed highly significant relationship between the two criteria ($p < 0.05$). The degree of relationship between them measured by the contingency coefficient was 0.155, which is significant ($p < 0.05$), meaning that both the males and females graduates are in agreement as to appropriateness of their

Table 8. Graduates' classified by extent to which jobs are relevant to courses taken at the university

Relevance of jobs to course taken at university	Gender				Total	
	Male		Female			
	Count	Col %	Count	Col %	Count	Col %
Not at all relevant	4	1.3	11	4.6	15	2.8
Slightly relevant	21	7.0	22	9.2	43	7.9
Relevant	90	29.8	82	34.2	172	31.7
Very relevant	162	53.6	98	40.8	260	48.0
Not indicated	25	8.3	27	11.3	52	9.6
Total	**302**	**100**	**240**	**100**	**542**	**100**

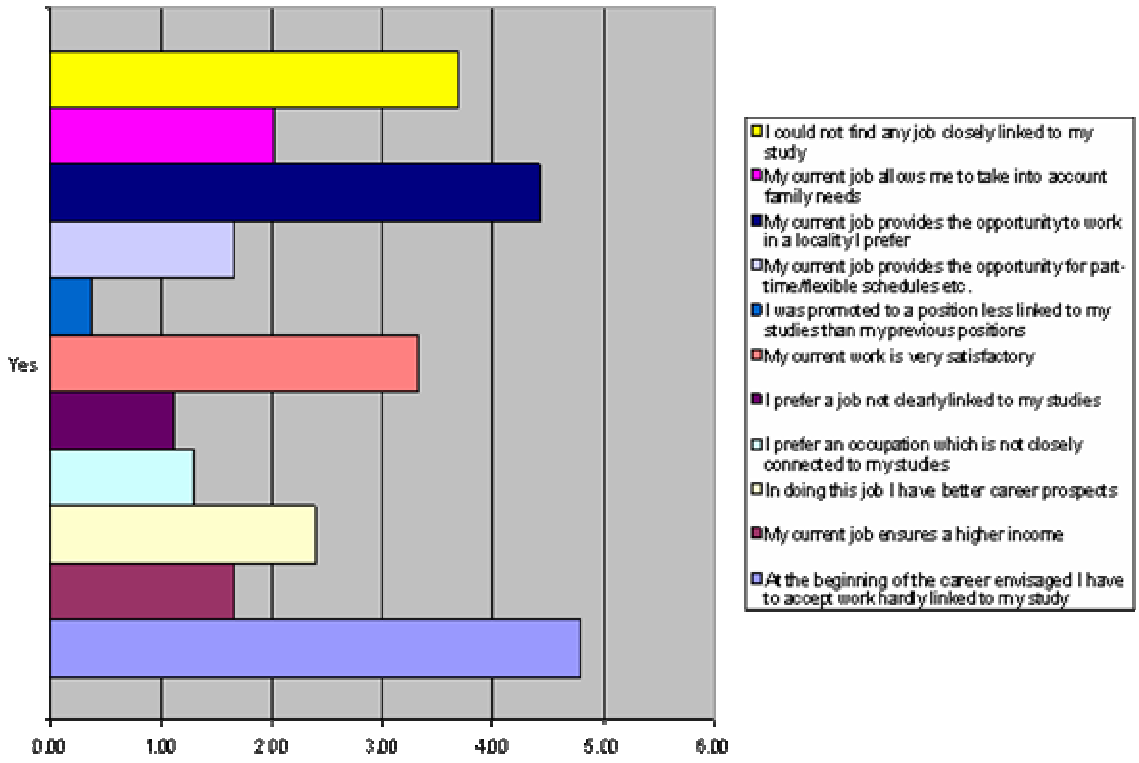

Figure 3. Reasons for taking up their first employment even though it was a mismatch to their education.

academic qualification to the job positions and status they occupy in their various places of work.

On the relevance of the jobs the graduates were doing to the courses taken at the university, the graduates' answers were based on a four-point scale: 1 = not relevant at all; 2 = slightly relevant; 3 = relevant; 4 = very relevant. The graduates' responses shown in Table 8 reveal that overall, about four in every five graduates agreed that the jobs they were doing were either relevant or very relevant (collapsing both categories) to the courses they had taken at the university. However, 83% of the males and 75% of the females were convinced that the jobs were relevant or very relevant to the courses they had taken in the university.

The association between their opinion and gender was significant ($p < 0.05$) with degree of relationship measured by the contingency coefficient given as 0.151 which is also significant ($p < 0.05$).

The graduates' responses to appropriateness of their discipline of study to the status and position they occupied in their work places, are classified by the degree obtained using a three point scale: 1 = inappropriate; 2 = appropriate; 3 = very appropriate have been shown in Table 9. The table shows that in each programme the percentages of graduates that indicated that their job status and position were either appropriate or very appro-

Table 9. Graduates' opinions as to the appropriateness of status and position at work to the level of their education.

Course of study at Bachelor's Degree	Appropriateness of status and position at work to level of education				Total
	Inappropriate	Appropriate	Very appropriate	Not indicated	
B.Com/Combination %	0 (0.0)	0 (0.0)	6 (100.0)	0 (0.0)	6 (100.0)
Bachelor of social Sciences %	28 (22.8)	38 (30.9)	55 (44.7)	2 (1.6)	123 (100.0)
Demography/combination %	1 (16.7)	4 (66.7)	1 (16.7)	0 (0.0)	6 (100.0)
Economics/Combination %	9 (13.4)	27 (40.3)	29 (43.3)	2 (3.0)	67 (100.0)
Humanities/Combination %	0 (0.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)
Law %	6 (28.6)	2 (9.5)	13 61.9	0 (0.0)	21 100.0
Population Studies/Combination %	2 (16.7)	2 (16.7)	8 (66.6)	0 (0.0)	12 (100.0)
Public Administration/Combination %	11 (20.4)	15 (27.8)	24 (44.4)	4 (7.4)	54 (100.0)
Social Work %	5 (14.3)	17 (48.6)	12 (34.3)	1 (2.9)	35 (100.0)
Sociology/Combination %	1 (8.3)	2 (16.7)	5 (41.7)	4 (33.3)	12 (100.0)
Statistics/Combination %	7 (23.3)	10 (33.3)	12 (40.0)	1 (3.3)	30 (100.0)
Not indicated %	2 (33.3)	1 (16.7)	3 (50.0)	0 (0.0)	6 (100.0)
Diplomas %	24 (14.2)	44 (26.0)	62 (36.7)	39 (23.1)	169 (100.0)
Total %	**96 (17.7)**	**162 (29.9)**	**231 (42.6)**	**53 (9.8)**	**542 (100.0)**

priate with their level of education were between 70 and 100% except, perhaps, Sociology where the percentage was 58.4.

A chi-square test of the association between the two criteria of classifications shows that there is significant association ($p < 0.01$) with degree of association measured by the contingency coefficient of 0.386, which is also significant at the 1% level of significance. ($p < 0.01$).

Those graduates who indicated that their employment and work were inappropriate to their status, position and level of education were asked why they took up those jobs. Their responses have been summarized and displayed in Figure 3. Majority of the respondents took the offer of employment because at the beginning of their employment search they were forced into taking any job that comes their way irrespective of whether the job has any relevance with their education. Other reasons included:

- Their current job provided them opportunity to work in the area of their choice.
- Current work is satisfactory although not related to my education.
- Inability to find an employment closely linked to their level of education.

DISCUSSION

This study has shown that 56% of the Faculty of Social Sciences graduates within the study period were employ-

ed while 3.5% were unemployed. This unemployment rate, although based on a sample of graduates from the Faculty of Social Sciences, University of Botswana, is slightly higher than the national figure for university degree holders (3.2%) reported by Siphambe (n.d) on analyzing the manpower and economic characteristics of the population as revealed by the 2001 population census. However, it is lower than those for graduates possessing university diploma (4.4%), university certificate (8.1 %) and Adeyemi (1997)'s reported unemployment rates of 6% for 1993 graduates and 10% for 1994 graduates. The percentage of the Faculty of social Sciences graduates, who were employed, however, is very much higher than those reported by Siphambe (n.d) for administrators and managers (34%) or professionals (45%).

The findings from the study showed that the percentage of the 1986-1996 and 1997-2004 cohorts of graduates who got their first employment in the first four months were 42.9 and 33.9, respectively, indicating that 57% of the 1986-1996 cohort and 66.1% of the 1997-2004 cohorts were still unemployed after 4 months. These figures are very much higher than the 3% by Psacharopoulos (1982) and Teichler (2000) who gave the average search time period as 6 months. The higher percentage of the 1986-1996 cohorts employed within the first four months is not surprising since most of them only needed to submit one set of information to the Government and await their allocation to places of employment.

The study also found that the mean number of contacts made by the graduates with employers before getting their first employment was 13.5 with a standard deviation of 0.5. This number of contacts varied over the years increasing over the period 1997 to 2004. For instance, the 1997-2004 cohorts of graduates made more contacts than the 1986-1996 cohorts. This result would be expected because over the period before 1997, quality and performance were sacrificed for quantity in considering who should be employed but became major concerns as the automatic employment was abolished (Adeyemi, 1997). Employers, including the public sector, had to scrutinize the employees for quality and performance as well as available vacancies before considering the graduates for employment (Siphambe, n.d). The study found out that although male graduates made less contact with employers than female graduates before getting their first employment, the difference was not statistically significant. However, further research is needed in this area to ascertain the reasons for this disparity.

Transition time which is defined as the time between graduation and obtaining the first employment by graduates is a crucial index of the systems' preparedness to absorb graduates into the world of work. The study has shown that graduates had to wait on the average 4.6 months before getting their first employment. This figure is much smaller than those reported by Teichler (2000) who gave the average search time period as 6 months but higher than expected average job time search period by students (Phillipines et al., 1981). In fact, slightly more than half the graduates got their first employment within the first 9 months with the men mostly affected. The transition time continued to increase as we moved away from the period of automatic employment by public and private sector. This should sound a warning on the government who up to this day continues to be the major employer of our graduates (73% of graduates are employed by them with private sector employing only 7%) of an impending increase in graduate unemployment.

The finding that the graduates found themselves in jobs that matched their level of education (73%) and the courses they had at the university (over 80%) is indicative of quality and versatility of the programmes run by the different departments in the Faculty of Social Sciences. This finding is in agreement with Purcell and Elias (2006) who showed that social science PhD holders were satisfied with the type of job they were doing and satisfied that their training matched the kind of job they were doing. However, the mismatch between employment and education expressed by a few of the graduates was mainly due to the graduates' own desire not to wait longer but to start up with some jobs while hoping for better opportunities.

RECOMMENDATIONS

The employment prospects of the graduates are of primary importance, not just to the individual graduates themselves but to the institutions where the student graduates from and Botswana nation as a whole. It is of utmost importance that all parties involved in the production of this person power, namely, the university, various faculties and departments are conscious and perform their responsibilities towards quality product. Based on the results of this study, it is recommended that:

(i) It is highly appreciated that over 70% of the graduates found themselves in jobs that matched their level of education. This is indicative of quality and versatility of the programmes run by the different departments in the Faculty of Social Sciences. However, the Faculty of Social Sciences still needs to intensify a consideration of the structure and contents of its courses in order to enhance a hundred percent match of its programmes to the world of work. In this regard the Faculty of Social Sciences need to work closely with the industry to understand what is happening in each other's domain, what needs to be improved and how it can be achieved through constant consultations, monitoring and adjustment. A thorough understanding of the country's economic activities and new areas of industrial expansion is necessary to achieve this.

(ii) The public sector can not continue to bear the major

burden of employing our graduates. The private sector which has lagged behind in this regard need to be sensitized and encouraged to share this responsibility with the public sector. Self-employment should be advocated and young graduates encouraged through incentives to set up their own businesses and become employers. The success of this venture, however, depends too on the level of skills that had been learnt by the graduates while in the university, and points to versatility of the courses in both content and personal skills acquisition which the faculty should set up as a priority.

(iii) Programmes of the faculty should be structured bearing in mind the technical competence, innovativeness and potential for growth of the students. Most jobs require a mixture of technical competence as well as personal skills while on the jobs. The challenge of the faculty is how to combine these factors in our programmes while that of the industry is how to assist the young graduates through additional training to optimize these qualities. Women need to be particularly assisted in this regard as we observe from the outcome of the study that less women were able to secure employment within the first 9 months after graduation.

ACKNOWLEDGEMENTS

The author is particularly grateful to the Office of Research and Development (ORD), University of Botswana for providing the fund for the study which has given birth to this paper.

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