SECONDARY EDUCATION GRADUATES IN THE LABOUR MARKET: EVIDENCE AND CAREER EDUCATION POLICY ISSUES FOR GREECE*

Stamatis Paleocrassas, Panagiotis Rousseas, Vassilia Vretakou
(Pedagogical Institute, Athens)

Abstract

Gender, primarily, work experience acquired while attending school, and knowledge of a foreign language (in this order) seem to be the most important factors which determine the employment status of secondary general and vocational education graduates in the Greek labour market. Evidence from a national graduate follow-up survey shows that employment mismatch, earnings and unemployment period following graduation are differentiated unfavorably for women, and favorably for individuals who held a job while attending school, and for those who were certified in a foreign language (mainly in English). School-based career education policy measures such as a more efficient informing of students on labour market conditions, and linking schools with local enterprises through alternating (school-industry) enterpreneural activities, would raise the quality of the vocational orientation of the students and enhance their opportunities to secure matched employment upon graduation.

1. Introduction

Career education (CE) is an important educational institution throughout the world. It manifests itself in various educational activities, such as a separate curricular subject, career information diffused in many related subjects and educational activities taking place inside or outside the school. Regardless of the form it takes, it is valued as a compulsory education component, which assists young people to make realistic career choices. In Greece, CE was introduced in the compulsory education curriculum in 1976, adopting the "developmental model" (Super, 1957). Since then there have been many critical reviews, assessments and discussions of implementation measures, which aimed at making CE more effective. However, concrete evidence from national graduate surveys was rarely available to provide feedback in supporting the recommendations.

The purpose of this article is to offer such evidence and initiate a discussion for critical CE policy issues, which may interest not only the Greek but the international community, as well. To this end we will briefly introduce the "Transition Observatory" at the Pedagogical Institute, so that we may define the research framework, which conceptualizes national graduate surveys in Greece. In turn we will present the research design and methodology, followed by the presentation of the evidence. The paper will conclude with discussion of some critical CE issues and a proposal for policy reform.

2. The research Framework

The Pedagogical Institute is an extension of the Ministry of Education and acts as the scientific adviser to the Minister on such issues as curriculum reform, teacher in-service training, educational media, school innovations, education accountability and new technologies in education. To this end it conducts educational research and maintains documentation facilities. The "Transition Observatory" was established to generate accountability data relative to student transition flows. Consequently, its research menu includes dropout surveys, cross sectional graduate surveys, reviews of curriculum compatibility with labor market needs (for vocational education) and student transition (school-to-university and school-to-work) surveys. The data, which will be presented in this article, was generated in a cross-sectional graduate survey.

* The study was financed with funds from the 2nd European Union Support Framework Program

3. The research design

The scope of the research was to generate and explore quantitative and qualitative data on the transition of secondary education (both general and vocational) students from school to work. The students were graduates of a diversified upper-secondary education cycle, which includes a general education school, a vocational school, an occupation-specific school and an integrated comprehensive (general and vocational) school. Only graduates who did not continue their studies in post-secondary and higher education were included in the survey. Compulsory education lasts 9 years and it ends with the 3-yr lower-secondary general school (the Gymnasium).

The methodology followed may be identified as a cross-sectional survey using structured personal interviews.

The population of the cohort used (graduates of the school year 1988-89) was 75,600 graduates of all four types of school and the sample used in the survey was 4,986 graduates (6.6%). The data was processed using the SPSS, v. 10.0 statistical package.

4. Evidence and discussion

Gender, primarily, work experience acquired while in school and good foreign language skills seem to be the most important factors influencing the occupational status of secondary education graduates in Greece, who did not continue their studies in higher education. This conclusion is derived from logistic regression model, shown in Table 1.

TABLE 1.: LOGISTIC REGRESSION MODEL Method: Forward (Wald)

A. Depended Variable Occupational Status of Graduate (1: Employed, 0: Not employed)				
B. Independent Variables (used as inputs in the model)				
	Â	S.E	Sig.	Exp(B)
1. Type of school (1)				
ÔÅS (Occupation-specific)	0,264	0,196	0,179	1,302
ÔÅL (Vocational)	-0,081	0,107	0,450	0,922
ÅPL (Integrated-Comprehensive)	-0,244	0,109	0,025*	0,783
2. Foreign Language Skill	0,455	0,099	0,000*	1,577
3. Working while in school	0,477	0,117	0,000*	1,611
4. Gender	2,187	0,108	0,000*	8,910
5. Father's education	0,079	0,035	0,026*	1,082
6. Residence classification (2)				
Urban	0,002	0,106	0,984	1,002
Semi-urban	-0,287	0,142	0,043*	0,751
7. GPA of Gymnasium Leaving Certificate	0,081	0,028	0,003*	1,085
Constant	-1,124	0,462	0,015	0,325
C. Independent Variables (not used as inputs in the model)				
8. Training following graduation				
9. Father's occupation				
D.Adjustment Coefficient for the model				
Nagelkerke R Square=0,266				

*****_Statistically important at probability level 0,05_

(1) General school used as reference category

(2) Rural residence used as reference category

Note

The indicator Nagelkerke R Square takes values from 0 to 1 (full adjustment). Since this indicator has low values the model cannot be used for predictions. Nevertheless, it may be used to assess the impact of the seven independent variables which were entered in the model on the values of the dependent variable.

The national survey showed that employment rates, income and duration of unemployment, following graduation, are differentiated for women, individuals who worked while in school and those who had acquired good foreign language (English) skills. Relative evidence will be presented in the form of multiple entrance tables.

The increased unemployment for women, shown in Table 2, could be attributed, inter alia, to the fact that girls in Greece are less geographically mobile when seeking employment. They would rather stay with their parents until they get married, and they consider only job offers, which are in the general vicinity of their parent's residence. Supporting this view are the data

TABLE 2: EMPLOYMENT STATUS OF GRADUATE BY GENDER (9 years following graduation)

GENDER	EMPLOYMENT STATUS	TYPE OF SCHOOL ATTENDED							
		TES Occ.-specific		TEL Vocational		EPL Integrated		GEL General	
		%		%		%		%	
MAN	Matched employment	33	95	18	94	14	92	94	
	Mismatch	62		76		78			
	Unemployed	5		5		6		6	
	Other			1		2			
	TOTAL	100		100		100		100	
WOMAN	Matched employment			11	59	14	60	66	
	Mismatch			48		46			
	Unemployed			18		16		14	
	Other			23		24		20	
	TOTAL	100		100		100		100	

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

presented in Table 3, which presents employment figures in the greater Athens area (Attica Prefecture), in which employment opportunities are much greater when compared with those offered in the rest of the country. It is clear that the data referring to women show important improvement, as compared with corresponding national average data.

TABLE 3 : EMPLOYMENT STATUS OF GRADUATE BY GENDER (9 years following graduation) [ATTICA PREFECTURE]

GENDER	EMPLOYMENT STATUS	TYPE OF SCHOOL ATTENDED							
		TES Occ.-specific		TEL Vocational		EPL Integrated		GEL General	
		%		%		%		%	
MAN	Matched employment	40	95	29	94	35	93	93	
	Mismatch	55		65		58			
	Unemployed	5		6		4		6	
	Other					3		1	
	TOTAL	100		100		100		100	
WOMAN	Matched employment			21	68	31	79	74	
	Mismatch			47		48			
	Unemployed			14		5		12	
	Other			18		16		14	
	TOTAL			100		100		100	

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

In addition, matched employment for women improves, especially for some stereotype "women occupations", such as administration assistants and secretaries, who graduated from TEL and EPL (see Table 4 as compared to Table 2 corresponding figures).

TABLE 4 : EMPLOYMENT STATUS OF GRADUATE BY GENDER (9 years following graduation) for Administration Assistants and Secretaries

	EMPLOYMENT STATUS	Administration Assistants (ÔÅL)		Secretaries (ÅPL)	
		%		%	
MAN	Matched employment	12	92	9	91
	Mismatch	80		82	
	Unemployed		7		9
	Other		1		0
	TOTAL		100		100
WOMAN	Matched employment	14	56	24	66
	Mismatch	42		42	
	Unemployed		20		19
	Other		24		15
	TOTAL		100		100

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

It should be noted also that employment rates for women graduates, as presented in Table 2 (about 60%), of the specific age (about 27 yrs old) and with formal secondary education qualifications, exceed the corresponding European average for all ages, which is reported to be about 50% (European Commission, 2000a; p.19). It is also worth noting the employment rate for women graduates of general education (GEL), which offers an academic curriculum. When compared with the rates corresponding to vocational or "vocationalized" curricula (TEL and EPL) it surpasses them by 6 pct. points. Could this mean that for some professions the benefit of general education is greater, relative to vocational education?

The issue of gender is not always unbalanced in favor of men. Specifically, in the European Union the civil service employment rate for women is double that of men (44% vs. 22%) (European Commission, 2000a; p. 18). This information could be fed in student discussions, in the context of CE activities, to inform girls that the public sector offers greater future employment opportunities for them.

On the other hand, our study shows that in Greece women graduates of secondary education earn considerably less income than men of the same formal qualifications do. As shown in Table 5, women earn on the average about 20% less than what men do. The corresponding figure for the European Union is 25% (European Commission, 2000b; p. 24). To what extent this difference can be attributed to higher earning men-centered occupations (mostly technical) and to what extent is related to societal gender inequalities?

TABLE 5: NET MONTHLY INCOME FROM MAIN JOB, BY GENDER

GENDER	Avg. Income (Drs.*)	Normal deviation
MAN	209,000	108,000
WOMAN	169,000	85,000

* ~385drs./ U.S. $

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

It seems that holding a job while attending school affects future employment prospects. Our study shows (Table 6) some evident difference in favor of students who had acquired work experience before graduation, which should raise an issue for CE. It is apparent that having assimilated the so-called "work culture" presents added value to job candidacies.

TABLE 6: EMPLOYMENT STATUS OF GRADUATE (9 years following graduation) / HOLDING A JOB WHILE IN SCHOOL

WORKING WHILE IN SCHOOL	EMPLOYMENT STATUS	TYPE OF SCHOOL ATTENDED							
		TES Occ.-specific		TEL Vocational		EPL Integrated		GEL General	
		%		%		%		%	
YES	Matched employment	40	96	18	93	17	86	89	
	Mismatch	56		75		69			
	Unemployed		4		5		7	7	
	Other				2		7	4	
	TOTAL		100		100		100	100	
NO	Matched employment	19	95	14	74	13	73	75	
	Mismatch	76		60		60			
	Unemployed		5		12		13	11	
	Other		10		14		14	14	
	TOTAL		100		100		100	100	

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

The evidence also shows (Table 7) that previous work experience reduces the unemployment period following graduation.

TABLE 7: MONTHS OF UNEMPLOYMENT BEFORE FIRST JOB/ WORKING WHILE ATTENDING SCHOOL

WORKING WHILE IN SCHOOL	NUMBER OF MONTHS (MEAN VALUE)			
	TES Occ.-specific	TEL Vocational	EPL Integrated	GEL General
YES	9	11	18	12
NO	20	20	26	23

Source: Paleocrassas et al (2000). Secondary Education Graduate Survey.

Finally, foreign language skills proved to be valuable for getting a first job in occupations, which were not highly "vocationalized". As seen in Table 8, foreign language qualification shows higher added value for the lower vocational intensity curricula. At one end, the employment status of graduates of the high vocational intensity school (TES) is not affected by the presence of foreign language skills. This is logical, because the vocations offered in this type of school lead to highly technical production jobs. On the other end, foreign language skills are very important for office jobs, which are available to general education

(GEL) graduates. In between the foreign language significance scale are placed the graduates of the other two types of schools, which offer courses of pre-vocational intensity (EPL) and of generic vocational intensity (TEL).

TABLE 8: EMPLOYMENT STATUS OF GRADUATE (9 years following graduation) / FOREIGN LANGUAGE QUALIFICATION

FOREIGN LANGUAGE SKILL	EMPLOYMENT STATUS	TYPE OF SCHOOL ATTENDED							
		TES Occ.-specific		TEL Vocational		EPL Integrated		GEL General	
		%		%		%		%	
YES	Matched employment	39	94	20	81	23	81	82	
	Mismatch	55		61		58			
	Other	6		19		19		18	
	TOTAL	100		100		100		100	
NO	Matched employment	32	96	14	80	10	73	74	
	Mismatch	64		66		63			
	Other	4		20		27		26	
	TOTAL	100		100		100		100	

5. Proposals for Career Education

How could the evidence presented here be of any value to governments in other parts of the world, for CE policy reviews?

First, regarding the gender equity issue, it seems that with the exception of the Scandinavian countries, where employment rates for women exceed 60% (European Commission, 2000a; p. 19) this is an international issue. It has been suggested that girls are led to career choices by motives related to social contribution and personal upgrading, while boys are motivated more by utilitarian incentives (become rich, acquire authority etc.), since the principal roles of man in his family is that of "protector" and "provider" (Holland, 1985). Furthermore, in spite of evidence presented during the last two decades, showing that values adopted by girls have evolved to the point that they place equal emphasis to having a family with having a career (Davey, 1992 and Farmer, 1983), it seems that the majority of young women is still expected to follow the traditional interrupted employment pattern, which allows baring and raising children during their early ages (Cook, 1993 and Gaskell, 1983). Our results are in line with this rationale and suggest the formulation of policies, which favor offering vocational courses in accordance with regional and local labor market needs. This, when combined with social policies which protect women from being fired during pregnancy (offering incentives to employers), will improve considerably the employment picture of women. In addition, CE should inform compulsory education girl students about occupations, which may be performed at home (e.g. commercial art, tax counseling, telephone marketing etc.), and about relative enterpreneurship opportunities. Enterpreneurship skills should be included in compulsory education curricula and in vocational education curricula. It is generally true that there are serious doubts for advising students to follow specific vocational paths, following the fiasco of manpower planning in the 70s. Nevertheless, we feel it necessary for CE to be informing young girls that their employment prospects are increased when they avoid highly

specialized vocational courses and when they choose professions, for which there is demand in the civil services.

Regarding the issue of work experience, we have no reasons to suspect that the Greek evidence may not apply in other countries. It makes sense for labor markets to favor job seekers with previous work experience, which, at least from our findings does not necessarily have to be relative to the job offered. Documentation at the global level shows labor market demand for the so-called "transferable skills" or "key skills", which include "work culture" as a basic skill. Truly, it is a fact that very few young people work while attending school, and they do so because of necessity. However, it is not necessary for someone to get intensively involved in a job in order to assimilate work culture. In some countries, where CE includes active schemes of vocational orientation, as the "Betriebspraktikum" applied in Germany (Franzinger, 1994), student apprentices spend one or two weeks in enterprises to gain valuable first hand experience, relative to a prospective career choice. At the same time they are inducted into an enterprise culture.

Finally, regarding the foreign language qualification issue, CE could provide lists of vocational courses and corresponding occupations, for which foreign language skills are a precondition for a job offer. When young people are warned ahead of this requirement they could plan their foreign language training and reach a satisfactory certified level prior to commencing a vocational course, in spite of the fact that most relative vocational courses integrate intense foreign language learning in the curriculum.

References

Cook, E. P. (1993). "The gendered context of life: implications for women's and men's career-life plans". *Career Development Quarterly*, 41, 227-237.

Davey, F. H. (1993). "The occupational aspirations and expectations of senior high school students". *Guidance and Counseling*, 8, 16-28.

European Commission (2000a). « Equal opportunities for women and men in the European Union: Annual Report 1999». ***Employment & Social Affairs***.

European Commission (2000b). *European policy for employment and social affairs: a policy for man*. Directorate General of Education and Culture.

Farmer, H.S. (1983). "Career and homemaking plans for high school youth". *Journal of Counseling Psychology***,** 30, 40-45.

Franziner, B. (1994). *Die Gymnasiallehrer und das Betriebspraktikum*, Koeln

Gaskell, J. (1983). "The reproduction of family: Perspectives of male and female adolescents". ***British Journal of Sociology of Education***, 4, 19-38.

Holland, É. (1985). *Gender and Class: Adolescent Conceptions of the Division of Labour,* Ph.D.thesis, University of London, Institute of Education

Paleocrassas, S., Rousseas, P., Vretakou, V. (2000). *Secondary Education Graduate Survey* www.pi-schools.gr/par/ , (in Greek).

Super, D.E., Bachrach, P.B. (1957). *Scientific Careers and Vocational Development Theory*, Teachers College, N.Y.