

ACADEMIC AND CAREER DEVELOPMENT OF YOUNG CYPRIOT FEMALES: OPENING ALTERNATIVE PATHS

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The study presented in the paper aims at investigating gender differences among Cypriot youth attending college regarding enrolment rates, academic performance, decisions about major, and academic and career aspirations, and the impact that these differences might have on their subsequent employment outcomes once in the labour market. The study included the entire graduating class of 2003 (N=2180) in both the public and the private higher education sector in Cyprus, and in all types of postsecondary programs (from 1- or 2-year programs providing vocational training to 4-year academic programs). The students were administered a questionnaire shortly before graduation concerning their background, educational experiences, future plans and job seeking skills. The second phase of the study was a follow up survey administered approximately one and a half year after graduation, which examined the transition of this cohort into the workplace. Findings indicate that female students differed from males on a number of characteristics. Despite their higher academic achievement, they tended to attend traditionally female-dominated programs that often had a short duration, and to have lower academic and career expectations. Females' lower work expectations were confirmed upon entrance into the labour force. They tended to have lower earnings than male graduates across almost all fields of study. The lowest earnings were made by women in feminized professions such as aesthetics, secretarial studies, and education.

1. INTRODUCTION

During the last few decades, women internationally have made great strides in educational attainment. In most countries, their participation in postsecondary education has increased significantly, whether measured by the number of female students enrolled, or the proportion of students who are women. Women not only enroll and attain at higher rates than men but also do better academically on average (McCormick et al. 1999; Fenwick, 2004; U.S. Department of Education, NCES, 2005; Meletiou-Mavrotheris et al., 2008).

In Cyprus, similarly to other countries, we have witnessed an explosion in the enrolment of Cypriot female students in higher education. While, for example, during the academic year 1985-1986 there were only 1404 Cypriot females enrolled in local higher education institutions, two decades later they reached 9021 students – a more than six-fold increase in female enrolment. During 2008-2009, the number of undergraduate Cypriot females in local higher education institutions totalled 11888 students (Cyprus Statistical Services, 2009). At the same time, many Cypriot women choose to pursue degrees abroad with favourite destinations being Greece, the U.K and the U.S.A.

It is interesting to note that the number of women electing to pursue a postsecondary degree either in Cyprus or abroad has been increasing at higher rates than that of men. In 2008-2009, 89 percent of the female graduates of secondary education institutions continued with the

pursuit of postsecondary studies compared to only 69 percent of the male graduates. Currently, women are the majority of the Cypriot college population both locally and in foreign institutions. Fifty-nine percent of the Cypriots students in local institutions during 2008-2009 were females. Among Cypriot students studying abroad during the same year, 53 percent were females. The corresponding percentage 20 years earlier was only 39 percent. This trend observed in Cyprus mirrors what is happening in several other countries as well where women now represent over 50 percent of college enrolment (e.g. US Department of Education, NCES, 2005; Purcell et al., 2005).

According to the international research literature, the increased participation in higher education and the superior academic performance of female students has not translated into equal to males' labour market outcomes. Persistent gender-role stereotyping continues to limit young women's choices of fields of study and occupation (Bailey, 1992; U.S. Department of Education, NCES, 2001; Purcell et al., 2005). The majority of women worldwide continue to choose traditionally feminized fields of study and career paths, resulting in the perpetuation of the existing gendered inequalities observed in the workplace (McCormick et al., 1999; Purcell et al., 2005; Drewes, 2006; Hansen, 2006; Greenman & Xie, 2008).

The current article utilizes data from a longitudinal study that tracked the transition from college to the workplace of Cypriot graduates of local higher education institutions, in an attempt to elucidate the impact of gender on education and labour market outcomes. The article investigates gender differences among Cypriot youth attending college regarding enrolment rates, academic performance, decisions about major, and academic and career aspirations, and the impact that these differences might have on their subsequent employment outcomes. The specific focus is on how differences in gender are reflected in:

- enrolment rates in postsecondary education;
- type of program attended;
- future plans and expectations regarding employment and further studies;
- labour market outcomes once in the workplace.

2. METHODOLOGY

The data reported in the paper came from PERSEAS, a longitudinal study funded by the Cyprus Research Promotion Foundation. The survey population was the cohort of Cypriot students enrolled in both public and private local institutions and in all types of postsecondary programs in Cyprus (ranging from 1- or 2-year programs providing vocational training to 4-year academic programs) that were in their final year of enrolment and were expected to graduate by the end of the academic year 2002-2003.

The base-year study consisted of a survey administered to students in their final semester before graduation. The survey inquired students to provide detailed information regarding their demographic characteristics, family socioeconomic background, secondary school education and performance, college experience, the attributes of the particular higher education institution and program attended, as well as their employment and educational expectations after graduation. The questionnaire was originally developed based on both the international educational research literature and local conditions in Cyprus and was revised based on feedback from a pilot study which used a representative sample of 75 students. It was administered to the population under study during the Spring 2003 semester. All 2180 final year undergraduate students in all Cypriot higher education institutions (6 public and 20 private tertiary education institutions) were invited to participate in the study. A total of 1388 students completed the survey (a response rate of 64 percent).

The first follow-up study was conducted approximately 1 ½ year after graduation. The respondents to the base-year survey were tracked and invited to participate in a telephone

survey inquiring information about their labour market experiences and occupational outcomes (employment status, type of employer, earnings, education-job matching, satisfaction from work). The survey had the form of a structured interview and was administered by trained interviewers. Again, the international and local research literature had been used as a guide in designing the interview protocol, which was also pilot-tested using a representative sample of 30 graduates. In total, 1134 graduates (81% of the respondents to the base-line survey; 52% of the original population of 2002-2003 graduates) participated in the follow-up survey.

3. RESULTS

The data reported in this paper are drawn from both phases of the study. Data from the first phase have been used to draw the profile of Cypriot male and female students enrolled in local higher education institutions, while data from the second phase were utilized to depict the recent graduates' transition from college to the labour force.

3.1 CYPRIOT COLLEGE STUDENT PROFILE

3.1.1 Personal Characteristics

As can be seen from Table 1, almost three out of four participants in the study were women ($n=1002$, 72%). This statistic reflects the overall picture of the total graduating population of 2003 where out of $N=2180$ students, 1551 were women (71%). The majority of this cohort (90%) was less than 25 years old with very few students graduating from higher education after the age of 30. It is evident from the data that students entered postsecondary education immediately after high school graduation. Non-traditional students were few, and they could be found mostly in the private sector of higher education.

The majority of the graduating students were single and resided at the family home for the duration of their studies. There was a difference in terms of gender concerning their living arrangements. More women (72%) lived at home compared to the male population (64%). However, it is interesting to note that only 18 percent of the students lived alone or with roommates while at college.

According to the distribution of parental educational background, most of the students' mothers (69%) had at least graduated from high school, but only a very small percentage (5%) had bachelor or postgraduate level qualifications. The statistics were similar for the fathers' educational level. It is worthwhile to note that 31 percent of the students' mothers had completed only elementary school education.

The participants in the study came mainly from low and middle- income families. However, most of the students (72%) did not work while at college. From those students who reported a parallel to study employment, everyone reported income below 10.255€. The cost of higher education was mainly shouldered by the parents of these students, (71%) and it was supplemented by government subsidies. Only 6 percent reported having a student loan and very few students had scholarships.

On average, female students had graduated from high school with a higher GPA (Grade Point Average) than males (16.1/20.0 vs. 15.5/20.0).

	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Total %</u>
		<i>Frequency</i>		
	386	1002	1388	
Age				
18-22	173	839	1012	72.9
23-24	140	92	232	16.8
25-29	51	54	105	7.6
<30	17	22	39	2.8
Marital Status				
Single	331	783	1114	80.2
Engaged	26	129	155	11.2
Married	29	79	108	7.8
Divorced	3	8	11	0.8
Residence				
Parents' House	246	726	972	70.0
With husband	52	121	173	12.5
Alone	35	38	73	5.3
With Roommate/s	53	117	170	12.2
Mother's Highest Level of Education				
Elementary School	110	316	426	30.7
High School	211	537	748	53.9
Some College	45	100	145	10.4
Bachelor's Degree	14	38	52	3.7
Graduate Degree	6	11	17	1.3
Family Income Level				
Low	152	427	579	54.9
Middle Low	102	187	289	27.4
Middle High	34	75	109	10.3
High	33	44	77	7.3
High School GPA	15.5	16.1		

Table 1: Profile of graduating students in Cyprus higher education institutions during the academic year 2002-2003

3.1.2 Institutions and Fields of Study

The study participants were enrolled in both public and private institutions of higher education. Fifty-five percent of the students were enrolled in private institutions of higher education, 17 percent at the University of Cyprus, and 28 percent in public institutions of higher education.

Cypriot higher education institutions offer a variety of programs of study ranging from one year to a four - year bachelor's degree. Programs of study are mainly academic but private colleges in particular offer vocational education as well tailored to meet the immediate needs of the Cypriot labour market. Programs in secretarial studies, aesthetics, culinary arts, travel and

Duration of study	Gender				Group Total	
	Male		Female			
	Count	Percent %	Count	Percent %	Count	Percent %
1-Year Program	7	1.8	136	13.6	143	10.3
2-Year Program	43	11.2	300	29.9	343	24.7
3-Year Program	212	54.9	194	19.4	406	29.3
4-Year Program	124	32.9	372	37.1	496	35.7
<i>Total</i>	<i>386</i>	<i>100.0</i>	<i>1002</i>	<i>100.0</i>	<i>1388</i>	<i>100.0</i>

Table 2: Duration of Study of Graduates by Gender

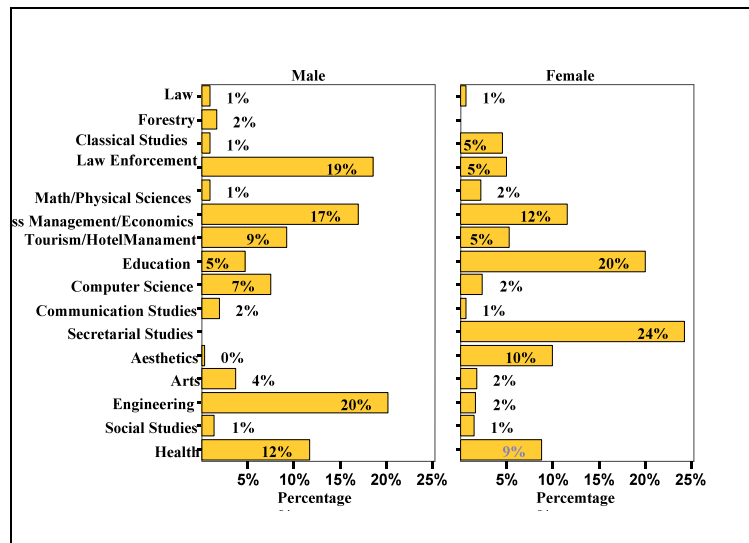


Figure 1: Percentage of Males and Females Receiving Degrees by Field of Study

tourism are some examples of the programs available. These programs tend to be offered as associate degrees and are completed within one or two years.

As seen in Table 2, the overall majority (65%) of the graduates were enrolled in three and 4-year programs of study. However, there were significant differences in enrolment in terms of gender. Males tended to enroll in greater numbers in 3-year and 4-year programs (87%) compared to females (57%). Female graduates were more evenly distributed among the four categories and almost half of them (44%) graduated from college with an associate degree (a 1-year or 2-year program). In comparison, very few males elected to enroll in 1-year and 2-year programs (13%) favoring academic programs instead.

As shown in Figure 1, there were significant gender differences not only in terms of program duration, but also in terms of fields of study. Obviously, women tended to enroll in female-dominated fields and men in male-dominated fields. Twenty-four percent of women majored in Secretarial Studies and 10 percent in Aesthetics, fields of study that were not attended by any male. Twenty percent of women majored in Education in contrast to only 5 percent of men. Only 2 percent of the female students, in contrast to 20 percent of the males majored in Engineering. Similarly, only 5 percent of women, in contrast to 19 percent of men, majored in Law Enforcement, and no woman majored in Forestry.

Despite the differences in the chosen field of study between male and female graduates, it is evident that both enrolled in applied fields of studies such as education, business, health and engineering. The enrolment in more theoretical fields such as the humanities and mathematics is indeed very small among both men and women.

Factors	Percentage %
Intellectual development/Personal Growth	84.6
Acquisition of skills for work	82.7
Prospect of quick employment after graduation	78.8
Great working conditions after graduation	74.2
Accreditation	71.2
Prospect of large income	71.1
To satisfy parents' wishes	49.6
Government Subsidies	49.3
Compatibility with raising a family	47.0
Easy transfer of credits for study abroad	45.5
Short duration of study	37.9

Table 3. Factors influencing the participants' choice of field of study

This phenomenon can be partially explained from the reasons the participants provided when asked why they chose their particular field of study. The question was phrased in terms of parameters the participants rated on a four-point scale with 4 being strong agreement. In Table 3, we report the factors that greatly influenced our participants in their choice of program of study. Aside from the "personal growth" factor, most other reasons influencing enrolment in a certain field of study had to do with labour market outcomes such as possibility of large income, quick employment, good working conditions and training in specific skills needed in the labour market.

It is interesting that while the parents paid for tuition, and supported these students for the duration of their studies, fulfilling parental wishes was not a very important factor in determining field of study choices. These students were more concerned with securing a good paying job with great benefits immediately after graduation than anything else.

The above results were not differentiated in terms of gender. However, when the participants were asked specifically whether they would choose the same field of study if they were of the opposite gender we received some interesting results. While 67 percent of the men stated that they would choose the same field, only 43 percent of the women would do so. This was also true among the female education graduates. Traditionally, education graduates were employed immediately with very competitive salaries and good working hours that are compatible with raising a family. Consequently, females dominated this field of study. However, given a choice, these graduates would follow a different career path such as doctor, pilot, mathematician, archaeologist etc.

3.1.3 Employment Expectations

There were some very indicative results when the graduates were asked to estimate the amount of money they would be receiving as salary for their work (see Table 4). Women overall tended to expect less money as compensation than men even in similar fields. For example, men in the social sciences expected to make 330€ more than women in the same area. Women in the fields of aesthetics and secretarial studies – which are female dominated sectors – reported the lowest expected salaries. As a result, the overall median of the entry salary that female students expected to receive was only 685€, while for men it was 975€.

Female graduating students not only anticipated making a smaller income, but also had lower demands and expectations than men. In a question where they had to state what they considered as a satisfactory monthly salary in Cyprus, the median of the salaries females gave was only 1195€, compared to 1370€ for men. Comparing the median of the salaries graduates consider as satisfactory, based on duration of program of study, the same pattern is observed. The male students graduating from 2-year programs considered 1240€ as a satisfactory salary, while

Field of Study	MEDIAN OF EXPECTED ENTRY SALARY (IN €)		
	Male	Female	Overall
Health	1025	975	1025
Social Studies	1110	770	770
Engineering	1025	855	1025
Arts	770	770	770
Aesthetics		600	600
Secretarial Studies		685	685
Communication Studies	1110	855	855
Computer Science	1025	855	940
Education	1325	685	685
Tourism/Hotel management	1025	770	855
Business Management/Economics	855	770	855
Math/Physical Sciences	1370	810	855
Law Enforcement	940	940	940
Classical Studies	1370	1025	1025
Forestry	1010		1010
Law	1710		1710
<i>Overall</i>	975	685	770

Table 4. Expected Entry Salary by gender and field of study (for full-time employment)

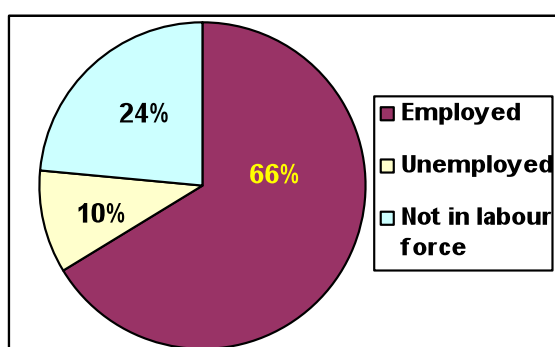


Figure 2: Employment Status

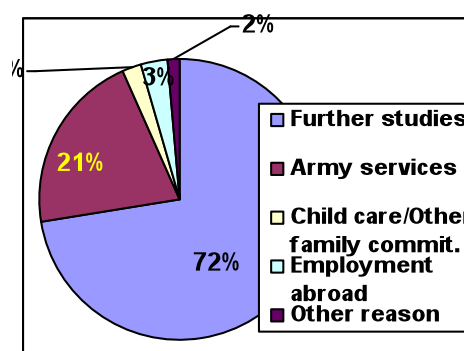


Figure 3: Reasons for not participating in the labour force

women would be satisfied with only 1025€. Similarly, the median salary that male graduates of 3-year and 4-year programs considered as satisfactory exceeded by 90€ that of women (1370€ vs. 1280€).

3.2 COLLEGE GRADUATES' TRANSITION TO THE WORKPLACE: LABOUR MARKET OUTCOMES

3.2.1 Employment Status

After obtaining their undergraduate degrees or diplomas and certificates, the majority of graduates joined the labour force. Sixty-six percent of the graduates were in employment at the time of the interview, 10 percent were unemployed, and 24 percent were not seeking employment (see Figure 2). The main reason given by the vast majority (72%) of those graduates who were not seeking employment was continuation of studies (see Figure 3).

Of those graduates employed, 91 percent were employed full-time. Only 66 graduates (9%) were employed part-time, and one-third of those (22 graduates) reported that they were working part-time by choice.

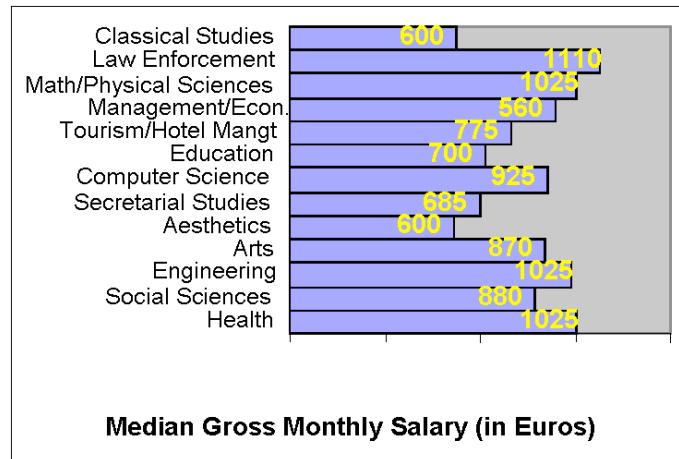


Figure 4: Salary by Field of Study

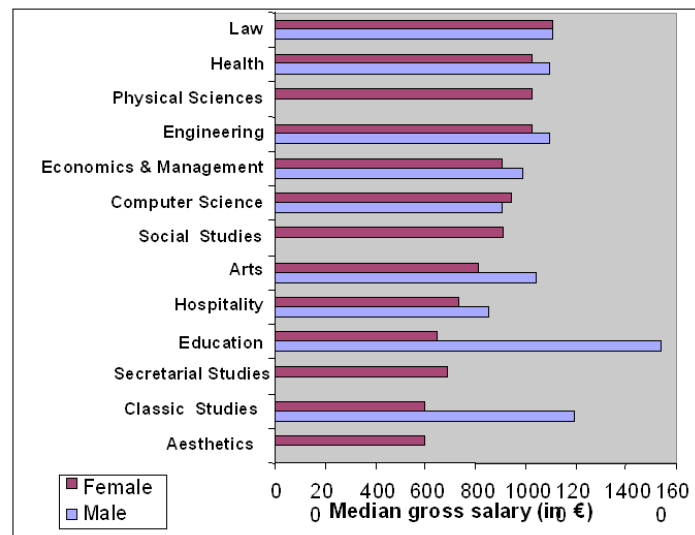


Figure 5: Median gross monthly salary of males and females, based on program of study

According to the study's findings, the unemployment rate among recent graduates of higher education institutions in Cyprus is quite high. While only 10 percent of all graduates were unemployed at the time of the survey, the actual unemployment rate was higher. Given that only 76 percent of the respondents were participating in the labour force (i.e. either working or being available to work and looking for a job), the actual unemployment rate was 13 percent.

Unemployment hit women a bit harder than men. Fourteen percent of females in the labour force were unemployed, compared to 10 percent of males in the labour force. This difference, however, was not statistically significant (Pearson chi-square, $p > 0.05$).

3.2.2 Earnings

The lower work expectations reported in the first phase of the study were confirmed for the female participants once they entered the workplace. There was a statistically significant difference in salaries between male and female graduates (non-parametric Mann-Whitney, $p < 0.05$). While the reported median monthly gross salary of male graduates in full time employment was 1085€ that of women was only 815€. Thus, 1½ year after graduation, the median gross monthly salary of males exceeded that of females by 33 percent.

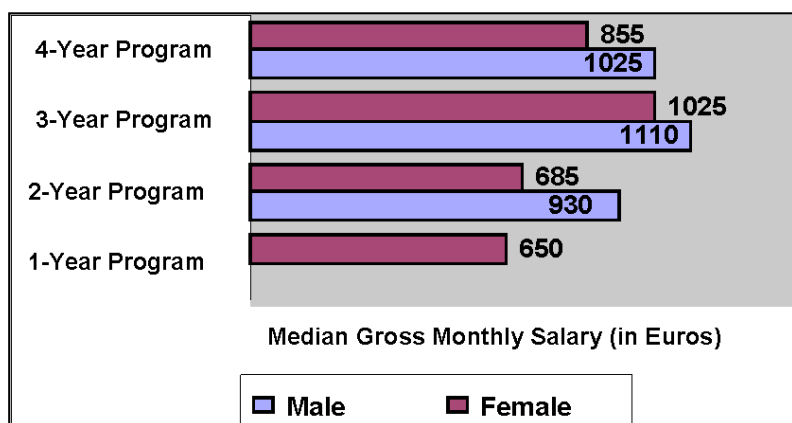


Figure 6: Median Gross Monthly Salary of males and females, based on program duration

The lowest earnings were made by the graduates that had majored in Aesthetics, Classical Studies, Secretarial Studies and Education (see Figure 4). The fact that these study areas attract a large percentage of the female population attending college means that many women end up in fields where compensation tends to be particularly low.

As shown in Figure 5, women received lower salaries than their male counterparts, not only in feminized professions, but across almost all fields of study. Exceptions to this trend were the salaries of graduates from the Law Enforcement Academy who were all employed by the government, where, in accordance with the regulations of public service, there is gender pay equity. The females that had acquired a degree in Engineering or Computer Science were remunerated equally well as men. This phenomenon, of women working in male-dominated fields receiving higher salaries than women working in female-dominated sectors, has been observed not only in Cyprus, but also internationally (π.χ. Purcell et al., 2005).

The assertion that female graduates tended to get a lower compensation than men is further confirmed if we examine the income of male and female graduates based on the duration of their program of study (see Figure 6). Obviously, men's earnings were higher than women's earnings, both in 2-year, as well as in 3-year and 4-year programs of study (all of the graduates of 1-year programs were females).

4. CONCLUSIONS

Findings of the current study indicate that among the 2002-2003 graduating Cypriot students women differed from men on a number of characteristics, including major and duration of program of study, academic performance, and educational and career aspirations. Despite their higher academic achievement than males, women were less likely than males to enroll in 3-year or 4-year academic programs. Consistent with historically gender-dominated fields, women were clustered in traditionally female fields like aesthetics, secretarial studies, and education, while men were more likely to major in technical fields like computer science and engineering. Female students also tended to have lower career expectations. Female students expected to earn lower salaries than men, both overall and within specific fields of study. The lowest salaries were expected by students majoring in secretarial studies and aesthetics, fields attended only by females.

The lower work expectations reported in the first phase of the study were confirmed for the female participants once they entered the workplace. Women overall received lower salaries than their male counterparts across almost all fields of study. In feminized professions such as secretarial studies, education, and aesthetics, the salaries for women were the lowest received by the cohort.

The above findings are similar to those found in the international research literature. Research conducted worldwide shows that although women now enter higher education in much larger numbers than in the past, they continue to congregate in traditionally female areas of study, to set lower career goals than their male counterparts and to be discriminated against in terms of compensation and advancement once in the labour market. (Blau & Kahl, 2000; Joy, 2000; National Women's Law Center, 2002; Agars, 2004; Jackson, 2004; Fenwick, 2004). The literature also indicates that vocationalization of higher education, although overall desirable as it provides wider access to education, might reinforce occupational sex segregation and wage disparities by diverting women from academic subjects and leading them into short-duration programs that do not provide them with the training or technical skills necessary to enter highly paid jobs.

Young women ought to become aware of the ways in which gender role socialization might negatively impact their academic and career aspirations and choices. It is critical that they get provided with the extensive support and guidance required to overcome the actual or perceived social barriers limiting their educational and vocational development and participation (Hackett & Byars, 1996). Schools, agencies, and higher education institutions, should develop career guidance services that can assist adolescent girls and young female adults in making more informed educational and occupational decisions. Such services should help females explore nontraditional, often higher paying, career choices by providing them access to current and accurate information regarding the nature of different occupations, career preparation and training, as well as lines of progression leading to job placement and advancement.

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