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## Gender Barriers in Higher Education: The Case of Taiwan

Ru-jer Wang<br>National Chung Cheng University<br>Taiwan, R.O.C.

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#### Abstract

As a consequence of the rapid expansion of higher education in Taiwan over the past decades, the enrolment of females in higher education has grown considerably. However, this article reports that in terms of institutional difference, access to advanced study, and differing subject preferences, the barriers to women's participation in higher education remain. Thus, the findings drawn from this article lead to the conclusion that females still suffer disadvantages in access to higher education, although the expansion of higher education in Taiwan has substantially benefited females over the past few decades


## Introduction

In Taiwan, there has been a significant diminution in gender inequality in entrance into higher education, as is shown in Figure 1. Figure 1 indicates that only about 11 per cent of the students enrolled in higher education in 1950 were female, while by 1998 the percentage had increased to approximately half (50.36\%). This shows a remarkable increase in the number of women entering higher education, largely as a result of the rapid expansion in higher education over the past decades.


Figure 1. The Percentage of Females in Higher Education by School Year 1950-99. (Source: Ministry of Education, 2000a, Education Statistical Indicators, p. 33.)

In fact, the increase in female access to higher education in Taiwan has been in line with that of the worldwide increase. The UNESCO World Education Report for 1998 revealed a general trend in female intake into higher education, and showed that in terms of the gross enrolment ratio (females to males), female students have significantly increased in number in OECD countries. For example, in Australia in 1985, the gross enrolment ratio of female in tertiary education was about 27.0 per cent. The figure increased to 73.5 per cent in 1995 . Over the same period some OECD countries have experienced similar increases in this regard, as indicated in Table 1.

## Table 1 <br> Gross Enrolment Ratios of Female in Tertiary Education in Some OECD Countries

|  | $\mathbf{1 9 8 5}(\boldsymbol{\%})$ | $\mathbf{1 9 9 5}(\boldsymbol{\%})$ |
| :--- | :---: | :---: |
| Australia | 27.0 | 73.5 |
| Canada | 77.7 | 110.2 |
| France | 30.3 | 55.4 |
| Germany | $\ldots$ | 38.5 |
| Japan | 19.8 | 36.3 |
| Netherlands | 26.6 | 46.0 |
| Spain | 28.6 | 49.8 |
| United Kingdom | 20.1 | 50.8 |
| United States of America | 64.3 | 91.7 |

(Source: UNESCO, 1998, World Education Report, 1998, pp.148-151.)
However, there is a growing concern with the issues relating to female participation in higher education in Taiwan recently due to the democratization of society in Taiwan. The main purpose of this paper is therefore to examine gender barriers in higher education in Taiwan, and the following sections will pay attention to three aspects of female access to higher education: (1) the representation of females as students among different types of institution of higher education i.e. university, college and junior college; (2) the distribution of females as students in advanced study i.e. for a master's degree and a doctor's degree; (3) female choice of subjects of study. Finally, some observations are concluded from the previous examination.

## Female Access to University vs. Non-university Institutions of Higher Education

As indicated earlier, opportunities for women to study in higher education in Taiwan have significantly increased over the past decades, as seen by the relatively high proportion of females now entering higher education. Nevertheless, the focus should now move on from the problem of how to increase female participation in higher education in general, to an examination of the fact that there is a noticeable difference in the numbers of females attending university and the numbers of females attending the lower level non-university institutions in higher education. In terms of institutional difference females are under-represented in university institutions (universities and colleges) and over-represented in non-university institutions (junior colleges). This conclusion can be drawn from the following statistical information. In 1996/1997 females made up about 46.48 per cent of the total number of students attending university and college sectors, while they comprised 53.51 percent at junior colleges (See Tables 2 and 3).

## Table 2

The Number and Percentage of Students Enrolled in Universities and Colleges by Gender and Subject in 1996/97

|  | Humanities | Social Sciences | Science \& Tech. | Total |
| :--- | :---: | :---: | :---: | :--- |
| Females | 61,353 | 81,398 | 53,531 | 196,282 |
|  | $69.85 \%$ | $58.16 \%$ | $27.53 \%$ | $46.48 \%$ |
| Males | 26,493 | 58,569 | 140,977 | 226,039 |
|  | $30.15 \%$ | $41.84 \%$ | $72.47 \%$ | $53.52 \%$ |
| Total | 87,846 | 139,967 | 194,508 | 422,321 |
|  | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

(Source: Taken from Ministry of Education, 1998, Education Statistics Abstract, Table 5-3, p. 19.)
In terms of subject preference, females were overrepresented in Humanities and Social Sciences, but underrepresented in Science and Technology. The difference between male and female numbers in junior colleges, is not dissimilar to that in universities and colleges. These statistics are reproduced in Table 3.

# Table 3 <br> The Number and Percentage of Students Enrolled in Junior Colleges by Gender and Subject in 1996/97 

|  | Humanities | Social Sciences | Science \& Tech. | Total |
| :--- | :---: | :---: | :---: | :--- |
| Females | 16,738 | 105,905 | 109,522 | 232,165 |
|  | $77.63 \%$ | $83.17 \%$ | $38.44 \%$ | $53.51 \%$ |
| Males | 4,825 | 21,444 | 175,431 | 201,700 |
|  | $22.37 \%$ | $16.83 \%$ | $61.56 \%$ | $46.49 \%$ |
| Total | 21,563 | 127,349 | 284,953 | 433,865 |
|  | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

(Source: Taken from Ministry of Education, 1998, Education Statistics Abstract, Table 5-7, p. 21.)
The fact that more females are entering non-university institutions rather than university institutions can be seen in Figure 2, where the distinct tendency in female participation in different institutions of higher education from 1970-1999 is reflected in the two approximately parallel curves indicating the number of females in university and college sectors and junior college sector respectively.


Figure 2. The Percentage of Females in Universities and Colleges, as well as Junior College by School Year from 1970-99.
(Source: Ministry of Education, 2000a, Education Statistical Indicators, p. 33.)
Although there will be a variety of reasons why the percentage of females attending junior colleges is higher than that of females in institutions of higher education and while each stands in need of further investigation, what is relevant to this paper is that this difference has obvious implications for any examination of the issue of access for women. This is because the fact that there is a hierarchy of prestige among Taiwan's higher education institutions. Compared with universities and colleges, junior colleges in Taiwan are seen as being inferior in terms of prestige. This in turn reflects upon the perceived status of the qualifications awarded. If women continue to be

## Female Choice of Subjects to Study

Let us move on to look at significantly differing subject preferences between males and females. As far as subject preference is concerned, there is a significant distinction between males and females seeking admission for university and college in Taiwan. It is interesting to note that the success rate for admission to the Social Sciences and Humanities as a whole was 54.78 per cent compared to a 66.87 per cent success rate in admission to the Science and Technology. It is important to consider that the number of applicants $(68,778)$ for places in the Social Sciences and Humanities exceeds the number of applications to the Science and Technology $(14,753)$. This in effect means that women will find it more difficult to gain admission in the Social Sciences and Humanities. (See Table 5).

## Table 5

## Gender Differences in Admission to University and College by Division

 in 1998| Division | Applicants |  |  | Passers |  |  | Admission <br> $(\%)$ |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Social <br> Sciences <br>  | 67,874 | 26,202 | 42,576 | 37,676 | 13,889 | 23,787 | 54.78 | 53.01 | 55.87 |
| Humanities |  |  |  |  |  |  |  |  |  |$|$|  <br> Tech. | 14,753 | 13,243 | 1,510 | 9,865 | 8,847 |
| :---: | :---: | :---: | :---: | :---: | :---: |

(Source: Ministry of Education, 2000b, Education Statistics of the Republic of China, p. 39.)
These facts suggest that women, due to their differing preference in subjects of study, have still suffered some disadvantages in terms of entrance into higher education in Taiwan in the past. A solution may be found if attention is focused on two main areas (Thomas, 1988): First, the socialisation processes that currently affect gender roles in education. For instance, an attempt should be made to change the traditional values that dominate gender, role and opportunity, whereby men are regarded as more appropriate for scientific work and women are seen as fitted for social work. Second, a greater range of subjects should be offered to girls at secondary education level. Another possible solution would be to increase the places available for study in the social sciences and humanities.

## Concluding Remarks

Based upon this examination of the data, it appears that all the evidence so far presented has clearly indicated that in Taiwan females do stand less chance of obtaining access to higher education. First, in terms of institutional type, females are entering less prestigious non-university institutions (i.e., junior college in Taiwan) rather than universities. Second, males stand a better chance of being accepted than females, largely as a result of the remarkable difference shown in subject preference between males and
females. Third, in terms of access to higher education, it is very disappointing to conclude that females are still lagging behind in their access to university, especially to advanced study. In conclusion, although the expansion of higher education in Taiwan has substantially benefited females over the past few decades, women still suffer disadvantages in access to higher education.

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#### Abstract

About the Author Dr. Ru-jer Wang, Director of Graduate Institute of Education National Chung Cheng University Taiwan, R.O.C. 160, San-Hsing, Ming-Hsiung, Chia-Yi, Taiwan Tel: 886-5-2720871 Fax: 886-5-2720875 E-mail: edurjw@ccunix.ccu.edu.tw Dr. Ru-Jer Wang received his Ph.D. degree from the University of Manchester (UK) and is currently an Associate Professor and former director of the Graduate Institute of Education, National Chung Cheng University. His main research and teaching interests are educational administration, comparative education, and higher education, knowledge management and education, and the knowledge economy and education. He is also in charge of the Center for Research into the Knowledge Economy and Education. He has published more than 30 research papers and four books: Educational Administration (1998), Comparative Education (1999), The Theory and Application of Knowledge Management: The Case of the Education Sector and Its Innovation (2000), and The Knowledge-based Economy and Education (2001).


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