



Genderisation of Subjects: Trends in Choice of Discipline by women In Higher Education

Swati Billus

Assistant Professor, S.D College(Lahore), Ambala Cantt

Dr. Harvinder Kaur

Assistant Professor, S.D College(Lahore), Ambala Cantt

Email: swatibillus@yahoo.com

Abstract

Women have often been deprived from their basic rights. One such right is that of Education. While the access to education has improved over time, the representation of women is restricted to few disciplines only. The paper examines this trend using the data from Statistical Abstract of India, 2011 and All India survey on Higher Education 2010-11. The main reason for continuation of this trend, even after 66 years of independence, lies in the gender socialization process that starts taking place right from the childhood. Reluctance of parents to invest in their daughters education also attributes to this trend.

deprived from the benefits of India's growth story. Education is still a distant dream for many people belonging to disadvantaged and marginalized community. One such section of population is that of women. Access to education is one of the many areas where women have to constantly battle it out. An influential global community, ranging from intellectual leaders at the World Economic Forum and the World Bank, to prominent business CEO's from many of the world's most profitable companies, is coalescing around the idea that delivering on the universal right to education, with a particular emphasis on girls' education, is one of the most effective ways to generate a significant social and economic return on investment. The challenges to expanding girls' access to quality education are myriad: logistical, technical, cultural, religious. Whatever the origin, these barriers contribute to the current state of crisis for many girls and women throughout the world. Moreover, the hardships facing girls negatively impact an ecosystem of people that reaches far beyond the girl herself. These "vicious cycles," rather than "virtuous cycles," mean that the burdens borne by girls are subsequently passed on to their children, families and other members of their community (Global Education Digest, 2010).

INTRODUCTION

Education is the most important weapon which you can use to change the world.

- Nelson Mandela.

Education is considered as important agent of Economic and Social change. Nation's trajectory of Growth is influenced by the education policies it follows. Education is the first step on the ladder of higher socio-economic status. It is of much more importance in the country like ours, where large sections of population have been

According to All India Survey on Higher Education 2010-11 conducted by MHRD there were 1,20,33,190 female students were enrolled as against 1,54,66,559 male students in Higher Education i.e. the proportion of female and male students in Higher Education was 44:56. Not only are women underrepresented in Higher Education but their representation is lopsided when it comes to choice of subjects. In this paper we will be examining the trends in the subject choice of female students since 1950-51 and provide with the possible reasons for bias against some subjects and disciplines. Before we analyse the trends, it is important to have an understanding of the Indian System of education.

The Indian System of Education

The Indian system of education has its roots in the system inherited from the British at independence in 1947. Although the structure left by the British provided for educational opportunities from primary school to university, the system was highly exclusive and available to only a select minority within Indian society. Jawaharlal Nehru and the members of the Constituent Assembly responsible for framing the Indian Constitution (1950) sought to deal with the social and educational inequalities of illiteracy and discrimination by explicitly prohibiting discrimination in education on the grounds of religion, caste, sex, race or birth. To prevent such discrimination certain rights are guaranteed, including the right for Indian citizens to enter any institution of education and to receive instruction in their native language. Current education policy as related to structure and access is based on the objectives of the National Education Commission (NEC), which, in its 1968

Education Policy, called for a standard educational structure based on a 10+2+3-year model. The first ten years were to be non-selective and provide a well-rounded general education available to all children. After the first ten years of general education the system would become highly selective and provide opportunities in both the academic and vocational streams.

Primary Education

The primary cycle lasts seven to eight years and is divided into two stages: lower primary (Standards I to V) and upper primary (Standards VI to VIII).

Secondary education

Secondary education is divided into two, two-year stages: lower (Standard IX to X) and higher (XI to XII). After both stages students take examinations controlled by state and central examination boards.

Lower Secondary: Lower secondary school generally begins at Standard IX and lasts two or three years. Lower secondary education emphasizes general education with no, or little, specialization.

Upper Secondary: Upper secondary education (sometimes referred to as 10+2) is dual track (academic, vocational/professional). The second stage of secondary education is designed to allow for diversification and specialization, while also preparing students for higher education.

Higher Education.

India has a three-tier degree structure with bachelor, master and research degrees. Apart from degree programme, universities also offer shorter programs at certificate and diploma-level. Diploma courses are available at undergraduate and postgraduate level. At undergraduate level, they vary from one to

three years in length; postgraduate diplomas are normally awarded after one year's study. There follows a description of the different degrees, and some comments on the postgraduate Diploma.

Undergraduate level – Bachelor: The present system is commonly referred to as the 10+2+3 pattern, requiring 3 years of study for a bachelor degree in arts, science and commerce. The professional bachelor's degrees in engineering and technology, veterinary science, and pharmacy and agriculture are obtained after 4 years of study.

Postgraduate level – Master: Master degrees are of different types. The Master of Arts, Science or Commerce takes another 2 years of studies in the same subject after the bachelor degree. The professional master degrees are of 3 or 4 semester duration based on a 4-year bachelor in the same field.

Master of Philosophy: Some universities offer the Master of Philosophy (M.Phil), a pre-

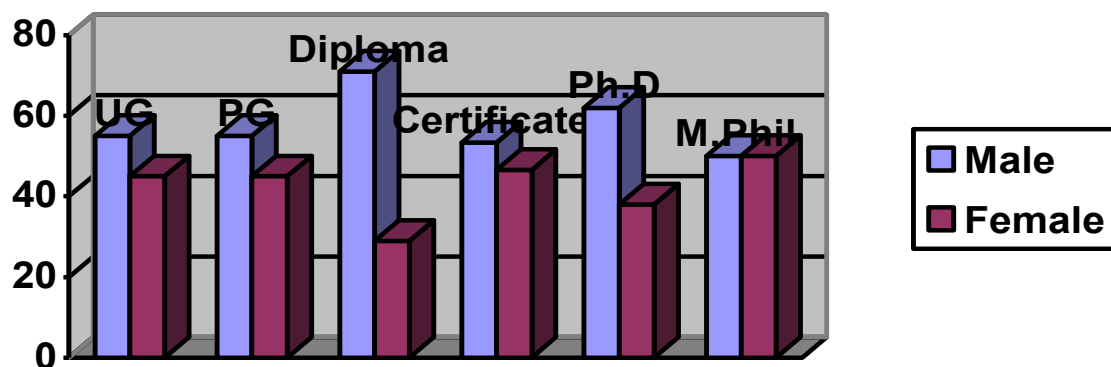
doctoral research programme requiring a master for admission.

Research degrees - PhD: The degree of Doctor of Philosophy is awarded at least 2 years after the M.Phil or at least 3 years after the Master's Degree. It involves original research resulting in the writing of a thesis and in some cases also substantial coursework.

Trends in the choice of Subjects/ Discipline.

In this section, the trends in the subject choice of women for the tie period 1950-51 to 2008-09 have been presented by segregating the data for General Courses and Professional Courses. Arts, Science and Commerce comes under the category of General Courses and Education, Medicine, Engineering, Agriculture and Law comes under the category of Professional Courses. The proportion of male and female students enrolled at different levels for the year 2010-11 has been presented first.

Figure 1: Gender Distribution at Different Levels



So

Source: All India Survey on Higher Education 2010-11, MHRD

Taking look at Male-Female Ratio at each level, the trend is of higher males than females in each level ,except for M.Phil, which is almost equal with 50 percent males and female each. Student enrollment at both Under Graduate and Post Graduate level has a similar trend with around 55 percent males

and 45 percent females. Ph.D has an unequal distribution with 62 percent male and 38 percent females.Diploma student enrollment projects the most lopsided scenario with 71 percent male and only 29 percent female students.

Table 1:Proportion of female and Male Students to Total Enrollment by Gender and Discipline/Subject in General Courses (1950-51-2008-09)

Year	Arts		Science		Commerce	
	Female	Male	Female	Male	Female	Male
1950-51	16.1	83.9	7.1	92.9	0.6	99.4
1960-61	24.6	75.4	10.5	89.5	0.9	99.1
1970-71	31.7	68.3	17.8	82.2	3.7	96.3
1980-81	37.7	62.3	28.8	71.2	15.9	84.1
1991-92	41.8	58.2	32.9	67.1	22.1	77.9
2001-02	43.7	56.3	39.1	60.9	38.6	61.4
2008-09	50.4	49.6	42.1	57.9	41.5	58.5

Source: Statistical Abstract of India,2011

Table 1 reveals proportion of men and women students to total enrollment by gender and Discipline/subject in General Courses for the year 1950-51 to 2008-09.In 1950-51,16.1 percent of female students opted for Arts as compared to 83.9% male students. This figure was 50.4 percent for female and 49.6 percent for male students in 2008-09. In Sciences, the representation of female students rose from 7.1 percent in 1950-51 to 42.1 percent in 2008-09. The remarkable improvement has been seen in the enrollment of Commerce. There were just 0.6 percent female students in 1950-51, it rose to 41.5 percent in 2008-09.The decade of seventies was the time period which saw the substantial rise in the enrollment of women.

Table 2: Proportion of Female and Male Students to Total Enrollment by Gender and Discipline/Subject in Professional Courses (1950-51-2008-09)

Year	Education		Engineering		Medicine		Agriculture		Law	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
1950-51	32.4	67.6	0.2	99.8	16.3	83.7	5.8	94.2	2.1	97.9
1960-61	32.8	67.2	0.9	99.1	21.9	78.1	7	93	3.0	97
1970-71	36.5	63.5	1	99	22.8	77.2	9.5	90.5	3.7	96.3
1980-81	47.3	52.7	3.8	96.2	24.4	75.6	13.6	86.4	6.9	93.1

1991-92	50.2	49.8	7.6	92.4	33.2	66.8	7.1	92.9	11.0	89
2001-02	43.4	56.6	22.4	77.6	40.6	59.4	16.7	83.3	20.6	79.4
2008-09	49.5	50.5	28.8	71.2	36.7	63.3	23.5	76.5	34.5	65.5

Source: Statistical Abstract of India, 2011

The proportion of women students is much skewed in the Professional Courses as compared to General Courses. Except for Education, there is a wide disparity in the proportion of female and male students. Though the proportion of females in Engineering has risen from 0.2 percent 1950-51 to 28.8 percent in 2008-09, but still their representation is disappointingly low. Another discipline where female students are marginal as compared to their male counterparts is Agriculture. Only 23.5 percent of females opted for Agriculture as compared to 76.5 percent of male students in 2008-09. After Education, the professional discipline where the maximum number of women is enrolled is that of Medicine. During 1950-51, 16.3 percent of women were enrolled in Medicines. Their number rose to 36.7 percent in 2008-09. The reason could be that in India, many women prefer to go to female doctors only. So the women doctors always seem to be in demand.

Possible explanations for this trend

The entry of women into the formal education system started in the mid 19th century, but they got acceptance only in the mid of 20th century. Although the proportion of female students as compared to male students in Higher education has risen from 10.9 per cent in 1950-51 to 44 per cent in 2008-09, the under representation of women in some of the

disciplines is a worrisome trend. Many subjects exhibit an imbalance in the proportion of male and female students. Males still dominate in engineering, law, medicines, agriculture which are considered as masculine subjects whereas females can be found opting more for subjects like arts/humanities, education which are feminine.

According to Becher(1981) "academic subjects are not neutral, they are cultures, each with its own way of perceiving and interpreting the world".

The phenomenon of genderisation of subjects has its seeds rooted in the cultural dynamics which rule our society. There exists gender stereotypes i.e. society have different expectations from males and females in terms of their behaviour and role in the family. These stereotypes are further strengthened through the process of gender socialization which means that children of different sexes are socialized into their gender roles and are taught what it means to be male or female.

Family is the foremost influence on gender role development in the early years of one's life. The family is "the social and symbolic place in which difference, in particular sexual difference, is believed to be fundamental and at same time constructed." (Crespi). The psychological literature suggests that boys and girls are raised in ways that tend to foster consistency with traditional sex roles. Eccles

and Hoffman(1984) and Marini and Brinton(1984) claim that early sex-role socialization might influence boys and girls' economic behaviour in two ways. First boys and girls are encouraged to develop different skills and personality traits and the difference in skills and personality traits in turn prepare them for different kinds of jobs(Corcoran and Courant,1987). This holds particularly true for the Indian society where women's duties as good daughters, good wives and good mothers are very well defined. Though the Indian constitution grants equal rights to women and men, strong patriarchal traditions persist and manifest themselves in different ways. In most Indian families, a daughter is viewed as a liability, and she is conditioned to believe that she is inferior and subordinate to men. Sons are idolised and celebrated. The primary role of a woman is expected to be that of a wife and mother and therefore career takes a backseat. Women are encouraged to take up subjects that are gender appropriate.

Another possible reason for female students opting for gender appropriate subjects is that women do not feel welcome in traditionally male-dominated career fields and college majors. The perception of being unwelcome can result from women being ignored, treated differently, or sexually harassed.

This phenomenon was labeled the "chilly climate" by Hall and .They contended that differential treatment puts women at a significant educational disadvantage in college classrooms and negatively impacts their performance.As a result of the chilly climate, women may choose not to enter traditionally male-dominated college majors or may not persist in these majors.(Morris, 2008)

An important reason for women choosing General Education Courses over the Professional courses can be the difference in the fee structure of these courses. General education courses are more affordable. The fees for these courses are not as exorbitant as they are for professional courses. According to Yeuh(2001), when it comes to investing in developing human capital in their children, parents do look for returns on their investment. Parents will invest in the education of those children from where it gets the maximum returns. In our culture, women leave their parent's home after marriage. Women are considered as *paraya dhan* i.e. someone else's wealth. The cost of educating a daughter is borne by parents but the benefits from this investment is reaped by her in-laws. The existence of these perceived earning differentials leads to more investment by parents in the education of their sons as compared to the investment in the education of their daughters.

Conclusion

Girl's education is an integral aspect of development. For economic growth and social development, girl's access to quality education is imperative. However, females' access to higher education is restricted to some disciplines/subjects only. The under representation of females in some of the disciplines then manifests in the absence of females from some of the career fields. The major cause of gender bias in difference in subject choice of female and male students is the gender socialization process. The reluctance of parents' to invest in the education of their daughters also contributes to the existing bias.



References

- No.1,pp.35-48, DOI: 10.1080/030549800103845
- [1.] All India Survey on Higher Education 2010-2011(2013),Government of India,Ministry of Human Resource Development,Department of Higher Education,New Delhi.
- [2.] Chanana, K(2007), 'Globalisation, Higher Education and Gender: Changing Subject Choices of Indian Women Students', Economic and Political Weekly, Vol. 42, No. 7, pp. 590-598, URL: <http://www.jstor.org/stable/4419259> .
- [3.] Colley, A and Comber, C (2003), 'School Subject Preferences: Age and gender differences revisited', Educational Studies, Vol.29 No.1, pp.59-67, DOI: [10.1080/03055690303269](https://doi.org/10.1080/03055690303269)
- [4.] Corcoran, M and Courant, P (1987), 'Sex-role socialization and occupational segregation: an exploratory investigation', Journal of Post Keynesian Economics/Spring, Vol. IX, No. 3.
- [5.] Crespi, I, 'Socialization and Gender Roles within the family: A study on Adolescents and their Parents in Great Britain'.
- [6.] Educational Access in India: Country Brief(2009), Consortium for Research on Education, Access, Transitions and Equity.
- [7.] Francis, B (2000), 'The Gendered Subject: Students' subject preferences and discussions of gender and subject ability', Oxford Review of Education, Vol.26,
- [8.] Hill, S. and T. Chalaux (2011), "Improving Access and Quality in the Indian Education System", OECD Economics Department Working Papers, No. 885,
- [9.] Global Education Digest 2010, Comparing Education Statistics Across the World, UNESCO Institute for Statistics.
- [10.] <http://dx.doi.org/10.1787/5kg83k687ng7-en>
- [11.] Moon, U, (2012), Women participation in higher education of India: the enrolment scenario, Int. J. Education Economics and Development, Vol. 3, No. 1, 2012
- [12.] Morris, L. and Daniel, L. (2008), 'Perceptions of a Chilly Climate: Differences in Traditional and Non Traditional Majors for Women', *Research in Higher Education*, Vol.49, No.3, pp.256-273.
- [13.] Rhodes K, Early Childhood Gender Socialization: Implications of Sex Typed Toys and Play on Adulthood Career Outcomes.
- [14.] Yueh, L (2001), A Model of Parental Investment in Children's Human Capital, SKOPE Research Paper No 15 Spring 2001.