

EMPOWERMENT AND GENDER DIFFERENCE IN EDUCATION STATUS

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A LAYMAN's definition would consider empowerment as position of woman vis-à-vis man in society. The term empowerment is widely used in the context of development, particularly women's development. Women are partner in developmental process. It has been said by various dignitaries that in case of any big achievement by a man, contribution of the woman is well recognized. But it is found that women are not established in the deserving places of the society. The level of acquired education is an important pre-condition for individuals to enjoy power and achieve satisfaction in his/her life. Opportunities to access education are not uniform to different sections of the population. Gender bias is a major concern for unequal opportunities for acquiring education.

In West Bengal, in the case of gender, girl students are relatively more deprived to reach at the end of Madhyamik level. Proportion of girls among Madhyamik examinees is 42% as against 58% of boys but negligible difference is observed with respect to achievement(result). In the present study effect of gender on Madhyamik results have been investigated.

Key Words: Empowerment, Achievement, Gender bias.

Introduction

Empowerment, as widely accepted is a process of awareness and building of capacity leading to greater participation, to greater decision-making power and control to transformative action (Karl, 1995). It is a way of defining, challenging and overcoming barriers in one's life through which the individual increases his/her ability to shape his/ her life and environment (Devadas, 1999). Empowerment is the process of challenging existing power relations and of gaining greater control over the sources of power. This term is widely used in the context of development and women's are partner in the developmental process. One can not disagree that a woman is quite capable to reach the goal and society can enjoy her services. But in the self-introspection, it will be found that women are not established in the deserving places of the society. There are various reasons behind this factor. Economic, political and mainly lack of education has deprived the women to get their rightful place in the social process. According to 2001 census, the available statistics provide adequate evidence to show that there continue to be considerable gap in literacy by sex in India (Dutta, 2004). On the contrary, one of the stated aims of the education system is to provide a learning environment in which all students can strive to achieve their potential. Despite that goal, gender inequality still persists. Moreover, around the world, girls face multiple social and economic barriers for enrolling in school.

Review of Literature

Prolific attempts have been made to explain this fact. Buckingham(1999)observed that boys and girls differ in scholastic performance due to biological differences, gender biases and socio-economic factors. Even in United States, after several decades of intense scrutiny and policy change, gender differences

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in education linger (Nowell and Hedges, 1998; Ballantine, 2001). Lower percentages of adolescent girls attend and complete secondary school than boys in several parts of the world (Kurz and Prather, 1995). Horne (2000) in one of his studies revealed that educational performance at school has also been found to vary according to the students' sex. Gender disparity in schooling is also observed among the younger population, where female school enrolment in basic and secondary education is less compared to the male children (Tansel, 2002; Erturk and Daylo' Lu, 2004). Mostly, girls drop out before completing four years of primary school (Women: Looking beyond 2000, 1995). Social inequality in educational opportunity with respect to gender is evident in India also. Gender difference is reflected in access to educational opportunity, empowerment to political power and allocation of resources within the household sector as well (Dutta and Bandopadhyay, 2004). Ramchandran (2003), in an empirical study revealed that if regularity in school could be ensured in case of girls, they performed as well, if not better than boys in school. It is observed that gender gap in enrolment persists at all levels for all the considered years. In a study by Gupta (2004) it has been observed that boys get opportunity to continue their education in spite of their disadvantaged social family background because they are considered as assets of family for economic and social reasons. This is a reflection of social attitude, which definitely indicates bias in favour of boys. Moss and Brown (1979) concluded that sex differences occur in academic achievement partially due to biases and stereotypes.

The review of relevant literature shows that various studies have been conducted considering different social parameters which may have bearing with academic achievement of the students but comparative studies are few, especially in West Bengal, considering genders. This present study would consider the gender inequality in Madhyamik results of the State i.e., West Bengal. Madhyamik Examination is conducted by West Bengal Board of Secondary Education (WBBSE) and by this examination, students' attainment level is evaluated after completing study of consecutive ten years in school. Students have to follow a scheduled curriculum ascertained by WBBSE to appear in this examination. It is the first public Examination taken by large number of students as the initial door to enter the higher secondary course which will be followed by various graduation/post graduation/technical/vocational/specialized courses at the higher level. Though Government of India entails a special thrust on girls education yet gender disparities persist in enrolment of girls, especially in rural areas and among disadvantaged class of people. Hence, the aim of the present study is to see the level of educational status with respect to gender.

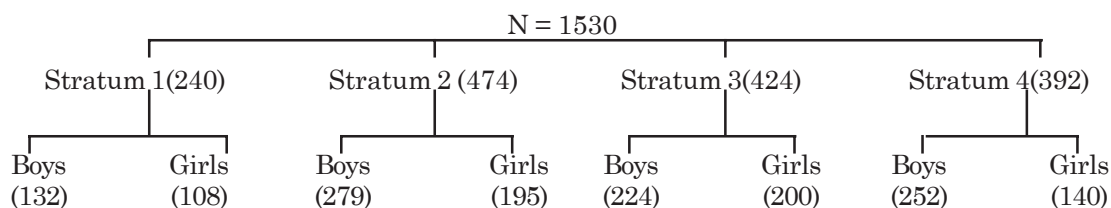
Method Sample

Multistage stratified clustered sampling was adopted in this study. In the first stage, districts of West Bengal were divided into 4 strata. The first stratum was taken as Kolkata. The other districts were stratified into 3 strata. Stratum 2 comprises the districts located in North Bengal which is relatively backward region. The relatively advanced districts of South Bengal are taken into the stratum 3 and the rest backward districts in the fourth stratum. Two districts from each of the strata 2,3,4 were selected by Rao, Hartley and Cochran (1962) scheme by considering number of schools in a district as the district size measure. Thus total seven districts were selected in the following strata:

- Stratum 1 Kolkata district
- Stratum 2 Jalpaiguri and Malda district
- Stratum 3 Howrah and Hoogly district
- Stratum 4 Medinipur and Bankura district

Fifteen Boys' schools and ten Girls' schools were selected randomly (SRSWOR) from each selected district except that from Medinipur and Kolkata. For these two districts, twenty four boys' schools and twelve girls' schools were selected. As a result, 197 schools were selected for the purpose of this study. The medium of instruction in all selected schools was Bengali. District-wise numbers of schools and names of schools were available from a list published by WBBSE (1989). Around ten students were selected following SRSWOR per school from all the students who appeared in Madhyamik Examination

from that school. Total number of students sampled was 1530 (Boys = 887 and Girls = 643). Stratum-wise and gender-wise no.of students selected from Madhyamik examinees of selected schools are presented below.



Instruments

Detailed mark sheets of all the 1530 students who appeared in the Madhyamik Examination were collected from the WBBSE. The marks obtained by the students in this Examination was considered as the academic achievement score of the student.

Socio-economic information of them were collected through a structured schedule from a random sample of those students from each selected school.

Analysis

It is observed from Table 1 that proportion of girls are significantly less than the proportion of boys for the entire sample. Major reasons for such significant difference appears to be lesser girl students in the schools belonging to underprivileged strata like stratum 2 (consisting of Jalpaiguri and Malda) and Stratum 4(consisting of Medinipur and Bankura).

Table 1: Stratum Wise Distribution of Proportion of Boys and Girls

Gender	Stratum 1	Stratum 2	Stratum 3	Stratum 4	Total
Boys	0.55	0.59	0.53	0.64	0.58
Girls	0.45	0.41	0.47	0.36	0.42
Difference (Proportion of Boys-Proportion of Girls)	0.10	0.18*	0.06	0.28*	0.16*

*Significant at 1% Level

Action may be initiated for encouraging enrolment of girls students and ensuring that they continue at least up to school leaving examination. In other words higher enrolment and lower drop out rate are required.

From the Table 2 it is observed that χ^2 value with 1 df for association of the two attributes namely academic achievement and gender is 0.0037 which is insignificant. Thus the academic

Table 2: Academic Achievement with Respect to Genders

Gender	Pass	Fail	Total
Boys	567	320	887
Girls	412	231	643
Total	979	551	1530

χ^2 value with 1 df = 0.0037

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achievement in Madhyamik Examination in terms of pass and fail does not appear to be associated with gender.

Then attempt was made to find association between genders and level of academic achievement. The result is presented in Table 3.

Table 3: Association between Gender and Academic Achievement

Gender	1st Division	2nd Division	3rd Division	P Division	Failed	Total
Boys	168	244	79	76	320	887
Girls	89	196	82	45	231	643
Total	257	440	161	121	551	1530

χ^2 value with 4 df = 13.32

The χ^2 value of association for the 5 X 2 contingency table is 13.32 with 4 df. The obtained value of χ^2 at 1% level exceeds the tabulated value of 13.28.

The association of gender with academic achievement in terms of pass and fail was not significant. However, gender does play a role in level of academic achievement in terms of 1st Division, 2nd Division, 3rd Division, P Division etc.

It appears, boys group exceeded the girls counter part in obtaining 1st Division marks. While 18.94% boys passed in 1st Division, only 13.84% girls were able to obtain such 1st Division marks.

The aggregate achievement for boys is slightly higher than for girls. This pattern holds true both subject wise and stratum wise. Results are presented in Table 4.

Table 4: Average Marks Obtained by Boys & Girls in Each of the Seven Subjects and Total

St	Gender	Beng	Eng	Math	Ph Sc	Life Sc	Hist	Geo	Total
1	Boys	44.54	38.16	42.80	46.13	49.33	42.08	43.45	42.56
	Girls	45.00	35.16	38.16	44.73	52.88	41.37	41.56	41.42
2	Boys	34.57	24.36	29.04	32.32	37.22	32.91	32.91	31.03
	Girls	36.36	23.16	27.64	32.77	38.67	33.95	31.17	31.13
3	Boys	45.85	34.99	44.61	47.18	53.69	42.71	45.81	43.73
	Girls	47.60	32.17	39.35	42.94	52.32	43.93	41.08	41.60
4	Boys	42.42	28.79	37.89	41.92	48.61	37.39	38.67	39.10
	Girls	41.60	26.32	33.51	38.73	46.94	37.08	35.16	36.65
WB	Boys	42.16	43.20	38.63	42.01	48.16	38.49	40.12	39.24
	Girls	43.20	28.53	34.98	39.58	47.82	39.48	37.12	37.83

It is evident from the results presented in Table 4 that some subjects reveal wider gender gaps in academic achievement.

It is revealed from Table 5 that average total marks for the boys group was higher in comparison to the girls group. However, Standard Deviation (SD) for boys group was also higher.

Equality of mean of total marks (out of 100) for boys group and girls group was tested by 't' ratio and the value of t-statistic was found to be 1.57 with df 1528 which is insignificant.

Table 5: Average Marks (out of 100) Combining all Subjects and SD

Gender	Mean	SD
Boys	39.24	17.76
Girls	37.83	16.58
Overall	38.65	17.28

t = 1.57 with df 1528

Thus, average total marks for the boys group and the girls group are not significantly different. This tallies with our inferences with 2X2 contingency table for gender and overall performance in terms of pass and fail.

Total average marks (out of 100) was different for various strata-gender combination (Table 4). Hypothesis regarding equality of mean of boys group and girls group for each strata was tested using t- statistic. The 't' values are presented in Table 6.

The analysis shows that average total marks of the boys group and the girls group were significantly different for all strata except the 2nd strata. In other words gender affected the academic achievement in three out of four chosen strata. However, insignificant 't' value for the stratum 2 probably needs to be probed further considering demographic subgroups, SC/ST students, income parameter of the families of the students etc.

Table 6: Average Marks (out of 100) for Gender Vis-à-vis Strata

Strata	df	t value
1	238	3.47*
2	472	0.064
3	422	2.43*
4	390	3.75*

* Significant at 1% level

Table 4 depicts subject wise average marks for each strata-gender group. 't' ratios were found to test equality of mean for boys group and girls group for each subject. For each of Bengali and History average marks obtained by the girls group were higher. Corresponding 't' values were found to be 3.03 and 2.86 respectively. Careful focusing on the subject wise average marks, it was observed that girls performed marginally better in subjects like Bengali and History. This pattern is more or less similar in advanced as well as in backward districts. This could be due to higher recall ability of the girls. However, for subjects Mathematics, Geography and Physical Science average marks for boys group were found to be significantly higher in comparison to the same for the girls group in advanced as well as backward districts. Corresponding 't' values were 3.68, 3.13 and 2.78 respectively. Stipek and Granlinski (1991) indicated that poor performance in Mathematics were related to the girls' lower expectations for themselves because of their inability to do Mathematics. Gill (1994) and Swetman (1995) identified girls' negative attitude towards Mathematics. For subjects like English and Life Science, 't' values were found to be insignificant.

Conclusion

Gender bias appears to be a major constraint for unequal opportunities for acquiring education. Possible reasons could be that pressure for socialization, job possibility through education etc. are more intense for the boys than girls. In India, generally boys are perceived to be wage earners and education is a means to facilitate wage earning.

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It is revealed from the analysis that average marks obtained by boys group and girls group did not differ significantly. However, significant differences were observed in average marks of boys and girls group for various regions having various degree of urbanisation. In other words, process for development for boys and girls in India do not appear to be equal. Need for further study is felt to analyze the performances of boys and girls group subject wise, region wise through MANOVA.

The findings also include that boys did better in some subjects like Mathematics, Geography and Physical Science. Similarly, girls group performed better in subjects like Bengali and History.

Appropriate action plan may be drawn up for encouraging higher enrollment of girls students and ensuring level playing field for the girl students so that they continue up to school leaving examination and beyond.

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