

Academic Achievement of KGBV Hostel and Parental Home Girls in the Subjects of English, Mathematics and Science

¹Ms. Sita Devi & ²Dr. Vivek Nath Tripathi

¹UGC-Senior Research Fellow, Deptt. Of Education, H.P.U. Shmla-171005 (India)

²Assistant Prof., Baba Sahib Bhim Rao Ambedkar University, (A central University) , VidyaVihar Rai Bareli Road, Lucknow (India)

ARTICLE DETAILS

Article History

Published Online: 12 June 2019

Keywords

Academic achievement, KGBV hostel girls, Parental home girls.

ABSTRACT

The present study was undertaken with an objective to compare the academic achievement of the girls staying in KGBV hostels attached to the nearby schools (KGBVs) and the girls who are staying with their parents (Parental home). For this a sample of 100 KGBVs and 100 Parental home 8th grade girls was taken from seven schools attached with KGBVs under model-III functioning in District Chamba of Himachal Pradesh. Achievement tests constructed and standardized by the investigator to measure the achievement of the girls in the subjects of English, Mathematics, and science were used. The findings of the study indicate that there is no significant difference in the achievement of KGBV girls and Parental home girls in the subjects of English and Mathematics. However, there is a significant difference in the achievement of KGBV and Parental home girls in the subject of science. The Parental home girls attain significantly higher in the subject of Science as compared to KGBV girls.

1. Introduction

The main focus of educative process in the 21st Century is to improve the performance or learning outcomes of the students. Learning outcomes of the students have become a phenomenon of interest to all and these are measured with the help of their academic achievement. The academic achievement is one of the most important factors in assessing the quality of education. Moreover, the social and economic development of a country is directly linked with student academic performance. The students' performance (academic achievement) plays an important role in producing the best quality graduates who will become great leaders and manpower for the country, thus responsible for the country's economic and social development (Ali, et.al , 2009). It forms the main basis of admission and promotion into the class and important for obtaining degree and getting a job.

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. Dictionary of Education by Good (1973) defines that academic achievement is the "Knowledge attained or skills developed in the school subjects, are usually designed by test scores or by mark assigned by teacher or by both." Hawes and Hawes (1982) defined academic achievement as the successful accomplishment or performance in particular subjects, areas or courses, usually by reasons of skill, handwork and interest typically summarized in various types of grades, marks, scores or descriptive, commentary. It means the students' achievements in the academic subjects in context to their knowledge or competence in school tasks measured by standardized tests and expressed in grades based on pupil's performance. It generally refers to the levels of success attained in some specific or general area concerning scholastic or academic work (Steinberger (1993).

Academic achievement as measured by the GPA (grade point average) or by standardized assessments designed for selection purpose such as the SAT (Scholastic Assessment Test) determines whether a student will have the opportunity to continue his or her education (e.g., to attend a university). Therefore, academic achievement defines whether one can take part in higher education, and based on the educational degrees one attains, influences one's vocational career after education. Besides the relevance for an individual, academic achievement is of utmost importance for the wealth of a nation and its prosperity (Steinmayr , Meißner , Weidinger and Wirthwein, 2014).

The educational needs of the girls in KGBVs from SC, ST, OBC, minority and BPL families are a challenge to the educational planners, academicians and teachers. Most of the KGBV girls have had a break in their schooling due to family or other circumstances. Such girls are likely to be lagging behind academically.

Shukla and Sanyal (2008) undertook a comparative study of achievement levels of the girls of Kasturba Gandhi Balika Vidyalayas and girls of Parishadiya upper primary schools and found that the achievement scores of girls of Kasturba Gandhi Balika Vidyalaya (total as well in terms of their social categorization) was significantly higher than those of the girls of Parishadiya upper primary schools, in all the three subjects i.e. languages, mathematics, and social sciences.

Devi, Mayuri and Kavithakiran (2014) undertook a study on learning outcomes of girl children studying in KGBVs and found that 88 percent of girls perceived that KGBV helped in their personality development. Some girls expressed little difficulty in understanding. In scholastic achievement the level of girls was average. Only 10 percent children were in 'A' grade'.

The efficacy of Kasturba Gandhi BalikaVidyalaya (KGBV) on academic performance of children in Assam was studied by Gogoi and Goswami (2015). 529 numbers of the girls had appeared in the term end evaluation at KGBVs. Out of them, 12.29 per cent earned A grade, 27.98 per cent B grade, 40.45 per cent C grade and 19.28 percent D grade in the selected KGBVs. As the class eight girls had studied for three years in the KGBVs, a significant difference among the girls achievement in marks at all the subjects at entry level and exit level was observed.

Kavithakaran and Devi (2015) studied the academic achievement of Girls studying in KGBVs. The finding of the study revealed that very few (10 percent) KGBV girls were good in their studies achieving A+ grade. Most of the girls were found to be average and low in their studies. In English it was found that many girls were performing poorly.

Singh and Singh (2017) conducted a study on Hindi language competency of KGBV Students in Bihar. Findings of the study indicate that students of minority group showed lower performance (32 percent) as compared to state average (39.85). Performance of ST students was better than that of SC and OBC students. Though only four students in general category were available, their performance was better than the remaining groups.

A cursory look at the review of the literature indicates that no investigation has been undertaken in the state of Himachal Pradesh to study the academic achievement of KGBV hostel girls in the subjects of English, Mathematics and Science in comparison to Parental home girls. To fulfill this gap, the present study was undertaken.

2. Objectives

1. To compare the academic achievement of 8th class KGBV hostel and Parental home girls in the following subjects:
 - i). English
 - ii). Mathematics and
 - iii). Science
2. To Compare the Attainment of different levels of academic achievement by KGBV hostels and parental home girls in the subjects of:
 - i). English
 - ii). Mathematics and
 - iii). Science

3. Hypotheses

1. There is no significant difference in the mean scores of academic achievement of 8th class KGBV hostel and Parental home girls in the following subjects:
 - i). English
 - ii). Mathematics and
 - iii). Science

2. There is no significant difference in the Attainment of different levels of academic achievement scores by KGBV hostels and parental home girls in the following subjects:

- i). English
- ii). Mathematics and
- iii). Science

4. Operational definition of the terms used

Academic achievement: The scores obtained by the 8th grade girls on the achievement tests in the subjects of English, Mathematics and Science constructed and standardized by the investigator herself.

KGBV hostel Girls: Girls who are staying in KGBV hostels and studying in the attached government schools under Model-III

Parental home Girls: Girls living with their parents and studying with KGBV girls in the same government schools.

5. Method

Descriptive survey method was used in the present study.

6. Population/Sample

Out of the districts namely Chamba, Sirmaur and Shimla where KGBVs are functional, District Chamba was selected to take a sample for the study as eighty percent of the KGBV schools are functional in this district. All the KGBV schools except one not accessible due to weather conditions were taken for the study. From all of these schools, 100 eighth grade girls staying in KGBV hostels and 100 staying in parental homes were taken for the study.

7. Tools

Achievement tests constructed and standardized by the investigator herself in the subjects of English, mathematics and science were used to measure the academic achievement of the girls.

8. Statistical Techniques Used

Means, Standard deviations, and critical ratios were computed to compare mean scores achievement and percentages to compare the attainment of different levels of academic achievement by KGBV hostels and parental home girls.

9. Analysis And Interpretation

1. Comparison of the academic achievement of KGBV hostel and parental home girls in the subjects of English, Mathematics and Science

The computed values of means, standard deviations, SE_D and CR for the comparison of the academic achievement scores of KGBV hostels and Parental home girls in the subject of English, Mathematics and English are given in Table-1 as under:

Table-1
Means, standard deviation, SE_D and CR for the comparison of achievement scores of KGBVs and Parental homes girls in the subject of English, Mathematics and Science

Subjects of Study	Comparative Groups	N	M	σ	SE _D	Critical Ratio (CR)
English	KGBV Girls	100	33.64	15.52	2.21	1.04
	Parent home Girls	100	31.35	15.74		
Mathematics	KGBV Girls	100	25.51	6.48	0.92	0.39
	Parent home Girls	100	25.87	6.50		
Science	KGBV Girls	100	35.77	10.14	1.67	2.92*
	Parent home Girls	100	40.65	13.28		

*Significant at 0.05 level of significance for 198 df

Academic achievement in the subject of English

From Table-1, it is evident that that computed CR-value for comparing the academic achievement of KGBV and Parent home girls in the subject of English came out to be 1.04 which is not significant at 0.05 level of significance for 198 df. This indicates that there is no significant difference in the achievement of KGBV and Parental home girls in the subject of English. Although there is no statistically significant difference between the mean achievement scores of both the groups, yet the trend of the means shows that the mean score of achievement of the KGBV girls (33.64) in the subject of English is higher to that of the Parental home girls (31.35). This trend indicates higher academic achievement of KGBV girls in the subject of English as compared to Parental home girls.

Academic achievement in the subject of Mathematics

Table-1 shows that computed CR-value for comparing the academic achievement of KGBV and Non -KGBV girls in the subject of Mathematics came out to be 0.92 which is not significant at 0.05 level of significance for 198 df. This indicates that there is no significant difference in the academic achievement of 8th class KGBV and Parental home girls in the subject of Mathematics. Near about equal mean scores of KGBV and Parental home girls also indicate no difference in the achievement in the subject of Mathematics. In other words,

KGBV girls are at par with Parental home girls in their achievement in the subject of mathematics.

Academic achievement in the subject of Science

Further, from Table-1 it can be seen that computed CR-Value for comparing the achievement of KGBV and Non -KGBV girls in the subject of Science came out to be 2.92 which is significant at 0.05 level of significance for 198 df. This is indicative of the fact that there is a significant difference in the achievement of KGBV and Parental home girls in the subject of Science. The trend of the mean scores shows that the mean achievement of Parental home girls (40.65) is significantly higher to that of the KGBV girls (35.77). In other words, Parental home girls have higher achievement in the subject of science as compared to KGBV girls.

2. Comparison of KGBV hostel and parental home girls on academic achievement levels in the subjects of English, Mathematics and Science

The frequencies and percentages of the KGBV hostel and Parental home girls having academic achievements scores at different levels of academic achievement by KGBV hostel and parental home girls in the subjects of English, Mathematics and Science are given in Table-2 as under:

Table-2
Attainment of different levels of academic achievement by KGBV hostel and parental home girls in the subjects of English, Mathematics and Science

Subjects	Measures	Levels of Achievement Scores					
		60% and above		50% to 59% scores		49% and below	
		KGBV	Parental home	KGBV	Parental home	KGBV	Parental home
English	f	25	24	15	11	60	65
	%	25.00	24.00	15.00	11.00	60.00	65.00
Mathematics	f	33	31	29	29	38	40
	%	33.00	31.00	29.00	29.00	38.00	40.00
Science	f	12	20	10	13	78	67
	%	12.00	20.00	10.00	13.00	78.00	67.00

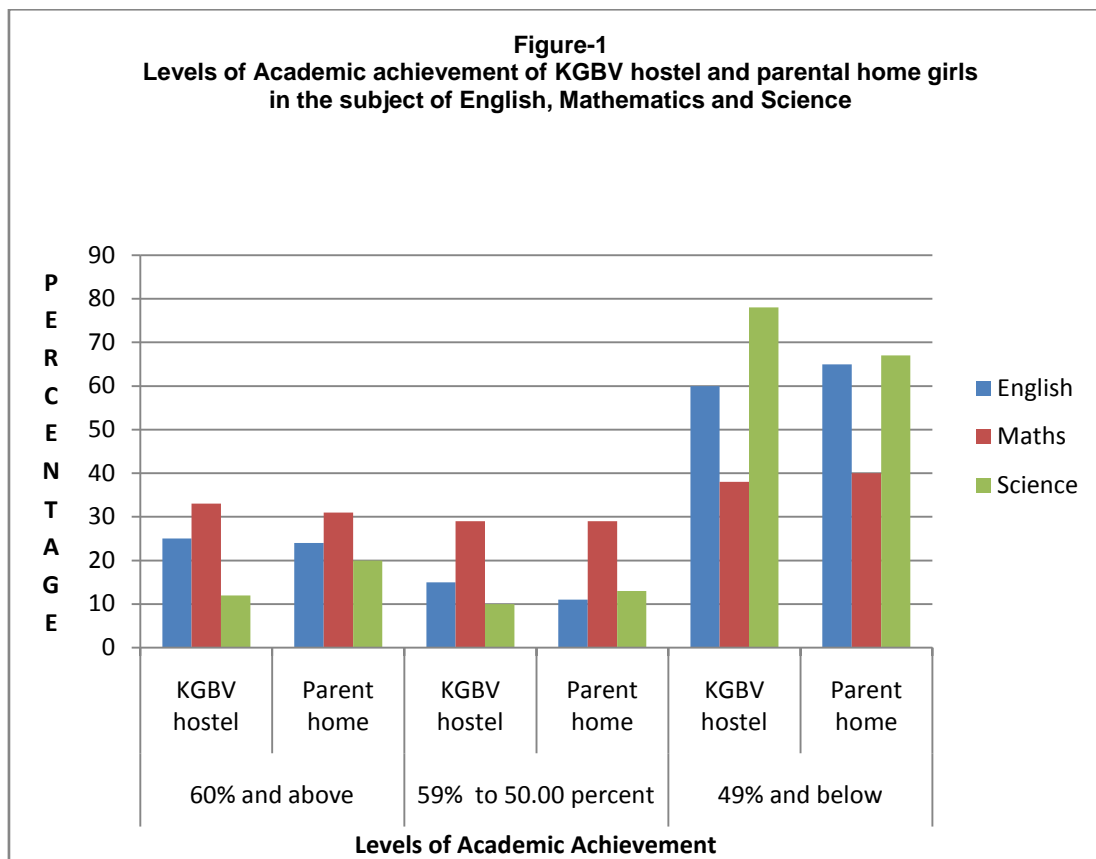
Levels of academic achievement scores in the subject of English

From Table-2, it is evident that 25.00, 15.00 and 60.00 percent of KGBV hostel girls and 24.00, 11.00 and 65.00 percent of parent home girls had academic achievement scores of 60 percent and above, 59.00 percent to 49.00

percent and 49.00 percent and below score respectively in the subject of English. Percentages of the KGBV hostel girls attaining 60 percent and above and 59 to 50 percent score are higher to that of parental home girls. Further the percentage of parental home girls is higher to that of the KGBV hostel girls attaining 49 percent and below marks in the subject of English.

This is indicative of the fact that the parental home girls attain less percentage of score in the subject of English as compared

to KGBV hostel girls. This can also be observed from the Figure-1.



Levels of academic achievement scores in the subject of Mathematics

Table-2 shows that 33.00, 29.00 and 38.00 percent of KGBV hostel girls and 31.00, 29.00 and 40.00 percent of parental home girls attained 60 percent and above, 59.00 percent to 50.00 percent and 49.00 percent and below scores respectively in the subject of Mathematics. Percentage of the KGBV hostel girls having academic achievement as 60 percent or above is higher to that of parental home girls. Further, the percentage of both the groups having academic achievement score 50 percent to 59 percent is near about the same. However, the percentage of the KGBV girls having academic achievement score as 49 percent or below is less to that of the parental home girls. From this, it can be said that the academic achievement scores in case of parental home girls are less in comparison to KGBV hostel girls. Figure-1 also depicts the same trends.

Levels of academic achievement scores in the subject of Science

Further, Table-2 is indicative of the fact that 12.00, 10.00 and 78.00 percent of KGBV hostel girls and 20.00, 13.00 and 67.00 percent of parental home girls attained 60 percent and above, 59.00 percent to 50.00 percent and 49.00 percent and below scores respectively in the subject of Science. Percentages of the parental home girls having academic achievement as 60 percent or above and 59-50 percent is higher to that of KGBV hostel girls whereas the percentage of the KGBV hostel girls having academic achievement as 49 percent and below is higher in comparison to that of the

parental home girls. From the above analysis it may be inferred that the academic achievement scores of parental home girls are higher in comparison to KGBV hostel girls. This is also very clear from Figure-1.

10. Results and discussions

1. Statistically there is no significant difference in the mean achievement scores of both the groups of girls i.e. KGBV and Parental home, yet the trend of the means indicates higher mean academic achievement scores of KGBV girls in the subject of English as compared to Parental home girls. Further, the attainment of the scores at different levels of academic achievement indicates the same trend i. e. the parental home girls attain less percentage of score in the subject of English as compared to KGBV girls. This may be due to the fact that the KGBV Girls in addition to regular class room teaching in the schools are also taught by the part time teachers in the KGBV hostels for duration of two hours as per the KGBV schedule. This intervention might have been successful in bringing these girls at par with other girls.
2. There is no significant difference in the academic mean achievement scores of 8th class KGBV and Parental home girls in the subject of Mathematics. Further, the percentage of the KGBV hostel girls attaining different levels of academic achievement scores indicate better achievement scores in the subject of Mathematics as compared to that of the

parental home girls. The teaching of Mathematics in the school by the subject teacher and also in the KGBV hostels by the part-time teachers might have been helpful to these girls to understand basic Mathematical concepts and have higher academic achievement scores as compared to parental home girls.

3. There is a significant difference in the mean academic achievement scores of 8th class KGBV and Parental home girls in the subject of science. In other words, it may be said that the academic achievement of

KGBVs girls is significantly poor to that of Parental home girls. Further, the low percentages of KGBV hostel girls in the higher levels of academic achievement scores and high percentage in the lowest level of academic achievement score show that the KGBV hostel girls score low in the subject of Science as compared to parental home girls. It may be due to the non-availability of Science teachers in majority of the KGBV schools, lack of parental support and involvement in the studies of KGBV girls.

References

1. Ali, Norhidayah, Jusoff, Kamaruzaman, Ali, Syukriah, Mokhtar, Najah and Salamt, Azni Syafena Andin (2009). 'The Factors Influencing Students' Performance at University Teknologi MARA Kedah, Malaysia'. Canadian Research & Development Center of Sciences and Cultures: 3(4), 81-90.
2. Devi, U. L.; Mayuri, K. & Kavithakiran, V. (2014). Learning outcomes of girl children studying in KGBVs. Retrieved from: ssa.tg.nic.in/research/Abstract2012-2014 on dated 12-05-2016.
3. Gogoi, S. & Goswami, U. (2015). Efficacy of Kasturba Gandhi Balika Vidyalaya (KGBV) in Assam on academic performance of children. *AJSH-Asian Journal of Home Science*. 10 (1), 161-167.
4. Good, C. V. (1973). *Dictionary of Education*. New York: McGraw Hill Company.
5. Hawes, G. R. & Hawes, L. S. (1982). *The Concise Dictionary of Education*. New York: Van Nostrand Reinhold Company.
6. Shukla, A. & Sanyal, R (2008). A comparative study of achievement levels of Kasturba Gandhi Balika Vidyalayas and girls of Parishadiya upper primary schools. Abstracts of Research Studies in Elementary Education (2003-2009). New Delhi: Research, Evaluation and Studies Unit Technical Support for SSA EdCIL (India) Ltd. 2010, 340-341.
7. Steinberger, E. D. (1993) *Improving student achievement*, Virginia: *American Association of School Administrators*, 1801 N. Moore Street, Arlington, VA 22209-9988 (Stock No. 21-00308).
8. Steinmayr, R., Meißner, A., Weidinger, & F.A., Wirthwein, L. (2014). Academic Achievement, Retrieved from <https://www.oxfordbibliographies.com/view/document/obo-9780199756810/obo-9780199756810-0108.xml> on dated 6-24-2019.
9. Umadevi, L. & Kavithakiran V. (2015). A Study of Academic Achievement of Girls Studying in KGBVs. *PARIPEX- Indian Journal of Research*, ISSN - 2250-19916, 4(3), 6-9.
10. Verma, R. R. ((2008). As quoted in the Proceedings of the National Consultation on Kasturba Gandhi Balika Vidyalaya Scheme (KGBV): A Visionary Initiative. August 11-12, 2008 Report. New Delhi: Department of Women Studies, NCERT., 5.