Impact Of School And Classroom Environment On The Academic Achievement Of Secondary School Students In And Around Delhi Region.

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ABSTRACT

Reducing level of academic performance of secondary school students is increasing in recent days, thus induce the present study to do research. School environment plays a vital role in enhancing the academic performance of the students. Further safe and healthy environment saturated with all learning facilities, and favourable climate, where the students must feel comfortable and able to concentrate on studies to attain high academic performance. Hence the present study attempts to find an impact of school and class room environment on academic performance of students. The aim of the study is to examine how school and class room environment influence academic performance of students. This study will analyse this aspect among the secondary school students studying in NCR and Delhi region. The school environment, which include the classrooms, libraries, technical workshops, laboratories, quality of teachers and their teaching methods, school management, peers, etc. are factors that affect academic achievement of students.

To obtain the objective, the present study used a secondary data source for data collection. Therefore, the study used various databases like different eminent journals were referred to collect the data. After data collection, the study made analysis with respect to collected articles. The study found out favourable school environment is the need to stimulate learning experience to realize better academic achievement. School environment may have negative influence on students’ academic achievement, provided such environment lacks good school climate, instructional materials, discipline, physical facilities and poor teacher quality. Further, negative influence may arise due to poor classroom environment, i.e. small class size and over population of students in classrooms. Otherwise, it could be in the form of poor lighting, inadequate maintenance, and ineffective ventilation system. As a result, with uncomfortable classroom, concentration of the students towards learning might go down leading to poor academic performance. Hence, the study recommends school environment to be well managed to enhance students’ academic performance. Moreover, the educational process of development takes place occurs in physical, social, cultural and psychological environment. Therefore, favourable school environment is the need to stimulate learning experience to realize better academic achievement.

Keywords: Academic performance, School built environment, Secondary school. Class room environment.

INTRODUCTION:

The review explores the impact of School environment of students on their academic achievement, engagement, affective state, well-being and attendance. Previous studies have shown that systems and processes, the school built environment (e.g. basic physical variables), physical environment (e.g. furniture, ownership of space and equipment), products and services (e.g. catering, teacher’s role beyond the classroom) and communication would influence the student learning. According to Zais (2011), school environment indicates the limit to which school settings take care of safety and health of students. In addition, it also includes the physical plant, availability of support system and services towards physical and mental health, including the maintenance of disciplinary procedures. Academic achievement of a student depends on type of school he or she attends. As far as factors of a school are concerned, it indicates about structure of the school and its environment.
Learning experience of a student depends on the institutional environment, where he or she studies. The concern on the part of schools is that they are accountable to the public and society in terms of academic performance. Hence, parameters or factors of school environment have been the focus of this study. There are so many studies having focus on teaching skills of teachers, environment, socioeconomic conditions, and achievement of students (Hoy et al., 2003). It is the school environment that sets the tone of academic performance (Barry, 2005). Crosnoe et al. (2004) in their study have emphasized on two structural parameters for both public and private schools. Usually, private schools focus on getting more financial resources rather than size as compared to public schools. Thus, the fund here makes the trick to attain better academic result as students get exposure to computers, library, and related study materials (Eamon, 2005). Experience of teacher also counts for attaining academic performance. If the student to teacher ratio is good, then also it would yield in better academic result (Bali & Alvarez, 2003). A student’s interpersonal relation with teacher matters to have right school environment. Crosnoe et al. (2004) in their study opined that atmosphere of school remains good if students trust their teachers and vice-versa. The aspect of trust here acts as motivational point, which in turn yields in better performance for students (Eamon, 2005). Another factor significant in school environment is its policies and programmes to which the parents and students including the administrators must feel comfortable in adhering (Crosnoe et al., 2004).

There are lot of previous studies conducted earlier noticed the academic performance among different levels of schools including government, CBSE and few in private schools. Although those studies focused only on the specific factor of school level environment (e.g. Physical facilities) on academic achievement. Other few studies have focused on school environment in general but not to specific factors which would influence the learning environment. Few studies did purely focus on academic achievement and its causative factors as school environment. However, it is well known that there are other factors also influences academic achievement of the student, such as school attendance, the well-being of students, an affective state which has not been studied holistically specifically in India. Hence the present study attempt to find the impact of school environment on academic performance of school students.

METHODOLOGY

The present study seeks to investigate the relationship between school environment and academic performance of the secondary school students. A large number of researchers in previously carried out the research in terms of academic performance and school and class environment via using both quantitative and qualitative methods, however those findings give reciprocal and bidirectional view. Further, quantitative research involves estimating and examining the data which is helpful to measure the relationship between the variables. However, it needs a huge number of sample and expensive one. While qualitative research involves direct observation via interview and it is a time taking process. Both these methods are not suitable for our research. Hence, the researcher used secondary data collection methods due to various advantages. It involves low cost, time and effort and also has the option to reuse. In this method, several secondary sources include peer journals, magazines, textbooks and academic databases include EBSCO, Elsevier, PROQUEST, Emerald, Springer, and other indexed journals with the following keyword strategies such as school built environment, system and processes, product and services, academic performance or secondary schools.

Definition of variables used:

School Physical facilities

The physical learning environments with regards to physical structures have linkage to spaces and equipments within the school premises involving furniture, equipment, layout, display and storage and ICT materials. According to the OECD efficiency framework (OECD, 2013), physical resources are defined as learning spaces, materials and technology.
Systems and processes
This involves roles and responsibility and functions of staffs at all managerial level, students and community including attitude and behaviour (OECD, 2013).

School built environment
This involves temperature, air quality, noise, light, colour and related features of school (OECD, 2013).

Product and services
This includes catering facility, time to eat, access to water (Burke & Grosvenor, 2003), involvement of community, adult education, and extra-curricular activities (OECD, 2013)

Academic attainment: There are standardised tests and observation by teachers to assess the academic achievement of students.

Engagement: There should be focus on the levels of attention, on-task observation of behaviours and how far distracted or disruptive behaviour is getting reduced.

Affect: This variable comprises of positive change in self-esteem for students and teachers, more self-concept on academic, elevation in mood and motivation.

Attendance: This variable counts lesser instances of coming late or absenteeism.

Well-being: This variable influences the physical-self related to discomfort including minor ailments as well as major ones.

REVIEW OF EMPIRICAL STUDIES

In the past few years, there have been increasing concerns of few educationalists about the downward trend of standard education in schools. The academic performance of students could be determined as the display of skill and knowledge obtained by the students as reflect in scores or grade getting at the end of the examination. Previous reports suggested that the lack of academic performance is mainly as one of the reason is poor class room and school environment. Hence the present study attempt to identify the specific factors of the School-Class room level environment that influence student level engagement and academic attainment. Further, there are an only limited number of studies focused on the impact of school environment on academic performance in more accurate to secondary schools in Delhi region. Though, the result of those studies is inconclusive and reciprocal.

Hence the present section reviews the previous articles with respect to identifying how school environment impacts student’s academic achievement. Hence the present study provides the good scope for future researchers. Therefore, the first section in this review describes the link between classroom and academic performance of students.

Link between classroom and academic performance of students:

The classrooms form a very crucial part of the school environment, as no meaningful learning can take place where no classrooms exist. It is the hub of every learning interaction between the teacher and his students. According to Oriere (2007) the teaching learning process takes place mostly in the classrooms. Because of the complexity of working out a uniform ratio for secondary schools, the National Policy on Education does not include a single prescription, but the National Council on Education (NCE) subsequently laid down that secondary school class size should not exceed 35 pupils (UNESCO, 2000).

However, as observed by Alude et al. (2010), classrooms have now become human poultry, where more than 50 students are canned in one classroom which is at variance with the expected. Subsequently, Afolabi (2010) observed that in a majority of Nigerian secondary schools, the classroom accommodation is grossly inadequate. As a result of the large enrolment in these schools, the classrooms designed for only thirty or forty students in most cases as well as the chairs and desks are not enough as students were found sharing chairs, standing up, or sitting on windows or broken desks. When students are overcrowded like this, there is a stalling of the teaching learning process and a...
disruption of the children’s mental activity, a situation that generally militate against effective teaching and intellectual development of the children. In many of these schools, classrooms, libraries and laboratories there is no learning material thereby lead to decline in academic standards and achievement (Aluede et al., 2009). Classroom lighting plays a particularly critical role in student performance (Phillips, 1997). Obviously, students cannot study unless lighting is adequate, and there have been many studies reporting optimal lighting levels. Tanner (2009) cites results of seventeen studies from the mid-1930s to 1997. The consensus of these studies is that appropriate lighting improves test scores, reduces off-task behaviour, and plays a significant role in students’ achievement. Recently there has been renewed interest in increasing natural daylight in school buildings. Until the 1950s, natural light was the predominant means of illuminating most school spaces, but as electric power costs declined, so too did the amount of day lighting used in schools.

From this, it is clear that the classroom environment has an impact on academic performance of the students. Hence the next section would find the relation between school and classroom environment and academic achievement of students.

Relation between school and classroom environment and academic achievement:

School environment should be free from risk of any kind and should promote health. In the positive school environment only the students excel in their study as they develop positive attitudes towards learning. Students who feel comfortable in their respective classroom and school environment feel to be a part of school community. Reason, the stress free environment ensures to concentrate on study and they refrain from indulging in risk-taking activities. Studies carried out on school environment have identified that better interpersonal relationships and opportunities for optimal learning have the potential to expect better achievement. (Megan, 2002, p. 58) conducted a study on school environment in high-risk urban environments, where the researcher found out that a positive and supportive school climate that understands the culture could enhance academic success. Researchers have also identified that positive school environment acts as protective factor, where high-risk students also will find a supportive learning environment while minimizing their anti-social behaviour. A positive school environment finally yields positive results to even school personnel (Odeh et al., 2015).

In addition to the above, presence of features like trust, mutual respect, obligation and welfare concern in school and classroom environment make tremendous impact on interpersonal relationships between learners and educators (Mendler, 2017). Students feel secure themselves if there is a safe and collaborative learning environment, where teachers also serve their profession for a longer period. This is how in a conduction learning environment, both the students and teachers would find themselves comfortable, which in turn would bring the desired results (Freiberg, 1998). Otherwise, learning and development of students would be hampered. Therefore school environment well organized in every aspect would meet the objectives successfully (Singh, 2006). Thus, school environment not only assists in attaining higher academic achievement but also in developing better socio emotional health (Freiberg et al., 1999).

Thus, there are so many factors that have potential to influence academic performance in a school. Now consider the location of school. For instance, a school is located in noise area like heart of a city or industrial area or airport; all these locations will definitely impact the classroom environment both in terms of teaching and learning. So, parents should not expect better performance for their children. Onukwo (2004) has highlighted in his study that it is the conducive environment only would assist in academic growth of students. Further, they would feel happy if their school is located in a peaceful environment. It has been noticed that noisy environment leads to less focus on study, which results in poor performance. Teachers in the noisy area won’t feel comfortable in imparting teaching. Apart of the poor performance, students would lose their personal control. Academic performance also gets affected to large extent if the students are not motivated enough and with poor economic background (Fraser, 1985). Finally, all these factors would hamper the intellectual development of students. Further, the learning material at the disposal of the students in the classroom and school environment matter in achieving their academic goals. Therefore, Onukwo (2003) is right in suggesting that
instructional material like audio-visual, books, and computers used for teaching will bring in better academic result. Thus, classroom without learning material will lead to poor academic performance. This is how learning environment is related to academic performance of students.

These studies were analysed in the perception of school students rely school and classroom environment for their academic achievement. In addition to this, some determinants that impact the academic performance of students was discussed in next section.

Determinants of academic performance of students:

Education is the key to progress of a nation. Hence, it becomes significant to understand the factors responsible for influencing the performance of learners. There are various studies on academic performance, where certain factors were identified such as quality of school, teaching quality, remuneration of teacher, size of class, and characteristic of learners.

Remuneration of teacher:

Remuneration here indicates about teacher’s payment for his or her service during employment (Investopedia, 2017). Here, the need is to determine the role of payment on academic performance of students. Geeta Kingdon and Teal (2002) conducted a study on Indian schools to examine that how performance-related pay is related to achievement of student. The study findings provided mixed results. In the case of private schools, performance-related pay makes impact on student achievement. However, there was no evidence like this in the case of public schools. Thus, it could be concluded that well-paid teacher pay more emphasis on his or her work, which in turn induces better performance by students. Though the salary might not be the motivating factor for teachers; nonetheless, it has a significant role on academic performance of students.

Quality of Teacher:

Be it education policy or any aspect of school, all revolves around teacher. In addition, the prime role played by a teacher is felt by other stakeholders like parents and administrators in restoring the quality of school. Teacher’s quality is assessed in terms of what they can do in context to their contribution to school. Here the teaching quality matters and it is evaluated on the basis of student’s performance (Sanders, 1999).

Qualification of Teachers:

Here the qualification possessed by a teacher counts as a determinant of student’s performance. There are certain studies cite that additional qualification of teacher has a positive correlation with achievement of student, however, it is not true always (Greenwald et al., 1996). The study conducted by Goldhaber and Brewer (2000) identified that an advanced degree of a teacher is not necessarily related to increased performance of students. Nonetheless, the advanced degree possessed by a teacher might impact to some extent on the performance of students. Again, it was identified that it is the level of the degree and not the subject of the degree has the potential to impact student achievement.

Experience of Teachers:

There are various studies on teaching experience making impact on student performance. Hanushek (1981) reviewed the previous studies to analyse this aspect, which provided mixed results. In some studies, it was identified that that additional years of experience yielded in positive result. However, in some studies, the outcome was negative in terms of student performance. Thus, it could be stated that experience of a teacher will lead to better performance of student is not true but it has its contribution (Hanushek, 1981).

Absent of teachers:

Teacher absenteeism has also got attention in various studies being the determinant of student performance. The study by Chaudhury et al. (2006) conducted in the developing countries such as
India, Peru, Bangladesh, and so on identified that absence of teachers leads to lower scores of students in the examination. Therefore, it could be concluded that teachers have significant role in the educational development of a nation as identified by Ukeje (1970) and Fafunwa (1969). Moreover, one can’t deny the fact that in every aspect, there is contribution of teacher; be it in terms of facilities available in school or content material or school environment, teacher plays a decisive role in setting the order for attaining academic achievements. Thus, with the availability of necessary facilities in a school, the learning environment becomes very conducive for students and educators. Fagbamiye (1977) identified that schools having experienced and qualified teachers in general are better equipped with facilities such as school buildings, library, and equipment as compared to other schools without experienced staff.

FINDINGS AND DISCUSSION

On the basis of collected reviews, the following results were drawn:

• The school and classroom environment creates great impact on students’ academic performance. The availability of necessary facilities in a school, the learning environment becomes very conducive for students and educators. Singh (2014) conducted a study to ascertain the factors responsible for making impact on the academic achievement like infrastructure facility, demography of places, geographic location, lack of trained teacher, and adequate infrastructure.

• The condition of School and classroom physical learning environment had great impact on students’ learning and motivation including the motivation to actively participate in academic activities; it can influence their personal behaviour and their school attendance.

• Both parents and school administrators would aware of the impact of school environment on academic performance of secondary school students of Delhi and NCR region.

CONCLUSION

This study concludes the necessity of strengthening school environment so as to realize better academic performance of students. In addition, social ability, healthy status and moral values too get influenced if there is an adequate school environment. Hence, it is concluded that physical environment of a classroom contains size and structure of classroom, seating arrangement, technology used for instruction, and other amenities like room heater, curtain, ceiling fans, cupboard, ventilation, and lighting system.

RECOMMENDATIONS

• The following recommendations and suggestions were given on the basis of findings: The study concluded by recommending that government and other education stakeholders should give priority attention to creating positive learning environment in schools for students' successful learning and academic development.

• This study will provide valuable information to school administrators, educators, researchers, as well as parents on factors of academic achievement goals in support of students. Consequently, the identified factors could be introduced in the learning environment to augment educational outcome of the students and school.

• This study is significant due to the fact that the stakeholders of school would aware of the reality and will make necessary change to create a favourable school and classroom environment. The study findings again would assist in modifying the existing curricula and create strategy for minimizing the negative effects of the environment. Therefore, educators want the school must contain all the resources at its disposal for providing better education.
With all these needs in sequence get fulfilled, then another need arises, i.e. to utilize the resources to the fullest so that students will perform better

References


