

BUILDING UP FEMALE SCIENCE STUDENTS' SOCIAL PROVISION: EXPLORING SCIENCE TEACHERS' PERSPECTIVES OF THE IMPACT OF CO- CURRICULAR ACTIVITIES ON FEMALE SCIENCE STUDENTS' SOCIAL DEVELOPMENT AFTER THE COVID 19

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ABSTRACT

Co-curricular activities are a compulsory part for female science students at every level to expand their abilities in various ways. The study aims to explore the role of co-curricular activities in the social development of female science students at the higher secondary levels. Co-curricular activities can give early preparation to girls as far as social skills, people skills, identity, and networking among students. This study used a semi-structured interview to explore the science teachers' views on the role of co-curricular activities in the social development of female science students. The sample includes science teachers involved in teaching and organizing various co-curricular activities. Findings showed that both male and female science teachers showed a positive response about the role of co-curricular activities in expanding female students' social skills and networking. According to science teachers, science students participate majorly in activities like painting, speeches, quizzes and photography rather less participate in organizing events or farewell parties. Data indicated that girls take advantage of co-curricular activities mostly from physical activity or brain activity like quizzes. The Science teachers pointed out that the main hindrance for the science students is just because of longer hours study habits, culture; weather, and their typical family settings which do not let them fully participate in co-curricular activities. This study concluded that the co-curricular activities balance female science students' personalities in their academics and social setup. This study recommends parents and Science teachers let the female students participate in more co-curricular activities to develop them socially, as well as academically.

Keywords: Co-curricular, Science Education, Social Development, Events, Networking

INTRODUCTION

Co-curricular activities are a fundamental piece of educational modules. These activities are compulsory for the agreeable improvement of the identity. Prior the activities like amusements, sports, trips, picnics, singing, drawing, painting, and, so on, were excluded from the educational programs and considered Extra-curricular activities. In this exercise, I will comprehend the idea of Curricular and Co-curricular activities, classify-curricular activities, and the significance of sorting out Co-curricular activities in instructive establishments. Encyclopedia of Educational Research (1960) defines school co-curricular activities as, programs and events carrying no academic credit, sponsored and organized by pupils' or students' organizations or by institutions designed to entertain, instruct and /or provide exercise of interest and abilities, subject to some measures of control by the institutions (p. 507). Co-curricular activities are a great source of interaction between students and Science teachers and build up a physical, social, environmental, and interpersonal relationships with people even more than what teachers intend to convey. Indeed the students have potential contributions to the value of education. The students, who are involved in good activities, are influenced positively. Therefore there is a need to explore the teachers' perspective on the impact of co-curricular activities in enhancing their social development after Covid 19. They need more healthy environment and resistance to Covid 19. Hence, Co-curricular activities generate them more active and interactive environment.

Objectives of the Study

There were the following objectives for the study:

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- To explore the nature of the co-curricular activities in which female students participate after Covid-19.
- To explore the role of co-curricular activities in the social development of female students after Covid-19.
- To explore any difficulties in participating in co-curricular activities in the social development of the female students after Covid-19.

Research Questions

The research questions derive from these objectives by asking:

- What is the nature of the co-curricular activities in which female students participate after Covid-19?
- What is the role of co-curricular activities in the social development of female students after Covid-19?
- What difficulties are there in participating in co-curricular activities in the social development of the female students after Covid-19?

Significance of the Study

The focus of the study is specifically on female students. The study seeks to identify the kinds of co-curricular activities currently in use and their role as well as identify any hindrances. In this way, the study may point to the value of such activities and offer guidance in the development and employment of such activities so that potential difficulties can be minimized. A central goal of all learning is the development of understanding and such activities may have an important role here. However, the study may be able to identify a much wider range of benefits for female students in terms of involvement, interest, and supporting the students in their social upbringing.

Background Literature

Madalli (2014) offers a description of co-curricular activities:

The activities that enhance and enrich the regular curriculum during normal school hours. All co-curricular activities are organized with a specific purpose which varies according to the nature and form of such activities.

There are various types of co-curricular activities including academic development activities, quizzes, projects, preparation of charts and models, essay writing and story writing, subject clubs (like social science clubs and geographical clubs), aesthetic and cultural development activities, music, classroom decoration, sculpture, leisure (hobbies) utilization activities. There are also activities like a collection of coins, pictures, and stones, a collection of stamps, photography, making of albums, physical activities, athletics, wrestling, swimming and cycling, indoor and outdoor, morning assembly, scouting, and girl guiding.

Dowshen (2004) expressed the view that co-educational programs can enhance many wider aspects of learning. They can expand knowledge and understanding as well as assist students in learning the skills for learning. They can expand learning into wider areas of everyday life. They can help students in organizing and apply their learning. It is also argued that wider, more generic, skills can be developed. This includes enhancing motivation to learn, deepening a sense of accomplishment, and developing greater self-assurance as well as character improvement (Bresciani, 2005; Feldman, Aper, and Meredith, 2011).

Khan and Iqbal (2014) argued that co-curricular activities can aid the improvement in many fields of personality and mind such as intellectual development, emotional development, social development and aesthetic development. Confidence in scholarly examinations is a significant factor in scholastic success. (Jing wang 2009) hold the view that co-curricular activities will underpin and enhance scholarly execution.

Tan and Pope (2007) also hold the view that co-curricular activities can generate abilities for life: they give learners opportunities to become more involved in their learning and develop new frames of mind and aptitudes. Marsh and Kleitman (2002) go on to see co-curricular activities offering opportunities not afforded in traditional learning. Sitra and Sasidhar (2005) found various benefits that students who partake in co-curricular activities gain when compared to those who are not involved. One of these is enhancing abilities in cooperation with others, a set of skills of generic value for many in a working lifetime characterized by change (Nesan, 2009).

Moreover, Daniyal *et al.*, (2012) suggested that the students who engage in any sort of games gain advantages in terms of shared commitments, and self-reliance. Chickering and Reisser (1993) suggested the value of co-curricular activities in terms of enhanced aptitudes. (Ahmad M1 2015) argue that co-curricular activities can give early preparation for a more healthy environment and networking among students. This may be important in a post-COVID age. Akhter (2020) sees benefits in terms of increased skills in collaboration as well as growing self-assurance. In addition, there is the potential for developing a wide range of social skills. Various authors (Manaf and Fauzee, 2002; Hamid, 2002) go further in holding the opinion that co-curricular activities can enhance an all-encompassing human capital as well releasing extreme giftedness.

In looking at the literature overall, there are several points can be noted:

- (a) If we encourage students to work together and to communicate about their studies, then it is unsurprising that these students will develop enhanced social skills relating to communication and cooperation. These kinds of activities are the norm in many countries but it seems the literature is comparing them to a more sterile environment where education is seen largely in terms of the transfer of information and understanding from teachers to learners. A range of current practices is outlined in Reid and Ali (2020: 311-327) although they are set here in a more formalized way.
- (b) Much of the literature is set in an atmosphere that is looking for a richer educational journey than that offered by the transmission model and is, perhaps, an expression of aspiration for which there is a simple principle. If we build in informal but planned educational activities that move beyond the transmission of information and understandings from teachers to learners, then these educational experiences will inevitably bring an enhanced educational journey.
- (c) Co-curricular activities are not assessed in the formal way that dominates education today. As long as the outcomes of written examinations in sciences are employed in wider societies as evidence for grading success by teachers and schools, notably, there is little incentive to develop co-curricular activities particularly in among science students.

RESEARCH METHODOLOGY

A semi-structured interview was used in this study. The purpose of these interviews is to explore the nature and perceived role of co-curricular activities in the social development of female science students at higher secondary level along with an exploration of difficulties in employing these activities.

An interview guide was developed. The goal was to discover the main co-curricular activities that could be employed in the context of the social development of the female science students understanding in a Pakistan setting. Further questions aimed to look at potential advantages and limitations through co-curricular activities as faced by the science students. As in any semi-structured interview, these questions formed only a framework and both the researcher and interviewee were free to expand and develop as seemed appropriate.

In practical terms, 20 science teachers (male and Female) were interviewed from the schools where both male and female teachers work. This way, both male and female science teachers' opinions were collected. The researcher contacted the science teachers (to arrange a meeting at a mutually agreed time and place. The interviews were individual and were recorded with the consent of the participants. However, the research did make notes with science teachers seeking their demographics as it was deemed necessary. All interview recordings were transcribed and translated into the English language.

Findings from Interview Data

The following themes emerged from the interview Data

The interview recordings were transcribed and the findings were grouped under the three broad areas defined by the objectives and research questions:

- Teachers' perceptions about the role of co-curricular activities in enhancing the social development of female students after Covid-19
- Advantages about of role of co-curricular activities in enhancing social development of female students after Covid-19
- Any limitations for the female science students about the role of co-curricular activities after Covid-19

The data are now discussed under these three broad headings

Perceptions about Role of Co-curricular Activities

The science teachers were asked about the role of co-curricular activities in the social development of female science students. They expressed their better understanding of the co-curricular activities. The majority of science teachers showed positive responses about co-curricular activities. Students use co-curricular activities in developing female students to enhance their abilities and confidence level. For example, T1 said:

Co-curricular activities are good for improving students learning experience at school and college which improves their attendance and increase participation by students in co-curricular activities.

The views of science teachers show that the role of co-curricular activities in the social development of female students is good for improving knowledge. Science teachers indicated that students who participated in co-curricular activities enjoyed an enhanced learning experience and also increased their attendance rate in schools and colleges. The science teachers also referred to enhanced motivation. For example, T4 expressed:

Co-curricular activities are very important for the mental as well as physical health of the students. They give them the confidence to interact with society.

In fact, the science teachers, overall, saw a key role in co-curricular activities as the improvement of mental and physical health. Science teachers had observed that failure to participate in co-curricular activities was linked to a failure to pay proper attention to study. However, this does not necessarily imply cause-and-effect. For example, T3 described:

Female students participate in activities to enhance their confidence level or to interact with society and interaction too after Covid-19.

For example, T8 expressed as: after Covid 19, the social setting is much more need, and students with precaution meet when they perform these activities.

Looking at the overall pattern of responses, these science teachers held the view that a key role of co-curricular activities was the improvement of learning experiences. Specifically, they saw co-curricular activities being able to enhance Science student motivation while improving mental and physical health.

Advantages of Co-Curricular Activities

The science teachers were asked about the advantages for female students in the context of learning enhancement. For example, T1 arranged that:

Co-curricular activities are the basic tool to help in social development to communicate with the science students and science teachers and also in societies after Covid-19.

Moreover, T18 said as, *our students get higher and feel better self-esteem when they perform in co-curricular activities. Their networking among themselves is getting better.*

COVID had generated a strong element of social isolation and co-curricular activities were making a positive contribution to communication as one aspect of social development. Science teachers also noted the advantages related to social problems. Thus, for example, T12 expressed:

Co-curricular activities occupy students' consideration from unsafe activities like smoking, drugs, wrongdoing, and so on. It channelizes their energies into productive activities after Covid-19.

Most of the science teachers agreed that co-curricular activities help the students to communicate better with others as well as allow them to face up to major social issues.

Limitations of Co-Curricular Activities for female science students

The female science teachers were asked about the limitation of co-curricular activities. Many science teachers appreciated the demands on themselves to set up opportunities for co-curricular activities. COVID had increased the needs and demands of physical fitness and enhanced the immunity system. Thus, science teacher for example, T14 noted as:

Numerous co-curricular activities require extraordinary use after Covid-19. The female students get back to life finally after the serious impact of Covid. These activities require more staff to sort out and oversee such occasions.

Also, for example T20 said as: *Parents do not want their girls to participate more... they want students to get deeply involved in their study*

Moreover, T6 said as: *Female science students are even shy in performing physical activities, sports, and Gym even costly for them. Because we hired a trainer so we need to pay the trainer...*

Thus both male and female science teachers pointed out that sometimes there were financial costs associated with some co-curricular activities, and exercise and training programs, making it more difficult for poorer families. They also noted that many students and parents did not seem interested in such activities. Perhaps, in our examination-driven educational system, co-curricular activities were not seen as holding value in terms of examination performance. In this, parents push their daughters in some situations only to focus on the academic curriculum and much importance only on the school, college, and university status rather than the co-curricular activities, particularly physical fitness activities. Overall, while science teachers saw the value of co-curricular activities, they appreciated that many parents were unconvinced and that there were considerable demands on science teachers to plan such activities as well as some associated costs.

DISCUSSION

The study aimed to explore the role of co-curricular activities in the social development of female students after covid-19. The first research question is how female students perceive co-curricular activities in their social development. Most agreed that such activities enhanced their learning experiences. They also suggested health improvement. Similar to the study by Black (2002), the students considered that their confidence in interacting with wider society was helped. Black (2002) considered that co-curricular activities would enhance achievement and, perhaps, such activities might reduce 'dropping out' rates.

The participants agreed that co-curricular activities help the students to communicate with others better, this benefitting wider society, and this was important after the restrictions caused by covid-19. Yusoff *et al.* (2012) argued that relational abilities, cooperation, critical thinking, and basic leadership aptitudes would be enhanced. Guest and Schneider (2003) found that co-curricular activities promoted communication abilities and the betterment of society.

Broh (2002) noted the value of such activities in increasing school and college attendance as well as enhancing specific aptitudes and non-scholastic capacities. The use of co-curricular activities was also related to better attitudes towards study and improved performance. Adeyemo (2010) considered wider school culture and found benefits, including in areas like self-esteem and leadership skills.

The respondents did emphasize communication and relationship skills. This is consistent with Noriah (2006) in seeing co-curricular activities as enhancing the development of shared objectives. (Jing wang 2009) express confidence that this confidence is seen in enhanced academic performance. The participants also showed that co-curricular activities helped in time management, as well as encouraged creative problem-solving skills. This finding is similar to that of Posner (2012) who noted enhancement of management skills related to learning. Co-curricular activities also offer opportunity for female students to develop leadership skills and encourage to develop the initiative.

Sitra and Sasidhar (2005) argue for co-curricular activities improve science student self-esteem as well the development of useful skills. In a formal teaching situation where the science teacher has the role of the dispenser of information, the scope for the development of wider skills is minimized. In such a situation, the interviewees noticed these activities offer scope for enhancing communication, and discernment, as well as gaining increased competencies in many areas. Similarly, Nesan (2009) argues for co-curricular activities promoting both self-esteem and academic competence. This is all related to enhancing mental and psychological well-being similar to (Barber *et al.*, 2001; Barber, Eccles, and Stone, 2001; Mahoney, Cairns, and Farmer, 2003).

The participants also felt that some students are hesitant to express ideas or share their feelings and co-curricular activities offer an opportunity to undermine such hesitations. This is similar to the observations of Chickering and Reisser (1993). Where it was noted that co-curricular activities can help students express ideas as well as feelings more easily.

The participants noted the way co-curricular activities can improve communication skills. Jackson (1992) also observed this and described it in terms of multi-directional relationships between academic and personality and character development. There are bonuses for the development of team-working skills. Esa (2005) and Puteh (2004) noted the way this encourages positive relationships and improved time management. Overall, Khan and Iqbal (2014) discussed that co-curricular activities bring positive benefits in relation to science student development mentally and emotionally as well as in intellectual areas.

CONCLUSIONS

In summing up, all the science teachers showed a positive response regarding various aspects of co-curricular activities. The science teachers stated that the girls participated in co-curricular activities at the school of Central Punjab. Data indicated that the girls participate majorly in painting, and photography, rather less participate in organizing events or farewell parties. Girls take advantage of co-curricular activities mostly casual physical activity or brain activity. The main hindrance for the girls just because of culture, weather, and their traditions are not allowing outdoor physical activities. The main difficulty for poor families not pays the extra fee for co-curricular activities. This is a burden for poor families to make their girls participate in physical fitness programs. Because the staffs are very important to manage or train the students but poor families do not bear the heavy expenses. Mostly in Pakistan girls are not involved in outdoor activities due to environmental and cultural conditions after covid-19. Precisely I can say that traditional setting hurdles females to take part in outdoor activities. Co-curricular activities play a pivotal role in lives of the female by bringing confidence and a sense of commitment therefore it should be part and parcel of the female learning process after covid-19. These activities help to strengthen the personality and learning capabilities. Some parents do not agree that girls to participate in co-curricular activities only focusing on their scientific studies or academics to achieve higher grades. Given that, the female science students are overburdened by school academic books therefore co-curricular activities can imbalance their schedule of studies. This study recommends that awareness about the benefits of co-curricular activities should be conducted by the parents. Hence this is a new contribution to research that co-curricular activities are no doubt a burden for parents who cannot afford physical fitness activities which involve intercity traveling programs after covid-19. Therefore, it is recommended that all educational institutes should develop more institutional societies to involve science students in co-curricular activities even after the serious impact of after covid-19 on educational organizations.

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