CHAPTER 5:

DISCUSSION AND CONCLUSION

5.1 Introduction:

India is a fast-growing economy with young people accounting for 22% of the overall population. Increased consumption and population put pressure on the environment in emerging countries. In light of this, it is critical to educate young people "who have the information, skills, attitudes, motivations, and commitment to work individually and collectively towards solutions and the prevention of new ones" (UNESCO, 1975, p.43). Schools are places where children acquire environmental education, and instructors have the power to affect their pupils' environmental beliefs (Said et. al., 2003).

Teachers play a significant influence in molding and developing pupils' thoughts. They play an important role in the educational system. If teachers lack the necessary knowledge and skills about environmental knowledge there is a negative influence on man and the environment. Thus pupils are unlikely to be interested.

It is the teacher's obligation to educate them. Teachers should be trained in the field of environmental education at institutions. As a result, substantial environmental education programmes are required for those who aspire to be teachers and those who educate teachers.

The University Grants Commission (UGC) and the National Council of Educational Research and Training (NCERT) have taken a number of initiatives to incorporate and improve environmental education into university and school curricula. Teacher education colleges at all levels should be updated to reflect the current requirement and place a greater emphasis on the development of attitudes and performance abilities to help minimize environmental issues. Practical abilities must be sufficiently supplemented by theoretical inputs.

5.2 Restatement of the problem:

"Attitude towards environment among pre-service teachers."

5.3 Principal findings and Suggestions based on the present study

This research has shown some promising results. Pre-service science teachers show a moderate level of positive environmental attitudes (M = 149.67, SD = 12.10), according to descriptive statistics. In this study that first aims to determine the environmental attitudes of preservice teachers, the environmental attitudes of preservice teachers were found to be moderately favorable. Such a result was found by Tikka, Kuitunen, and Tynys (2000) that preservice preschool teachers had moderately positive attitudes toward environment. Upon examining the literature, similar results were also obtained in many studies (Esa, 2010; Levine & Strube, 2012; Ozsoy, Ozsoy, & Kuruyer, 2011).

Participants are aware that humans affect and are affected by the environment, as indicated by the frequencies. Furthermore, the findings reveal that participants agree on the importance of individual responsibility and society support in environmental protection. They believe that in order to overcome environmental concerns, we must make significant adjustments in our way of life. Regardless, in the review completed by Erol and Gezer (2006) expressed that preservice educators' perspectives toward climate and natural issues were poor.

The study considers two independent variables: gender and courses. The findings of this study show that, despite being statistically insignificant, there are statistically significant disparities between males and females on all EAS scores.

The research study emphasized that both males and females of RIE has a favorable attitude towards environment. Irrespective of having such a behavior it can be clearly seen that there is a significant difference between males and females of pre-service teachers of RIE, NCERT, Bhopal. Female pre-service teachers showed a higher favorable attitude towards environment when compared with the males. On examining the literature survey, the research study was found consistent with the study done by (Koc & Kuvac, 2016) where female pre-service teachers displayed moderately favorable attitudes toward environment.

Furthermore, a significant gender difference favoring female preservice teachers was found in terms of total environmental protection when compared with the males. These gender differences are a result of gender roles and the socialization postulates that talks about the gender expectations according to the norms set by different cultures. (Zelezny, Chua, and Aldrich, 2000). Females have traditionally been more responsible for looking after the home and children, according to Gilligan (1982) and (Tikka, Kuitunen, & Tynys, 2000). In reality, females are more inclined to cherish and believe in environmental conservation.

In terms of different courses, the current study found no statistically significant changes in pre-service teachers' views about the environment amongst pre-service teachers enrolled in different RIE courses. However, the findings show that, despite the small effect size, there is a significant difference across courses in terms of attitudes toward various environmental components, individual responsibility, and attitudes for changing lifestyles.

For a range of grades, pupils' attitudes toward the environment were assessed (Ma & Bateson, 1999; Musser & Diamond, 1999). Previous study has found that age (or, in this case, course level) influences environmental attitudes, with younger students having more positive attitudes toward environment than older students (Malkus & Musser, 1997). The statistical difference obtained could be explained by differences in age. The impact sizes are minor, so even though the results are statistically insignificant, readers should bear that in mind. This indicates that while there are statistically insignificant disparities between course levels, these differences have minimal practical impact.

B.Ed-M.Ed (Integrated) students has slightly more EAS scores in comparison to M.Ed. students and B.Ed. students. The B.Ed-M.Ed course students achieved slightly higher EAS scores than B. Ed course. On further exploration, we can observe the mean scores for the course B. Ed and B.Ed-M.Ed (Integrated) are nearly equal. Thus, the EAS scores for the B. Ed students were found to be least among the three courses. Thus we can say that pre-service teachers across different courses showed a favorable attitude towards environment.

The study's findings show that today's pre-service science teachers have a favorable attitude toward the environment. The researcher feels that these findings can easily be extended to all pre-service science teachers because of the large number of participants. Based on the findings, it is advised that gender inequalities in environmental education be taken into account at all levels of formal education. Furthermore, pre-service teachers only take an environmental education course in one semester of their second year as part of their course.

There is already uncertainty about human use of nature, confidence in science and technology, and support for population growth policies, as well as appreciation of nature, environmental threat, and environmental movement activism. Preservice science teachers, in particular, appreciate spending time in nature and believe that the environment is delicate and easily destroyed by human activities, and that substantial environmental degradation is occurring and could soon have disastrous implications for both nature and humanity. They were also willing to actively support or participate in organized environmental protection activity. However, it was not agreed whether environmental protection or economic growth and development should take precedence.

Because this length of exposure may not be sufficient to establish environmental attitudes, it is recommended that several more environmental courses be added in pre-service teachers' education curricula. Pre-service teachers can effectively affect future generations' environmental attitudes if they receive effective training during their vocational education. This is the only method to ensure that children are trained to be ecologically conscious and sensitive to the issues that humans confront.

5.4 EDUCATIONAL IMPLICATIONS:

The research study conducted finds its importance in the field of education because of the following reasons:

1. Environmental education (EE) brings us closer to the world around us by teaching us about both natural and constructed settings. EE fosters awareness of issues that affect the environment we all rely on, as well as measures we can do to enhance and sustain it.

2. EE offers many benefits for youth, educators, schools, and communities, whether we bring nature into the classroom, take students outside to learn, or find impromptu educational moments on a nature walk with our families.

3. EE is a type of hands-on, interactive learning that encourages imagination and creativity. Students are more passionate and engaged in studying when EE is integrated into the curriculum, which improves student progress in essential academic subjects.

4. EE not only provides opportunities for experiential learning outside of the classroom, but it also allows students to make connections and apply what they've learned in the classroom to real-world situations. Learners can use EE to see how social, ecological, economic, cultural, and political challenges are all intertwined.

5. By incorporating EE practices into the curriculum, teachers can integrate science, math, linguistic arts, history and more into a wealth of lessons and activities to meet the academic standards of many states and countries in all subject areas. Taking classes outdoors or bringing nature indoors provides a great background or context for interdisciplinary learning.

6. EE promotes environmental sensitivity, appreciation and respect by allowing students to interact with nature, learn and play outside.

7. EE fosters a sense of location and connection through community involvement. If students decide to learn more and take action to improve the environment, they work with community experts, donors, volunteers, and community entities to bring the community together and impact the neighborhood. Understand and deal with the problem.

8. EE promotes active learning, citizenship, and student leadership. It empowers youth to share their voice and make a difference at their school and in their communities. EE helps teachers build their own environmental knowledge and teaching skills.

9. EE helps students understand how their decisions and actions affect the environment and builds knowledge and skills necessary to address complex environmental issues, and how we can take action to keep our environment healthy and sustainable for the future.

5.5 Suggestions for future studies:

1. A large sample of student-teachers and teacher-educators can be used in studies.

2. This study focused solely on colleges connected with **Regional Institute of College, NCERT**. However, if we want to make a significant impact to rescue our vanishing ecosystem, similar research should be undertaken at a big scale for all universities.

3. Because the current study is limited to student-teachers and teacher-educators from colleges of education, it opens the door for future researchers to undertake similar studies including schools, engineering/medical colleges, and other institutions.

4. Other factors, such as environmental ethics, attitude towards pollution in relation to environmental awareness, and attitude toward the environment, can be used to perform studies.

5. The study can be extrapolated to other population of different institutes of Bhopal.

6. Similar kind of studies can also be done for teacher educators and student teachers of other regions of country.

7. Similar study can be done for administrative institutions and among administrative managers to get an insight about their knowledge for environment.

5.6 Recommendations:

1.It is necessary to have environment education in different teacher education institutions to create a pool of well qualified environment educators.

2. Teachers should be made well-versed with the environmental needs of the world and nation to integrate in curriculum.

3. It should also be emphasized that nature-based pedagogical practices can be used to introduce environment education in the curriculum.

4.Environment education should be introduced as a subject in secondary and senior secondary grades for a more sensible understanding of environmental challenges.

5. It is crucial to introduce environment education among educational administrators for showcasing the importance of environment and various challenges.

5.4 Conclusion:

Education has the potential to provide meaningful change in people's value system, allowing us to progress toward a society with strong environmental values and a more sustainable way of life. As a result, it's critical to ensure that high-quality environmental education is incorporated into our school-based education system. Furthermore, creating an interdisciplinary course that covers the relationship between education, development, and the environment holistically and challenges students to promote environmental stewardship in their future professional and work lives will be highly beneficial. Supporting instructors' attitudes through real-life reflections may necessitate a variety of applications, including the introduction of the Science-Technology-Environment-Society (STES) approach, which is most likely the most appropriate strategy for the circumstances described in the current study.

Environmental publications, printed publications such as books, television shows, social media addresses, and environmental communities can all be promoted in these courses. Furthermore, pre-service teacher candidates should be encouraged to establish projects linked to environmental activities, and a variety of events can be planned to help them complete them. According to Scott (1996), the lack of a shared pedagogical approach to pre-service teachers for environmental education and the lack of use of active learning strategies by focusing on the transfer of knowledge in the education of environmental issues are the causes of problems in the preparation of teachers for environmental education. As a result, it can be directed to educational programmes that include practical activity (action research, etc.) in order to enhance teachers' and pre-service teachers' environmental attitudes.

General Outlook towards Environment Education

In 21st century there are many environmental issues ranging from climate change and disasters to pollution and ecological degradation. It becomes extremely important for the individuals to explore these environmental issues and study them to come up with better coping mechanisms to deal with various environmental concerns. Environmental education comes into vision for imparting best knowledge of the various environmental concerns , engage in environmental issues and strive to take appropriate actions to solve them.

Environment education ensures that the individuals learn about the various skill-sets to make an informed decision towards saving planet Earth. Environment education ensures awareness and sensitivity towards environment and environmental challenges. It makes sure to impart correct knowledge and understanding of environment, its components and various challenges surrounding them. Knowledge dissemination ensures right attitude to be developed over time to promote concern towards environment and motivate individuals to take right action at right places. Knowledge about environment ensures the right skill sets to be developed over time to deal with environmental mishaps. As a community, effective environment education promotes participatory intervention that leads to solving environmental challenges.

Environmental education does not promote any one point of view or action. Environmental education, on the other hand, teaches people how to use critical thinking to assess various sides of an issue and improves their problem-solving and decision-making abilities.

Thus as a conclusion we can say that environment education, increases public awareness and understanding of environmental issues. It ensures that individuals become extremely critical of the environmental issues and think critically about them to come up with innovative solutions to cope up with them. In this order, environment education ensures effective decision-making skills and promotes problem solving skills. Thus it is not 21st century need but the educational demand to have environment in course structure of different educational courses to make individuals aware and empathetic towards the environment.