

# **PRO-ENVIRONMENTAL BEHAVIOUR AMONG IGNOU B.ED STUDENTS**

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ABSTRACT

Environmental Problems are the most crucial problems all mankind face today. The reasons of environmental problems are generally described as industrialization, population explosion, advancement in science and technology, increasing needs and globalization, while mankind is considered as the most effective factor in environmental problems in terms of their thinking and way of behavior. Therefore Education for Sustainable Development (ESD) is important to promote or change student's ways of thinking and behaving in order to create a sustainable future for all. This paper aims to identify the status of the pro-environmental behaviour among the IGNOU B.Ed students, as they are pupil teacher to shape the future of our next generations. Further the present paper deals to explore the effect of demographic factors like, gender, age, locality and year of teaching experience on pro-environmental behaviour among the students. The data were gathered from students using purposive sampling techniques with the help of a self-made questionnaire using Likert Scale. The data were analysed using descriptive statistical techniques like SD and t-test. The statistical analysis shows that all the students have high level of pro-environmental behaviour as reveals from the study.

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Keywords-Pro-environmental behaviour,sustainable development,IGNOU  
B.Ed, Demographic Factors

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**“Our biggest challenge in the new century is to take on an idea that sounds abstract  
“Sustainable Development” and turn it into reality for the entire world’s people”- Kofi  
Annan, UN-2001**

## INTRODUCTION

Environmental Problems are the most crucial problems all mankind face today. The reasons of environmental problems are generally described as industrialization, population explosion, advancement in science and technology, increasing needs and globalization (Davis, 1998; Baykal, 2008; sadik, 2013), while mankind is considered as the most effective factor in environmental problems in terms of their thinking and way of behavior (Watson and Halse, 2005; Negev, 2010; sadik, 2013). Therefore Education for Sustainable Development (ESD) is important to promote or change student’s ways of thinking and behaving in order to create a sustainable future for all. In this context, Agenda 21 was the first International document that identified education as an powerful and effective tool for achieving sustainable development (SD) and highlighted areas for action for education.

## CONCEPTUAL FRAMEWORK:

**Sustainable Development**-Sustainable development is the development which meets the needs of the present without compromising the ability of the future generations to meet their own needs. (WCED-1987, Harris-2003)

**Sustainability**-It is understood as the development that meets the present needs without compromising the capacities of future generations, ensuring the balance between economic growth, environmental care and social welfare.

**Pro-Environmental Behaviour**-the behaviour that harms the environment as little as possible or even benefits the environment is called pro-environmental behaviour. (Stag & Vlek-2009)

IGNOU-B.Ed.-The Indira Gandhi National Open University (IGNOU) was established by an Act of Parliament in 1985 has continuously striven to build an inclusive knowledge society through inclusive education, thereby to increase the Gross Enrolment ratio (GER) by offering high quality teaching and learning through Open and Distance Learning (ODL) mode.

The Bachelor of Education (B.Ed.) programme of Indira Gandhi National Open University (IGNOU) has been designed with the aim to develop an understanding of teaching-learning process at secondary and senior-secondary level among student teachers. It focuses on enabling student-teachers to reflect critically on perspectives of education and integrate holistically the theory and practices to facilitate active engagement of learners for knowledge creation, For eligibility to take admission a candidate is required to have at least fifty per cent marks either in the Bachelor's Degree and/or in the Master's Degree in Sciences/Social Sciences/Commerce/Humanity. Bachelor's in Engineering or Technology with specialization in Science and Mathematics with 55% marks or any other qualification equivalent thereto and Trained in-service teachers in elementary education or Candidates who have completed a NCTE recognized teacher education programme through face-to-face mode. . Admission is done on the basis of the score obtained in the entrance test conducted by IGNOU all over India. The B.Ed. programme of IGNOU is duly recognised by NCTE(an advisory body to all state Govt. and Govt. at National level in issues pertaining to Teacher Education in India), and the syllabus it follows is in strictly in adherence with NCFTE-2010.

### **Rationale of the Study-**

Various environmental problems pose a great threat to environmental sustainability and the environment is the key factor of SD. Sustainable Development is a great challenge for all the people of the globe to guarantee a viable future. Education for Sustainable Development(ESD) is considered to be crucial to increase the understanding of the global community about sustainability(Collier,2004,Sterling,2009,Leeuw,2014).Recognising the important role of education, The United nations(2002) declared the period 2005-2014 as the decade of "Education for Sustainable Development".

To achieve sustainable development, the ecological, economic and social perceptions of the people need to be changed. The challenge that countries around the world face is to integrate the concept of SD.However, to be successful ESD needs a holistic approach of ecological responsibility, peace and social justice (Bajaj & Chiu, 2009) and education about environmental sustainability is a central aspect of the process of change towards sustainable

development. ESD is a process of recognising values and clarifying concepts in order to develop skills and added tools necessary to understand and appreciate the inter relationship among man, his culture and bio-physical surroundings (Pradhan , 2002).

Realizing the importance of Education for Sustainable Development, the Honourable Supreme Court of India (2004) endorsed a model syllabus prepared by the NCERT for introducing environmental studies as a compulsory subject from class one to class twelve. In this context the school teachers have the major responsibility to instil values and attitudes among students through the subjects they are teaching in schools. So, those students could behave responsibly towards the environment and contribute towards sustainable development. For the student teachers of both regular mode and distance mode themselves should have positive attitude, necessary awareness towards environment and behave responsibly towards environment. So, keeping this in view the IGNOU has prepared the syllabus of the B.Ed. programme as per the recommendations made by NCFTE-2010 to prepare the teacher for 21<sup>st</sup> century so as to address the challenges of the present day world.

Hence, realizing the importance of sustainable environment in the present day society the leadership role of future teachers, the following questions arose in the mind of the researcher.

- To what extent do the IGNOU B.Ed. students sensible towards sustainable environment & exhibit pro-environmental Behaviour.
- How do the student teachers actively involved in resolving environmental problem?

These questions need to be answered sensibly and sincerely. There by the study on “PRO-ENVIRONMENTAL BEHAVIOUR AMONG IGNOU B.ED. STUDENTS”

### **Need for Pro-Environmental Behavior-**

To address the issues related to unsustainable development, the \agenda 2030, which was adopted on 18<sup>th</sup> September, 2015 in the UN-General Assembly emphasizes five dimensions- The People, the Planet, Prosperity, peace and global Partnership (the five P's) along with a ultimate vision of healthy mankind, living in a peaceful fair society and a sound environment for everyone in the world and the most important dimension is the people, who can play a prominent role in the process of SD.

Hence the mind sets, values, beliefs of every single individual need to be changed through ESD and to enable them to exhibit pro-environmental behavior for a just society to live in. As

ESD enables every single individual to understand the impact of his or her behavior on the world and to take responsible decisions to act environmentally.

### **Objectives of the Study-**

The study was framed to explore into the pro-environmental behavior issues among IGNOU B.Ed. students with the following objectives

- To study the pro-environmental behavior among IGNOU-B.Ed. students.
- To study the Pro-environmental behavior among IGNOU B.Ed. students on the basis of gender.
- To study the Pro-environmental behavior among IGNOU B.Ed. students on the basis of age.
- To study the Pro-environmental behavior among IGNOU B.Ed. students on the basis of locality of residence.
- To study the Pro-environmental behavior among IGNOU B.Ed. students on the basis of year of teaching experience.

### **Hypotheses –**

- There is no significant difference in pro-environmental behaviors among IGNOU B.Ed. students on the basis of gender.
- There is no significant difference in Pro-environmental behavior among IGNOU B.Ed. students on the basis of age.
- There is no significant difference in pro-environmental behaviors among IGNOU B.Ed. students on the basis of locality of residence.
- There is no significant difference in Pro-environmental behavior among IGNOU B.Ed. students on the basis of year of teaching experience.

### **Materials and Methods-**

The Descriptive survey method was followed for the present study.

**Population-** All the 200 IGNOU B.Ed. students under Koraput , Regional Center Under IGNOU, of ODISHA state wee the population of the study.

**Sample-** Purposive sampling method was adopted to draw the sample size of 40 B.ED. Students from the IGNOU study Centre CTE Bolangir -2107 for the study. The sample was

drawn and classified as per the demographic factors like gender, Age, Locality, Year of teaching experiences.

**Table-1 Sample showing category of respondents**

Respondent Category	Male	Female	Urban	Rural	Below 30 years(Age )	Above 30 years(Age )	Below 10 years (Experiences )	Below 10 years (Experiences)
No. of Respondent	25	15	11	29	16	24	24	16

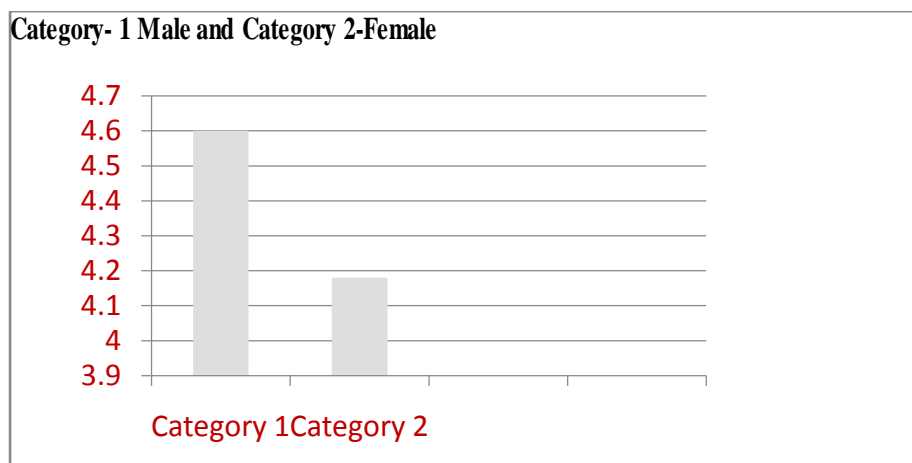
**Tools-**A self-made tool to measure environmental sustainability concern and pro-environmental behavior of IGNOU B.Ed. students was administered to collect data from the respondents. The questionnaire was consisted of 5-point Likert scale with each statement provided with 5-alternative responses viz.- Strongly Agree-(SA), Agree-(A), Undecided-(UD), Disagree-(DA), Strongly Disagree-(SDA). The scale was consisted of 21 items comprising of 9 items based on environmental sustainability concern and 12 items on pro-environmental behavior intention.

**Procedure-** the respondents were approached personally by the researcher during the 2<sup>nd</sup> year workshop at IGNOU Study Centre CTE, Bolangir (2107) under Koraput IGNOU, Regional Centre, ODISHA. Also to cross validate their responses their behavior was observed during the work shop activities.

**Statistical Techniques-** Simple percentage along with Mean, Standard Deviation and t-test were used to analyze and interpret the data to arrive at a conclusion.

#### **Analysis and Interpretation of Data-**

Descriptive analysis of mean revealed that the level of pro-environmental Behavior amongst IGNOU B.Ed. students was high. **Mean-4.60 (Male) and 4.18 (Female)**



**Table-2: Pro-Environmental Behavior of IGNOU B.Ed. Students on the basis of Gender**

Respondent	N	M	SD	t-value	Significance level
Male	25	4.60	0.35	3.88	0.05 level
Female	15	4.18	0.31		0.01 level

In the study, 62.5% of the respondents were Male IGNOU B.Ed Students, while 37.5% were female B.Ed students.

Data presented in Table-2 reveals that male respondents found high in showing concern about environmental sustainability and exhibiting pro-environmental behavior than their female counter part. The difference was found statistically significant at 0.05 and 0.01 level of significance.

**Table-3: Pro-Environmental Behavior of IGNOU B.Ed. Students on the basis of Locality**

Respondent	N	M	SD	t-value	Significance level
Rural	29	4.36	0.35	0.67	
Urban	11	4.29	0.24		

In the study, 72.5% of the respondents were IGNOU B.Ed Students from Rural area, while 27.5% were from urban area.

Data presented in Table-3 reveals that there is no significant difference among IGNOU B.Ed. students of rural area and those of urban area, in showing concern about environmental

sustainability and exhibiting pro-environmental behavior. The difference was not found statistically significant at both 0.05 and 0.01 level of significance.

**Table-4 : Pro-Environmental Behavior of IGNOU B.Ed. Students on the basis of Age**

Respondent	N	M	SD	t-value	Significance level
Above 30 years	24	4.41	0.25	2.00	Not significant
Below 30 years	16	4.21	0.37		

In the study, 60% of the respondents were the age group of above 30 years and while 40% were the below the age group of 30 years.

Data presented in Table-4 reveals that there is no significant difference among IGNOU B.Ed. students belonging to the age group of above 30 years and those of the age group below 30 years, in showing concern about environmental sustainability and exhibiting pro-environmental behavior. The difference was not found statistically significant at both 0.05 and 0.01 level of significance.

**Table-5: Pro-Environmental Behavior of IGNOU B.Ed. Students on the basis of Year of Teaching Experiences**

Respondent	N	M	SD	t-value	Significance level
Above 10 years	16	4.43	0.30	1.7	Not significant
Below 10 years	24	4.26	0.32		

In the study, 40% of the respondents were having teaching experiences of more than 10 years and while 60% were having teaching experiences of less than 10 years.

Data presented in Table-5 reveals that there is no significant difference among IGNOU B.Ed. students having teaching experiences of more than 10 years and those of having teaching experiences of less than 10 years in showing concern about environmental sustainability and



exhibiting pro-environmental behavior. The difference was not found statistically significant at both 0.05 and 0.01 level of significance.

### **Discussion-**

From the study it is clear that the level of pro-environmental behavior among the IGNOU B.Ed. Students were high. Respondents believed and realized that there must be a proper balance between development, environment and society and environment is the key factor for sustainable development.

All the respondents considered that global warming is a serious environmental problem for the globe to sustain and to protect the mother earth in this regard they would like to plant trees. About 77.5% of respondents were strongly agree with the view point that they used to switched off the light whenever they leave the room, and they were very much interested to join in sustainability related activities or course to be more skillful. However, 72.55 of IGNOU B.Ed students were used to writing on both sides of the paper and strongly agree to recycle the material to protect the environment from degradation. Moreover, 67.5% of respondents were strongly agreed to live in a sustainable environment and they would like to use energy efficient electrical appliances and interested to learn more about sustainable environment through curriculum.

However, if we consider the total percentages of (SA and A) of student' responses to each items of the Likert scale, than interestingly more than 90% of the found to exhibit pro-environmental behavior and concern for environmental sustainability, but, interestingly less than 40% of respondents preferred bottle water than tap-water, this showed students "did not understand" clearly about some sustainable development related issues of their day to day life.

This showed that IGNOU B.Ed. students were very much concern about the environmental sustainability and their responsibility to environmental problems around them.

There seemed to be significant difference at both the level of significance (0.05 and 0.01) level on pro-environmental behavior and concern about environmental sustainability between male IGNOU B.Ed students and their female counterpart. The male students showed very high level of pro-environmental behavior as compared to female students.

This is probably because, though the female students are imparted the same course and undertaken the same activities as their male counterpart, this may not be meaningful for them and/or is highlighted at the expense of a personalized process of learning.

Research in education for sustainable development shows that apart from knowledge acquisition feeling, psychological factors and active participation while learning are important determinants of commitments. Fostering an attitude of pro-environmental behavior is not dependent on what is delivered, but how it is delivered and experienced. (Beringer and Adombent-2008)

This findings was corresponding with the result of Arun Kumar(2012) but contradicted with that of (Sahay and Singh-2012), Asha & Divedi-2015.

The present study revealed that gender had no significant impact on exhibiting pro-environmental behavior among the IGNOU B.Ed. students. Moreover, it was found that year of teaching experiences had no such influence on the trainees in creating significantly different pro-environmental behavior and concern towards environmental sustainability. The study also revealed that age of the respondents had no such significant influence on exhibiting pro-environmental behavior and showing concern towards environmental sustainability.

### **Limitations and Suggestions-**

The present study has some limitations, sample size of the study was not adequate as one all the students of one IGNOU, B.Ed. study Centre was taken into account which limits the generalizability of the findings.

Another limitation of the study is that it was survey based, with observations of their behavior during workshop only; it would be more valid to observe their activities in large scale through observational study to determine the value-action gaps towards environmental sustainability.

However, such a comprehensive approach would be impractical in terms of time, funding and personnel it would require.

This study recommends to introduce education for sustainable development as a separate subject in the teacher education curriculum like all other core subjects so, as to develop a

comprehensive knowledge, attitude, belief, values and skill to transform those into action of the teacher trainees in all kind of Teacher education programme. By which we can have clean ,green ,safe and just society to live in.

### **Conclusion-**

As it is known to us, that environmental degradation is a matter of great concern before mankind. Many of environmental problems who pose a threat to environmental sustainability are rooted in human behavior (Stek-2007), and thus be managed by changing the relevant behavior so as to reduce its environmental impacts. So, for this environmental consciousness among the students is the need of the hour. Teachers as agent of change have a greater role to play in this context. For this a strong base of concern about environmental sustainability & pro-environmental behavior activism is to be generated among the teacher so that they can transform the same to the learner (the future generation) through direct or indirect influence in and outside the school, so that we can have a sustainable society to live in.

The knowledge, attitude and actions of the teacher towards environmental sustainability deeply influence their students and make them conscious about different sustainability issues.

This study will help the curriculum planner to integrate the content related to sustainability issues and sustainable development in the present teacher education curriculum of both regular and distance mode.

Moreover regular sustainability activities need to be conducted by all stakeholders at local ,regional, and national level to have more environmental responsible citizen for a sustainable world.

**“Wisdom without its proper translation into action is wisdom of no use”-LKP**

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