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## ENVIRONMENTAL KNOWLEDGE OF B.Ed. and D.Ed. TEACHER TRAINEES

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Received: February 07, 2019

Accepted: March 15, 2019

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**ABSTRACT:** *The present study aimed at to study and compare the Environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to gender, management, locality and parental education. The sample consisted of 600 teacher trainees out of 300 B.Ed. teacher trainees and 300 D.Ed. teacher trainees from Andhra Pradesh State, the sample has been collected by using stratified random sampling technique. The normative survey method had been used for the study. Environmental knowledge scale was constructed by the researcher. The findings of the study revealed that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees.*

**Key Words:** *Environmental Education, Environmental Knowledge, B.Ed. and D.Ed. Teacher Trainees*

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### Introduction

Today, man is existing in a world of environmental crises, in the last two decades we have seen a lot of industrial revolution due to which the environment has been extremely affected. Over usages of pesticides, fertilizers, insecticides has improved the crop yield but causes negative impact on environment. Due to increasing in population and industrialization leads to environmental crises in our country which shows severe effect on the society. The series of environmental problems comprise of global warming, ozone layer depletion, acid rains, greenhouse effect, pollution of air and water, droughts, floods, exploitation of natural resources, scarcity of fuel and fresh water, epidemic diseases and health hazards. To save the environment and protect ourselves we should take urgent action to solve environmental problems and we have to take safety measures to decrease severity of all such environmental crises. Education is a fundamental aspect in developing knowledge and awareness among community about issues that affect the society. It is the need of the hour to study the environmental education extensively to survive human beings comfortably on the earth. The aim of environmental education is to develop environmental knowledge, attitude and skills among global population to provide contribution and make solutions of present environmental problems. Environmental education is modification of the human undesirable environmental behaviour to protect environment by making them progressively knowledgeable about the environmental problems. In this regard various environmental knowledge components are introduced in school curriculum to create environmental awareness among the students. The effective environmental education always requires the commitment of teacher trainees. Teacher trainees are trained in teacher education institutes to teach the students at different levels of education. The major objectives of environmental education at B.Ed. and D.Ed. training courses are to enhance the environmental knowledge and awareness of the teacher trainees about the environmental problems and its associated issues to create positive environmental attitude and values among them. The fruitful implementation of environmental education depends upon the teacher trainees who are expected to have a worthy level of knowledge about the environment. The teacher trainees who are environmentally literate and have a worthy level of environmental knowledge and skills, can only produce environmentally literate students. It is the responsibility of the teachers to create environmental awareness positive attitudes towards environment among the students by imparting environmental knowledge which are existed in the school curriculum. Hence there is a need of the present study “ENVIRONMENTAL KNOWLEDGE OF B.Ed. and D.Ed. TEACHER TRAINEES”

### Review of related literature

Makki, M. H (2003) conducted a study on Lebanese secondary school students Environmental Knowledge and Attitudes. He that participants possessed favourable attitude towards the environment but lacked in their environmental knowledge. Environmental knowledge was significantly differ in parental education level. However, the correlations were low that indicating small relationship between the variables.

Murat Gokdere (2005) made a study on Environmental knowledge level of primary school students in Turkey. He found the environmental aspects effect on student's environmental knowledge students who were provides with better environment and learning materials it would enhance student's environmental knowledge.

Elvan Alp (2006) made a study on Children's Environmental Knowledge and Attitudes in Turkey. A significant result was observed on environmental knowledge and attitudes. The gender influence on attitudes towards the environment was significant in favour of females, there is no significant difference among gender on environmental knowledge.

Kasavan (2008) conducted a study on the Environmental Knowledge of higher secondary students in villupuram educational district and observed that the girl students are possessing better environmental knowledge than Boys student and the environmental knowledge of private school students is better than that of the Government school students.

### **Objectives of the Study**

- To find out the difference in the environmental knowledge of B.Ed. and D.Ed. teacher trainees with respect to whole sample.
- To find out the difference in the environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to gender, management, locality, parental education.

### **Hypotheses of the Study**

1. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees.
2. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. male teacher trainees.
3. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. female teacher trainees.
4. There is no significant difference between the environmental knowledge of government college B.Ed. and D.Ed. teacher trainees.
5. There is no significant difference between the environmental knowledge of private college B.Ed. and D.Ed. teacher trainees.
6. There is no significant difference between the environmental knowledge of rural area B.Ed. and D.Ed. teacher trainees.
7. There is no significant difference between the environmental knowledge of urban area B.Ed. and D.Ed. teacher trainees.
8. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of literate parents.
9. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of illiterate parents.

### **Method of the study**

The normative survey method had been used for the study.

### **Sample of the study**

The sample consisted of 600 teacher trainees out of 300 B.Ed. teacher trainees and 300 D.Ed. teacher trainees from Andhra Pradesh State, the sample has been collected by using stratified random sampling technique.

### **Tool of the study**

The environmental knowledge scale constructed and validated by the investigator. The scale consists of 65 items. Each item provide four responses, the response of each item was scored on one mark for correct response and zero for wrong response, the reliability of the scale was 0.82

### **Statistical Techniques used**

In order to make comparisons of environmental knowledge between the groups of B.Ed. and D.Ed. teacher trainees, the 't'- value was calculated to find the differences in the mean scores on environmental knowledge.

**Analysis and interpretation of Data**

In the present investigation the data was tabulated of the demographic variables viz., Gender, Management, Locality, Parental Education of B.Ed. and D.Ed. teacher trainees on Environmental Knowledge.

**Hypothesis-1:** There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees.

**Table 1: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Teacher Trainees**

Group	Sample	Sample size (N)	Mean	S.D.	Cal.t- value
whole sample	B.Ed.	300	34.58	8.09	0.38@
	D.Ed.	300	34.33	7.80	

@ Not Significant at 0.05 level

From table 1, it is observed that the calculated t-value (0.38) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees. Hence it can be said that the hypothesis accepted.

**Hypothesis-2:** There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. male teacher trainees.

**Table 2: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Male Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Male	B.Ed.	150	35.47	7.90	1.99*
	D.Ed.	150	33.68	8.20	

\* Significant at 0.01 level

From table 2, it is evident that the calculated t-value (1.99) is significant at 0.01 level, it is clear that there is a significant difference between the environmental knowledge of B.Ed. and D.Ed. male teacher trainees. B.Ed. male teacher trainees had better environmental knowledge than the D.Ed. male teacher trainees. Hence it can be said the formulated hypothesis can be rejected.

**Hypothesis-3:** There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. female teacher trainees.

**Table 3: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Female Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Female	B.Ed.	150	34.43	8.39	0.30@
	D.Ed.	150	34.72	7.80	

@ Not Significant at 0.05 level

From table 3, it is evident that the calculated t-value (0.30) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. female teacher trainees. Hence the hypothesis can be accepted.

**Hypothesis-4:** There is no significant difference between the environmental knowledge of government college B.Ed. and D.Ed. teacher trainees.

**Table 4: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Government College Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Government	B.Ed.	108	34.12	7.85	0.74@
	D.Ed.	192	34.83	8.23	

@ Not Significant at 0.05 level

From table 4, it is clear that the calculated t-value (0.74) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to government College. Hence the hypothesis accepted.

**Hypothesis - 5:** There is no significant difference between the environmental knowledge of private college B.Ed. and D.Ed. teacher trainees.

**Table 5: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Private College Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Private	B.Ed.	123	34.07	7.54	0.48@
	D.Ed.	177	34.51	7.92	

@ Not Significant at 0.05 level

From table 5, it reveals that the calculated t-value (0.48) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to private college. Hence the hypothesis accepted.

**Hypothesis-6:** There is no significant difference between the environmental knowledge of rural area B.Ed. and D.Ed. teacher trainees.

**Table 6: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Rural Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Rural	B.Ed.	156	35.00	8.17	1.55@
	D.Ed.	144	33.60	7.33	

@ Not Significant at 0.05 level

From table 6, it reveals that the calculated t-value (1.55) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to rural area. Hence the hypothesis accepted.

**Hypothesis - 7:** There is no significant difference between the environmental knowledge of urban area B.Ed. and D.Ed. teacher trainees.

**Table 7: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Urban Teacher Trainees**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Urban	B.Ed.	135	33.91	7.92	0.83@
	D.Ed.	165	34.57	7.70	

@ Not Significant at 0.05 level

From table 7, it shows that the calculated t-value (0.83) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees with reference to urban area. Hence the hypothesis can be accepted.

**Hypothesis - 8:** There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of literate parents.

**Table 8: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Teacher Trainees of Literate parents**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Literate parents	B.Ed.	140	34.42	7.60	0.31@
	D.Ed.	160	34.71	8.51	

@ Not Significant at 0.05 level

From table 8, it reveals that the calculated t-value (0.31) is not significant at 0.05 level, it is clear that there is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of literate parents. Hence the hypothesis can be accepted.

**Hypothesis - 9:** There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of illiterate parents.

**Table 9: Comparison of Environmental Knowledge of B.Ed. and D.Ed. Teacher Trainees of Illiterate parents**

Variable	Sample	Sample size (N)	Mean	S.D.	Cal. t- value
Illiterate Parents	B.Ed.	198	34.18	8.15	1.18@
	D.Ed.	102	35.36	7.94	

@ Not Significant at 0.05 level

From table 9, it is clear that the calculated t-value (1.18) is not significant at 0.05 level, it is clear that there is a no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of illiterate parents. Hence the hypothesis can be accepted.

### Major Findings

1. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees.
2. There is a significant difference between the environmental knowledge of B.Ed. and D.Ed. male teacher trainees.

3. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. female teacher trainees.
4. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. government college teacher trainees
5. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. private college teacher trainees.
6. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. rural area teacher trainees.
7. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. urban area teacher trainees.
8. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of literate parents.
9. There is no significant difference between the environmental knowledge of B.Ed. and D.Ed. teacher trainees of illiterate parents.

### Suggestions for further research

The present study, "Environmental knowledge of B.Ed. and D.Ed. teacher trainees" brings to light a good number of new areas to be studied by future researchers. The areas and variables that are not covered by this study may be put to test to enlighten the other associated factors. So, the researchers may think of the following areas of study in detail.

1. This study may be extended to students of all Intermediate, graduation and post-graduation at district and state levels.
2. A research on different aspects environmental knowledge can be carried out at different district levels.
3. A study on development of environmental knowledge for prospective teachers can be done.
4. A study on environmental knowledge of teachers and students can be done.
5. A comparative study of environmental knowledge primary and secondary school teachers can be done.

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