



INFLUENCES OF GENDER ON THE ENVIRONMENTAL ATTITUDES OF B. ED. TRAINEES FROM DIFFERENT FAMILY BACKGROUNDS

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ABSTRACT

“The attitudes of future educators towards the environment are particularly important, as they have the ability to shape their students’ appreciation for it” (Kiso, 2025). With this in mind, researchers sought to analyze how gender influences the environmental attitude of B. Ed. trainees, conducting a random selection from four teacher training institutions (two government and two private) in Manipur. The sample consists of 322 trainees from the selected B. Ed. training institutions. The Environmental Attitude Scale constructed by Dr. (Mrs.) Haseen Taj was the investigating instrument of this study. The findings indicated that there was an effect of gender on the environmental attitude of B. Ed. trainees from different family backgrounds in Manipur. Further, statistically significant differences were found among B. Ed. trainees regarding their family backgrounds (nuclear vs. joint), specifically between female trainees of both backgrounds, and between females from nuclear families and males from joint families.

Key Words: Environmental Attitude, B. Ed. Trainees, Male, Female, Nuclear Family, Joint Family, Manipur.

1. INTRODUCTION

Attitudes are one of psychology’s fundamental concepts because they help to explain people’s decisions and action. An attitude is a global and relatively enduring evaluation of a person, object, or issue – a representation of whether we think the target is generally good or bad, desirable or undesirable (Bizer et al., 2006). Therefore, environmental attitudes, a crucial construct in environmental psychology, are a psychological tendency expressed by evaluating the natural environment with some degree of favour or disfavour (Milfont and Duckitt, 2010). In the rapidly changing, 21st century globalized world, with increasing environmental pressures and challenges, education for the environment and sustainability is a priority at all levels; from kindergarten to higher education. It is the education that will create the environmentally aware and socially responsible individuals, capable of addressing existing and future environmental challenges (Misseyanni et al., 2020). Environmental education is of great importance in the prevention of environmental issues and creating a healthy environment. For this reason, the factors that play a role in the formation of primary school teachers’ attitudes toward the environment need to be studied in depth (Tan, 2014). An increasing trend of environmental problems is largely associated with human interaction with nature. While individual attitudes and behavior play a pivotal role in attaining sustainable ecological actions (Nkaizirwa et al., 2021). Human generated environmental problems are significant issues of global concern. Despite this, varying attitudes towards environments continue to exist across the globe, impacting on environmental decision-making and action at local, national and international levels (Watson and Halse, 2005). Individuals have a great responsibility to solve man-made environmental problems. For this to be effective, it is necessary to develop

attitudes toward the environment (Molnár et al., 2026). Pro-environmental attitude refers to a strong willingness to adopt pro-environmental behaviour to protect the environment and achieve sustainable development, it is relatively stable and comprises three main aspects: cognitive composition, emotional composition, and behavioral tendency composition (Shen et al., 2024). Pro-environmental attitudes rise and fall with current events and vary with age, gender, socioeconomic status, nation, urban-rural residence, religion, politics, values, personality, experience, education, and environmental knowledge (Gifford and Sussman, 2012). We expect that pro-environmental attitude, defined as a person’s tendency to be concerned about the natural environment (Bamberg, 2003; Hawcroft & Milfont, 2010 as cited in Bissing-Olson et al. 2013), is positively related to daily pro-environmental behaviors at work. The results of the study by Cayolla et al., (2023) showed that participants’ pro-environmental attitude had a positive and significant effect on pro-environmental behavior. Miller et al., (2022) also observed that the overall environmental attitudes are a strong predictor of pro environmental behaviours

Guiding future awareness of and attitudes on the importance of nature and understanding environmental change is crucial for its future mitigation (Granato, 2025). Schools, as key educational institutions, play an essential role in raising a generation that is aware of and responsible for environmental issues. Teachers, as role models for students, can lead the way by teaching and promoting a culture of energy saving and proper waste management (Hassanshaali et al., 2025). Teachers are also the second-highest determining factor in the development of individuals, after the parents. It must not be forgotten that children take on role models while learning and



that is why perhaps the behavior and attitude of teachers, which they spend the most time with apart from their parents, has an effect on their personality development and thus whether they will be successful or not. Teachers being good role models should precede classes because their views on life and behavior guide the student (Ulug et al., 2011). The attitudes and behaviors of teachers directly influence the cognitive, affective, and social development of students (Kahveci, 2023).

2. NEED & SIGNIFICANCE OF THE STUDY

Humans are considered the main and influential factor in environmental problems, therefore, correcting the trend of the environmental crisis depends on correcting human teachings and changing the attitude of knowledge and sensitivity of humans towards their destiny and the environment around them (Kashkouli, 2025). Academicians with a pro-environmental attitude can play a pivotal role in developing curricula and new programs aimed at education for sustainable development (Sehar et al., 2025). Schools, being a primary institution for learning and socialization, serve as a critical platform to shape students' knowledge, attitudes, and behaviors regarding the environment (Roy, 2024). As teachers' attitudes significantly influence students' motivation and interest in learning (Bodinga et al., 2025), the investigators feel it necessary to check their environmental attitude of prospective teachers.

3. RESEARCH QUESTION AND HYPOTHESES

3.1. Research Question

1. "Is there a difference in environmental attitude levels among B. Ed. Trainees from different family background based on gender?"

3.2. Hypotheses

The following hypotheses have been framed based on the above research question:

- H₁:** Environmental attitude differs significantly among B. Ed trainees based on their gender.
H₂: Environmental attitude differs significantly among B. Ed. trainees based on their family background.
H₃: Environmental attitude differs significantly among male B. Ed. trainees from nuclear and joint family.
H₄: Environmental attitude differs significantly among female B. Ed. trainees from nuclear and joint family.
H₅: Environmental attitude differs significantly between male and female B. Ed. trainees from nuclear family.
H₆: Environmental attitude differs significantly between male and female B. Ed. trainees from joint family.
H₇: Environmental knowledge differs significantly between male B. Ed. trainees from nuclear family and female B. Ed. trainees from joint family.
H₈: Environmental knowledge differs significantly between female B. Ed. trainees from nuclear family and male B. Ed. trainees from joint family.

4. RESEARCH METHODOLOGY

4.1 Sample

Four B. Ed. training institutions in Manipur were selected randomly: two private institutions (Ibotombi Institute of Education and the Institute of Rural Education) and two government institutions (D.M. College of Teacher Education and the Department of Teacher Education, Manipur University). A total of 322 B. Ed. trainees were selected using random sampling method.

4.2 Variables of the study

4.2.1 Independent variables

- (i) Gender (Male/Female)
- (ii) Family Background (Nuclear/Joint)

4.2.2 Dependent variables

- (i) Environmental Attitude

4.3 Research tools used:

Environmental Attitude Scale:

Environmental Attitude Scale (EAS) developed and validated by Dr. (Mrs.) Haseen Taj was used as a tool of the research. The tool consists of 61 items covering six areas: I. Population Explosion, II. Health and Hygiene, III. Polluters, IV. Wildlife, V. Forest, and VI. Environmental Concerns. It was standardized on a sample of 350 males and 250 females between the ages of 14 and 50.

4.4 Procedure for collection of data

The above environmental attitude scale was administered to the B. Ed. trainee respondents, and their responses were scored, analyzed and interpreted.

4.5 Statistical tools used:

Percentage, means, standard deviations and t-test.

5. DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

5.1. General Discussion

As per the scoring norm of the questionnaire, the maximum possible score was 244 and the minimum was 61. The maximum score of the present study was 218, while the minimum was 78. The entire sample had a mean of 178.02 with a standard deviation of 21.23.



Table No. 1: Stanine grade range and level of environmental attitude based on the raw score of B. Ed. trainees of the four selected teacher training institutions, Manipur				
Sl. No.	Stanine Grade Range	Level of Environmental attitude	N	Percentage respondents
1	207 to 244 (IX)	Extremely high	13	4%
2	201 to 206 (VIII)	High	23	7%
3	194 to 200 (VII)	Above average	39	12%
4	169 to 193 (IV, V, VI)	Average/Moderate	172	54%
5	160 to 168 (III)	Below average	39	12%
6	140 to 159 (II)	Low	23	7%
7	139 to 61 (I)	Extremely low	13	4%

Since the maximum and minimum scores of the present investigation were 218 and 78, the actual stanine grade ranges of IX and I ranged from 207 to 218 and 78 to 139, respectively.

(i.e. 1.96 and 2.58) to determine statistical significance at the 0.05 and 0.01 levels as N values of all the sub-samples were higher than 30.

5.2. Hypothesis Testing:

The investigators compared the calculated t-statistics with standard critical values of the t-distribution table

H₁: Environmental attitude differs significantly among B. Ed trainees based on their gender.

Table No. 2: Comparison of Environmental Attitude Levels of B. Ed. Trainees based on their gender					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Male	80	176.03	21.25	0.967	Not significant at both levels
Female	242	178.68	21.23		

The t-value for the comparison of male and female B. Ed. trainees indicated that there was no significant difference in their environmental attitude proving that the constructed hypothesis was rejected. However, their mean values indicated

that female trainees have a slightly higher level of environmental attitude than male trainees (See Table No. 2).

H₂: Environmental attitude differs significantly among B. Ed. trainees based on their family background.

Table No. 3: Comparison of Environmental Attitude Levels of B. Ed. Trainees based on their family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Nuclear family background	162	182.05	18.88	3.481	Significant at both levels
Joint family background	160	173.94	22.72		

A significant difference in environmental attitude was observed, with B. Ed. trainees from nuclear families showing a higher attitude than those from joint families. Therefore, the

hypothesis framed based on family background of B. Ed. trainees was accepted (See Table No. 3).

H₃: Environmental attitude differs significantly among male B.Ed. trainees from nuclear and joint family.

Table No. 4: Comparison of Environmental Attitude Levels among male B. Ed. Trainees from nuclear and joint family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Males from nuclear family background	38	180.16	22.49	1.660	Not significant at both levels
Males from joint family background	42	172.29	19.58		

The t-ratio regarding environmental attitude among male B. Ed. trainees from nuclear and joint family backgrounds showed no statistical significance at both 0.05 and 0.01 levels; however, males from nuclear family backgrounds displayed a higher

environmental attitude than those from joint family backgrounds. Therefore, the hypothesis constructed among males of different family background was rejected (See Table No. 4).



H4: Environmental attitude differs significantly among female B. Ed. trainees from nuclear and joint family.

Table No. 5: Comparison of Environmental Attitude Levels among female B.Ed. Trainees from nuclear and joint family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Females from nuclear family background	124	182.63	17.70	2.989	Significant at both levels
Females from joint family background	118	174.53	23.78		

The obtained t-value suggests a significant difference in the level of environmental attitude among female B. Ed. trainees from different family backgrounds. Therefore, the hypothesis is accepted, indicating that females from nuclear family

backgrounds have a higher environmental attitude than those from joint family backgrounds (See Table No. 5).

H5: Environmental attitude differs significantly between male and female B. Ed. trainees from nuclear family.

Table No. 6: Comparison of Environmental Attitude Levels among male and female B. Ed. Trainees from nuclear family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Males from nuclear family background	38	180.16	22.49	0.621	Not significant at both levels
Females from nuclear family background	124	182.63	17.70		

The t-test value indicates that the difference between male and female B. Ed. trainees from nuclear family backgrounds was not statistically significant, leading to the rejection of alternative hypothesis or more precisely, the null hypothesis is

accepted; however, the mean score of females was higher than their male counterparts, suggesting a higher level of environmental attitude among females from nuclear family backgrounds (See Table No. 6).

H6: Environmental attitude differs significantly between male and female B. Ed. trainees from joint family.

Table No. 7: Comparison of Environmental Attitude Levels among male and female B. Ed. Trainees from joint family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Males from Joint family background	42	172.29	19.58	0.601	Not significant at both levels
Females from Joint family background	118	174.53	23.78		

The mean score of females from joint family background was greater than that of males from same family background, indicating that females from joint family background have higher environmental attitude than their male counterpart. However, the t-test value further indicated that their difference was not statistically significant. Thus, the hypothesis

formulated for these two variables was also rejected (See Table No. 7).

H7: Environmental knowledge differs significantly between male B. Ed. trainees from nuclear family and female B.Ed. trainees from joint family.

Table No. 8: Comparison of Environmental Attitude Levels between male B. Ed. trainees from nuclear family background and female B.Ed. Trainees from joint family background					
Group	N	Mean	Standard Deviation	t-ratio	Significance
Males from nuclear family background	38	180.16	22.49	1.325	Not significant at both levels
Females from joint family background	118	174.53	23.78		

The t-test value indicates that the difference between males of nuclear family background and females of joint family background was statistically not significant with respect to their

level of environmental attitude. So, the hypothesis framed between these two variables was also rejected. However, the mean scores showed that the score of males from



nuclear families was higher than the score of females from joint families, suggesting that males have a higher environmental attitude than females in this context. (See Table No. 8).

H₈: Environmental knowledge differs significantly between female B. Ed. trainees from nuclear family and male B. Ed. trainees from joint family.

Table No. 9: Comparison of Environmental Attitude Levels between female B. Ed. trainees from nuclear family background and male B.Ed. trainees from joint family background

Group	N	Mean	Standard Deviation	t-ratio	Significance
Females from nuclear family background	124	182.63	17.7	3.032	Significant at both levels
Males from joint family background	42	172.29	19.58		

The mean score of females from nuclear family background was higher than the score of males from joint family background, indicating that females from nuclear family background have higher environmental attitude. The t-test value further indicates that their difference was statistically significant and therefore, the hypothesis about these two variables was retained.

6. KEY FINDINGS

- As there were only five B. Ed. trainee respondents whose raw scores were less than 100, it might be concluded that the overall level of environmental attitude of the B. Ed. trainees was high.
- It was further revealed from the analyses that there were significant differences in environmental attitude based on family background, with key disparities identified between female-female nuclear family/joint family pairs and female-male nuclear family/joint family pairs.

7. CONCLUSION

The present research assessed the roles of gender and family background (nuclear/joint) on the environmental attitude levels of B. Ed. trainees in Manipur. The results revealed that there was a complex intersection between gender and family background of the B. Ed. trainees regarding their environmental attitude. Among the B. Ed. trainees, females from nuclear family background had significantly higher environmental attitude than females from joint family background; similarly, females from nuclear family background had significantly higher environmental attitude than males from joint family background. It can therefore be concluded that gender and family background interact to influence the environmental attitudes of B. Ed. trainees.

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