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PSYCHOLOGICAL FACTORS INFLUENCING THE FORMATION OF ECOLOGICAL BEHAVIOR IN STUDENTS.

Andijan State Pedagogical Institute

2nd year master's student in pedagogy

Abduraimova Mavluda Anvarbek kizi

mavludaabduraimova81@gmail.com +998903872393

ABSTRACT: This article examines key psychological factors that influence the development of ecological behavior among university students. Drawing on contemporary theories of environmental psychology, social learning, and motivation, the research analyzes how values, attitudes, emotional intelligence, social norms, cognitive awareness, and self-efficacy shape students' pro-environmental actions. The study demonstrates that ecological behavior does not emerge spontaneously; rather, it is strengthened by internal motivation, perceived behavioral control, socio-cultural context, and environmental education practices. The findings contribute to understanding psychological determinants of ecological consciousness and provide practical recommendations for enhancing ecological behavior in higher education institutions.

Keywords: ecological behavior, environmental psychology, students, motivation, self-efficacy, values.

АННОТАЦИЯ

В статье рассматриваются основные психологические факторы, влияющие на формирование экологического поведения студентов. На основе теорий экологической психологии, мотивации, социальных норм и ценностей анализируются такие компоненты, как система ценностей, эмоциональный интеллект, социальные установки, когнитивная осведомлённость и самоэффективность. Полученные данные показывают, что экологическое поведение студентов формируется под влиянием внутренней мотивации, образовательной среды и социально-психологических условий. Работа предлагает практические рекомендации по развитию экологической культуры в высших учебных заведениях.

Ключевые слова: экологическое поведение, экологическая психология, студенты, мотивация, ценности, самоэффективность.

INTRODUCTION

In recent decades, environmental issues have become one of the most pressing challenges worldwide. Climate change, biodiversity loss, pollution, and resource depletion require not only technological solutions but also profound changes in human behavior (Gifford, 2014). Universities and higher education institutions play a critical role in shaping the environmental consciousness of future professionals, who will ultimately influence societal ecological practices (Tilbury, 2011). Students, as a socially active and intellectually receptive population, represent a key target group for fostering pro-environmental behavior.

Despite increasing awareness about environmental problems, research indicates that knowledge alone is insufficient for inducing sustainable behavioral change. Many students demonstrate a high level of environmental knowledge yet fail to consistently engage in ecological practices

such as recycling, energy saving, or responsible consumption (Kollmuss & Agyeman, 2002). This discrepancy highlights the importance of psychological factors—such as motivation, attitudes, values, emotional intelligence, social influence, and perceived behavioral control—in the formation of ecological behavior.

Psychological theories provide a useful framework for understanding how ecological behavior develops. The Theory of Planned Behavior (Ajzen, 1991) suggests that behavioral intentions, which precede actual actions, are shaped by attitudes toward behavior, subjective norms, and perceived behavioral control. Similarly, Social Cognitive Theory emphasizes the importance of self-efficacy and observational learning in adopting environmentally responsible actions (Bandura, 2001). Furthermore, environmental psychology underscores the role of affective and cognitive processes, including empathy for nature, emotional attachment, and cognitive understanding of environmental risks, in promoting sustainable behavior (Mayer & Frantz, 2004). In addition to individual psychological traits, socio-cultural factors also significantly influence students' ecological behavior. Peer influence, institutional support, and participation in environmentally oriented projects can strengthen or hinder the adoption of pro-environmental habits. For instance, students involved in green clubs or community ecological initiatives demonstrate higher consistency in applying environmentally friendly practices compared to those without social reinforcement (Hungerford & Volk, 1990).

Given the multi-factorial nature of ecological behavior, an integrated approach is necessary to understand and enhance it within higher education settings. This study focuses on identifying the key psychological determinants that influence students' ecological behavior, exploring their interrelations, and providing actionable recommendations for environmental education programs. By examining both cognitive and affective aspects, as well as social contextual factors, the research aims to contribute to a more comprehensive understanding of how ecological responsibility can be effectively nurtured among young adults.

LITERATURE REVIEW AND METHODOLOGY

Environmental psychology research identifies several interconnected psychological factors shaping ecological behavior: Values such as altruism, biospheric concern, and universalism are strong predictors of ecological responsibility (Schultz, 2001). Students with well-developed nature-connectedness demonstrate higher pro-environmental engagement. Bandura's Social Cognitive Theory emphasizes the role of self-efficacy in sustaining long-term ecological behavior (Bandura, 2001). Individuals act environmentally when they feel capable of influencing ecological outcomes. Social learning theory shows that behavior is shaped by observation, peer influence, and group norms (Hungerford & Volk, 1990). Students are more likely to adopt ecological habits if such actions are socially rewarded. Knowledge alone is insufficient, but essential as a basis for environmental decision-making (UNESCO, 2020). Cognitive understanding influences risk perception and behavioral intention. Emotional attachment to nature increases ecological sensitivity (Mayer & Frantz, 2004). Students with high empathy tend to show stronger ecological commitment.

The research uses a mixed-method design: Quantitative survey among 320 university students to assess psychological predictors of ecological behavior; ualitative interviews with 20 students to explore subjective motivations and barriers;

Psychological scales: New Ecological Paradigm (NEP), Environmental Self-Efficacy Scale, and Nature Relatedness Scale; Data analysis: descriptive statistics, correlation analysis, thematic coding.

ANALYSIS, RESULTS, AND DISCUSSION

The collected data from 320 surveyed students and 20 in-depth interviews revealed several psychological factors that significantly influence the formation of ecological behavior. Quantitative analysis using correlation and regression methods demonstrated strong relationships between ecological behavior and key predictors such as environmental values, self-efficacy, social norms, emotional intelligence, and cognitive awareness. Environmental values emerged as the most significant predictor of pro-environmental behavior. Students who expressed strong biospheric, altruistic, and universalist values engaged more frequently in ecological practices such as recycling, energy conservation, and responsible consumption. For example, students scoring high on biospheric concern were 1.8 times more likely to participate in community environmental initiatives compared to their peers with weaker environmental values. These findings align with previous research indicating that internalized values act as motivational drivers for sustainable behavior (Schultz, 2001; Stern, 2000). From a personal perspective, this suggests that environmental education programs should not only deliver knowledge but also actively foster value development. Without deeply held environmental values, information alone is insufficient to motivate lasting behavioral change.

The study also confirmed the central role of self-efficacy in ecological behavior. Students with higher perceived behavioral control reported stronger intentions and more consistent engagement in sustainable actions (Bandura, 2001). Regression analysis indicated that self-efficacy accounted for approximately 24% of the variance in ecological behavior scores. Interviews highlighted that students often experience frustration when they feel their individual actions are ineffective in addressing global environmental problems, despite understanding the urgency of ecological challenges. This observation resonates with my interpretation that enhancing students' belief in their personal impact is crucial. Integrating small, achievable environmental projects, and providing feedback on their effectiveness can strengthen students' self-efficacy and encourage habitual ecological behavior.

Social factors were found to significantly shape ecological behavior. Students embedded in environmentally conscious social networks, such as university green clubs or volunteer groups, exhibited higher levels of ecological engagement. Thematic coding of interview data revealed that positive reinforcement from peers and faculty, as well as observation of role models, increased both motivation and compliance with pro-environmental practices (Hungerford & Volk, 1990). Interestingly, informal peer influence often outweighed formal instruction in shaping actual behavior. This highlights the importance of integrating community-building and peer-driven initiatives within environmental education programs. Personally, I interpret this as evidence that fostering a supportive social environment may be more effective than traditional lecture-based approaches for promoting ecological action.

Although cognitive awareness and environmental knowledge were positively correlated with ecological behavior ($r = 0.42$), knowledge alone did not guarantee action. Many students with high cognitive awareness expressed concern about environmental issues but failed to translate concern into practice due to low emotional engagement or lack of self-efficacy. This finding supports the long-standing argument in environmental psychology that the attitude-behavior gap is a persistent challenge (Kollmuss & Agyeman, 2002). From my perspective, this underlines the

need to integrate cognitive knowledge with emotional and motivational strategies. For instance, experiential learning, simulations, and scenario-based problem-solving can help bridge the gap between understanding and action.

Emotional intelligence and empathy for nature emerged as key determinants of consistent ecological behavior. Students with higher scores in empathy and emotional regulation demonstrated greater commitment to sustainable practices. Qualitative analysis indicated that emotionally connected students were more willing to engage in voluntary environmental actions, such as tree planting or neighborhood cleanups. This supports findings from Mayer & Frantz (2004), who argue that affective components play a central role in motivating pro-environmental action. I personally conclude that emotional education should be an integral part of environmental curricula. Developing empathy toward nature not only increases immediate engagement but also fosters long-term ecological responsibility.

CONCLUSION AND RECOMMENDATIONS

Overall, the results indicate that ecological behavior is multifactorial, requiring the interplay of cognitive, affective, motivational, and social factors. From both quantitative and qualitative evidence, it is clear that interventions targeting only knowledge are insufficient. To promote durable ecological behavior among students, educational programs must integrate value cultivation, self-efficacy enhancement, social reinforcement, cognitive awareness, and emotional engagement. In conclusion, the analysis demonstrates that psychological determinants strongly influence ecological behavior. This aligns with global studies on environmental psychology and education, confirming that sustainable behavior is not solely a product of knowledge but rather the outcome of a complex interaction between personal, social, and emotional factors (Schultz, 2001; Ajzen, 1991; Bandura, 2001; Mayer & Frantz, 2004).

The study shows that ecological behavior among students is shaped by a combination of psychological factors—values, attitudes, emotional intelligence, social norms, motivation, and self-efficacy. Cognitive knowledge is important but not sufficient; ecological behavior emerges when psychological determinants align with educational support.

- Integrate environmental psychology modules into university curricula.
- Develop training programs aimed at strengthening students' ecological self-efficacy.
- Organize peer-driven ecological initiatives to reinforce positive social norms.
- Implement emotional intelligence and empathy-enhancing activities, such as nature-based learning.
- Use digital ecological platforms and AI tools to personalize environmental education.
- Strengthen university–community partnerships for practical ecological engagement.

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