

**CRITICAL THINKING AND EMOTIONAL AWARENESS IN HIGHER EDUCATION:
A RECONSIDERATION THROUGH AFFECT THEORY**

Mamatmurotov Oybek Kamol ugli

Lecturer of the Department of Pedagogy, Termez State Pedagogical Institute

Abstract: This article reconsiders the concept of critical thinking in higher education from the perspective of affect theory. It analyzes the importance of emotional factors in the critical thinking process and their interrelation. The article emphasizes the necessity of considering emotional awareness in the development of students' critical thinking skills. A qualitative methodology was employed, and data were collected through interviews with students and educators. The research results demonstrate the significant role of emotional factors in critical thinking and offer practical recommendations for teaching in higher education.

Keywords: critical thinking, emotional awareness, affect theory, higher education, students, teaching, emotions, cognitive processes.

Introduction

The concept of "critical thinking" entered the field of pedagogy in the mid-20th century. One of the first to use the term was K. Popper, who argued that every living organism performs the function of solving problems. According to him, surrounding information either confirms or refutes the meaning of existence, offering predictive value. In this context, critical thinking operates as a method for seeking truth and eliminating error (Mamatmurotov, O.K., 2024) [10]. Over recent decades, critical thinking has become a foundational concept in Western universities, serving as a key tool for cultivating students' critical civic consciousness (Barnett, 1997) [2]. This conceptualization began with John Dewey's theory of reflective thinking and remains a central focus of educational theorists and policymakers (Dewey, 1933; Siegel, 1988) [6].

In contemporary research, critical thinking is interpreted not only as a process of logical analysis but also as one closely tied to emotional, ethical, and social values (Pettersson, 2020) [14]. Especially within the framework of affect theory, there is a growing approach that views critical thinking as formed through the interaction of human emotion and cognition (Ahmed, 2004; Massumi, 2015) [1]. Higher education plays a vital role in the intellectual and social development of individuals in modern society. As one of its core goals, critical thinking enables students to analyze information, make evaluations, and form rational decisions (Ennis, 1985; Facione, 1990) [7]. However, critical thinking is often examined purely as a cognitive process, with insufficient attention paid to the role of emotions.

In recent years, affect theory has become increasingly important in understanding how emotional awareness influences human behavior and thinking (Damasio, 1994; Nussbaum, 2001) [5]. This theory enables a perspective that views critical thinking not only as a logical process but also as one intertwined with emotional factors.

This article aims to reassess the concept of critical thinking in higher education through the lens of affect theory and to analyze the significance of emotional awareness in this process. The core research questions include:

What role do emotional factors play in students' critical thinking processes?

How do educators take emotional awareness into account when teaching critical thinking?

What is the pedagogical significance of integrating emotional awareness in fostering critical thinking in higher education?

Literature Review

The concept of critical thinking has long been discussed in educational literature. Numerous scholars define it as the ability to analyze, evaluate, and synthesize information (Ennis, 1985; Facione, 1990; Paul & Elder, 2008) [7]. These definitions primarily emphasize cognitive aspects, often neglecting the role of emotional factors.

Critical thinking is a deliberate and active mental process that allows individuals to make informed decisions, solve problems, and analyze complex situations based on evidence and logic. John Dewey (1933) referred to this as “reflective thinking.”

According to Davies and Barnett (2015), critical thinking is essential in shaping students into independent, responsible, and engaged citizens within modern education. Moore (2013) interprets critical thinking not merely as a logical skill but also as one linked to social and cultural values.

Additionally, research in educational psychology underscores the significance of students' emotional experiences in learning. Emotions such as motivation, interest, anxiety, and joy have been shown to substantially influence students' academic engagement and outcomes (Pekrun, 2006; Schutz & Pekrun, 2007) [13].

Affect theory has gained traction in the educational context in recent years. Its core premise is that emotional experiences significantly influence behavior and thought (Damasio, 1994; Nussbaum, 2001; Zembylas, 2005). In education, affect theory is applied to study how factors like motivation, classroom climate, and student-teacher relationships affect the learning process.

This literature review highlights a gap in the study of the relationship between critical thinking and emotional awareness. The present study aims to address this gap and emphasize the importance of emotional factors in the development of critical thinking in higher education.

Theoretical Framework

This research is grounded in affect theory, which studies the influence of emotional experiences on human behavior and thought processes (Damasio, 1994; Nussbaum, 2001) [5]. The core idea is that feelings, emotions, and moods significantly shape an individual's worldview, decision-making, and behavior.

Emotional factors play a crucial role in critical thinking. Students may exhibit strong emotional responses to certain topics, influencing their reasoning processes (Zembylas, 2013). For instance, when discussing topics related to social injustice, students may experience anger, frustration, or hopelessness—emotions that impact their capacity to critically analyze and evaluate arguments.

Hence, developing students' emotional awareness is essential for fostering critical thinking in higher education. Educators should understand students' emotional experiences and support them in managing emotions during the critical thinking process. This includes offering emotional support, raising emotional literacy, and creating psychologically safe learning environments.

Furthermore, this research employs the cognitive appraisal theory of emotion to understand the relationship between cognitive and emotional dimensions of critical thinking (Lazarus, 1991) [9]. This theory emphasizes that emotions are linked to how individuals assess situations. In the

context of critical thinking, it suggests that students' emotional responses to certain topics can affect their evaluation and analysis.

Research Methodology

A qualitative research approach was adopted for this study. Qualitative methods provide a rich and in-depth understanding of social phenomena (Creswell, 2014). Data were collected through semi-structured interviews with students and educators.

Participants included undergraduate and graduate students from various faculties, as well as instructors from different disciplines at a higher education institution. Purposeful sampling was used to select participants who could provide the most relevant insights for answering the research questions.

The interviews explored students' experiences with critical thinking, their emotional responses to specific topics, and the influence of emotional awareness on their reasoning. Educators were asked about their experiences considering emotional factors in teaching critical thinking, emotional support strategies, and practices aimed at developing students' emotional awareness.

All interviews were audio-recorded and transcribed verbatim. Data were analyzed using thematic analysis (Braun & Clarke, 2006) [3], which allowed the identification and organization of key themes within the data.

Confidentiality and anonymity were maintained throughout the research. Written consent was obtained from all participants, and ethical research standards were strictly followed.

Findings

The study revealed that emotional factors play a significant role in students' critical thinking processes. Students often displayed strong emotional responses to specific topics, which influenced their reasoning.

Impact of Emotional Responses on Critical Thinking:

When discussing complex or controversial topics, students reported experiencing intense emotions such as anger, anxiety, or excitement. These emotions affected their ability to analyze arguments, consider alternative viewpoints, and draw reasoned conclusions.

Role of Emotional Awareness in Critical Thinking:

Students' ability to understand and manage their emotions—emotional awareness—was found to be critical in the reasoning process. Emotionally aware students were more capable of recognizing the influence of emotions on their thinking and making reasoned decisions by regulating those emotions.

Educators' Practice of Considering Emotional Awareness:

The majority of educators acknowledged the importance of understanding students' emotional experiences and providing emotional support. However, their practices for integrating emotional awareness into the learning process varied considerably.

Discussion

The findings confirm the relevance of affect theory and cognitive appraisal theory in the context of critical thinking. Emotional awareness significantly contributes to the development of students' critical thinking skills.

Complexity of Emotional Responses:

The results show that emotional responses can have both positive and negative effects on critical thinking. Strong emotions can enhance engagement and lead to deeper exploration of topics.

However, excessively intense emotions may hinder rational thought and obstruct sound decision-making.

Need for Emotional Awareness Development:

The study highlights the importance of fostering emotional awareness among students. Educators should help students identify, express, and regulate their emotions. This enhances students' critical thinking abilities and prepares them to address complex social issues.

Pedagogical Recommendations:

The findings suggest several practical implications for teaching critical thinking in higher education. Educators should account for students' emotional experiences, provide emotional support during the learning process, and implement practices that promote emotional awareness.

Conclusion

This article attempts to reconsider the concept of critical thinking in higher education through affect theory. The findings demonstrate that emotional awareness plays a vital role in critical thinking. Higher education institutions must account for emotional awareness in developing students' critical thinking skills. Future research may focus on further exploring this topic in greater depth.

Acknowledgements

The authors would like to thank all participants for their great support and inspiration.

Funding

This study was conducted solely by the author without any external funding or financial support.

Availability of data and materials

The author examined the results of critical thinking methods implemented in interactive lessons at Termiz State Pedagogical Institute and conducted a comparative analysis between existing local approaches and internationally recognized standards for critical thinking assessment.

References:

1. Ahmed, S. (2004). *The Cultural Politics of Emotion*. Edinburgh University Press.
2. Barnett, R. (1997). *Higher Education: A Critical Business*. Open University Press.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
4. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
5. Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. GP Putnam's Sons.
6. Dewey, J. (1933). *How We Think*. D.C. Heath and Company.
7. Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43(2), 44-48.
8. Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. American Philosophical Association.
9. Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
10. Mamatmurotov, O. K. (2024). Tanqidiy fikrlashning pedagogik aspektlari. *Inter education & global study*, (5), 275-282.

11. Nussbaum, M. C. (2001). *Upheavals of thought: The intelligence of emotions*. Cambridge University Press.
12. Paul, R., & Elder, L. (2008). *Critical thinking: Tools for taking charge of your learning and your life*. Pearson Education.
13. Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, 18(4), 315-341.
14. Pettersson, H. (2020). De-idealizing Critical Thinking. *Theory and Research in Education*.
15. Schutz, P. A., & Pekrun