

## Effect of the Professor's Ethical Philosophy and Perception of Class Quality on Critical Thinking and Sense of Belonging to the University, with the Mediating Role of Academic Goal Orientation among Students at Al-Iraqia University in Baghdad.

Emad Ebrahim Ahmed Al-Azami <sup>1</sup>, Hassan Ghalavandi <sup>2\*</sup>

<sup>1</sup> PhD student in Educational Management, Department of Educational Sciences, Urmia University, Urmia, Iran

<sup>2</sup> Professor, Department of Educational Sciences, Urmia University, Urmia, Iran

---

Cite this paper as: Emad Ebrahim Ahmed Al-Azami , Hassan Ghalavandi (2024). Effect of the Professor's Ethical Philosophy and Perception of Class Quality on Critical Thinking and Sense of Belonging to the University, with the Mediating Role of Academic Goal Orientation among Students at Al-Iraqia University in Baghdad. *Frontiers in Health Informatics*, 13 (8) 382-397

---

### Abstract

This research aims to examine the relationship between the professor's ethical philosophy, perception of class quality, critical thinking, and sense of belonging to the university, with the mediating role of academic goal orientation among students at Al-Iraqia University in Baghdad. The study population consisted of all students at Al-Iraqia University, Baghdad. Based on Cochran's sampling formula and considering the large size of the population, a sample of 384 students was selected through cluster random sampling. Data were collected using the following questionnaires: Kojala's (2009) Ethical Philosophy, Seraaj's (2002) Teaching Quality, Bried, Betty, and Watt's (2004) Sense of Belonging to the University, Elliott and McGregor et al.'s (2001) Academic Goal Orientation, and Ricketts' (2003) Critical Thinking. The reliability of the questionnaires was 0.78, 0.80, 0.82, 0.88, and 0.78, respectively. The results indicated that the professor's ethical philosophy had no significant relationship with students' critical thinking ( $r = 0.009$ ). However, the professor's ethical philosophy was significantly related to students' sense of belonging to the university ( $r = 0.238$ ). There was a significant relationship between the perception of class quality and critical thinking ( $r = 0.192$ ) and between the perception of class quality and students' sense of belonging to the university ( $r = 0.536$ ). Furthermore, academic goal orientation had a significant relationship with critical thinking ( $r = 0.649$ ) and a sense of belonging ( $r = 0.221$ ) among students. The professor's ethical philosophy showed a significant relationship with students' sense of belonging through the mediating role of academic goal orientation ( $r = 0.039$ ). Perception of class quality also had a significant relationship with students' sense of belonging through the mediating role of academic goal orientation ( $r = 0.075$ ). The results showed a significant relationship between the professor's ethical philosophy and critical thinking with the mediating role of academic goal orientation ( $r = 0.115$ ). Additionally, perception of class quality had a significant relationship with critical thinking with the mediating role of academic goal orientation ( $r = 0.221$ ).

**Keywords:** Ethical Philosophy, Teaching Quality, Sense of Belonging to the University, Academic Goal Orientation, Critical Thinking.

### Introduction

Critical thinking is a systematic process of conceptualizing, applying, analyzing, synthesizing, and evaluating information gathered from observation, experience, reflection, reasoning, or communication. It involves questioning assumptions, identifying underlying values, evaluating evidence, and assessing conclusions. This process is not just

about gathering information but is more concerned with understanding the logical connections between ideas, identifying, constructing, and evaluating arguments, and discovering inconsistencies or common mistakes in reasoning (Su et al., 2023). Critical thinking is essential in problem-solving and decision-making because it allows individuals to process information in a reasoned, reflective, and unbiased manner. By employing critical thinking, individuals can avoid cognitive biases and make more logical decisions. It fosters creativity by encouraging the search for alternative solutions and perspectives, promotes an open mind, and supports the development of well-reasoned conclusions. In academic and professional settings, critical thinking is crucial for effective communication, research, and the ability to engage with complex issues thoughtfully and thoroughly (Warsa et al., 2021). A sense of belonging to the university is an emotional connection that students, staff, and faculty members establish with their educational institution. This sense of belonging arises when individuals feel accepted, valued, and supported within the university community. It encompasses a sense of identity and attachment to the university, where members view themselves as an integral part of the larger educational environment. This feeling is nurtured through positive relationships, inclusive practices, and a shared sense of purpose and commitment to the values and goals of the university (Porter et al., 2024).

A strong sense of belonging to the university enhances engagement, motivation, and well-being, improving the overall educational experience. Students who feel a sense of belonging are likely to actively participate in academic and extracurricular activities, show better academic performance, and demonstrate higher levels of resilience and persistence. For staff and faculty, this sense of belonging contributes to a sense of connection, collaboration, and professional growth. Ultimately, this feeling of connection helps create a supportive and thriving university culture, where all members feel respected and empowered to contribute to the success of the community (Matthews et al., 2024). Ethical philosophy, or ethics, is a branch of philosophy that examines the nature of ethics, exploring what constitutes right and wrong, good and bad, and virtue and vice. It includes systematic approaches to understanding ethical concepts and principles, analyzing the frameworks within which ethical judgments are made, and discussing the consequences of ethical actions. Key areas in ethical philosophy include normative ethics, which proposes standards for right action; meta-ethics, which investigates the nature and meaning of ethical terms and concepts; and applied ethics, which applies ethical theories to practical situations and issues (Hou et al., 2024).

Ethical philosophy delves into the principles and values governing human behavior and seeks to establish criteria for determining what is morally right or wrong. It encompasses various approaches, such as deontology, which emphasizes duties and rules; consequentialism, which considers the outcomes of actions; and virtue ethics, which focuses on character and moral virtues. The goal of ethical philosophy is, through rigorous analysis and discussion, to clarify ethical concepts, resolve moral conflicts, and provide guidance for making ethical decisions in both personal and social contexts. By exploring the foundations of ethics, it helps individuals understand and justify their moral choices and cultivate a more coherent and consistent ethical perspective (Benson, 2023). Perception of class quality refers to how students, instructors, and stakeholders assess the effectiveness and overall value of a classroom experience. This perception is shaped by various factors, including the clarity and relevance of the curriculum, the competence and engagement of the instructor, the availability of resources, and the level of student participation and interaction. Students evaluate class quality based on how well the course meets their educational needs, the clarity of instruction, the fairness and transparency of assessments, and the support of the learning environment. On the other hand, instructors consider how well the class aligns with educational standards, the success rate of students, and the feedback from evaluations (Suisal, 2023).

Perception of class quality is essential for fostering a productive and satisfying educational experience. When students perceive their classes as high quality, they are more likely to be motivated, engaged, and committed to their studies. This perception leads to improved academic performance, satisfaction, and overall educational outcomes. For instructors, providing high-quality classes can result in greater professional satisfaction, improved teaching evaluations, and a

positive reputation among students. Overall, the perception of class quality affects the effectiveness of the educational process and contributes to the success and well-being of both students and instructors (Henry et al., 2023). Academic goal orientation refers to the attitudes and motivations students adopt toward their educational and academic progress. It includes the reasons why students engage in academic tasks and the types of goals they set for themselves. There are generally three main types of goal orientations: mastery, performance approach, and performance-avoidance. Mastery orientation is when students focus on learning, understanding, and improving their competence. Performance approach orientation involves aiming to outperform others and demonstrate superior ability. Performance avoidance orientation is characterized by a desire to avoid failure and negative judgments from others. Each type of orientation influences how students approach their studies, their persistence in challenges, and their reactions to success or failure (Liu et al., 2023). The type of academic goal orientation adopted by students can significantly influence their learning behaviors and academic outcomes. Mastery-oriented students are more likely to engage deeply with the content, demonstrate flexibility when facing challenges, and view failures as opportunities for growth. Performance-oriented students may achieve high grades and recognition but might experience stress and anxiety. Students with a performance-avoidance orientation tend to experience higher levels of anxiety and are more likely to engage in self-defeating behaviors. Understanding these orientations helps instructors create supportive learning environments that promote positive motivational strategies, ultimately enhancing students' experiences and educational achievements (Mohzana, 2023). The lack of critical thinking skills and a sense of belonging among students at the University of Al-Iraqia in Baghdad can have numerous consequences. Without critical thinking skills, students may struggle to analyze information critically, solve complex problems, or engage deeply with their studies, potentially hindering their academic performance and preparedness for future careers. A decreased sense of belonging can contribute to feelings of isolation and detachment from the academic community, affecting motivation and overall well-being. The ethical philosophy of the instructor, which influences their values and ethical framework, along with the perceived quality of the classroom environment, can significantly impact students' experiences. When instructors support a strong ethical philosophy that promotes fairness, respect, and academic integrity, and when students perceive the learning environment as supportive and conducive to learning, these factors can enhance students' academic objectivity—their ability to approach learning with an open and unbiased mindset. This, in turn, can mitigate the negative effects of a lack of critical thinking skills and a sense of belonging, creating a richer educational experience for students at the University of Al-Iraqia. The influence of the instructor's ethical philosophy and class quality perception on students' critical thinking and sense of belonging at the University of Al-Iraqia in Baghdad is profound, especially when mediated by academic goal orientation. The instructor's ethical philosophy, which includes values like fairness, respect, and integrity, sets the tone for classroom interactions and learning environments. When students perceive these qualities in their instructors and classes, they are more likely to feel respected, engaged, and motivated to pursue their academic goals. This positive environment nurtures their goal orientation, clarifies their educational objectives, and motivates them to persevere through challenges. Moreover, a supportive classroom setting enhances students' critical thinking skills by encouraging open dialogue, constructive discussions, and exploration of diverse perspectives. Together, these factors strengthen students' sense of belonging to the academic community and foster a comprehensive educational experience that not only nurtures critical thinking but also strengthens their connection with the University of Al-Iraqia and their academic journey. Al-Azeem (2023) examined the relationship between critical thinking and academic progress, mediated by the sense of belonging to the university. The results indicated a significant relationship between critical thinking and academic progress through the mediator of university belonging. Al-Othman (2023) investigated the relationship between the instructor's ethical philosophy and critical thinking, mediated by academic ethics. The results revealed a significant relationship between the instructor's ethical philosophy and critical thinking through the mediator of academic ethics. Based on the findings mentioned, this study aims to answer the question: Does the instructor's ethical philosophy and the perception of class quality influence critical

thinking and the sense of belonging to the university, with academic goal orientation mediating the relationship among students at the University of Al-Iraqia in Baghdad?

### **Methodology of the Study**

This research is of a correlational type, specifically structural equation modeling. In a correlational method, the relationship between two or more variables is measured, with typically one variable considered as the criterion variable and the others as predictor variables. The statistical population in this study consisted of the students of the University of Al-Iraqia in Baghdad. Given that the student population of the University of Al-Iraqia in Baghdad is large, the sample size was determined using Cochran's sampling formula, resulting in a sample size of 384 individuals. In this research, simple random sampling was used to select participants from the students of the University of Al-Iraqia in Baghdad. For data collection in this study, the following questionnaires were used:

#### **Kujala's Ethical Philosophy Questionnaire**

The Kujala Ethical Philosophy Questionnaire was developed by Kujala, Lamsa, and Petina in 2009. This questionnaire measures ethical philosophy based on 17 questions and 5 components: 1) Eternal Law, 2) Utilitarianism or Consequentialism, 3) Deontology or Duty-based Ethics, 4) Justice, 5) Individual Freedom. The Kujala Ethical Philosophy Questionnaire uses a Likert scale (ranging from Strongly Agree to Strongly Disagree). The questionnaire was validated in the Expansive (2013) study, where the validity was established through the opinions of the thesis advisor and several other professors, experts, and specialists. The reliability coefficient of the questionnaire in the Expansive (2013) study was found to be 0.88.

#### **Seraj's Teaching Quality Questionnaire**

This questionnaire, developed by Seraj in 2002, aims to assess teaching quality. It consists of 20 questions across four dimensions: 1) Lesson Planning, 2) Teaching Execution, 3) Teaching Evaluation, and 4) Interpersonal Relationships. The Likert scale has four options ranging from "No Effect" to "Very Effective." The validity and reliability of Seraj's Teaching Quality Questionnaire have been confirmed. In Esmailian et al.'s (2014) study, the reliability was found to be 0.83 using Cronbach's alpha.

#### **Berry's Sense of Belonging to University Questionnaire (SSCS)**

The Berry, Betti, and Watt (2004) Sense of Belonging to University Questionnaire was designed to measure students' sense of belonging to their university. In Iran, it was validated by Makyian and Kalantar Koosheh (2015). The questionnaire includes 27 questions and six components: 1) Teacher Support, 2) Participation in the Community, 3) Respect and Justice in the University, 4) Positive Feelings toward the University, 5) Personal Belonging to the University, and 6) Academic Participation. It uses a five-point Likert scale (from Strongly Disagree = 1 to Strongly Agree = 5). The total score range is from 27 to 108, with higher scores indicating a stronger sense of belonging. In Makyian and Kalantar Koosheh's study, the content, face, and criterion validity were confirmed, and Cronbach's alpha was above 0.84.

#### **Academic Goal Orientation Questionnaire**

Developed by Elliot, McGregor, and colleagues in 2001, this questionnaire includes 12 items and four components to measure academic goal orientation, using a five-point Likert scale (from Very Low to Very High). The components are: 1) Mastery Approach, 2) Mastery Avoidance, 3) Performance Approach, and 4) Performance Avoidance. Scores between 12 and 20 indicate low goal orientation, between 20 and 40 indicate moderate orientation, and above 40 indicate high orientation. In Azizi et al.'s (2016) study, the validity was confirmed by experts, and the reliability was found to be 0.77 using Cronbach's alpha.

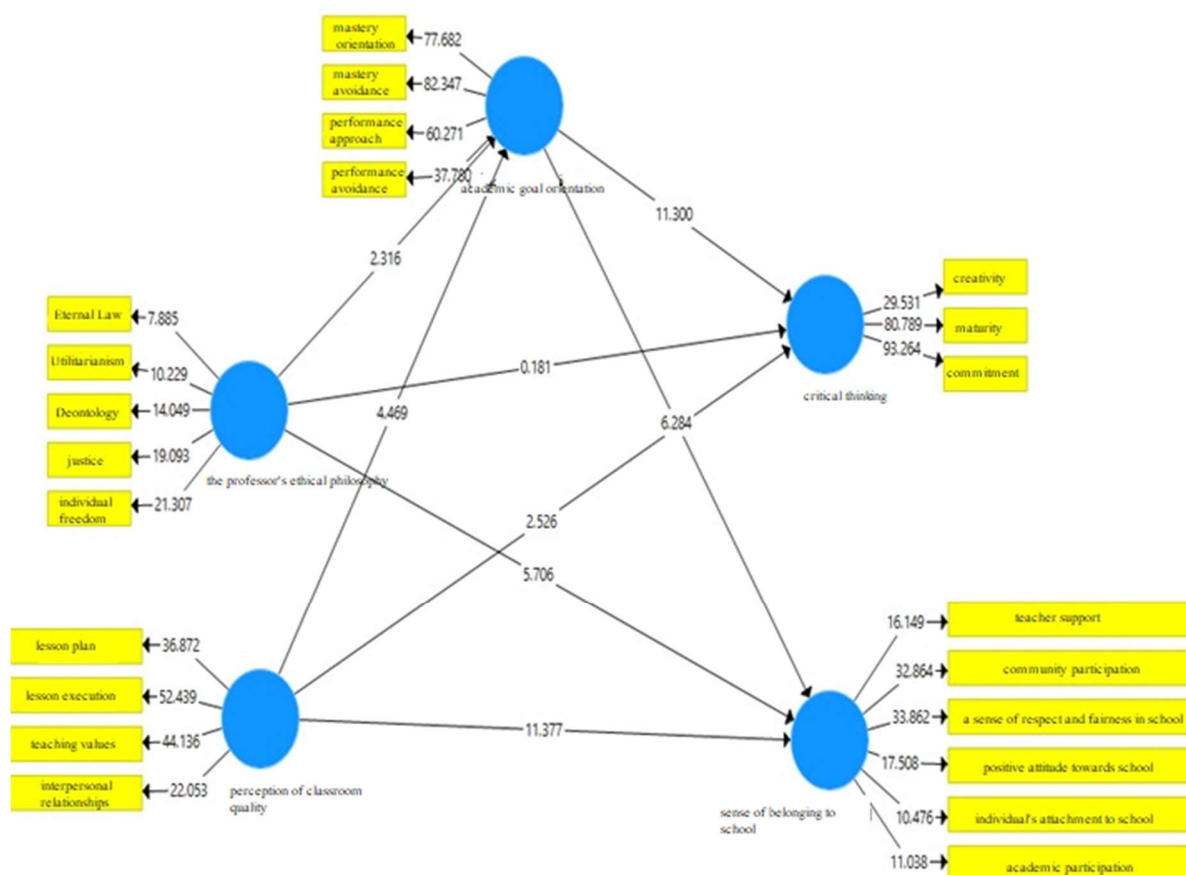
#### **Ricketts' Critical Thinking Questionnaire (2003)**

Ricketts' Critical Thinking Questionnaire consists of 33 questions and three subscales: 1) Creativity (11 questions), 2) Logical Reasoning (9 questions), and 3) Commitment (13 questions). It uses a five-point Likert scale (from Strongly Disagree = 1 to Strongly Agree = 5). The total score range is from 33 to 165, with scores between 33 and 66 indicating

weak critical thinking, between 66 and 99 indicating moderate thinking, and above 99 indicating strong critical thinking. In Biabankhord's (2008) study, the test-retest reliability for all participants and gender-based subgroups was reported as satisfactory. The reliability of the questionnaire in Izadifard and Sepasi Ashteyani's (2010) study was reported as 0.94 for the total sample, 0.95 for female participants, and 0.92 for male participants using Cronbach's alpha.

## Findings

Only the endogenous variables have a value. After performing the calculations, the GOF (Goodness of Fit) index for academic goal orientation, critical thinking, and sense of belonging to the university is obtained as 0.503, which is a good indicator and shows the overall good quality of the model.



**Figure (1)** t-statistic related to the professor's ethical philosophy, perception of class quality, academic goal orientation, critical thinking, and sense of belonging to the university.

## The professor's ethical philosophy has no significant effect on the critical thinking of students at Al-Iraqia University in Baghdad.

The findings in Table (1) show that the correlation coefficient between the professor's ethical philosophy and the critical thinking of students at Al-Iraqia University is not significant. In other words, the professor's ethical philosophy does not have a significant relationship with the critical thinking of students at Al-Iraqia University ( $r = 0.009$ ). Based on the coefficient of determination ( $r^2$ ), 1% of the variance in the professor's ethical philosophy and the critical thinking of students at Al-Iraqia University is shared.



**Table (1)** shows the correlation coefficient between the professor's ethical philosophy and the critical thinking of students at Al-Iraqia University in Baghdad.

	Independent variable: The teacher's ethical philosophy				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Critical thinking	0.009	0.001	0.169	0.866	Failure to confirm the hypothesis

05/0>p

**The moral philosophy of the instructor has an impact on the sense of belonging of students at Al-Iraqi University in Baghdad.**

The findings in Table (2) show that the correlation coefficient between the instructor's moral philosophy and the sense of belonging of students at Al-Iraqi University is statistically significant. In other words, there is a meaningful relationship between the instructor's moral philosophy and the sense of belonging of students at Al-Iraqi University ( $r = 0.238$ ). Based on the coefficient of determination ( $r^2$ ), 5.7% of the variance in the instructor's moral philosophy is shared with the sense of belonging of the students at Al-Iraqi University.

**Table (2):** Correlation coefficient between the instructor's moral philosophy and the sense of belonging of students at Al-Iraqi University in Baghdad

	Independent variable: The teacher's ethical philosophy				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
sense of belonging	0.238**	0.057	5.791	0.001	Failure to confirm the hypothesis

05/0>p

**The perception of class quality affects the critical thinking of students at the University of Al-Iraqia, Baghdad.**

The findings from Table (3) indicate that the correlation coefficient between the perception of class quality and the critical thinking of students at the University of Al-Iraqia is significant. This means that there is a meaningful relationship between the perception of class quality and critical thinking among the students at the University of Al-Iraqia ( $r = 0.192$ ). Based on the coefficient of determination ( $r^2$ ), 3.7% of the variance in the perception of class quality is shared with the critical thinking of students at the University of Al-Iraqia.

**Table (3)** Correlation Coefficient of Perception of Class Quality with Critical Thinking of Students at the University of Al-Iraqia, Baghdad

	Independent variable: Perception of Class Quality				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result

Critical Thinking	0.192*	0.037	2.555	0.011	Failure to confirm the hypothesis
-------------------	--------	-------	-------	-------	-----------------------------------

05/0>p

### The perception of class quality affects the sense of belonging of students at the University of Al-Iraqiya in Baghdad.

The findings in Table (4) show that the correlation coefficient between the perception of class quality and the sense of belonging of students at the University of Al-Iraqiya is statistically significant. In other words, the perception of class quality has a significant relationship with the sense of belonging of students at the University of Al-Iraqiya ( $r = 0.536$ ). Based on the coefficient of determination ( $r^2$ ), 28.7% of the variance in the perception of class quality is shared with the sense of belonging of the students at the University of Al-Iraqiya.

**Table (4)** Correlation Coefficient of Perception of Class Quality with the Sense of Belonging of Students at the University of Al-Iraqiya in Baghdad

	Independent variable: Perception of Class Quality				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Sense of Belonging	0.536**	0.287	11.452	0.001	Failure to confirm the hypothesis

05/0>p

### Academic goal orientation affects the critical thinking of students at the University of Al-Iraqiya in Baghdad.

The findings in Table (5) show that the correlation coefficient between academic goal orientation and critical thinking of students at the University of Al-Iraqiya in Baghdad is significant. This means that academic goal orientation has a meaningful relationship with the critical thinking of students at the University of Al-Iraqiya in Baghdad ( $r = 0.649$ ). Based on the coefficient of determination ( $r^2$ ), 42.1% of the variance in academic goal orientation is shared with the critical thinking of students at the University of Al-Iraqiya in Baghdad.

**Table (5)** shows the correlation coefficient between academic goal orientation and critical thinking of students at the University of Al-Iraqiya in Baghdad

	Independent variable: academic goal orientation				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
critical thinking	0.649**	0.421	11.054	0.001	Failure to confirm the hypothesis

05/0>p

### Academic goal orientation has an impact on the sense of belonging of students at the University of Al-Iraqiya in Baghdad.

The findings from Table (6) show that the correlation coefficient between academic goal orientation and students' sense of belonging at the University of Al-Iraqiya in Baghdad is statistically significant. Specifically, academic goal orientation has a significant relationship with students' sense of belonging ( $r = 0.221$ ). Based on the coefficient of determination ( $2r$ ), 4.9% of the variance in academic goal orientation is shared with the sense of belonging of students at the University of Al-Iraqiya in Baghdad.

**Table (6):** Correlation Coefficient between Academic Goal Orientation and Sense of Belonging among Students at the University of Al-Iraqiya, Baghdad

	Independent variable: academic goal orientation				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Sense of Belonging	0.221**	0.049	6.249	0.001	Failure to confirm the hypothesis

05/0>p

**The professor's ethical philosophy indirectly influences students' sense of belonging at Al-Iraqiya University in Baghdad through the mediating role of academic goal orientation.**

The findings in Table (7) show that the correlation coefficient between the professor's ethical philosophy and students' sense of belonging, with the mediating role of academic goal orientation at Al-Iraqiya University in Baghdad, is significant. In other words, the professor's ethical philosophy has a significant relationship with students' sense of belonging through the mediating role of academic goal orientation ( $r = 0.039$ ). Based on the coefficient of determination ( $2r$ ), 0.2% of the variance in the professor's ethical philosophy and students' sense of belonging, with the mediating role of academic goal orientation, is shared.

**Table (7)** Correlation Coefficient of the Professor's Ethical Philosophy on Sense of Belonging Considering the Mediating Role of Academic Goal Orientation of Students at Al-Iraqiya University in Baghdad

	Independent variable: academic goal orientation * Professor's Ethical Philosophy				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Sense of Belonging	0.03.9**	0.002	1.976	0.049	Failure to confirm the hypothesis

05/0>p

**Perception of Class Quality Has an Indirect Impact on the Sense of Belonging with the Mediating Role of Academic Goal Orientation Among Students at Al-Iraqiya University in Baghdad.**

The findings in Table (8) indicate that the correlation coefficient between the perception of class quality and sense of belonging with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad is significant. This means that there is a meaningful relationship between the perception of class quality and a sense of belonging, with the mediating role of academic goal orientation ( $r = 0.075$ ). Based on the coefficient of determination



( $r^2$ ), 0.6% of the variance in the perception of class quality and sense of belonging with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad is shared.

**Table (8):** Correlation Coefficient of the Perception of Class Quality on Sense of Belonging Considering the Mediating Role of Academic Goal Orientation Among Students at Al-Iraqiya University in Baghdad

	Independent variable: academic goal orientation * Perception of Class Quality				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Sense of Belonging	0.075**	0.006	3.774	0.001	Failure to confirm the hypothesis

05/0>p

**The Professor's Ethical Philosophy Has an Indirect Effect on Students' Critical Thinking Through the Mediating Role of Academic Goal Orientation at Al-Iraqiya University in Baghdad.**

The findings in Table (9) show that the correlation coefficient between the professor's ethical philosophy and critical thinking with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad is significant. This means that the professor's ethical philosophy has a significant relationship with students' critical thinking through the mediating role of academic goal orientation ( $r = 0.115$ ). Based on the coefficient of determination ( $r^2$ ), 1.3% of the variance in the professor's ethical philosophy and critical thinking with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad is shared.

**Table (9)** Correlation Coefficient of the Professor's Ethical Philosophy on Critical Thinking, Considering the Mediating Role of Academic Goal Orientation Among Students at Al-Iraqiya University in Baghdad

	Independent variable: academic goal orientation * Professor's Ethical Philosophy				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Critical Thinking	0.115*	0.013	2.246	0.025	Failure to confirm the hypothesis

05/0>p

**Perception of Classroom Quality on Critical Thinking with the Mediating Role of Academic Goal Orientation Among Students at Al-Iraqiya University in Baghdad has an Indirect Effect.**

The findings in Table (10) show that the correlation coefficient between the perception of classroom quality and critical thinking, with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad, is significant. This means that the perception of classroom quality has a significant relationship with critical thinking through the mediating role of academic goal orientation among the students ( $r = 0.221$ ). Based on the coefficient of determination ( $r^2$ ), 4.9% of the variance in the perception of classroom quality and critical thinking is shared with the mediating role of academic goal orientation among students at Al-Iraqiya University in Baghdad.

**Table (10):** Correlation Coefficient of Perception of Classroom Quality on Critical Thinking with the Mediating Role of Academic Goal Orientation Among Students at Al-Iraqiya University in Baghdad

	Independent variable: academic goal orientation * Perception of Classroom Quality				
Statistical index Criterion variable	The correlation coefficient	The square of the correlation coefficient	Test	Significance level	Result
Critical Thinking	0.221**	0.049	4.023	0.001	Failure to confirm the hypothesis

05/0>p

**Discussion and Conclusion**

**The moral philosophy of the professor impacts the critical thinking of students at Al-Iraqiya University in Baghdad.**

The findings showed that the correlation coefficient between the professor's moral philosophy and the students' critical thinking at Al-Iraqiya University in Baghdad is not significant. In other words, there is no meaningful relationship between the professor's moral philosophy and the critical thinking of students at Al-Iraqiya University in Baghdad ( $r = 0.009$ ). The results of this hypothesis align with the studies of Al-Azeem (2023), Zaeri (2023), Rostami et al. (2022), Mahmoudfakh and Hosseinpour (2022), Allen et al. (2022), and Lesani and Kark (2016). To explain this hypothesis, it can be said that the professor's ethical philosophy significantly influences the development of critical thinking skills among students at Al-Iraqiya University in Baghdad. When professors embody a strong moral philosophy characterized by values such as honesty, fairness, and respect, they create an ethical classroom environment that fosters trust and open dialogue. This supportive atmosphere encourages students to engage actively with the material, ask questions, and consider different perspectives. Since students feel secure in expressing their thoughts and challenging their own ideas, they develop critical thinking skills necessary for analyzing complex information and making informed decisions. Furthermore, the professor's moral philosophy shapes the teaching approaches used in the classroom. Instructors who prioritize ethical considerations in their teaching often employ methods that promote critical inquiry, such as collaborative learning, problem-solving tasks, and discussions that challenge students to think deeply about the subject matter. These educational strategies encourage students to move beyond rote memorization and engage with the content at a deeper level. By modeling ethical reasoning and encouraging students to consider the consequences of their ideas, professors contribute to cultivating an environment where critical thinking thrives, ultimately enhancing both the academic and personal growth of students. Moreover, the influence of the professor's moral philosophy extends beyond immediate classroom interactions. It impacts students' attitudes toward learning and their engagement with the academic community.

**The professor's moral philosophy impacts students' sense of belonging at Al-Iraqiya University in Baghdad.**

The findings showed that the correlation coefficient between the professor's moral philosophy and the students' sense of belonging at Al-Iraqiya University in Baghdad is significant. In other words, there is a meaningful relationship between the professor's moral philosophy and the students' sense of belonging at Al-Iraqiya University in Baghdad ( $r = 0.238$ ). The results of this hypothesis align with the studies of Al-Azeem (2023), Al-Othman (2023), Les (2024), Zhao et al. (2024), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), Lesani, and Kark (2016). To explain this hypothesis, it can be said that the professor's moral philosophy significantly influences students' sense of belonging at Al-Iraqiya University in Baghdad by shaping the classroom environment and impacting interpersonal relationships.

When instructors embody strong ethical values—such as respect, empathy, and fairness—they create a positive and inclusive space where students feel valued and understood. This supportive environment encourages open communication and collaboration among students and strengthens the connections that are vital for creating a sense of community. When students perceive their professors as morally grounded, they are more likely to engage in the learning process and form meaningful relationships with their peers and mentors. Furthermore, the professor's moral philosophy influences the behavior towards students in the classroom. Instructors who prioritize ethical considerations often implement fair and just methods, promoting a sense of fairness and belonging among their students. When students feel their contributions are valued and their unique perspectives are respected, they are more likely to form a stronger connection with the academic community. This sense of belonging is crucial for students' participation, motivation, and overall satisfaction with their educational experience. On the contrary, if students perceive a lack of moral integrity or fairness from their professors, it can lead to feelings of alienation and detachment from the academic environment. Moreover, the impact of the professor's moral philosophy on students' sense of belonging extends beyond the classroom. When instructors model ethical behavior and encourage students to engage in respectful dialogue and collaboration, they contribute to the development of a positive academic culture.

#### **The perception of classroom quality impacts critical thinking skills of students at Al-Iraqiya University in Baghdad.**

The findings showed that the correlation coefficient between the perception of classroom quality and critical thinking skills of students at Al-Iraqiya University in Baghdad is significant. In other words, the perception of classroom quality is significantly related to the critical thinking skills of students at Al-Iraqiya University in Baghdad ( $r = 0.192$ ). These results align with the studies of Al-Azeem (2023), Al-Othman (2023), Les (2024), Rostami et al. (2022), Mahmoudfakhe and Hosseinpour (2022), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), Lesani, and Kark (2016). To explain this hypothesis, it can be said that the perception of classroom quality significantly affects the critical thinking skills of students at Al-Iraqiya University in Baghdad. Classroom quality is often determined by factors such as teaching methods, the classroom environment, and the level of student engagement encouraged by instructors. When students perceive their classrooms as high-quality—characterized by interactive teaching, relevant curricula, and supportive learning environments—they are more likely to engage deeply with the material. This interaction creates a space for critical thinking, as students feel empowered to analyze information, question assumptions, and explore diverse viewpoints. In contrast, when the perception of classroom quality is low, students may experience a decline in motivation and participation. In classrooms where there is poor perception, with traditional lecture methods dominating and little space for discussion or debate, students may become passive recipients of information instead of active participants in the learning process. This passivity can stifle critical thinking, as students may not be encouraged to express their thoughts or challenge the material presented to them. As a result, their ability to develop analytical thinking skills and apply them to real-world issues may diminish, limiting their academic and professional potential. Furthermore, the consequences of classroom quality perception extend beyond immediate academic performance. They can influence students' attitudes towards education and lifelong learning.

#### **The perception of classroom quality impacts students' sense of belonging at Al-Iraqiya University in Baghdad.**

The findings showed that the correlation coefficient between the perception of classroom quality and students' sense of belonging at Al-Iraqiya University in Baghdad is significant. In other words, the perception of classroom quality is significantly related to students' sense of belonging at Al-Iraqiya University in Baghdad ( $r = 0.536$ ). The results of this hypothesis align with the studies of Al-Azeem (2023), Al-Othman (2023), Les (2024), Zhao et al. (2024), Abdulmir Karim Mubarak (2023), Lark (2023), Zakeri Solghani (2023), Zayari (2023), Rostami et al. (2022).

To explain this hypothesis, it can be said that the perception of classroom quality plays an important role in shaping the sense of belonging among students at Al-Iraqiya University in Baghdad. When students perceive their classrooms as engaging, supportive, and aligned with their academic and personal growth, they are more likely to connect with their

peers and instructors. High-quality classrooms often foster a collaborative learning environment, where students actively participate in discussions and group activities. This collaborative atmosphere enhances their sense of community and belonging, as students build relationships with their peers and feel valued in the learning process. In contrast, a negative perception of classroom quality can lead to feelings of alienation and detachment among students. When classrooms are characterized by unengaging lectures, minimal interaction, and limited support from instructors, students may feel isolated and less likely to participate. This lack of engagement can hinder the development of meaningful relationships with peers and faculty, diminishing their overall sense of belonging within the academic community. As students struggle to find common ground with their classmates or feel unsupported in their academic journey, their commitment to the university and its activities may decrease, intensifying feelings of isolation. Moreover, a strong sense of belonging is crucial for students' overall well-being and academic success. When students feel connected to their classes and academic environment, they are more likely to be motivated, engaged, and committed to their studies. This sense of belonging can enhance their academic performance and retention rates, leading to a more positive university experience. Therefore, improving the perceived quality of classrooms at Al-Iraqiya University is essential not only for academic progress but also for fostering a supportive and inclusive environment where students feel a strong sense of belonging and community.

#### **Academic Goal Orientation Impacts Critical Thinking Skills of Students at Al-Iraqiya University in Baghdad**

The findings showed that the correlation coefficient between academic goal orientation and critical thinking skills of students at Al-Iraqiya University in Baghdad is significant. In other words, academic goal orientation is significantly related to the critical thinking skills of students at Al-Iraqiya University in Baghdad ( $r = 0.649$ ). These results align with the studies of Zhao et al. (2024), Mahmoudfakhe and Hosseinpour (2022), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), Lesani, and Kark (2016). To explain this hypothesis, it can be said that academic goal orientation significantly influences the critical thinking abilities of students at Al-Iraqiya University in Baghdad. Students with a mastery goal orientation—characterized by a desire to learn, improve, and understand content—are more likely to engage deeply with their studies. This engagement creates an environment conducive to critical thinking, as these students are more likely to analyze information, seek connections between concepts, and question underlying assumptions. Their focus on mastery encourages them to view challenges as opportunities for growth, which is essential for developing higher-order thinking skills. In contrast, students with a performance goal orientation, who prioritize achieving high grades or outperforming their peers, may be less likely to engage in critical thinking. When their primary motivation is to achieve specific performance outcomes, students may resort to surface-level learning strategies, such as rote memorization, rather than engaging in deep analysis or critical reflection. This focus on external validation can hinder their ability to think critically about the subject matter, as they may prioritize quick results over genuine understanding of content. As a result, performance-oriented students may miss opportunities to develop critical thinking skills essential for their academic and professional success. Moreover, the impact of academic goal orientation on critical thinking extends beyond individual classroom experiences. It shapes the overall learning culture at the university. When most students adopt mastery goals, it can create a collaborative and supportive learning environment where critical thinking is encouraged and valued.

#### **Academic Goal Orientation Impacts Students' Sense of Belonging at Al-Iraqiya University in Baghdad**

The findings showed that the correlation coefficient between academic goal orientation and students' sense of belonging at Al-Iraqiya University in Baghdad is significant. In other words, academic goal orientation is significantly related to students' sense of belonging at Al-Iraqiya University in Baghdad ( $r = 0.221$ ). These results align with the studies of Al-Azeem (2023), Al-Othman (2023), Les (2024), Zakeri Solghani (2023), Zayari (2023), Rostami et al. (2022), Mahmoudfakhe and Hosseinpour (2022), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), Lesani, and Kark (2016). To explain this hypothesis, it can be said that academic goal orientation significantly influences the sense of belonging among students at Al-Iraqiya University in Baghdad. Students with a mastery goal orientation, which emphasizes learning, personal growth, and understanding, often experience a stronger sense of belonging in their

academic community. This orientation fosters collaboration, as students are more likely to engage with their peers in discussions, group projects, and study sessions. These interactions enhance their relationships and friendships, creating a supportive network that strengthens their sense of community and belonging at the university. In contrast, students who adopt a performance goal orientation and focus primarily on achieving high grades or outperforming their peers may feel isolated or disconnected from their classmates. This competitive mindset can lead to anxiety and stress, hindering their willingness to collaborate or seek help from others. As a result, performance-oriented students may miss opportunities for meaningful interactions with their peers, leading to a reduced sense of belonging. Instead of feeling part of a community, they may view their academic journey as an individual pursuit, further strengthening feelings of alienation and disconnection from the university environment. Moreover, the overall university culture influenced by students' goal orientations can impact the collective sense of belonging at Al-Iraqiya University. A dominant mastery goal orientation can create an inclusive and collaborative environment where students support each other's learning, share experiences, and strengthen social bonds.

### **The Ethical Philosophy of Instructors Affects Students' Sense of Belonging at Al-Iraqiya University in Baghdad, with Academic Goal Orientation as a Mediating Role**

The findings indicated that the correlation between the instructor's ethical philosophy and students' sense of belonging, with academic goal orientation as a mediating role, is significant. In other words, the instructor's ethical philosophy is significantly related to students' sense of belonging at Al-Iraqiya University in Baghdad ( $r = 0.39$ ). These results are consistent with studies by Al-Azeem (2023), Al-Othman (2023), Les (2024), Zhao et al. (2024), Mahmoudfakhe and Hosseinpour (2022), Allen et al. (2022), and Yacoubi et al. (2020). To explain this hypothesis, it can be said that the instructor's ethical philosophy plays a crucial role in shaping students' academic experiences at Al-Iraqiya University in Baghdad and indirectly impacts their sense of belonging through its influence on academic goal orientation. Instructors with a strong ethical philosophy often prioritize values such as respect, honesty, and empathy in their teaching practices. This approach fosters a positive classroom environment where students feel valued and understood, encouraging them to adopt a mastery goal orientation. When students perceive their instructors as ethically grounded and supportive, they are more likely to engage in collaborative learning and seek meaningful interactions with their peers, thereby strengthening their overall sense of belonging. As students internalize the values promoted by their instructors, they are likely to shift their academic goal orientation from performance to mastery. Mastery goal orientation focuses on personal growth, understanding, and the intrinsic value of learning, creating a culture where students are encouraged to explore ideas and share knowledge. In this environment, students feel a stronger sense of belonging as they build strong connections with their peers based on mutual support and shared learning experiences. In contrast, when instructors emphasize competition or solely value high performance, students may adopt a performance goal orientation that reinforces isolation and weakens their social sense in the university. Additionally, the indirect impact of the instructor's ethical philosophy on students' sense of belonging highlights the importance of fostering an ethical academic culture. When instructors promote ethical behavior and a supportive classroom environment, they not only influence students' academic goal orientations but also enhance their overall university experience.

### **Perception of Classroom Quality Affects Students' Sense of Belonging at Al-Iraqiya University in Baghdad, with Academic Goal Orientation as a Mediating Role**

The findings showed that the correlation between students' perception of classroom quality and their sense of belonging, with academic goal orientation as a mediating role, is significant. In other words, students' perception of classroom quality is significantly related to their sense of belonging at Al-Iraqiya University in Baghdad ( $r = 0.75$ ). These results align with the studies of Al-Azeem (2023), Al-Othman (2023), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), and Lesani and Kark (2016). To explain this hypothesis, it can be said that the perception of classroom quality significantly affects students' sense of belonging at Al-Iraqiya University in Baghdad, primarily through its influence on academic goal orientation. When students perceive their classrooms as high-quality—characterized by engaging content,



supportive teaching methods, and a participatory environment—they are more likely to adopt a mastery goal orientation. This orientation emphasizes learning, personal growth, and the intrinsic value of education, encouraging students to actively engage in discussions and collaborate with their peers. As they become more deeply involved with their course material and classmates, their sense of belonging to the academic community is strengthened. In contrast, when students perceive the classroom quality as low, they may adopt a performance goal orientation, focusing on grades and external validation rather than genuine learning. This shift can lead to feelings of isolation and disconnection from their peers, as students may prioritize competition over collaboration. In classrooms with poor quality, where interaction is minimal and the learning environment is uninviting, students are less likely to engage in group activities or establish meaningful relationships with their peers. As a result, the decrease in sense of belonging driven by a performance-oriented approach can negatively affect their overall university experience and academic success. Moreover, the indirect impact of classroom quality on students' sense of belonging emphasizes the importance of improving teaching practices at Al-Iraqiya University. By prioritizing high-quality teaching and creating an engaging classroom environment, instructors can foster a mastery goal orientation among students. This shift can promote collaboration, open dialogue, and supportive peer relationships, ultimately strengthening students' sense of belonging within the academic community. Recognizing the mediating role of academic goal orientation underscores that enhancing classroom quality is not only about academic performance but also about cultivating a vibrant and inclusive environment where students feel connected and valued.

#### **The Ethical Philosophy of Instructors Affects Critical Thinking, with Academic Goal Orientation as a Mediating Role at Al-Iraqiya University in Baghdad**

The findings showed that the correlation between the instructor's ethical philosophy and students' critical thinking, with academic goal orientation as a mediating role, is significant. In other words, the instructor's ethical philosophy is significantly related to students' critical thinking at Al-Iraqiya University in Baghdad ( $r = 0.115$ ). Based on the coefficient of determination ( $r^2$ ), 1.3% of the variance in the instructor's ethical philosophy and critical thinking, with academic goal orientation as a mediating role, is shared. These results align with studies by Al-Azeem (2023), Al-Othman (2023), Les (2024), Zakeri Solghani (2023), Zaeri (2023), Rostami et al. (2022), and Mahmoudfakhe and Hosseinpour (2022). To explain this hypothesis, it can be said that the instructor's ethical philosophy significantly influences students' critical thinking abilities at Al-Iraqiya University in Baghdad, primarily through its impact on academic goal orientation. When instructors embody a strong ethical philosophy characterized by principles such as respect, fairness, and integrity, they create a classroom environment that fosters trust and open communication. In such an environment, students are more likely to adopt a mastery goal orientation, which focuses on personal growth and the pursuit of knowledge. This shift in goal orientation encourages students to engage more deeply with the course material, ask questions, and critically analyze information, thereby enhancing their critical thinking skills. In contrast, when instructors lack a clear ethical philosophy or do not prioritize ethical considerations in their teaching, students may develop a performance goal orientation, focusing on grades and external validation rather than genuine understanding. This performance-focused approach can lead to surface-level learning strategies, where students prioritize memorization over critical analysis and reflection. In this scenario, students may be less encouraged to explore complex ideas or challenge assumptions, which reduces their critical thinking abilities. Therefore, the instructor's ethical philosophy indirectly shapes students' critical thinking by influencing their academic goal orientation. Additionally, the indirect relationship between the instructor's ethical philosophy, academic goal orientation, and critical thinking highlights the importance of cultivating an ethical educational culture at Al-Iraqiya University. By promoting ethical values and behavior in the classroom, instructors can encourage students to adopt mastery goals that prioritize deep understanding and critical engagement with the material.

#### **Perception of Classroom Quality Affects Critical Thinking, with Academic Goal Orientation as a Mediating Role at Al-Iraqiya University in Baghdad**

The findings revealed that the correlation between students' perception of classroom quality and their critical thinking, with academic goal orientation as a mediating role, is significant. In other words, students' perception of classroom



quality is significantly related to their critical thinking at Al-Iraqiya University in Baghdad ( $r = 0.221$ ). Based on the coefficient of determination ( $r^2$ ), 4.9% of the variance in classroom quality perception and critical thinking, with academic goal orientation as a mediating role, is shared. These results are consistent with studies by Mahmoudfakhe and Hosseinpour (2022), Allen et al. (2022), Yacoubi et al. (2020), Moradi et al. (2018), Lesani and Kark (2016). To explain this hypothesis, it can be said that the perception of classroom quality plays a crucial role in influencing students' critical thinking skills at Al-Iraqiya University in Baghdad, primarily through its impact on academic goal orientation. When students perceive their classrooms as high-quality—characterized by engaging teaching methods, relevant content, and supportive interactions—they are more likely to adopt a mastery goal orientation. This goal orientation emphasizes intrinsic motivation, personal growth, and the value of deeply understanding the material. As a result, students with a mastery goal orientation are encouraged to engage critically with the content, ask exploratory questions, and analyze information from various perspectives, thus strengthening their critical thinking skills. In contrast, when students perceive the classroom quality as low, they may adopt a performance goal orientation, which focuses primarily on grades and external validation instead of genuine understanding. This shift can lead to surface-level learning strategies, where students may prioritize memorization over critical analysis. In classrooms with poor quality, where interaction is minimal and the learning environment is less stimulating, students may be less inclined to engage critically with the subject matter. As a result, their critical thinking abilities may stagnate or decline, indicating how negative perceptions of classroom quality can hinder their academic development. Furthermore, the indirect relationship between classroom quality perception, academic goal orientation, and critical thinking underscores the need for improvements in teaching practices at Al-Iraqiya University. By prioritizing high-quality teaching and creating a stimulating classroom environment, instructors can foster mastery goal orientation among students. This change can promote critical engagement with the material, exploratory questions, and in-depth analysis, ultimately enhancing students' critical thinking skills.

## References

1. Allen, K. A., Gallo Cordoba, B., Ryan, T., Arslan, G., Slaten, C. D., Ferguson, J. K., ... & Vella-Brodrick, D. (2023). Examining predictors of school belonging using a socio-ecological perspective. *Journal of Child and Family Studies*, 32(9), 2804-2819.
2. Henry, A. J., Hatfield, B. E., & Chandler, K. D. (2023). Toddler teacher job strain, resources, and classroom quality. *International Journal of Early Years Education*, 31(4), 844-858.
3. Zhao, A., & Chen, M. (2024). Future Directions in Bioethics Education: Strategies to Foster Moral Competence and Critical Thinking in Nursing Students. *Journal of Commercial Biotechnology*, 29(1).
4. Allen, K. A., Jamshidi, N., Berger, E., Reupert, A., Wurf, G., & May, F. (2022). Impact of school-based interventions for building school belonging in adolescence: A systematic review. *Educational Psychology Review*, 34(1), 229-257.
5. Benson, H. H. (2023). Socrates and the beginnings of moral philosophy. In *From the Beginning to Plato* (pp. 323-355). Routledge.
6. Hou, T., Ding, X., & Yu, F. (2024). The moral behavior of ethics professors: A replication-extension in Chinese mainland. *Philosophical Psychology*, 37(2), 396-427.
7. Jamil, M., Bokhari, T. B., & Rafiq, M. (2024). Critical thinking skills development for 21st century: An analysis of Biology curriculum (2006). *Voyage Journal of Educational Studies*, 4(1), 127-138.
8. Karim Mubarak, Abdul Amir. (2023). On learning quality, critical thinking skills, and the use of learning strategies (A case study of undergraduate students in English as a Foreign Language at pre-advanced level in Iraq). Master's Thesis, University of Tehran, Regional Campuses - International Aras Campus.
9. Kumar, P., Rawat, N., & Tiwari, A. (2023). Micro-characteristics of a naturally ventilated classroom air quality under varying air purifier placements. *Environmental Research*, 217, 114849.

10. Lak, Fatemeh. (2023). Investigating the mediating role of school belonging in the relationship between school culture and the quality of learning experiences in secondary school girls in Dorud. Sixth International Conference on Psychology, Educational Sciences, and Social Studies, Hamadan.
11. Leś, T. (2024). Education, Ideology, and Critical Thinking. Defending the Value of Education as a Public Good: Philosophical Dialogues on Education and the State.
12. Lesani, Mehdi, and Kark, Farah. (2016). The relationship between goal orientation and critical thinking tendencies among students. National Conference on Knowledge and Technology of Psychology, Educational Sciences, and General Psychology of Iran, Tehran.
13. Liu, Q., Du, X., & Lu, H. (2023). Teacher support and learning engagement of EFL learners: The mediating role of self-efficacy and achievement goal orientation. *Current Psychology*, 42(4), 2619-2635.
14. Luo, Y. F., Zhang, S., Yang, S. C., & Huang, C. L. (2023). Students' judgments on different cyberbullying incidents: The relationship between moral philosophy and intention to engage. *European Journal of Psychology of Education*, 38(3), 989-1009.
15. Mahmoudfakhe, Hemen, and Hosseinpour, Hiwa. (2022). Assessing the relationship between school belonging and learning quality among students (Sample: High school students in Piranshahr). Eighth International Conference on Psychology, Counseling, and Educational Sciences, Tehran.
16. Matthews, J. S., Boomhower, K. M., & Ekwueme, C. (2024). Assimilationist, reformist, and sociopolitical phases of school belonging research: A critical race and optimal distinctiveness review. *Advances in Motivation Science*.
17. Moradi Makhless, Hossein, Heydari, Jamshid, and Pooti, Nasibe. (2018). The development of moral education by integrating critical thinking components. *Ethics in Science and Technology*, 13(3), 8-15.
18. Porter, J., McDermott, T., Daniels, H., & Ingram, J. (2024). Feeling part of the school and feeling safe: Further development of a tool for investigating school belonging. *Educational Studies*, 50(3), 382-398.
19. Rostami, Edris, Babaei, Erfan, and Babaei, Shamsi. (2022). An analysis of combined ethics and critical thinking education among students. Second International Conference on Psychology, Social Sciences, Educational Sciences, and Humanities.
20. Soysal, Y. (2023). An exploration of the determinants of middle school students' argument quality by classroom discourse analysis. *Research in Science & Technological Education*, 41(1), 343-371.
21. Warsah, I., Morganna, R., Uyun, M., Afandi, M., & Hamengkubuwono, H. (2021). The impact of collaborative learning on learners' critical thinking skills. *International Journal of Instruction*, 14(2), 443-460.
22. Xu, E., Wang, W., & Wang, Q. (2023). The effectiveness of collaborative problem solving in promoting students' critical thinking: A meta-analysis based on empirical literature. *Humanities and Social Sciences Communications*, 10(1), 1-11.
23. Yacoubi, Abolghasem, Doqi Paydar, Mohammadreza, Farhadi, Mehran, and Yousefi, Behnoush. (2020). Predicting academic well-being based on school belonging and mental vitality with the mediation of goal orientation among students. *Journal of School Psychology and Education*, Vol. 9, Issue 2.
24. Zaeri, Behrooz, Mohammadreza. (2023). The relationship between teacher's teaching quality and students' academic adjustment and school belonging (from the perspective of middle school students in Kangavar). First International Conference on Psychology, Social Sciences, Educational Sciences, and Philosophy, Babol.
25. Zakeri Solghani, Batool. (2023). Investigating the impact of school life quality on students' learning with the mediating role of school belonging among elementary school students in Minab. Second National Conference on New Developments in Developmental and Educational Psychology, Bandar Abbas.