

# The Relationship Between Perception of the Learning Environment and Employment Hope in Predicting Students' Academic Vitality in the Post-COVID-19 Era

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## ABSTRACT

**Purpose:** The present study aimed to examine the predictive role of perception of the learning environment and employment hope in explaining students' academic vitality in the post-COVID-19 era.

**Methods and Materials:** This applied, descriptive-correlational study was conducted among students of Islamic Azad University in Tehran during the 2022–2023 academic year. A sample of 154 students was selected using a three-stage cluster sampling method. Data were collected using the Academic Vitality Questionnaire (Dehghanizadeh et al., 2014), the Perception of Learning Environment Questionnaire (Roff et al., 2001), and the Employment Hope Questionnaire (Ghoreyshi Rad, 2008). The instruments demonstrated acceptable validity and reliability. Data analysis was performed using SPSS version 25 through descriptive statistics and inferential tests, including the Kolmogorov–Smirnov test, Pearson correlation coefficients, and simultaneous multiple regression analysis.

**Findings:** The results of Pearson correlation analysis indicated that perception of the learning environment ( $r = 0.32, p < 0.01$ ) and employment hope ( $r = 0.33, p < 0.01$ ) were positively and significantly associated with academic vitality. The regression model was statistically significant ( $F = 28.65, p < 0.001$ ), indicating a good model fit. Both perception of the learning environment ( $\beta = 0.27, p < 0.01$ ) and employment hope ( $\beta = 0.30, p < 0.01$ ) significantly predicted academic vitality. The model explained 22.8% of the variance in academic vitality ( $R^2 = 0.228$ ; Adjusted  $R^2 = 0.214$ ), demonstrating the combined contribution of the predictor variables.

**Conclusion:** The findings suggest that both contextual (perception of the learning environment) and psychological (employment hope) factors play significant roles in enhancing students' academic vitality, highlighting the importance of supportive educational environments and future-oriented motivation in promoting adaptive academic functioning in the post-COVID-19 era.

**Keywords:** Perception of Learning Environment, Employment Hope, Academic Vitality, Post-COVID-19 Era, University Students

## 1. Introduction

The post-COVID era has reshaped higher education in ways that continue to influence how students learn, interpret academic demands, and imagine their future

occupational pathways. The pandemic did not merely interrupt instructional routines; it transformed the conditions under which students experience university life, including their access to educational resources, their relationships with

instructors and peers, their confidence in academic continuity, and their expectations about transition to employment. Global evidence has shown that the pandemic altered students' daily lives, study habits, psychological well-being, and perceptions of institutional support, producing academic and emotional consequences that have persisted beyond the immediate health crisis (Aristovnik et al., 2020; Marinoni et al., 2020). In the post-COVID context, students are therefore required not only to recover from educational disruption but also to re-establish academic motivation, psychological adaptability, and confidence in their future employability.

One of the key constructs for understanding student adaptation under challenging academic conditions is academic vitality. Academic vitality refers to students' positive, adaptive, and constructive response to routine academic challenges, setbacks, and pressures. Unlike extreme forms of resilience that emerge under major adversity, academic vitality concerns everyday academic coping and reflects a student's capacity to remain engaged, effective, and psychologically active in the face of common educational difficulties (Martin & Marsh, 2006, 2008). This construct has attracted growing attention because it captures a functional form of academic adjustment that is highly relevant in uncertain educational environments. Longitudinal evidence has also shown that academic vitality is tied to motivational processes over time and is sustained by adaptive cognitive and emotional resources, making it a particularly important variable in periods marked by instability and institutional transition (Martin et al., 2010). In educational psychology, academic vitality has therefore become a valuable framework for explaining why some students maintain momentum and enthusiasm despite academic strain while others experience disengagement and exhaustion.

The significance of academic vitality has become even greater after COVID-19 because the return to face-to-face or hybrid university education has not fully erased the effects of previous disruption. The transition from virtual learning to restored physical academic settings has often been accompanied by adjustment demands, academic uncertainty, weakened study routines, and residual psychological strain. Studies on post-pandemic educational transition indicate that students continue to negotiate the aftereffects of virtual instruction, discontinuity in classroom interaction, and changing expectations regarding academic performance and professional development (Elangovan & Sundaravel, 2024; Kiltz et al., 2022). Similarly, students' pandemic

experiences have been associated with anxiety, reduced certainty about life direction, and fluctuations in academic motivation, all of which can directly undermine vitality in educational settings (Aslan et al., 2023; Cayubit, 2024). Under such conditions, identifying the factors that help sustain academic vitality is essential for both theory and practice in higher education.

Among the variables that may shape academic vitality, students' perception of the learning environment occupies a central place. The learning environment is not limited to physical facilities; rather, it includes the instructional climate, students' perceptions of teaching quality, opportunities for participation, academic support, peer interaction, and the broader social and psychological atmosphere of the institution. Roff et al. conceptualized the educational environment as a measurable and diagnostic construct that reflects how students interpret the quality and supportiveness of their academic setting (Roff et al., 2001). A positive learning environment can enhance students' sense of competence, belonging, security, and meaning, whereas a negative one may intensify stress, passivity, and academic alienation. Contemporary studies continue to affirm that campus and classroom environments influence how students approach learning, regulate effort, and remain motivated in higher education (Chen & Shin, 2025; Khairunnisa et al., 2026).

Perception of the learning environment is particularly important because students do not respond only to objective educational conditions; they respond to how those conditions are interpreted psychologically. When students perceive their academic setting as organized, supportive, stimulating, and fair, they are more likely to participate actively, believe in the value of academic engagement, and remain resilient in response to difficulties. Evidence from university contexts has shown that favorable perceptions of the learning environment are associated with stronger motivation and better academic functioning (Bahmei et al., 2019). Dehghanizadeh et al. also demonstrated that academic vitality is linked with contextual perceptions and that students' understanding of their academic environment, in interaction with personal resources such as self-efficacy, can strengthen adaptive academic functioning (Dehghanizadeh et al., 2014). This suggests that academic vitality should not be viewed solely as an internal characteristic; it is also shaped by how students read and experience the structure and climate of the educational context surrounding them.



The relevance of learning environment perception has grown in the wake of pandemic-driven educational changes. During and after COVID-19, students' experiences of virtual learning environments varied widely, with some reporting flexibility and continuity while others described isolation, reduced instructional clarity, and weakened engagement. Research on virtual learning experiences during the pandemic showed that students' academic responses depended heavily on how they perceived the usefulness, interactivity, and supportiveness of the altered educational environment (Hwang et al., 2023). Other work likewise indicated that the quality of learning conditions during disrupted academic periods influenced academic adjustment and student interpretations of institutional effectiveness (Hwang et al., 2023). In the post-COVID era, when students re-enter or continue within transformed academic systems, the perceived quality of the learning environment remains a highly relevant determinant of their motivation and vitality.

A second critical variable in the present study is hope for employment. In higher education, students do not pursue academic goals in isolation from occupational aspirations. Their persistence, investment, and emotional engagement are often connected to beliefs about whether education will lead to meaningful work, social status, financial stability, and future mobility. Employment hope refers to a future-oriented positive expectation that one can attain work-related goals and successfully navigate pathways toward employment. The construct draws conceptually on hope theory, according to which hope involves both agency, or the motivational energy to pursue goals, and pathways, or the perceived capacity to generate routes toward those goals (Snyder et al., 2002). When applied to education and career development, hope becomes a major psychological resource that can shape students' persistence, engagement, and interpretation of setbacks.

The academic significance of hope has been widely documented. Hope has been associated with academic success, greater engagement, better performance, and stronger subjective well-being among college students (Pedrotti, 2018; Rand et al., 2020; Snyder et al., 2002). In career-related contexts, hope also contributes to vocational identity, academic effort, and confidence in future career outcomes (Yoon et al., 2015; Yotsidi et al., 2018). Students who are hopeful about the future are more likely to interpret difficulties as manageable, remain committed to long-term goals, and sustain active involvement in academic tasks. Thus, hope for employment may not merely reflect labor market optimism; it may also function as a motivational

engine that protects academic vitality under uncertain conditions.

In the specific context of university students, hope for employment is especially important because higher education is strongly tied to future work aspirations. Ghoreyshi Rad conceptualized employment hope among students in relation to perceptions of future occupational opportunities and demonstrated that such hope can vary meaningfully across educational contexts and expectations (Ghoreyshi Rad, 2008). More recent studies have shown that employment-related perceptions continue to influence student well-being and academic functioning. For example, perceived employability and academic commitment during the pandemic were positively linked to student well-being, suggesting that future-oriented occupational confidence has immediate psychological and educational implications (Capone et al., 2021). Research has also indicated that academic burnout is negatively related to employment hope, reinforcing the idea that students who see a more hopeful professional future are less likely to be depleted by academic strain (Askaripoor et al., 2022). These findings imply that hope for employment may play a protective role in sustaining students' energy, persistence, and adaptability.

From a broader educational and labor-market perspective, contemporary scholarship increasingly emphasizes that students' academic experiences and employability development are intertwined. Higher education institutions are now expected not only to transmit knowledge but also to create conditions that support work readiness, career learning, and confidence in labor market transition. Studies have shown that career education improves students' perceptions of the labor market and helps shape future-oriented expectations (Nwakanma, 2024). Other research has reported that academic leadership, experiential learning, and institutional quality can strengthen employability development and institutional performance (Pandita & Kiran, 2023). Similarly, work on academic-faculty environments has demonstrated that supportive educational climates influence work-readiness perceptions and graduate employability (Chigbu & Nekhwevha, 2022). These findings support the assumption that students' perceptions of the university environment and their hope for employment are not separate domains but interrelated dimensions of postsecondary development.

The link between academic vitality and future career orientation is also increasingly evident in recent research. Mostajeran et al. found that academic vitality is meaningfully associated with students' career aspirations,





especially when considered alongside self-regulatory processes (Mostajeran et al., 2025). This suggests that vitality is not merely about surviving academic demands; it may also be part of the psychological architecture through which students sustain future ambition. In a similar vein, Hou highlighted that academic self-efficacy and career development learning are related to employability skills, further indicating that adaptive academic functioning and career-related beliefs often reinforce one another (Hou, 2024). When students believe they can grow academically and move effectively toward employment, they may be better positioned to maintain vitality in their studies.

At the same time, the post-COVID educational landscape has introduced challenges that may weaken both employment hope and academic vitality. Online learning difficulties, disruptions in skill acquisition, uncertainty about labor market competitiveness, and concern over the quality of academic preparation have all been reported as barriers affecting higher education students' academic achievement and employability perceptions (Bhinder, 2025). Since university students evaluate the value of their education partly through its connection to future work opportunities, any weakening of employment confidence may diminish academic enthusiasm and persistence. Conversely, when students perceive their university as capable of offering meaningful learning experiences and pathways toward employability, their academic vitality may be strengthened.

The educational environment can also influence vitality indirectly through psychological resources. Positive contextual experiences may enhance confidence, autonomy, and proactive coping, all of which support hopeful thinking and adaptive academic behavior. Lodi et al. showed that positive personal resources contribute to well-being through mediating psychological strengths, highlighting the importance of resource-based models in educational adjustment (Lodi et al., 2022). In academic settings, this means that supportive environments may not simply reduce distress; they may actively build the internal conditions necessary for sustained vitality. Conversely, when the educational environment is perceived as fragmented, unsupportive, or misaligned with students' developmental needs, vitality may decline.

Another issue relevant to the present study is that higher education students increasingly combine academic roles with work-related concerns and real-world preparation. Even before the pandemic, studies noted that part-time work and work-based learning contexts could function as

important sites for connecting academic identity to employability development (Shaw & Ogilvie, 2010). In the current era, this integration is even more salient. Students evaluate the effectiveness of their educational environment partly by whether it equips them for employment, and this evaluation may shape both their current academic involvement and their future expectations. Therefore, examining academic vitality without attending to employment hope may overlook a central motivational dimension in contemporary student life.

Despite the conceptual relevance of these relationships, there remains a need for more integrated research examining how perception of the learning environment and hope for employment jointly relate to academic vitality, especially in post-COVID university populations. Existing literature has often investigated these variables separately, focusing either on learning environment and academic outcomes, or on employment-related beliefs and well-being, without sufficiently addressing their combined predictive role in students' adaptive academic functioning. Furthermore, much of the post-pandemic literature has emphasized disruption, distress, and instructional change, while less attention has been devoted to the protective psychological and contextual factors that may help students recover and thrive.

This gap is particularly important in university contexts where academic continuity, future employment concerns, and environmental perceptions intersect. In such contexts, students are not only managing coursework but also interpreting whether the institution provides a credible pathway toward post-graduation success. Their vitality may therefore depend on both present educational experience and future occupational hope. Understanding this relationship can help universities design more supportive academic climates, strengthen student services, and align educational practice with career development needs. It can also enrich educational psychology by situating academic vitality within a broader network of contextual and future-oriented variables.

Accordingly, the aim of the present study was to determine the relationship between perception of the learning environment and hope for employment in predicting students' academic vitality in the post-COVID era.





## 2. Methods and Materials

### 2.1. Study Design and Participants

The present study, in terms of its objective, is classified as applied research, and in terms of data collection, it is a descriptive correlational study. The statistical population consisted of all students of Islamic Azad University in Tehran who were enrolled during the 2022–2023 academic year. To determine the sample size, Green's rule was applied, according to which the minimum sample size for correlational designs is calculated as  $50 + 8k$ , where  $k$  represents the number of predictor variables. In the present study, there were two predictor variables; therefore, the minimum sample size was estimated at 66. Considering the possibility of incomplete or invalid questionnaires, the sample size was increased to 160 participants. A three-stage cluster sampling method was employed, such that one university unit was randomly selected from among the Islamic Azad University branches in Tehran. Subsequently, three faculties were selected, and from each faculty, three groups were randomly chosen. The questionnaire link was then distributed online through social media platforms in student groups and completed by participants. Six incomplete questionnaires were excluded, resulting in a final sample size of 154. Data collection in this study was conducted through both library-based and questionnaire-based methods. In the library method, relevant materials—including specialized books, theses, journal articles, and periodicals—were reviewed online via national and international scientific databases and digital libraries, and after note-taking, the research manuscript was developed accordingly.

### 2.2. Data Collection Tools

**Academic Vitality Questionnaire:** The Academic Vitality Questionnaire was developed by Dehghani Zadeh et al. (2014). These researchers designed the instrument based on the Academic Vitality Scale by Martin and Marsh (2008), which originally contained four items. The developed version consists of nine items rated on a five-point Likert scale ranging from “strongly agree” (5) to “strongly disagree” (1). For the development and psychometric evaluation of the Iranian version of the questionnaire, two preliminary studies were conducted, in which Cronbach's alpha coefficient, internal consistency, and principal component analysis with varimax rotation were employed. The final questionnaire demonstrated a Cronbach's alpha

coefficient of 0.80 and a test–retest reliability coefficient of 0.73, indicating satisfactory internal consistency and stability of the items. In the study by Dehghani Zadeh et al. (2014), the Cronbach's alpha coefficient was reported as 0.77.

**Perception of Learning Environment Questionnaire:** This questionnaire was developed by Roff et al. (2001, 2005) and consists of two sections. The first section includes items related to students' demographic and background characteristics, while the second section comprises 50 items designed to assess students' perceptions and expectations of the university learning environment. This section is divided into five dimensions: students' perception of learning (12 items; maximum score = 48), students' perception of teachers (11 items; maximum score = 44), students' perception of their academic self-ability (8 items; maximum score = 32), students' perception of the educational atmosphere (12 items; maximum score = 48), and students' perception of the social conditions of education (7 items; maximum score = 28). The total possible score for the questionnaire is 200. Each item is rated on a five-point Likert scale ranging from 1 to 5 (strongly agree = 5, strongly disagree = 1). For each dimension, as well as for the overall learning environment, maximum scores are calculated based on the number of items; higher scores indicate a more positive and desirable educational environment, and vice versa. The reliability of the questionnaire, as reported by its developers, was 0.88 using Cronbach's alpha, and its content validity has been confirmed.

**Employment Hope Questionnaire:** The Employment Hope Questionnaire was developed by Qureshi Rad (2008) to assess students' hope for employment. The instrument consists of 20 items across five dimensions: interest in the field of study, income, social status, time, and available societal opportunities. The scoring is based on a five-point Likert scale (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1). The total score ranges from 20 to 100, with higher scores indicating higher levels of employment hope and lower scores indicating lower levels. The content validity of the questionnaire has been confirmed by subject-matter experts, and its reliability was reported by Qureshi Rad (2008) as 0.83. In the present study, the content validity was also confirmed by experts, and the reliability coefficient calculated using Cronbach's alpha was 0.78.



### 2.3. Data Analysis

For data analysis, descriptive statistics (including mean, standard deviation, skewness, and kurtosis) and inferential statistics (Kolmogorov–Smirnov test, Pearson correlation coefficients, and multiple regression analysis) were conducted using SPSS software version 25.

### 3. Findings and Results

The demographic information of the research sample indicated that 59% of the participants were female and 41%

were male. The mean age of participants was 36.71 years with a standard deviation of 10.64. Approximately 40% of the participants were single, 56% were married, and 4% were divorced. The majority of participants (68%) held a bachelor’s degree, while 32% had a master’s degree. Most participants (63%) were from the Faculty of Humanities, 18% from Engineering, and 19% from Basic Sciences. Additionally, 44% of participants were employed, and 56% were unemployed. The descriptive indices of the study variables are presented in Table 1.

**Table 1**

*Descriptive Statistics of Research Variables*

Variable	Mean	SD	Skewness	Kurtosis	Min	Max
Learning	45.06	6.88	-0.35	-0.24	29	60
Perception of Teachers	43.01	5.59	-0.55	0.68	26	54
Perception of Academic Ability	32.26	3.66	-0.75	0.26	18	40
Perception of Educational Atmosphere	44.77	6.63	-0.45	0.11	27	60
Perception of Social Conditions	26.70	3.30	-0.13	0.39	18	35
Total Perception of Learning Environment	191.81	22.82	-0.27	-0.05	13	242
Academic Vitality	32.94	6.91	-0.30	-0.05	13	45
Interest in Field of Study	15.60	3.64	-0.70	-0.02	5	25
Income	15.47	3.75	0.38	0.83	5	25
Social Status	10.95	2.13	-0.11	0.09	5	15
Time	9.46	2.75	-0.24	-0.37	3	15
Available Societal Facilities	9.02	2.79	0.09	-0.35	3	15
Total Employment Hope	70.95	14.22	-0.17	0.38	33	104

As shown in Table 1, the mean and standard deviation of employment hope were 70.95 and 14.22, respectively; for academic vitality, the mean was 32.94 and the standard deviation was 6.91; and for perception of the learning environment, the mean was 191.81 with a standard deviation of 22.82. The results of the Kolmogorov–Smirnov test indicated that the significance values for the variables of perception of the learning environment, employment hope,

academic vitality, and their components were greater than 0.05, indicating the normality of the data. Pearson correlation and regression analyses were conducted to examine the relationships among the study variables and to predict academic vitality based on perception of the learning environment and employment hope among students of Islamic Azad University in Tehran.

**Table 2**

*Pearson Correlation Coefficients*

Variable	Correlation Coefficient	Significance Level
Employment Hope	0.33	0.001
Total Perception of Learning Environment	0.32	0.002

Based on the results, both perception of the learning environment and employment hope had a positive and statistically significant relationship with academic vitality ( $p$

$< 0.05$ ). The analysis of variance for the regression model is presented in Table 3.

**Table 3**

*ANOVA for Regression of Predictor Variables*

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	591.63	2	295.81	28.65	0.000
Residual	1559.09	151	10.33	—	—
Total	2150.72	153	—	—	—

As shown in Table 3, the F statistic was 28.65 with a significance level of 0.001, indicating that the regression

model demonstrated a good fit. The regression coefficients are presented in Table 4.

**Table 4**

*Regression Coefficients and Significance*

Variable	B	SE	$\beta$	t	Sig.
Constant	12.907	1.920	—	2.18	0.032
Perception of Learning Environment	0.163	0.035	0.27	3.65	0.000
Employment Hope	0.212	0.056	0.30	4.13	0.000

The results in Table 4 indicate that the regression coefficients for perception of the learning environment ( $\beta = 0.27$ ,  $p < 0.01$ ) and employment hope ( $\beta = 0.30$ ,  $p < 0.01$ ) were statistically significant. Therefore, these variables explained a portion of the variance in academic vitality. Based on the regression coefficients, a one-unit increase in perception of the learning environment resulted in a 0.27 increase in academic vitality, and a one-unit increase in

employment hope resulted in a 0.30 increase in academic vitality. Accordingly, the main hypothesis of the study regarding the predictive relationship between perception of the learning environment and employment hope with academic vitality was confirmed. The explained variance of academic vitality by the predictor variables is presented in Table 5.

**Table 5**

*Explained Variance of Academic Vitality by Predictor Variables*

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of Estimate
Simultaneous Multiple Regression	0.478	0.228	0.214	6.47083

Based on the results in Table 5, perception of the learning environment and employment hope explained 21% of the variance in academic vitality among students. The regression diagnostics indicated that the Variance Inflation Factor (VIF) values for the independent variables were less than 10 (maximum = 1.234) and tolerance values were greater than 0.10 (minimum = 0.783), indicating no multicollinearity among the predictor variables. Additionally, the residual scatterplot demonstrated linearity of the relationships among variables. The normal probability plot (P-P plot) showed that the points were distributed along the diagonal line from the lower left to the upper right, indicating no substantial deviation from normality. The scatterplot of standardized residuals displayed an approximately rectangular distribution, suggesting that most values were concentrated around the center, and the absence of a systematic pattern (such as curvature) in the residuals indicated a linear relationship between the dependent variable scores and

prediction errors. Therefore, the assumptions of multiple regression analysis were satisfied.

#### 4. Discussion and Conclusion

The present study aimed to examine the predictive role of perception of the learning environment and hope for employment in explaining academic vitality among university students in the post-COVID era. The findings demonstrated that both perception of the learning environment and employment hope were positively and significantly associated with academic vitality. Furthermore, the regression analysis indicated that these two variables jointly accounted for approximately 21% of the variance in academic vitality, with both predictors exerting statistically significant positive effects. These results confirm the main hypothesis of the study and provide empirical support for the integrative role of contextual and future-oriented psychological variables in shaping students' adaptive academic functioning.



The positive relationship between perception of the learning environment and academic vitality observed in this study is consistent with theoretical and empirical perspectives emphasizing the importance of contextual factors in students' academic engagement and resilience. Academic vitality, as conceptualized by Martin and Marsh, reflects students' capacity to effectively deal with routine academic challenges, and such capacity is inherently influenced by the quality of the environment in which learning occurs (Martin & Marsh, 2006, 2008). When students perceive their educational environment as supportive, structured, and conducive to learning, they are more likely to experience a sense of competence, autonomy, and belonging, which in turn enhances their ability to persist and remain engaged despite difficulties. The findings of the present study align with prior research indicating that students' perceptions of their learning environment significantly influence their academic motivation and vitality (Bahmei et al., 2019). Similarly, Dehghanizadeh et al. found that academic vitality is closely linked with students' perceptions of their educational context, particularly when such perceptions interact with internal psychological resources (Dehghanizadeh et al., 2014).

In the context of post-COVID higher education, the importance of the learning environment becomes even more pronounced. The pandemic disrupted traditional educational structures and altered students' expectations of instructional quality, interaction, and institutional support. Studies have shown that students' experiences with virtual and hybrid learning environments during the pandemic varied significantly, with perceptions of effectiveness and engagement playing a critical role in shaping academic outcomes (Hwang et al., 2023). The transition back to in-person or blended learning has required students to readjust to evolving academic conditions, making their perception of the learning environment a central determinant of their academic vitality. The findings of the present study support this notion, suggesting that students who perceive their learning environment as positive and supportive are better equipped to cope with post-pandemic academic challenges and maintain vitality in their studies.

Moreover, the significant predictive role of perception of the learning environment is consistent with broader educational research emphasizing the role of institutional and instructional factors in shaping student outcomes. Khairunnisa et al. highlighted that campus environment significantly influences students' learning motivation, which is closely related to academic vitality (Khairunnisa et al.,

2026). Chen and Shin also demonstrated that learning environment variables are closely associated with motivation and employability-related competencies, indicating that educational context influences both immediate academic functioning and future-oriented outcomes (Chen & Shin, 2025). Therefore, the present findings reinforce the idea that enhancing the quality of the learning environment can serve as an effective strategy for promoting academic vitality among students.

In addition to the learning environment, hope for employment emerged as a significant predictor of academic vitality. This finding underscores the importance of future-oriented cognitive and motivational processes in sustaining students' academic engagement. According to hope theory, individuals who possess higher levels of hope are better able to generate pathways toward their goals and maintain the motivational energy required to pursue them (Snyder et al., 2002). In the academic domain, this translates into greater persistence, engagement, and adaptability. The present findings are consistent with previous studies demonstrating that hope is positively associated with academic success, engagement, and well-being (Pedrotti, 2018; Rand et al., 2020). Students who believe in their ability to achieve meaningful employment outcomes are more likely to perceive their academic efforts as purposeful, which in turn enhances their vitality and resilience in the face of challenges.

The role of employment hope in predicting academic vitality is particularly relevant in the post-COVID context, where uncertainty about labor market conditions and career opportunities has increased. Research has shown that students' perceptions of employability significantly influence their well-being and academic commitment during periods of crisis (Capone et al., 2021). Furthermore, Askaripour et al. found that higher levels of employment hope are associated with lower academic burnout, suggesting that hope serves as a protective factor against academic exhaustion (Askaripour et al., 2022). The findings of the present study extend this line of research by demonstrating that employment hope not only reduces negative outcomes but also actively contributes to positive academic functioning, such as vitality.

The interplay between academic vitality and employment-related expectations can also be understood within the broader framework of career development and higher education outcomes. University students often view their academic experiences as a pathway to future employment, and their level of engagement is influenced by





the perceived relevance of their studies to career goals. Studies have shown that career education and employability skills development play a crucial role in shaping students' perceptions of the labor market and their readiness for employment (Nwakanma, 2024; Pandita & Kiran, 2023). Additionally, research by Chigbu and Nekhwevha indicated that the academic environment influences students' perceptions of work readiness, further highlighting the interconnectedness of educational and occupational domains (Chigbu & Nekhwevha, 2022). The present findings support this integrative perspective, suggesting that academic vitality is influenced not only by current educational conditions but also by students' expectations regarding their future careers.

The combined predictive power of perception of the learning environment and employment hope, accounting for 21% of the variance in academic vitality, indicates that both contextual and psychological factors play complementary roles in shaping students' academic functioning. This finding is consistent with contemporary models of student development, which emphasize the interaction between environmental influences and individual psychological resources. For instance, Mostajeran et al. demonstrated that academic vitality is linked with career aspirations through self-regulatory processes, suggesting that vitality is embedded within a broader network of motivational and contextual variables (Mostajeran et al., 2025). Similarly, Hou found that academic self-efficacy and career development learning contribute to employability skills, reinforcing the idea that academic and career-related processes are mutually reinforcing (Hou, 2024).

Another important implication of the findings is that academic vitality can be understood as a dynamic construct influenced by both immediate academic experiences and long-term future expectations. In this regard, the results align with research on student well-being during the pandemic, which has emphasized the role of contextual support and psychological resources in maintaining adaptive functioning (Kiltz et al., 2022). The ability of students to remain academically vital in uncertain conditions depends not only on the absence of stress but also on the presence of supportive environments and hopeful future outlooks. This perspective is further supported by studies indicating that positive psychological resources, such as hope and courage, mediate the relationship between environmental factors and well-being outcomes (Lodi et al., 2022).

Furthermore, the findings of the present study are consistent with research highlighting the challenges faced by

students in online and post-pandemic learning environments. Bhinder reported that difficulties associated with online education can negatively impact both academic achievement and employability perceptions, underscoring the importance of addressing environmental and psychological factors simultaneously (Bhinder, 2025). Similarly, Elangovan emphasized the complexities of transitioning from virtual to in-person academic settings, which require students to readjust their learning strategies and expectations (Elangovan & Sundaravel, 2024). In this context, fostering a positive perception of the learning environment and strengthening employment hope can serve as key strategies for enhancing academic vitality.

In summary, the findings of the present study provide robust evidence for the significant roles of perception of the learning environment and employment hope in predicting academic vitality among university students. These results highlight the importance of adopting a holistic approach to student development that considers both contextual and psychological dimensions. By improving the quality of the learning environment and fostering positive expectations about future employment, higher education institutions can enhance students' capacity to cope with academic challenges and maintain vitality in their studies.

One limitation of the present study is the use of a correlational design, which precludes causal inferences regarding the relationships among the variables. Additionally, the data were collected using self-report questionnaires, which may be subject to response biases such as social desirability and common method variance. The sample was also limited to students from a single university context, which may restrict the generalizability of the findings to other educational settings. Furthermore, the study focused on a limited number of variables, and other potentially relevant factors, such as personality traits, emotional regulation, and institutional characteristics, were not examined.

Future research is recommended to employ longitudinal and experimental designs to better understand the causal mechanisms underlying the relationships among perception of the learning environment, employment hope, and academic vitality. Expanding the scope of research to include diverse student populations and institutional contexts would enhance the generalizability of findings. Additionally, future studies could investigate the mediating and moderating roles of variables such as self-efficacy, resilience, and academic motivation. Exploring the impact of specific components of the learning environment, such as



instructional methods and peer interaction, may also provide more detailed insights into how academic vitality can be enhanced.

From a practical perspective, the findings suggest that higher education institutions should prioritize the creation of supportive and engaging learning environments that foster students' academic vitality. This can be achieved through improving teaching quality, enhancing student-faculty interaction, and providing adequate educational resources. Universities should also implement career development programs and counseling services aimed at strengthening students' hope for employment. By integrating academic and career support initiatives, institutions can help students develop both the skills and the confidence needed to succeed in their academic and professional endeavors.

### Authors' Contributions

Authors equally contributed to this article.

### Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

### Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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All procedures performed in studies involving human participants were under the ethical standards of the institutional and, or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

### References

- Aristovnik, A., Keržič, D., Ravšelj, D., Tomažević, N., & Umek, L. (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*, *12*(20), 8438. <https://doi.org/10.3390/su12208438>
- Askaripoor, T., Aghaei, H., Rahmani, A., Abolhasannejad, V., Shafii motlagh, M., & Abbasi, A. M. (2022). Academic Burnout and its Relationship with Employment Hope among Health Sciences Students. *J Med Edu Dev*, *15*(45), 8-18.
- Aslan, H., Aslan, A. M., & Tuzgöl Dost, M. (2023). COVID-19 pandemic experiences of secondary school students in Turkey. *Curr Psychol*, *42*, 17244-17259. <https://doi.org/10.1007/s12144-022-03111-0>
- Bahmei, J., Mostatab, R., Shomalinezhad, M., Maleki, A., & Mobasheri, F. (2019). Investigating the academic vitality and motivation of students based on their perception of the learning environment in Abadan School of Medical Sciences in 2018. *Health Research in Community (Tahghighat-e Salamat dar Jameh)*, 31-40.
- Bhinder, H. (2025). Measuring the Challenges of Online Education and their Impact on the Academic Achievement and Employability of Higher Education Students. *Journal of Information Systems Engineering and Management*, *10*(27s), 528-536. <https://doi.org/10.52783/jisem.v10i27s.4442>
- Capone, V., Marino, L., & Park, M. (2021). Perceived Employability, Academic Commitment, and Competency of University Students During the COVID-19 Pandemic: An Exploratory Study of Student Well-Being. *Frontiers in psychology*, *12*. <https://doi.org/10.3389/fpsyg.2021.788387>
- Cayubit, R. F. O. (2024). The impact of COVID-19 anxiety on the academic motivation, life-orientation, and meaning in life of university students. *Discov Psychol*, *4*, 176. <https://doi.org/10.1007/s44202-024-00298-0>
- Chen, L., & Shin, C. (2025). Assessing Questionnaire Validity and Reliability on Learning Environment, School-Enterprise Cooperation, Motivation, and Employment Competitiveness. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*. <https://doi.org/10.47405/mjssh.v10i9.3544>
- Chigbu, B., & Nekhwevha, F. (2022). Academic-faculty environment and graduate employability: variation of work-readiness perceptions. *Heliyon*, *8*. <https://doi.org/10.1016/j.heliyon.2022.e09117>
- Dehghanizadeh, M. H., Hosseinchari, M., Moradi, M., & Soleimani Khashab, A. (2014). Academic vitality and perception of family communication patterns and class structure; the mediating role of self-efficacy dimensions. *Educational Psychology Quarterly (Faslnameh Ravan-shenasi-e Tarbiyat)*, *10*(32), 1-30.
- Elangovan, N., & Sundaravel, E. (2024). Transition From Virtual to Reality in Post-Pandemic Academic Environment. In (pp. 289-316). IGI Global. <https://doi.org/10.4018/979-8-3693-4417-0.ch012>
- Ghoreyshi Rad, F. (2008). Investigating the level of hope for future employment among humanities students. *Journal of Humanities Research, University of Isfahan (Majalleh-ye Pazhuheshi-e Olum-e Ensani-e Daneshgah-e Isfahan)*, *29*(1), 47-66.
- Hou, D. (2024). Academic self-efficacy, career development learning, and employability skills of Chinese university students. *International Journal of Research Studies in Management*. <https://doi.org/10.5861/ijrsm.2024.1040>
- Hwang, C., Ghalachyan, A., & Song, S. (2023). Exploring student experiences with a virtual learning environment in an apparel and textiles curriculum during the COVID-19 pandemic.

- International Journal of Fashion Design, Technology and Education*, 16(3), 247-256.  
<https://doi.org/10.1080/17543266.2022.2158237>
- Khairunnisa, N., Putri, T., Nursalim, M., Hakim, L., & Mulyeni, S. (2026). Pengaruh Lingkungan Kampus terhadap Motivasi Belajar Mahasiswa. *Journal Innovation In Education*, 4(1), 11-19. <https://doi.org/10.59841/inoved.v4i1.3618>
- Kiltz, L., Trippenzee, M., Fleer, J., Fokkens-Bruinsma, M., & Jansen, E. P. W. A. (2022). Student Well-being in Times of COVID-19 in the Netherlands. <https://doi.org/10.31219/osf.io/5e96w>
- Lodi, E., Perrella, L., Zarbo, R., & Patrizi, P. (2022). Courage as Mediator between Positive Resources and General/Domain-Specific Well-Being Indices. *European Journal of Investigation in Health, Psychology and Education*, 12(8), 1067-1081. <https://doi.org/10.3390/ejihpe12080076>
- Marinoni, G., Van't Land, H., & Jensen, T. (2020). *The impact of Covid-19 on higher education around the world* (IAU Global Survey Report, Issue).
- Martin, A. J., Colmar, S. H., Davey, L. A., & Marsh, H. W. (2010). Longitudinal modelling of academic buoyancy and motivation: do the 5Cs hold up over time? *Br J Educ Psychol*, 80(3), 473-496.
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychol Sch*, 43(3), 267-281.
- Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology*, 46(1), 53-83.
- Mostajeran, Z., Kazemi, M., Alimirzaie, M., & Asanjarani, F. (2025). Career aspirations: a structural equation model analyzing the role of academic vitality and academic self-regulation. *International Journal of Adolescence and Youth*, 30. <https://doi.org/10.1080/02673843.2025.2559814>
- Nwakanma, C. H. (2024). The Impact of Career Education on Students' Labour Market Perceptions. *Didaktika: Jurnal Kependidikan*, 13(1), 155-166. <https://doi.org/10.58230/27454312.490>
- Pandita, A., & Kiran, R. (2023). Tapping the Potential of Academic Leadership, Experiential Learning, and Employability of Students to Enhance Higher Educational Institute Performance. *Sage Open*, 13. <https://doi.org/10.1177/21582440231183932>
- Pedrotti, J. T. (2018). The will and the ways in school: Hope as a factor in academic success. In G. M. Taylor & M. W. Gallagher (Eds.), *The Oxford Handbook of Hope* (pp. 107-115). Oxford University Press.
- Rand, K., Shanahan, M., Fischer, I., & Fortney, S. (2020). Hope and optimism as predictors of academic performance and subjective well-being in college students. *Learning and Individual Differences*. <https://doi.org/10.1016/j.lindif.2020.101906>
- Roff, S., McAleer, S., Ifere, O. S., & Bhattacharya, S. (2001). A global diagnostic tool for measuring educational environment: Comparing Nigeria and Nepal. *Medical Teaching*, 23(4), 378-382.
- Shaw, S., & Ogilvie, C. (2010). Making a virtue out of a necessity: part time work as a site for undergraduate work-based learning. *Journal of European Industrial Training*, 34(8/9), 805-821. <https://doi.org/10.1108/03090591011080986>
- Snyder, C. R., Shorey, H., Cheavens, K., & Pulvers, M. (2002). Hope and academic success in college. *Journal of Educational Psychology*, 94(4), 820-826.
- Yoon, H. J., In, H., Niles, S. G., Amundson, N. E., Smith, B. A., & Mills, L. (2015). The effects of hope on student engagement, academic performance, and vocational identity. *Can. J. Career Dev.*, 14, 34-45. <https://doi.org/10.53379/cjcd.2015.176>
- Yotsidi, V., Pagoulatou, A., Kyriazos, T., & Stalikas, A. (2018). The Role of Hope in Academic and Work Environments: An Integrative Literature Review. *Psychology*, 9(2), 385-402.