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Cultivating Negotiation Skills As Critical Thinking: An Analysis of Emotional Intelligence and Self-Efficacy's Roles among Vietnamese Students

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ABSTRACT

This study examines psychological factors influencing job negotiation efficacy among Vietnamese economics students and conceptualizes negotiation as an applied critical thinking skill required for professional success. Drawing on Bandura's self-efficacy theory, the study develops and empirically tests a model assessing the effects of mastery experience, verbal persuasion, physiological and affective states, and emotional intelligence on job negotiation efficacy. Survey data were collected from 222 undergraduate economics students in Vietnam and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that emotional intelligence has the strongest positive effect on job negotiation efficacy, followed by verbal persuasion and physiological and affective states. In contrast, mastery experience from classroom-based negotiation activities does not show a significant effect. This finding suggests that experiential learning may not automatically strengthen students' negotiation efficacy when classroom activities are mainly group-oriented and do not provide sufficient individual responsibility, personalized feedback, and realistic decision-making pressure. The study contributes to self-efficacy theory by showing that emotional and psychological resources are central to negotiation-related critical thinking in higher education.

1. Introduction

Vietnam's rapid integration into the global economy, marked by major trade agreements and an expanding business sector, has shifted the skill set needed for professional success. In this context, effective negotiation of job terms has become a key problem-solving skill rather than just a procedural step [1]. Negotiation success depends on the ability to analyze complex situations, assess

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options, and make strategic decisions under pressure, illustrating the role of critical thinking in career development.

Despite advancements in teaching methods within Vietnamese higher education, many programs continue to emphasize technical knowledge at the expense of developing critical-thinking skills essential for addressing real-world professional challenges. In economics and business curricula, instruction often focuses on professional expertise, labor-market awareness, and general communication, while comparatively less emphasis is placed on the psychological capacities that enable effective application of this knowledge under pressure. As a result, the psychological foundations necessary for students to perform in high-stakes contexts, such as job negotiations, are frequently overlooked. This gap presents a significant research problem: students may comprehend the theoretical requirements of negotiation but still lack the self-efficacy, emotional regulation, and adaptive judgment required to negotiate employment terms with confidence and strategic intent. This issue is consequential, as negotiation outcomes shape career trajectories, workforce productivity, and the development of national human capital. Accordingly, investigating the psychological determinants of job negotiation efficacy is essential for understanding how higher education can more effectively prepare students for complex professional environments, beyond the provision of technical skills alone.

This research aims to investigate how specific psychological factors influence job negotiation efficacy among Vietnamese economics students. The study examines whether mastery experience, verbal persuasion, physiological and affective states, and emotional intelligence (EI) contribute to students' perceived capacity to negotiate employment-related terms. Drawing on Bandura's self-efficacy theory [2], the research addresses three central questions:

i. Which psychological factors significantly affect job negotiation efficacy among Vietnamese economics students?
ii. Which factor has the strongest influence?
iii. What are the implications of these findings for designing higher education curricula that foster negotiation as an applied critical thinking skill?

By framing negotiation as applied critical thinking and identifying its psychological foundations, this study contributes to the discussion on how higher education can better develop the thinking skills and psychological capabilities needed for success in today's global workplace. This approach aligns the research with current educational debates and highlights its relevance.

The structure of the article is as follows. Section 2 reviews the literature on job negotiation, self-efficacy, EI, and related psychological constructs. Section 3 outlines the research model, hypotheses, data collection procedures, measurement strategies, and analytical methods. Section 4 presents and discusses the results of the measurement and structural models. Section 5 concludes by summarizing the principal findings, contributions, implications, limitations, and recommendations for future research.

2. Literature Review

Kurtzberg & Naquin [3] identified job negotiation as one of the most challenging tasks individuals faced, with widespread interest in improving negotiation skills. Lipovsky [4] argued that making a strong impression on employers during job negotiations could be decisive, particularly when candidates had similar qualifications and experience, or when the job required strong interpersonal skills. Pence & Kirk-Jenkins [5] emphasized that job interviews and negotiations were essential

components of the recruitment process, enabling companies to form initial impressions of applicants and assess their potential fit with the team.

In an increasingly competitive job market, university graduates encountered challenges in securing positions that aligned with their qualifications and education. They competed not only with peers but also with experienced professionals seeking new opportunities. As options became more limited, many graduates accepted fewer desirable roles and lower compensation. For new graduates, concessions made in job negotiations, such as on salary or benefits, could have a lasting impact on their career earnings [6]. Research indicated that individuals who negotiated more assertively tended to achieve higher wages over time, while even small improvements in initial contracts could significantly affect long-term income and benefits [7,8].

Salary negotiations could have long-term emotional effects. Faria *et al.* [9] reported that low starting salaries often led employees to feel undervalued, thereby reducing the workplace's attractiveness. Curhan *et al.* [10] found that negative job negotiation experiences decreased new employees' satisfaction with salary and work, and could increase turnover intentions after the first year. These studies suggested that job negotiation should be treated not only as a recruitment procedure but also as an early career capability with long-term economic and psychological consequences. Therefore, it was important for recent graduates and job seekers to develop negotiation skills. These skills were needed not only for salary negotiation but also for discussing incentives and other employment conditions, such as position, schedule, and benefits.

Job bargaining was a central aspect of negotiation, occurring across all professions and business sectors. Despite its prevalence, researchers devoted limited scientific attention to job application negotiation [6]. Most available sources offered practical advice rather than empirical studies. Buelens *et al.* [11] reported that 88% of 76 published studies on job application and compensation negotiation relied on real-world negotiation samples. However, academic research did not clearly define job negotiation efficacy, often focusing on negotiation processes and outcomes. Ferguson *et al.* [12] defined negotiation efficacy by the outcome of successful contract signing. Achieving a target salary further indicated effectiveness in job negotiation. These findings implied that applicants with stronger bargaining power were more likely to secure contracts with favorable compensation. However, this stream of research still focused mainly on negotiation outcomes rather than the psychological readiness that enabled individuals to negotiate effectively. This limitation was particularly relevant for students, who could have limited real negotiation experience before entering the labor market.

Self-efficacy reflected an individual's confidence in their ability to accomplish specific tasks, including negotiation. It involved trust in one's capacity to meet requirements by leveraging motivation, available resources, and targeted behaviors [13]. Bandura's theory of self-efficacy [2] stated that individuals with high confidence in their abilities expected positive outcomes, maintained focus on success, and persisted through challenges, demonstrating persistent, goal-oriented thinking. In contrast, those with low self-confidence often anticipated failure, focused on perceived risks, and could either reduce effort or give up entirely [14,15]. High self-efficacy enabled negotiators to better manage setbacks, including reduced motivation, loss of process confidence, and limited information sharing. It also facilitated anxiety management, helping individuals avoid making low offers or exiting negotiations prematurely [16,17]. Numerous studies identified self-efficacy as a strong predictor of behavior and performance across tasks, including negotiation, with higher levels linked to greater effectiveness [18]. This indicated that negotiation efficacy could be understood as a specific form of self-efficacy that supported persistence, judgment, and strategic action in employment-related negotiations.

Gaspar & Schweitzer [18] found that self-confidence in bargaining skills significantly shaped dealmaker behavior, with different negotiation strategies producing varied outcomes. They described negotiation confidence as a dynamic quality, influenced by the results of prior negotiations. Experience in negotiation could alter perceptions of strategy effectiveness over time. Studies focusing on job negotiations reported that candidates who experienced anxiety during the process tended to receive lower interview evaluations and were less likely to be hired [19]. Stress and negative beliefs during negotiation decreased efficacy, demonstrating how affective states could impair cognitive functioning and performance. Companies could also reject candidates who displayed nervousness, regardless of their qualifications. Both applicants and employers, therefore, had a stake in understanding and managing anxiety during job negotiations [20].

EI, according to Meisler [21], was also a determinant influencing the success of recruiting negotiations that attracted the attention of scientists in recent decades. Mayer *et al.* [22] suggested that emotion was a systematic mental reaction to an experience that combined physiological, experiential, and cognitive elements. Emotions were acknowledged as belonging to three or four essential groups of mental functions: ambition, emotion, cognition, and (less commonly) consciousness. Emotions identified and reacted to changes in the individual-environment interaction. Scientists also considered that all emotions could enhance rather than interrupt cognition. It was suggested that to be emotionally knowledgeable, people had to understand what they were experiencing and the origins of their emotions. EI was thus expected to originate from the combination of emotion and cognition [14,23], making it a critical skill set for navigating complex social and professional problem-solving scenarios. According to Meisler's [21] discussion of Salovey and Mayer's ability-based perspective, EI connected emotion and cognition and thereby influenced emotional understanding, cognition, and behavior. This perspective was consistent with viewing negotiation as applied critical thinking, because effective negotiation required both cognitive evaluation and emotional regulation.

Research highlighted the importance of EI in professional settings, linking high EI to positive outcomes in leadership, negotiation success, and job performance [21,24]. Perry *et al.* [14] noted that strong candidates could positively influence employers through sympathy, self-presentation, and nonverbal communication. Effective emotion management was another valuable skill. Candidates who applied EI during job negotiations more confidently communicated their abilities and responded creatively to challenges, leaving a favorable impression on recruiters [25,26]. Conversely, interviewers could be influenced by their own emotions or the applicant's mood, leading to biased judgments [14].

Experience and intergenerational guidance also shaped the job application process. Research showed that accumulated experience and advice could enhance candidates' negotiation effectiveness [27]. Lu [7] found that individuals who received advice handled negotiations more efficiently than those without guidance, a result echoed in studies involving participants exposed to bargaining case studies. Developing a consistent negotiation strategy further improved efficacy. Marino *et al.* [28] reported that negotiators who cultivated and maintained a consistent style achieved better outcomes. In addition, exchanging information with negotiation partners helped individuals affirm and strengthen their negotiation abilities.

Overall, the literature indicated that job negotiation had important implications for graduates' career outcomes and that self-efficacy, emotional states, EI, experience, and advice could influence negotiation-related performance. However, job negotiation efficacy remained less clearly defined and was often examined through outcomes rather than as a psychological capability. Moreover, these factors were usually discussed separately rather than assessed together in the context of students preparing for employment negotiations. This study addressed this gap by examining how

mastery experience, verbal persuasion, physiological and affective states, and EI jointly shaped job negotiation efficacy among Vietnamese economics students.

3. Materials and Methods

3.1 Model and Hypotheses

This study adopts Bandura's self-efficacy theory [2], which emphasizes that belief in one's ability is central to performance. Applying this theory to job negotiations, negotiation is conceptualized as a complex cognitive and social problem-solving task that relies on effective use of psychological resources, rather than as a simple economic exchange. Ostrem [29] identifies four main sources of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

Mastery experiences refer to direct, hands-on engagement with relevant tasks [2]. In education, these experiences often occur through simulations and practice activities. The study hypothesizes that active participation in classroom negotiation simulations will build students' confidence and increase their negotiation efficacy:

- *H1 – Mastery experiences gained through classroom negotiation activities positively influence job negotiation self-efficacy.*

Verbal persuasion refers to encouragement and feedback that strengthen an individual's belief in their abilities. In academic settings, formal feedback and recognition reinforce self-confidence. It is proposed that positive academic feedback, such as high grades in the university program, effectively builds students' self-belief and readiness for real-world negotiations:

- *H2 – Verbal persuasion, manifested through positive academic feedback, positively influences job negotiation self-efficacy.*

Bandura *et al.* [2] define emotional state as the individual's feelings during task performance. Negative emotions, such as anxiety or sadness, reduce confidence and may hinder performance, while positive emotions enhance self-confidence and effectiveness. The ability to manage psychological states, including anxiety and stress, is a key conscious control skill in high-pressure situations like negotiations. Students who regulate their emotional state gain an advantage in bargaining scenarios.

- *H3 – The ability to manage one's physiological and affective states positively influences job negotiation self-efficacy.*

EI is a distinct factor that drives negotiation success. While internal states such as psychological, affective, and emotional factors are often grouped [2], EI, defined as the ability to perceive, use, understand, and manage emotions [22], is the essential skill set that translates a stable internal state into effective action. EI is conceptualized not merely as a static trait but as an active cognitive and affective skill set that enables individuals to navigate social interactions dynamically. While managing one's internal state (as in H3) provides a stable foundation, EI is the applied skill that allows a candidate to leverage that composure to read a recruiter's cues, build rapport, and creatively navigate the bargaining process. Therefore, EI is positioned as a direct and powerful enhancer of negotiation efficacy:

- *H4 – EI positively influences job negotiation self-efficacy*.

Vicarious experience involves learning through observing others. In this context, students may observe real interviews and negotiations outside the classroom, such as through group interviews with employers. Since students have multiple opportunities to observe these situations beyond the classroom, this element is excluded from the research model.

This study develops an integrated framework (Figure 1) that combines Bandura's self-efficacy theory, Ostrem's classification of self-efficacy sources, and Mayer *et al.* [22]'s EI perspective. The originality of the model lies in bringing these theoretical elements together to explain job negotiation efficacy as an applied critical-thinking skill among Vietnamese students. In this framework, mastery experience, verbal persuasion, and physiological and affective states represent key sources of negotiation-related self-efficacy, while EI is incorporated as an additional psychological capability that enables students to interpret emotions, regulate responses, and adapt their negotiation behavior in complex employment situations.

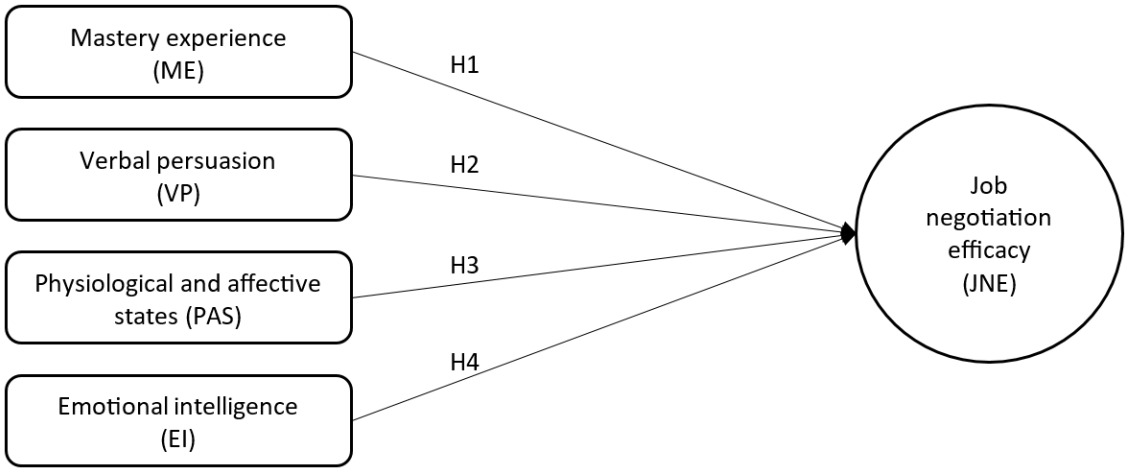

Fig. 1. Research model

In Figure 1, job negotiation efficacy (JNE) refers to students' self-confidence in application negotiations, demonstrating their perceived negotiating ability, while mastery experience (ME) refers to students' participation in negotiation sessions and classroom negotiation simulations. Classroom negotiation involvement levels include never participating, participating in a role-play, participating in a group writing exercise, and preparing in a group for negotiation planning. Verbal persuasion (VP) refers to persuasive academic feedback, as evidenced by the program's final results. Physiological and affective states (PAS) represent students' psychological and emotional states during negotiation-related tasks. EI represents students' ability to understand and manage emotions in negotiation-related contexts.

3.2 Methodology

The study employed a quantitative survey design and used Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed research model. Data processing and model estimation were conducted in RStudio using R [30] and the cSEM package [31]. The main analytical procedures included descriptive data screening, dummy coding for categorical formative indicators, reliability assessment, convergent validity assessment, discriminant validity assessment, collinearity diagnostics, bootstrapping for significance testing, and blindfolding for predictive relevance. PLS-SEM was selected because the model includes both reflective and formative constructs, the sample size is

moderate, and the study aims to explain variance in job negotiation efficacy rather than confirm a covariance-based model.

Before estimating the structural model, the reliability of measurement items was assessed using Cronbach's alpha and composite reliability (*ρc*). To confirm validity, Average Variance Extracted (AVE) was calculated for convergent validity and Heterotrait–Monotrait (HTMT) ratios were used for discriminant validity. For formative constructs, indicator weights and Variance Inflation Factors (VIFs) were examined to assess indicator relevance and potential multicollinearity [32]. Path significance was assessed using 5,000 bootstrap subsamples to improve the stability of the significance estimates and to align with current PLS-SEM reporting expectations.

The model's predictive capability was evaluated using the blindfolding procedure to estimate Stone–Geisser's Q^2, which measures out-of-sample predictive relevance. Overall model fit was assessed with the Standardized Root Mean Square Residual (SRMR), and model explanatory power was reflected in the coefficient of determination (R^2 and adjusted R^2 values).

3.3 Data collection and preparation

This research examined the negotiation capacity of Vietnamese economics students applying for jobs and identified key factors influencing this skill. A structured survey was conducted from October to December 2022 among undergraduate economics students in Vietnam. The questionnaire collected information on students' negotiation-related learning experience, academic feedback, emotional and physiological states, EI, and perceived job negotiation efficacy. After data cleaning, 222 valid responses were retained for analysis.

Snowball sampling was used to collect survey data, a method effective when direct access to participants is limited [33]. Initial respondents were contacted through universities in Northern Vietnam and were invited to share the survey with other economics students. This procedure helped expand access to relevant respondents and was appropriate for reaching economics students across university networks. As with many non-probability sampling approaches, the sample may partly reflect the institutional and peer networks through which the survey was distributed. Therefore, the findings should be interpreted primarily as explanatory evidence on the relationships among psychological factors and job negotiation efficacy within the surveyed student group.

The sample size was considered appropriate for PLS-SEM. The 10-times rule [32] requires a minimum sample equal to ten times the largest number of predictors pointing to an endogenous construct, which would be 40 observations in this model. In addition, the final sample exceeds the commonly recommended minimum of 200 observations for stable multivariate analysis [34, 35]. These considerations support the adequacy of the sample for the intended explanatory analysis.

All responses for analysis were numerically coded using RStudio. Reflective constructs PAS, EI, and JNE were measured on a five-point Likert scale, with responses ranging from "totally disagree" to "totally agree," converted to a scale of one to five for consistency. ME and VP were measured as formative constructs using ordinal, categorical scales. ME was assessed on a four-level participation scale, and VP on the grade (failure-excellent). The study used dummy coding to convert these categories into binary variables relative to a reference group for PLS-SEM analysis.

During data preparation, the distributions of several categorical variables were found to be unbalanced, with relatively few responses in the lowest categories. Therefore, the lower-level categories were combined to improve group stability and maintain sufficient statistical power for model estimation. To avoid perfect multicollinearity, which may arise when all dummy variables for a categorical variable are included simultaneously, the lowest ordinal category was used as the reference group and was omitted from the estimation model. This coding strategy enabled

independent interpretation of the remaining categories and ensured the appropriateness of the structural equation modeling procedure (Table 1).

Table 1
Dummy variable explanation

New dummy variable	Condition for value 1	Equivalent original level(s)
ME_low	The respondent did not participate or participated via situation role-play	No Participation (Level 1) and Role-Play (Level 2)
ME_middle	The respondent participated via group written assignment	Group Assignment (Level 3)
ME_high	The respondent participated via planning negotiation for the group	Planning Negotiation (Level 4, Reference Group)
VP_low	The respondent has a final grade of Good or lower	Good, Average, Failure
VP_middle	The respondent has a final grade of Very good	Very good
VP_high	The respondent has a final grade of Excellent	Excellent

4. Results and Discussion

4.1 Measurement Model Analysis

Before testing structural relationships, the study evaluated the measurement model's reliability and validity. This assessment ensures that all constructs and indicators accurately represent the theoretical dimensions of job negotiation efficacy among Vietnamese students.

4.1.1 Reliability and convergent validity

For reflective constructs, indicator reliability was assessed through indicator loadings, which measure the correlation between each item and its latent construct (Table 2).

Table 2
Loadings

Construct	Loadings	*t*-value	*p*-value
Physiological and affective states			
PAS1	0.827	8.91	0.000
PAS2	0.812	9.33	0.000
PAS3	0.942	13.34	0.000
Emotional intelligence			
EI1	0.835	15.42	0.000
EI2	0.678	10.53	0.000
EI3	0.722	9.34	0.000
EI4	0.726	11.92	0.000
Job negotiation efficacy			
JNE1	0.737	12.55	0.000
JNE2	0.641	9.39	0.000
JNE3	0.658	10.08	0.000
JNE4	0.600	8.42	0.000

Loadings above 0.7 indicate that a question explains more variance in the construct than in measurement error and should be retained [36].

The internal consistency and convergent validity of reflective constructs (Table 3) were examined using Cronbach's alpha, Dijkstra–Henseler's (*ρA*), and composite reliability (*ρc*), all of which should exceed 0.70 for acceptable consistency [32]. Convergent validity was assessed using AVE. Values above 0.50 indicate that a construct explains more than half of the variance in its indicators [37].

Table 3
Reliability and convergent validity of reflective constructs

Construct	AVE	Cronbach's α	*ρA*	*ρc*
PAS	0.743	0.896	0.902	0.896
EI	0.552	0.833	0.836	0.831
JNE	0.437	0.756	0.760	0.755

The model demonstrates strong reliability and validity for almost all constructs. PAS had loadings above 0.80, an AVE of 0.743, and internal consistency indices (*α*, *ρA*, *ρc*) above 0.89. EI showed highly significant loadings, strong reliability indices (all above 0.83), and an AVE of 0.552, with only one indicator (EI2) slightly below the 0.70 threshold.

The AVE of JNE was 0.437, which is slightly below the recommended threshold of 0.50. This indicates that the convergent validity of JNE is weaker than that of PAS and EI and should therefore be interpreted with appropriate caution. However, several empirical and theoretical considerations support retaining the construct in the model. First, all four JNE indicators were statistically significant, with t-values well above the recommended threshold and p-values below 0.001, indicating that each item contributed meaningfully to the construct. Second, although some outer loadings were below the ideal 0.70 level, they remained within an acceptable range for exploratory social science research, ranging from 0.600 to 0.737 [32]. Third, the internal consistency of JNE was acceptable, as Cronbach's alpha (0.756), *ρA* (0.760), and composite reliability (0.755) all exceeded the 0.70 threshold.

Following Fornell & Larcker [37], JNE remains empirically and theoretically valid for this model. Therefore, deleting JNE indicators solely to increase AVE could weaken the construct's theoretical coverage and reduce content validity. Nevertheless, the AVE result suggests that future studies should further refine the JNE scale, consider adding stronger indicators, and validate the construct in larger and more diverse student samples.

4.1.2 Discriminant validity

Discriminant validity was also assessed to ensure that the reflective constructs were empirically distinct and that the same concept was not being measured repeatedly. For this purpose, the Heterotrait–Monotrait (HTMT) ratio was used (Table 4).

Table 4
Heterotrait–Monotrait ratio

Construct	PAS	EI	JNE
PAS	1.000	–	–
EI	0.280	1.000	–
JNE	0.328	0.626	1.000

According to established guidelines, HTMT values should remain below 0.85 to indicate adequate discriminant validity among related but distinct constructs [38]. The results show that all HTMT ratios were below the recommended threshold of 0.85. This finding supports the discriminant validity of the measurement model and indicates that the three reflective constructs are empirically distinct.

4.1.3 Multicollinearity and indicator weight

For the formative constructs, ME and VP, indicator weights and multicollinearity were assessed (Table 5). Significant indicator weights, indicated by *t*-values greater than 1.96, suggest that the indicators make relevant contributions to their respective constructs. VIF values below 3.3 indicate that multicollinearity is not a concern [32].

Table 5
Indicator weights and collinearity of formative constructs

Construct	**Indicators**				
ME	*β*	*SE*	*t*	*p*	*VIF*
ME_middle	0.521	0.270	1.94	0.053	1.26
ME_high	1.120	0.083	13.93	< 0.001	1.26
VP					
VP_middle	1.083	0.111	9.77	< 0.001	1.56
VP_high	1.149	0.099	11.58	< 0.001	1.56

The ME_middle indicator showed a marginally significant contribution (t = 1.94). It was retained because of its practical relevance, as it represents a moderate level of classroom negotiation participation that may still contribute to the gradual development of students' self-efficacy. Its retention is considered conceptually appropriate for capturing different levels of mastery experience among Vietnamese students, although the marginal result suggests that this indicator should be interpreted with caution.

The ME_high indicator had a strong, significant influence on ME, confirming that high-performance achievements are impactful for self-efficacy. Both VP_middle and VP_high significantly contributed to VP, validating the motivational role of positive course results and engagement. Low VIF values confirmed each indicator's independent contribution.

4.2 Structural Model Analysis

The structural model was assessed to examine the hypothesized relationships among the constructs and to evaluate the model's explanatory and predictive performance. The assessment focused on the SRMR, R^2, and Q^2 as key indicators of model quality.

4.2.1 Model fit, explanatory power, and predictive relevance

The SRMR evaluates overall model fit, and values below 0.08 are typically considered indicative of good fit [39]. The R^2 value indicates the proportion of variance in the dependent variable explained by the independent variables, with benchmarks set at 0.26 (substantial), 0.13 (moderate), and 0.02 (weak) [40]. Finally, the Q^2 value, calculated using the blindfolding procedure, signifies the model's out-of-sample predictive relevance. Values above 0.15 suggest medium predictive power, and those above 0.35 suggest strong power [32]. The model produced robust results (Table 6). The SRMR was

0.053, indicating an excellent fit. The model explained 51.0% of the variance in job negotiation efficacy (R^2 = 0.510), with adjusted R^2 (0.501) confirming stability. The Q^2 value of 0.171 indicates medium predictive relevance beyond the sample.

Table 6
Model fit and predictive relevance

Index	Value	Recommended threshold	Interpretation
SRMR	0.053	< 0.08	Excellent model fit
R^2 (JNE)	0.510	> 0.26	Strong explanatory power
Adjusted R^2	0.501		Stable model
Q^2 (JNE)	0.171	> 0.15	Medium predictive relevance

4.2.2 Multicollinearity among predictors

To ensure stable estimation, collinearity among the predictor variables was examined (Table 7). All predictor variables showed low VIF values, including ME = 1.08, VP = 1.10, PAS = 1.10, and EI = 1.21. These values indicate that multicollinearity was not a concern and that the estimated path coefficients were unlikely to be distorted by excessive overlap among predictors. The results therefore support the distinct contribution of each predictor to the explanation of job negotiation efficacy.

Table 7
Model-level VIF values among predictors

Predictor	VIF	Threshold	Interpretation
ME	1.08	< 3.3	No multicollinearity
VP	1.10		
PAS	1.10		
EI	1.21		

4.2.3 Path coefficients and hypothesis testing

Path coefficients (β) represent the strength of hypothesized relationships (Table 8). Significance is determined when $t > 1.96$ ($p < .05$).

Table 8
Structural path estimates

Hypothesized path	β	*SE*	*t*	*p*	Significance
ME → JNE	0.059	0.069	0.864	0.388	Not significant
VP → JNE	0.300	0.067	4.456	< .001	Significant
PAS → JNE	0.156	0.072	2.150	0.031	Significant
EI → JNE	0.500	0.081	6.175	< .001	Significant

To provide a clearer visual summary of the empirical results, Figure 2 presents the standardized path coefficients and explained variance of the structural model. Path analysis shows clear influences on JNE. EI was the strongest predictor (β = 0.500, $p < 0.001$), followed by VP (β = 0.300, $p < 0.001$) and PAS (β = 0.156, p = 0.031).

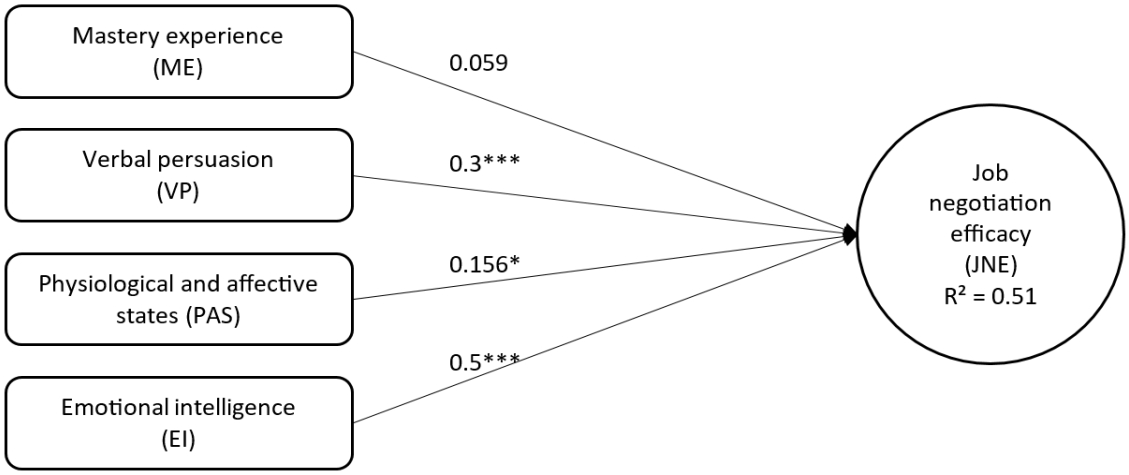

Fig. 2. Structural model (***, **, * when *p*-value is less than 0.001, 0.01, 0.05, respectively)

EI's strong effect highlights the importance of recognizing, understanding, and managing emotions in negotiation efficacy. This supports Mayer *et al.* [22] and shows that emotion regulation is vital for interpreting cues, adapting strategies, and building rapport, all of which are key to creative social problem-solving. From a decision-making perspective, the pattern of effects suggests that curriculum improvement should prioritize factors with greater explanatory power rather than treating all training components equally. This logic is consistent with recent Vietnamese research on innovation assessment, where multiple indicators and weighting procedures were used to evaluate complex development capacities [41]. Similarly, the present findings help identify which psychological resources should receive greater attention in the design of negotiation-related learning interventions.

The significant impact of VP, measured by academic results, highlights education's role in building self-belief and readiness. In this context, a positive program result serves as formal validation, directly building the psychological resources students need to confidently apply their knowledge and thinking skills in high-stakes, real-world scenarios. This finding suggests that educational reinforcement is a crucial lever for fostering the cognitive confidence needed to translate learning into effective action [18,19]. Similarly, the significance of PAS confirms that a candidate's ability to manage anxiety and maintain psychological composure is a foundational self-regulatory skill. The capacity to control one's emotional state prevents the negative outcomes associated with anxiety, such as lower initial offers and premature exit from talks, as noted by Brooks & Schweitzer [16] and Moturu & Lent [17]. This self-regulation prevents the impairment of analytical thinking and judgment under pressure, thereby creating the stable psychological platform from which higher-order skills like EI can be effectively deployed.

The non-significant effect of ME (β = 0.059, p = 0.388) is theoretically important because it appears to contradict Bandura's proposition [2] that mastery experience is one of the strongest sources of self-efficacy. However, this result does not necessarily reject self-efficacy theory. Rather, it suggests that the type and quality of mastery experience matter. In the present context, mastery experience was mainly represented by classroom-based negotiation activities, many of which were group-oriented. Such activities may expose students to negotiation procedures, but they may not provide the personal responsibility, emotional pressure, feedback specificity, or outcome ownership that characterize real job negotiations. As a result, students may participate in simulations without developing a strong belief that they can independently manage a high-stakes employment negotiation. This finding refines the application of self-efficacy theory in higher education. It suggests that experiential learning should not be treated as automatically effective. For negotiation efficacy

to develop, simulations need to be individualized, repeated, feedback-rich, and sufficiently realistic. Students should be required to formulate their own negotiation strategy, respond to unexpected counteroffers, justify their decisions, and reflect on their performance. Without these conditions, mastery experience may remain procedural rather than psychological, thereby explaining its weak effect in the model. This implication is also consistent with recent research on educational decision-making, which showed that classroom support decisions can benefit from structured multi-criteria evaluation rather than relying solely on intuitive choices [42].

5. Conclusion

This study examined the psychological determinants of job negotiation efficacy among Vietnamese economics students by conceptualizing negotiation as an applied critical thinking skill. Drawing on Bandura's self-efficacy theory, the study tested the effects of ME, VP, PAS, and EI on JNE. The findings show that EI is the strongest predictor of JNE, followed by VP and PAS. In contrast, ME has no significant effect on JNE. This result suggests that classroom-based negotiation activities may not automatically strengthen students' negotiation efficacy unless they provide sufficient individual responsibility, realistic decision-making pressure, and constructive feedback.

Regarding the theoretical implications, the study contributes to self-efficacy theory by showing that different sources of self-efficacy do not operate with equal strength in the context of job negotiation education. While Bandura's theory emphasizes mastery experience as an important source of self-efficacy, the non-significant effect of ME in this study suggests that the quality and structure of learning experience are crucial. Group-based or procedural simulations may expose students to negotiation tasks, but they may not be sufficient to develop individual confidence in managing real employment negotiations. The findings also support the view that negotiation efficacy is shaped not only by prior experience, but also by EI, psychological composure, and external validation through feedback or academic performance.

Regarding the practical and educational implications, the findings have implications for curriculum design in economics and business education. Negotiation training should move beyond general classroom simulations and should include more individualized role-play, repeated practice, structured feedback, and reflective debriefing. Because EI has the strongest effect on JNE, employability courses should also integrate activities that help students recognize emotional cues, manage anxiety, build rapport, and adapt their responses during difficult conversations. The significant role of VP further suggests that constructive feedback and positive academic reinforcement can help students develop the confidence needed to apply their knowledge in high-pressure professional contexts. These implications are socially relevant because job negotiation can influence graduates' early career outcomes, salary expectations, workplace satisfaction, and transition into the labor market. Strengthening negotiation efficacy therefore supports not only individual employability but also the development of a more confident and adaptive graduate workforce.

Several limitations should be acknowledged. First, the study used snowball sampling, which was appropriate for reaching economics students through university networks but may have limited the sample's breadth. Future studies could use stratified or probability-based sampling to validate the findings across different regions, universities, and fields of study in Vietnam. Second, the study only focuses on a specific cultural context, though this also provides a valuable foundation. Future research should use a cross-country comparative design to examine how different educational systems and cultural contexts influence the development of negotiation efficacy as a form of creative problem-solving. Such comparative work could separate universal psychological mechanisms from

culturally specific factors, offering more nuanced guidance for curriculum development across diverse learning environments. Third, the AVE of JNE was below the recommended threshold, although the construct was retained based on acceptable reliability, significant indicators, discriminant validity, and theoretical relevance. Future studies should refine the JNE scale by adding stronger indicators and validating it in larger samples.

In conclusion, this research contributes to the broader discourse on teaching thinking skills by showing that the quality and nature of learning experiences matter more than their existence. By shifting pedagogical focus toward developing EI and providing individualized validation, educators can more effectively cultivate the adaptive, creative, and critical thinkers needed to thrive in an increasingly complex world.

Conflicts of Interest

The authors declare no conflicts of interest.

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