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Fear of Failure vs Growth Mindset: Obstacle or Accelerator to the Courage to Start a Business?

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ABSTRACT

This study aims to analyze the influence of fear of failure and growth mindset on the courage to start a business among economics students in Makassar, with entrepreneurial self-efficacy as a mediating variable. The study employs an explanatory quantitative approach and uses a cross-sectional survey of 150 purposively selected respondents. Data analysis was performed using SEM-PLS in WarpPLS 8.0. The results showed that a growth mindset had a positive effect on entrepreneurial self-efficacy and the courage to start a business, and entrepreneurial self-efficacy had a positive impact on the courage to start a business. Conversely, fear of failure had no significant effect on either entrepreneurial self-efficacy or the courage to start a business. The mediation test confirmed that entrepreneurial self-efficacy mediates the impact of growth mindset on the courage to start a business but does not mediate the effect of fear of failure. These findings emphasize the importance of strengthening a growth mindset and self-efficacy to encourage students to take the courage to start a business.

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1. INTRODUCTION

The development of entrepreneurship education in the last decade has shown an increasingly prominent paradox. On the one hand, the promotion of entrepreneurship through higher education curricula, training programs, and institutional support has continued to expand, providing students with broader access to entrepreneurial knowledge and skills (Ahmed et al., 2025; Liu et al., 2020). On the other hand, this growing educational support has not always been followed by a corresponding increase in the courage to actually start a business (Deligianni

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et al., 2025; Zhang et al., 2022). Many students may already possess business ideas and basic entrepreneurial knowledge, yet still hesitate to translate them into real entrepreneurial action (Van Gelderen et al., 2015). This condition indicates a gap between entrepreneurial orientation and the act of starting a business (Mackiewicz, 2023), thereby requiring a scientific explanation that goes beyond cognitive and resource factors to include psychological determinants that influence the decision to act.

In the Indonesian context, entrepreneurship education has increasingly become an important component of higher education, as universities are expected to prepare graduates not only as job seekers but also as potential job creators (Saputra et al., 2023). Various curricular innovations, entrepreneurship programs, and student business activities have been introduced to strengthen entrepreneurial competencies and encourage students to participate in business creation. However, despite this growing emphasis, many students still hesitate to take the first step toward starting a business (Putri & Jamiat, 2022). This indicates that the expansion of entrepreneurship education in Indonesia does not automatically eliminate the psychological barriers that may arise when students are required to move from intention to action. Therefore, understanding the psychological factors that shape entrepreneurial courage is especially relevant among university students.

Within this broader national context, economics students in Makassar are an essential context for discussion because they are relatively more exposed to business and entrepreneurship literacy through academic activities in higher education. From a theoretical perspective, they have cognitive tools to recognize business opportunities. However, this knowledge does not always translate into the courage to actually start a business, especially when they are faced with various negative possibilities that can add to the psychological burden of decision-making (Gao et al., 2024). In addition, Makassar as one of the centers of economic growth in Eastern Indonesia has a dynamic MSME sector (Hernita et al., 2021) and the development of digital entrepreneurial opportunities, provides an environment that offers both opportunities and competition (Abduh et al., 2024), so that this local context has the potential to strengthen the role of psychological factors in shaping students' decisions to start a business.

The courage to start a business is a crucial aspect of entrepreneurial behavior because the initial stage involves the highest level of uncertainty (Cacciotti et al., 2016; Tomy & Pardede, 2018). Some causes of this uncertainty include psychological risks and market uncertainty arising from the possibility of negative assessments from the environment if the business does not go as expected (Halim et al., 2022; Simmons et al., 2019). Thus, the decision to start a business cannot be understood solely as the result of rational calculation, but also as the result of an interaction between risk assessment and self-confidence (Shepherd & Patzelt, 2017; Uygur & Kim, 2016). Therefore, research that treats the courage to start a business as an outcome variable has theoretical and practical relevance, especially for explaining why individuals with similar resources and knowledge can exhibit different starting behaviors.

One psychological determinant that often acts as an inhibitor in entrepreneurial decision-making is fear of failure (Chapman & Phillips, 2022). This concept details the anticipation of the personal and social consequences of failure (Tubadji et al., 2021). Fear of failure correlates with a tendency to avoid evaluative situations and minimize involvement in activities that raise the possibility of rejection (Duong, 2022). In entrepreneurial settings, this concern becomes especially relevant because venture creation is closely associated with uncertainty, high risk, and considerable failure rates. Recent empirical research on student entrepreneurial behavior has also emphasized that understanding actual entrepreneurial behavior requires greater attention to internal psychological and cognitive factors, particularly in educational contexts where entrepreneurship is promoted as a viable career pathway (F.

Wang et al., 2025). Therefore, fear of failure deserves greater attention as a psychological barrier that may reduce students' courage to start a business.

Conversely, a growth mindset is seen as a psychological factor that has the potential to encourage the courage to start a business (Botha, 2024; S. Morris et al., 2023). A growth mindset represents the belief that abilities can be developed through effort, appropriate strategies, and continuous learning. Individuals with this orientation tend to interpret challenges as learning opportunities, view mistakes as part of the adaptation process, and demonstrate higher persistence when facing obstacles. A growth mindset represents the belief that abilities can be developed through effort, appropriate strategies, and continuous learning (Burnette et al., 2020; Mendoza & Yan, 2025; Yeager & Dweck, 2020). Individuals with this orientation tend to view challenges as learning opportunities, interpret mistakes as part of the adaptation process, and show greater persistence when facing obstacles (Noskeau et al., 2021).

Fear of failure and a growth mindset describe two distinct psychological orientations toward uncertain situations. Fear of failure tends to activate protective strategies in the form of avoidance to reduce potential psychological pressure (Kollmann et al., 2017), while growth mindset encourages adaptive strategies in the form of approaching challenges to increase self-capacity (Sik et al., 2024). The difference between these orientations is relevant to examine simultaneously, as the decision to start a business often arises from an internal struggle between the urge to grow and the urge to avoid risk (Shepherd & Patzelt, 2018). Research that examines both factors simultaneously provides an opportunity to identify which factor is more dominant in explaining the courage to start a business, while offering a more comprehensive understanding than studies that examine inhibiting or driving factors separately.

However, directly testing the influence of fear of failure and growth mindset on entrepreneurial courage may not be sufficient to explain how these effects operate if it is not accompanied by a mechanism that clarifies the process through which such influence occurs (García-Salirrosas et al., 2025). Within the framework of Social Cognitive Theory, self-efficacy occupies a central role in linking beliefs, cognition, and behavior (Duong, 2023). Self-efficacy refers to an individual's belief in their capability to organize and perform the actions required to achieve a specific goal (Malenković & Slavec Gomezel, 2025). In the context of entrepreneurship, self-efficacy is particularly important because individuals with stronger entrepreneurial self-efficacy are more likely to take action, make decisions, persist when facing difficulties, and accelerate the transition from planning to action. Accordingly, entrepreneurial self-efficacy may serve as a key psychological mechanism through which fear of failure and growth mindset influence the courage to start a business.

This mediating role is theoretically meaningful. Fear of failure may weaken self-efficacy by increasing negative self-evaluation and hesitation to act (Martins et al., 2018), while growth mindset may strengthen self-efficacy by reinforcing the belief that entrepreneurial abilities can be learned and improved over time (Burnette et al., 2020). Through this mechanism, self-efficacy may translate psychological orientation into behavioral courage. This perspective is also important for entrepreneurship education because it suggests that educational interventions should not focus only on delivering business knowledge, but also on strengthening students' confidence in their ability to act and in their capacity to learn from failure (Liu et al., 2020).

Despite the rapid expansion of entrepreneurship education, an important gap remains between students' entrepreneurial orientation and their willingness to take the first entrepreneurial step. Many previous studies still focus on entrepreneurial intention, interest, or readiness, rather than on the courage to start a business as a more action-oriented outcome (Kusumojanto et al., 2020; Pribadi, 2023; Wardana et al., 2021). Although intention is a relevant predictor, it does not always translate into action (Albatran & Atikbay, 2025; Sheeran & Webb,

2016). As a result, the literature still offers limited explanation of why students with relatively similar access to entrepreneurial knowledge and learning opportunities may differ in their readiness to initiate actual business activity.

This issue is particularly important in the Indonesian higher education context, where universities are increasingly expected to produce not only job seekers but also job creators (Saputra et al., 2023). However, despite the growing emphasis on entrepreneurship education, many students still hesitate to take the first step toward starting a business (Putri & Jamiat, 2022). Among economics students in Makassar, this issue becomes even more relevant because they are exposed to entrepreneurship-related knowledge and operate in a local environment characterized by the growth of MSMEs and expanding digital business opportunities (Abduh et al., 2024; Hernita et al., 2021). However, exposure to knowledge and opportunity does not automatically lead to entrepreneurial action, especially when students are confronted with uncertainty and psychological burden in decision-making (Gao et al., 2024). This condition suggests that psychological factors may play a decisive role in shaping whether students remain at the level of intention or move toward actual business initiation.

Accordingly, this study addresses an important research gap by examining fear of failure and growth mindset simultaneously, with entrepreneurial self-efficacy positioned as a mediating mechanism and courage to start a business as the final outcome. This study is important because it extends the entrepreneurship literature beyond intention-based explanations and provides a more specific account of early-stage entrepreneurial action. In theoretical terms, this study is grounded mainly in Social Cognitive Theory, which emphasizes the role of self-efficacy in linking beliefs, cognition, and behavior (Chien-Chi et al., 2020), and offers a more specific explanation than intention-based approaches such as the Theory of Planned Behavior (Ajzen, 1991). Practically, the findings are expected to help universities, entrepreneurship educators, and student business incubators design interventions that do not focus solely on entrepreneurial knowledge, but also strengthen growth-oriented beliefs, mastery experiences, and confidence in entrepreneurial capability. In this way, the study contributes both theoretically, by clarifying the psychological pathway from belief to action, and practically, by informing programs intended to accelerate student entrepreneurship.

Based on the theoretical background and the proposed conceptual framework, the hypotheses of this study are formulated as follows:

H1: Fear of failure negatively affects entrepreneurial self-efficacy among economics students.

H2: Growth mindset positively affects entrepreneurial self-efficacy among economics students.

H3: Entrepreneurial self-efficacy positively affects the courage to start a business among economics students.

H4: Fear of failure negatively affects the courage to start a business among economics students.

H5: Growth mindset positively affects the courage to start a business among economics students.

H6: Entrepreneurial self-efficacy mediates the relationship between fear of failure and the courage to start a business.

H7: Entrepreneurial self-efficacy mediates the relationship between growth mindset and the courage to start a business.

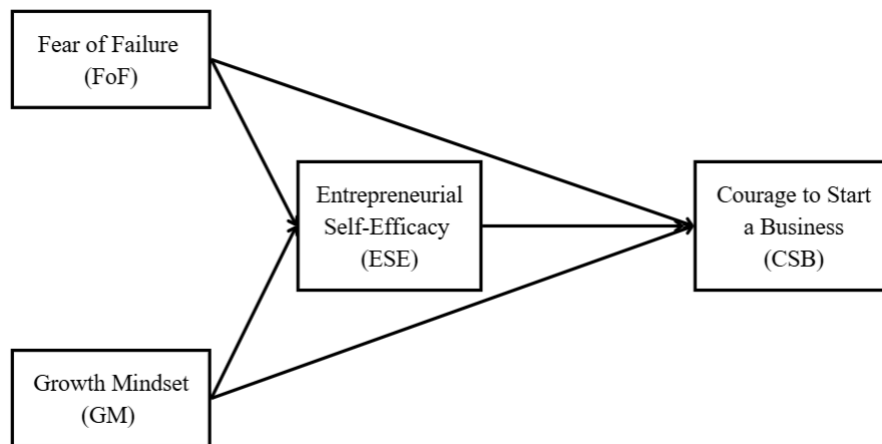


Figure 1. Conceptual Framework

Source: Adapted from prior studies on fear of failure, growth mindset, entrepreneurial self-efficacy, and entrepreneurial behavior (Burnette et al., 2020; Chen et al., 1998; Chien-Chi et al., 2020; Conroy et al., 2002; Duong, 2023)

2. METHOD

This study employed a quantitative explanatory design to examine the effects of fear of failure and growth mindset on the courage to start a business, with entrepreneurial self-efficacy as a mediating variable. Data were collected through a cross-sectional survey using a structured questionnaire distributed to economics students from three universities in Makassar, namely Universitas Negeri Makassar, Universitas Hasanuddin, and UIN Alauddin. The respondents were selected using purposive sampling based on the criteria that they were active economics students, had been exposed to entrepreneurship-related learning, and were considered relevant to the objectives of the study. The study was administered to economics students from three universities in Makassar. The minimum sample size was determined using the Lwanga and Lemeshow (1991) formula. Using a 95% confidence level, an assumed population proportion of 0.50, and a margin of error of 0.08, the required minimum sample was approximately 150 respondents. Therefore, 150 valid responses were included in the final analysis.

The questionnaire employed a five-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. The research instruments were selected based on their theoretical relevance to the constructs examined in this study and their prior validation in established research. The measurement items for fear of failure, growth mindset, entrepreneurial self-efficacy, and courage to start a business were adapted from previously validated instruments developed by (Blackwell et al., 2007; Chen et al., 1998; Conroy et al., 2002; Norton & Weiss, 2009). Because these instruments were originally developed in different contexts, several items were contextually adjusted to fit the characteristics of university students and early-stage entrepreneurship while maintaining their original conceptual meaning. To ensure content validity, the adapted items were reviewed by experts in entrepreneurship education and research methodology, and minor revisions were made based on their feedback to improve clarity, relevance, and comprehensibility before the questionnaire was distributed.

Ethical considerations were observed throughout the research process. Participation in this study was voluntary, and respondents were informed about the purpose of the study before completing the questionnaire. Informed consent was obtained from all participants, and their responses were collected anonymously and treated confidentially. The data were used solely for academic purposes, and no personally identifiable information was disclosed in the reporting of the results. Because all variables in this study were measured using self-reported

questionnaires, Harman's single-factor test was conducted to assess the potential presence of common method bias.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with WarpPLS 8.0. PLS-SEM was chosen over CB-SEM because this study is prediction-oriented and aims to explain the variance of the endogenous constructs, particularly entrepreneurial self-efficacy and the courage to start a business, while also testing mediation effects in a relatively complex model. In addition, PLS-SEM is appropriate for relatively small sample sizes and does not require strict multivariate normality assumptions (Hair et al., 2021). The analysis began with an evaluation of the measurement model, including indicator loadings, Average Variance Extracted (AVE), Cronbach's alpha, Composite Reliability (CR), the Fornell–Larcker criterion, and the Heterotrait–Monotrait Ratio (HTMT), to assess convergent validity, internal consistency reliability, and discriminant validity. After the measurement model met the required criteria, the structural model was evaluated through path coefficients, p-values, and the coefficient of determination (R^2). The mediating role of entrepreneurial self-efficacy was examined by estimating the indirect effects of fear of failure and growth mindset on the courage to start a business using the bootstrapping procedure with 5,000 resamples. The type of mediation was then determined based on the significance of both the direct and indirect effects.

Following established PLS-SEM guidelines (Hair et al., 2019), indicator loadings of 0.70 or higher were considered acceptable. Convergent validity was established when the Average Variance Extracted (AVE) exceeded 0.50, while internal consistency reliability was considered adequate when Cronbach's alpha and Composite Reliability values were above 0.70. Discriminant validity was assessed using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT), with HTMT values below 0.85 indicating satisfactory discriminant validity. For the structural model, path coefficients and indirect effects were evaluated using bootstrapping with 5,000 resamples, and relationships were considered significant at $p < 0.05$. The explanatory power of the model was assessed using R^2 values. In addition, model fit and quality were evaluated using WarpPLS indices, including APC and ARS (significant at $p < 0.05$), as well as AVIF and AFVIF (acceptable if ≤ 5 , ideally ≤ 3.3).

Table 1. Research Instruments

Variable	Item	Statement (Adapted)	Source
Fear of Failure (FoF)	FoF1	I tend to avoid starting a business because I worry I would feel embarrassed if I failed.	(Conroy et al., 2002)
	FoF2	I am afraid that business failure would make me feel less capable.	
	FoF3	I worry that business failure would negatively affect my plans.	
	FoF4	I am afraid that people who matter to me would be disappointed if my business failed.	
	FoF5	I'm afraid others would doubt my abilities if my business failed.	
	FoF6	When I imagine failing, I hesitate to take the first step toward starting a business.	
Growth Mindset (GM)	GM1	I believe my abilities can develop through effort and effective learning strategies.	(Blackwell et al., 2007)
	GM2	When I face difficulties, I see them as opportunities to improve my abilities.	
	GM3	Failure motivates me to seek new strategies for self-improvement.	
	GM4	I am confident that my abilities will improve over time with practice and learning.	
	ESE1	I am confident I can identify business opportunities worth pursuing.	

Variable	Item	Statement (Adapted)	Source
Entrepreneurial Self-Efficacy (ESE)	ESE2	I am confident I can create a realistic basic business plan.	(Chen et al., 1998)
	ESE3	I am confident I can start promoting a product or service with limited resources.	
	ESE4	I am confident I can persuade others to try my product or service.	
	ESE5	I am confident I can manage early-stage business finances in an orderly way.	
	ESE6	I am confident I can make decisions in the face of business uncertainty.	
	ESE7	I am confident I can handle customer rejection without losing motivation.	
	ESE8	I am confident I can build networks that support my business.	
	ESE9	I am confident I can adjust my strategy when the initial idea does not work.	
	ESE10	I am confident I can start a business while managing academic demands.	
Courage to Start a Business (CSB)	CSB1	I am willing to start a business even when I feel afraid of failing.	(Norton & Weiss, 2009)
	CSB2	I can take the first step to start a business even when outcomes are uncertain.	
	CSB3	I am willing to face potential negative judgments when starting a business.	
	CSB4	I can decide to start a business even when I do not have complete information.	
	CSB5	I am willing to take reasonable risks to start a business.	
	CSB6	I can still act to start a business even when I feel anxious.	

3. RESULTS AND DISCUSSION

3.1 Results

The demographic profile of the respondents is presented to provide an overview of the sample characteristics used in this study. These characteristics, including age and campus affiliation, may help contextualize the findings. Table 2 presents the demographic characteristics of the respondents. Most respondents were aged 20–21 years (49.3%), followed by 22–24 years (30.0%) and 18–19 years (20.7%). In terms of university affiliation, most respondents came from Universitas Negeri Makassar (60.0%), followed by Universitas Hasanuddin (30.0%) and UIN Alauddin (10.0%). These data indicate that the sample was dominated by students in the early adult stage and was drawn from three major universities in Makassar, providing an adequate context for examining the psychological factors associated with the courage to start a business.

Table 2. Demographic Characteristics of Research Respondents

Characteristic	Category	Frequency
Age	18-19	31
	20-21	74
	22-24	45
University	Universitas Negeri Makassar	90
	Universitas Hasanuddin	45
	UIN Alauddin	15

Source: Primary Data (2026)

Because all variables in this study were measured using self-reported questionnaires, Harman's single-factor test was conducted to assess the potential presence of common method bias. All 28 measurement items were entered into an unrotated principal components analysis.

The results showed that four components had eigenvalues greater than 1, indicating that the variance was distributed across multiple components rather than being dominated by a single general factor. More importantly, the first component explained 33.655% of the total variance, which is below the commonly used threshold of 50%. Therefore, the data does not indicate a serious common method bias problem in this study (Harman, 1976).

Table 3. Harman's Single-Factor Test for Common Method Bias

Indicator	Result
Extraction method	Principal Component Analysis
Number of measurement items	28
Number of components with eigenvalue > 1	4
Eigenvalue of the first component	9.423
Variance explained by the first component	33.655%
Cumulative variance of the first four components	69.084%
Conclusion	No serious common method bias detected

Source: SPSS Output (2026)

Table 4. Loading Factors, AVE, Composite Reliability

Item	Loading Factors	AVE	Cronbach's Alpha	Composite Reliability
FoF1	0.872	0.657	0.895	0.920
FoF2	0.766			
FoF3	0.796			
FoF4	0.833			
FoF5	0.805			
FoF6	0.786			
GM1	0.799	0.653	0.746	0.883
GM2	0.830			
GM3	0.802			
GM4	0.801			
ESE1	0.824	0.647	0.939	0.948
ESE2	0.768			
ESE3	0.721			
ESE4	0.799			
ESE5	0.777			
ESE6	0.819			
ESE7	0.769			
ESE8	0.801			
ESE9	0.859			
ESE10	0.895			
CSB1	0.895	0.834	0.960	0.968
CSB2	0.893			
CSB3	0.908			
CSB4	0.938			
CSB5	0.906			
CSB6	0.938			

Source: WarpPLS Output (2026)

Based on Table 4, the measurement model demonstrates satisfactory convergent validity and internal reliability. According to Hair et al. (2021), indicator loadings should generally exceed 0.70 to confirm that the items adequately represent their respective constructs. In this study, all loading factors ranged from 0.721 to 0.938, indicating that each indicator contributed adequately to its latent variable. In addition, the Average Variance Extracted (AVE) values for

all constructs exceeded the recommended threshold of 0.50, confirming that each construct explains more than half of the variance of its indicators and thus fulfills the criterion for convergent validity. Regarding internal consistency reliability, Cronbach's alphas were generally above the acceptable minimum of 0.70, although one construct showed a lower alpha, which may still be acceptable in exploratory research. Furthermore, Composite Reliability values for all constructions were above 0.70, indicating satisfaction with high internal consistency reliability. Overall, these results suggest that the measurement instrument has demonstrated acceptable validity and reliability, providing a sound basis for proceeding to the structural model analysis.

Table 5. Correlations Among Constructs with Significance Levels

Construct	FoF	GM	ESE	CSB
FoF	—	-0.195*	-0.166*	-0.086
GM	-0.195*	—	0.449***	0.278***
ESE	-0.166*	0.449***	—	0.378***
CSB	-0.086	0.278***	0.378***	—

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Source: WarpPLS output (2026)

Table 5 presents the correlations among the constructs and their significance levels. Fear of failure was negatively and significantly correlated with growth mindset and entrepreneurial self-efficacy, but its correlation with courage to start a business was negative and not statistically significant. A growth mindset showed positive and significant correlations with entrepreneurial self-efficacy and the courage to start a business. Entrepreneurial self-efficacy was also positively and significantly correlated with the courage to start a business. Overall, these correlations indicate meaningful associations among the constructs and are consistent with the proposed structural model.

Table 6. Correlations Among l.vs with sq. Rts. of AVEs

Construct	FoF	GM	ESE	CSB
FoF	0.810	-0.195	-0.166	-0.086
GM	-0.195	0.808	0.449	0.278
ESE	-0.166	0.449	0.805	0.378
CSB	-0.086	0.278	0.378	0.913

Source: WarpPLS Output (2026)

Table 7. Heterotrait–Monotrait Ratio HTMT

Construct	FoF	GM	ESE	CSB
FoF	—			
GM	0.204	—		
ESE	0.179	0.497	—	
CSB	0.097	0.291	0.398	—

Source: WarpPLS Output (2026)

Discriminant validity was assessed using both the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT). Based on the Fornell–Larcker criterion presented in Table 6, the square root of the Average Variance Extracted (AVE) for each construct was greater than its correlations with other constructs, indicating that each latent variable shared more variance with its own indicators than with other constructs in the model. This finding suggests that the constructs have adequate discriminant validity. To further confirm this result,

the HTMT values shown in Table 7 were also examined. All HTMT values ranged from 0.097 to 0.497, which are well below the recommended threshold of 0.85 and also below the more lenient threshold of 0.90. Therefore, the results from both Table 6 and Table 7 consistently indicate that the constructs are empirically distinct from one another and that discriminant validity is satisfactorily established in the measurement model (Hair et al., 2021).

Table 8. Model Fit and Quality Indices

No.	Model fit and quality indices	Fit Criteria	Analysis Results	Note
1	Average Path Coefficient (APC)	$p < 0.05$	0.223, $P=0.001$	Accepted
2	Average R-squared (ARS)	$p < 0.05$	0.203, $P=0.003$	Accepted
3	Average Adjusted R-squared (AARS)	$p < 0.05$	0.189, $P=0.004$	Accepted
4	Average block VIF (AVIF)	Accepted if ≤ 5 Normal ≤ 3.3	1,129	Accepted
5	Average Full Collinearity VIF (AFVIF)	Accepted if ≤ 5 Normal ≤ 3.3	1.228	Accepted
6	Tenenhaus GoF (GoF)	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	0.376	Large
7	Sympson's Paradox ratio (SPR)	≥ 0.25 , large ≥ 0.36 accepted if ≥ 0.7 Ideally = 1	1,000	Accepted
8	R-squared Contribution Ratio (RSCR)	Accepted if ≥ 0.9 Ideally = 1	1,000	Accepted
9	Statistical Suppression Ratio (SSR)	Accepted if ≥ 0.7	1,000	Accepted
10	Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	Accepted if ≥ 0.7	1,000	Accepted

Source: WarpPLS Output (2026)

The estimated model has met the criteria for model feasibility and quality based on the indices provided by WarpPLS. The model's global significance indicator indicates that the constructed structural relationships have statistical support, making the model interpretable. The model's explanatory power for endogenous variables is also acceptable, indicating that the constructs in the model have adequate predictive power.

Furthermore, the evaluation of multicollinearity at both the block and complete collinearity levels indicates that the model does not exhibit collinearity problems. Hence, the path coefficient estimates are stable and unbiased despite strong relationships among predictors. Additional quality indices that test for possible paradoxes, R-square contributions, and potential statistical suppression indicate that the model does not contain structural anomalies that could interfere with interpretation. Indicators of nonlinear relationships also support the direction of causality between variables being consistent with the model specification. Overall, these results reinforce that the research model is well-suited and can be used to continue the discussion of hypothesis testing and the interpretation of the relationship between constructs.

Figure 2 illustrates the Structural Model Results with Path Coefficients and R-Squared Values. The figure presents the structural relationships among the research variables, namely fear of failure (FoF), growth mindset (GM), entrepreneurial self-efficacy (ESE), and courage to start a business (CSB). It shows the direction and strength of each path relationship through the standardized path coefficients (β), along with the corresponding significance values. In addition, the figure reports the R-squared values for the endogenous variables, indicating the explanatory power of the model. Table 9 provides the detailed results of the hypothesis testing based on the structural model. The table presents the coefficient values, p-values, and decisions

for each hypothesized relationship. Therefore, while Figure 2 visually summarizes the structural model and its main statistical results, Table 9 provides a more detailed explanation of the path coefficients and significance levels used to determine whether each hypothesis is accepted or rejected.

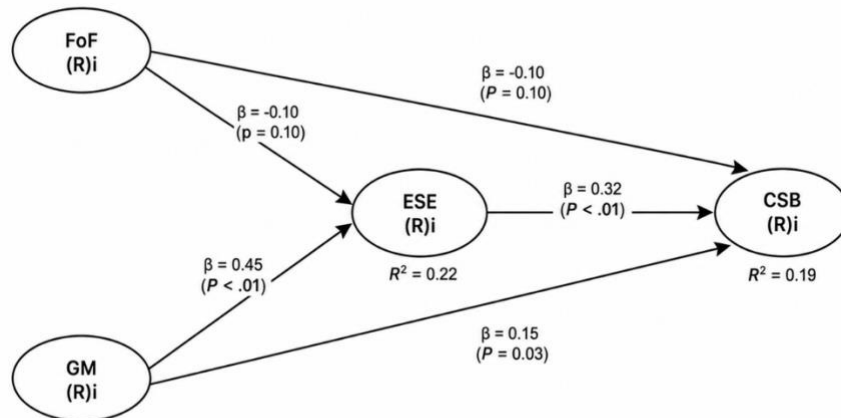


Figure 2. Structural Model Results with Path Coefficients and R-Squared Values

Source: WarpPLS Output (2026)

Table 9. Hypothesis Testing

Code	Track	Coef. (β)	p-value	Decision
H1	FoF → ESE	-0.100	0.106	Rejected
H2	GM → ESE	0.439	<0.001	Accepted, Positive
H3	ESE → CSB	0.324	<0.001	Accepted, Positive
H4	FoF → CSB	-0.109	0.086	Rejected
H5	GM → CSB	0.142	0.038	Accepted, Positive
H6	FoF → ESE → CSB	-0.032	0.286	Rejected
H7	GM → ESE → CSB	0.142	0.006	Accepted, Partial Mediation

Source: WarpPLS Output (2026)

Table 9 shows that most of the proposed relationships in the model are supported empirically. Growth mindset appears to be an important driving factor, both through its positive influence on entrepreneurial self-efficacy and its direct effect on the courage to start a business. Entrepreneurial self-efficacy also plays an important role in fostering the courage to start a business, supporting the view that self-efficacy is a key psychological mechanism for translating individuals' orientations and perceptions into action. In contrast, fear of failure did not have a significant effect on either entrepreneurial self-efficacy or the courage to start a business, indicating that it is not the main factor explaining respondents' entrepreneurial behaviour in this study. This pattern suggests that, in this context, adaptive and encouraging factors are more influential than inhibiting factors in shaping the courage to act. In terms of mediation, entrepreneurial self-efficacy did not mediate the relationship between fear of failure and the courage to start a business, indicating no mediation. On the other hand, entrepreneurial self-efficacy partially mediated the relationship between growth mindset and the courage to start a business, as both the direct and indirect effects were significant. This finding indicates that a growth mindset can strengthen the courage to start a business both directly and indirectly through entrepreneurial self-efficacy.

3.2 Discussion

3.2.1. Fear of failure negatively affects entrepreneurial self-efficacy

Hypothesis (H1) tests the influence of fear of failure on entrepreneurial self-efficacy. The test results indicate that this hypothesis is rejected, so the fear of failure is not found to have a significant effect on respondents' beliefs in their entrepreneurial abilities. This finding indicates that students' level of concern about the consequences of failure does not directly determine how confident they are in their ability to carry out entrepreneurial tasks (Deligianni et al., 2025), such as recognizing opportunities, developing plans, or managing basic business activities.

Conceptually, self-efficacy is shaped more by task mastery experiences, learning, feedback, and observation of successful models than by anticipatory affective responses (Larsen & James, 2022; Pfitzner-Eden, 2016; Regier, 2021). Among economics students, self-efficacy can arise from exposure to business literacy and relatively structured learning practices in higher education (Kusumojanto et al., 2020; Mack & Honig, 2024). This condition allows students to continue to assess themselves as cognitively capable, even though they still fear failure at an emotional level (Chien-Chi et al., 2020). Fear of failure operates as psychological pressure that affects readiness to act, but it is not strong enough to influence self-efficacy assessments formed through academic experience (Duong, 2022).

Furthermore, students' fear of failure may be more related to social risks, such as concerns about negative judgments or family expectations, than to personal competency evaluations (Chua & Bedford, 2016). When individuals have not been fully involved in entrepreneurial experiences that have real consequences, fear of failure tends to be a hypothetical anxiety that does not change their belief in their ability to perform entrepreneurial tasks (Hunter et al., 2021). In the context of economics students in Makassar, relatively strong urban social dynamics, a culture of close social relations, and a tendency to compare achievements with peers can make business failure perceived as a reputational risk rather than merely a matter of ability. When individuals have not yet been truly involved in entrepreneurial experiences that have real consequences, fear of failure tends to become hypothetical anxiety that does not change their belief in their ability to perform entrepreneurial tasks (Deligianni et al., 2025). This may explain why the relationship between fear of failure and self-efficacy did not receive empirical support in this study. Finding H1 implies that programs to strengthen entrepreneurial self-efficacy among economics students are more effective when directed at strategies that increase gradual success experiences through exposure to entrepreneurial practices, rather than merely reducing fear of failure. Meanwhile, fear of failure remains essential to consider. Still, it is likely more relevant as a predictor of other paths, such as the tendency to procrastinate, risk avoidance, or the decision to start a business directly.

3.2.2. Growth mindset positively affects entrepreneurial self-efficacy

In testing Hypothesis (H2), growth mindset emerged as a psychological factor that strengthens entrepreneurial self-efficacy. These findings show that students' belief that abilities can be developed through consistent learning and effort is related to their increased confidence in carrying out entrepreneurial activities (Wardana et al., 2020). This study found that a growth mindset makes individuals more resilient in the face of business difficulties, because challenges are perceived as learning opportunities (S. Morris et al., 2023). This perspective encourages students to be more daring in trying, thereby strengthening their belief in their abilities in the context of entrepreneurship (Dhali et al., 2025).

This relationship can be explained through the mechanism of adaptive learning, in which students with a growth mindset view the learning process as an investment in skills (Colombelli, Panelli, et al., 2022; Y. Wang et al., 2023). This perspective encourages them to

create mastery experiences through continuous practice and improvement actively (Li et al., 2023). The accumulation of these successes provides internal evidence of self-competence, which directly strengthens self-efficacy. Therefore, a growth mindset functions as a vital cognitive framework that guides students' interpretations of failure and perseverance, which ultimately leads to increased entrepreneurial self-efficacy (Moss, 2024). In the context of economics students in Makassar, the influence of a growth mindset on self-efficacy can also be understood considering the environment's dynamic nature.

3.2.3. Entrepreneurial self-efficacy positively affects the courage to start a business

Finding Hypothesis (H3) shows that entrepreneurial self-efficacy plays a vital role in encouraging the courage to start a business. This finding indicates that the stronger students' belief in their ability to carry out entrepreneurial tasks, the greater their tendency to dare to take the first step, even when faced with risks and uncertainties (Engel et al., 2014; Wu et al., 2022). Self-efficacy functions as an internal evaluator, influencing whether a challenge is perceived as a threat or a manageable task (Ringeisen et al., 2019).

These findings are in line with the cognitive social framework, which emphasizes that self-efficacy beliefs shape resilience in the face of pressure (Smith et al., 2017). Individuals with high *self-efficacy* tend to be more active in seeking information, taking initiative, and making decisions, because they have expectations that their efforts will result in progress (Hoppe & Fujishiro, 2015; Yang & Delgado, 2025). This belief is crucial because the initial stages often require decisions with incomplete information. Self-efficacy helps individuals to continue acting in ambiguous conditions, because their focus is not only on the outcome but on the belief that the process can be carried out and improved gradually (Markowska & Wiklund, 2020).

3.2.4. Fear of failure negatively affects the courage to start a business

The subsequent results rejected Hypothesis (H4), indicating that fear of failure did not have a significant effect on respondents' courage to start a business. This finding suggests that students' level of concern about the consequences of failure does not automatically affect their courage to take the first step in starting a business (Nefzi, 2018). The courage to start a business among economics students is not solely determined by the degree of fear of failure but is more likely to be influenced by other factors that encourage action (Gao et al., 2024).

Concerns about failure can be a natural emotion, but they do not continually develop into avoidance behavior, especially when individuals have adequate cognitive resources and coping strategies (Cacciotti et al., 2016; Thompson et al., 2020). For economics students, exposure to business knowledge and academic experience can shape the perception that risk can be managed through planning, learning, and strategy adjustment (Arranz et al., 2019). The fear of failure is not intense enough to suppress the courage to start, because students assess that failure is still within tolerable and fixable limits (Hunter et al., 2021).

In the context of economics students in Makassar, these findings can also be understood from the reality of relatively accessible business opportunities that allow for gradual experimentation (Hasan et al., 2019). The MSME ecosystem in Makassar, with its easy access, allows novice entrepreneurs, including students, to experiment with small-scale businesses with relatively low risks (Abduh et al., 2024). In addition, the campus social environment and peer networks can provide a supportive space that helps students normalize the process of starting a business (Rocha et al., 2024). This situation makes concerns about failure more likely to be an emotional consideration that does not directly hinder the first steps, especially when other, more dominant factors shape the decision to start.

3.2.5. Growth mindset positively affects the courage to start a business

The courage to start a business among economics students does not only stem from business knowledge, but also from how they interpret the learning process and failure (De Carolis & Litzky, 2019). The findings from the fifth hypothesis confirm that a growth mindset drives the courage to start a business. This relationship can be understood because a growth mindset alters how individuals assess risk (Rizvi et al., 2023). Students who view capabilities as attributes that can be developed through effort and learning are more ready to start initiatives. This is due to their mindset, which views the initial phase as a means of self-development, rather than a performance test that demands perfection or instant success (Adeniyi et al., 2024).

Strengthening a growth mindset should be built into the design of entrepreneurship education, not just added as additional material (De Carolis & Litzky, 2019; T. H. Morris & König, 2020). The application of project-based methods, practical experience, and intensive guidance, supported by an academic environment that values evaluation and improvement processes, plays a crucial role in shaping a growth mindset in students (Chitamba et al., 2025; Moss, 2024). When this orientation is internalized, students dare to start a business because they see each initial step as part of a learning process that can be developed (Rizvi et al., 2023), not as a final decision that must be perfect right away.

3.2.6. Entrepreneurial self-efficacy mediates the relationship between fear of failure and the courage to start a business

Testing the mediating role of entrepreneurial self-efficacy in the relationship between fear of failure and the courage to start a business, the results of H6 were rejected. This finding indicates that fear of failure does not reduce the courage to start a business by reducing self-efficacy. Students can experience concerns about failure without necessarily doubting their abilities (García-Salirrosas et al., 2025). In this condition, fear of failure is more accurately understood as an emotional response or social risk consideration (Martins et al., 2018), while self-efficacy is formed from other sources such as learning experiences, practice, and exposure to entrepreneurial knowledge (Álvarez-Huerta et al., 2025).

The mediation of self-efficacy assumes a chain process whereby fear of failure lowers self-evaluation, and low self-evaluation makes individuals reluctant to take the first step. When research results show that this chain does not occur, it indicates that students can experience fear of failure without necessarily doubting their abilities (Hunter et al., 2021; Martins et al., 2018). Fear of failure is more accurately understood as an emotional response or independent social risk consideration (Zampetakis et al., 2017), while self-efficacy is formed from other sources such as learning experiences, practice, and exposure to entrepreneurial knowledge (Maritz & Brown, 2013). As a result, self-efficacy does not become the main pathway that leads to fear of failure to the courage to start.

3.2.7. Entrepreneurial self-efficacy mediates the relationship between growth mindset and the courage to start a business

The courage to start a business does not arise simply from intention, but from the belief that one can take the necessary initial steps (Kong et al., 2020). H7 explains that entrepreneurial self-efficacy can mediate the influence of a growth mindset on the courage to try. This connection makes sense because a growth mindset shapes how students interpret challenges (Burnette et al., 2020). When students realize that difficulties are a natural part of learning, they are more enthusiastic about trying and do not easily give up when receiving criticism. It is this experience of overcoming difficulties that fosters self-confidence (Jung & Lee, 2020), as they see evidence that entrepreneurial skills can be learned. The dynamics of MSMEs with the development of digital-based businesses and urban market competition make growth-oriented

students more active in taking advantage of opportunities to try entrepreneurship based on consumer response (Colombelli, Loccisano, et al., 2022; Sun et al., 2023). Such activities enrich mastery experiences that strengthen self-efficacy, thereby increasing the courage to start a business not out of recklessness, but because they feel capable of managing the process.

The findings of this study offer important theoretical implications for understanding entrepreneurial behavior in the early stage of business initiation. In particular, the results strengthen the relevance of Social Cognitive Theory by showing that entrepreneurial self-efficacy serves as a key psychological mechanism linking internal orientations to entrepreneurial action. The significant role of growth mindset, both directly and indirectly through entrepreneurial self-efficacy, suggests that adaptive learning-oriented beliefs are more influential than inhibiting emotional concerns in shaping the courage to start a business. In contrast, the non-significant effect of fear of failure indicates that concern about failure does not necessarily reduce students' confidence in their entrepreneurial abilities or their willingness to take the first step. This finding implies that entrepreneurial courage is better explained by the presence of constructive cognitive resources, rather than merely the absence of fear. Therefore, this study contributes to the entrepreneurship literature by clarifying how growth-oriented beliefs and self-efficacy work together as a psychological pathway that encourages students to move from orientation and perception toward entrepreneurial action.

4. CONCLUSION

The study concludes that among economics students in Makassar, a growth mindset accelerates the courage to start a business, both directly and by strengthening entrepreneurial self-efficacy. Entrepreneurial self-efficacy also emerges as a key determinant of the courage to start a business. In contrast, fear of failure does not significantly explain either entrepreneurial self-efficacy or entrepreneurial courage, and the mediating role of entrepreneurial self-efficacy in the relationship between fear of failure and entrepreneurial courage is not supported. These findings suggest that student entrepreneurship development should focus more on strengthening growth mindset and enriching mastery experiences in order to build self-efficacy and encourage the courage to start a business more sustainably.

This study has several limitations that should be acknowledged. First, the use of a cross-sectional design limits the ability to draw strong causal conclusions regarding the relationships among fear of failure, growth mindset, entrepreneurial self-efficacy, and the courage to start a business. Second, the sample was restricted to economics students from three universities in Makassar, which may limit the generalizability of the findings to other student populations or regional contexts. Third, all variables were measured using self-reported questionnaires, which may still involve response bias despite the indication that common method bias was not a serious concern. Therefore, future research is recommended to employ longitudinal or mixed-method designs, involve more diverse student populations across disciplines and regions, and incorporate additional contextual or psychological variables to provide a broader understanding of the factors shaping the courage to start a business.

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