

Shaping the entrepreneurial mindset: Exploring effect of Self-Reflection and Lifelong learning: The mediating role of Self-Efficacy - A Survey Study

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Abstract: *The paper examines entrepreneurial mind-set development, with a focus on the psychological processes and especially on self-reflection, lifelong learning, and self-efficacy. These internal drivers need to be comprehended in order to bring up a workforce that is proactive, flexible, and innovation-driven. The research took place in the AL-Qadisiyah University, Iraq and followed the quantitative research approach and relied on the reflective practice theory, Experiential learning, and social cognitive theory. To gather the data, Simple random sampling, was used, a prepared structured questionnaire was created with a 5-point Likert scale. The size of the sample was (110) participants. Alpha reliability was tested by Cronbach and Structural Equation Modeling (SEM) was used to test hypothesized effect. The findings indicated that Lifelong learning and self-reflection have a great influence on entrepreneurial mindset though, the standardized regression coefficient was (0.28 and 0.25, respectively). Also, self-efficacy was mediated in this effect with standardized regression coefficient (0.236) which added to the combined effect (0.928) with*

significant level (0.01). These findings prove that self-efficacy mediates these associations partly and is a key psychological facilitator of entrepreneurial orientation. The research provides worthwhile contributions as it identifies the key psychological processes that make entrepreneurship develop. It also offers viable suggestions on how reflective and lifelong learning practices may be incorporated into professional training programs to increase self-efficacy and thinking entrepreneurially.

Keywords: *Self-reflection, Lifelong learning, Self-efficacy, Entrepreneurial Mindset*

Introduction

The entrepreneurial mindset has been particularly demanding in the competitive global economy due to its capacity to promote innovation, solve problems, and seek opportunities amidst unpredictable business

environments. Being able to think creatively, proactively, and navigate risks to advance the value creation is the defining feature of this mindset (Heslin, P. A., et al. 2018). It is a distinctive combination of attitudes, skills, and behaviors that will help people find and exploit opportunities, be open to innovation, and handle uncertainty. On the one hand, it makes it go beyond the scope of conventional entrepreneurship with its impact on multiple organizational levels and a culture of creativity and problem-solving (St-Jean, E., et al. 2021). Entrepreneurial attitude is not something that comes naturally but a skill that has to be developed, which is tainted by personal development practices. Such practices allow people to overcome complexities, become flexible, and maintain competitive advantages in their entrepreneurial activities (Goldsby, T. J., et al. 2024). Although the body of knowledge on the topic of entrepreneurial mindset has grown recently, much of this has been dedicated to external facilitators, including new technology, regulatory change, demographic and sociocultural trends, macroeconomic fluctuations, and shifts in the natural environment that facilitate entrepreneurial activities (Kimjeon, J., and Davidsson, P. 2022, Davidsson, P., et al. 2022, Cestino Castilla, J., et al. 2023). Nevertheless, most of the available literature is located in developed economies and high-technology businesses. Scant understanding exists of the operation of psychological factors in the traditional industries or cultures of conservativeness and resource-deprivation, where the formal entrepreneurship support systems might be insufficient or not present. Additionally, although self-reflection and lifelong learning have been identified as useful in personal and professional development, the effect of self-reflection and lifelong learning on entrepreneurial mindset, in particular, has not been thoroughly recorded, and filling these gaps can present valuable information to researchers and practitioners alike, as it will help to understand the psychological underpinnings of entrepreneurship, as well as inform interventions, programs, or policies that could be used to develop entrepreneurial potential in the less-researched context.

The entrepreneurial mindset is a constellation of thought and action characteristics, which are opportunity recognition, creativity, calculated risk-taking, resilience, and proactive problem-solving (Jemal, J. T., et al. 2023). researchers have paid substantial attention to the concept of entrepreneurship education as a means of cultivating this mindset, (Davey, T.; et al. 2016, Aladejebi, O. 2018, Gianiodis, Peter T.; Meek, William R. 2020 According to Kuratko, D. F., et al. (2021), the entrepreneurial mind is less influenced by training and is more of an inherent part of the cognitive functioning in the individual. Daff, L., et al. (2024) proposed one of the most powerful concepts of the reflective practitioner, and it is important to note that professionals do not simply develop, but engage in skilled and critical self-reflecting on their actions and modes of thinking. Based on this basis, Silvia, P. J. (2022) revealed that those who receive consistent self-reflection

are more likely to show self-awareness, control, and proactiveness. The qualities are imperative in the process of opportunity recognition, risk appraisal and persistence which are key features of the entrepreneurial attitude. Building on this point, Budiningsih, I. et al. (2022) proposed that under the rapidly changing environment, the ability to learn constantly not only through formal education, but also through informal and experience-based one is the key to the performance and innovation. This learning allows one to be flexible in responding to challenges, changing obsolete mental models, and utilizing new knowledge that are crucial attributes in the business world. On the same note, Yu et al. (2025) pointed out that professional growth could not have been achieved without lifelong learning. Lifelong learning was associated by him with individual capacity to negotiate uncertainty, see patterns and spot emerging opportunities in complex environments.

Theoretical framework

The development of a person as an entrepreneur has much to do with his or her state of mind, which empowers him or her to see, analyze, and assess the external environment, discovering the opportunities and potential (Al-Mamary, Y. H., and Alshallaqi, M. 2022). Therefore, the theoretical foundation of this research Grounded theory of reflective practice, Experiential theory, and social cognitive theory. Shetty G., S., and co. (2024) put forward that the entrepreneurial mindset is a mental ability to identify opportunities, cognizant of their possible contribution to the economic and social growth, and finally implementing the innovative ideas in practical strategies to establish the desired objectives. Kouakou, K. K. E., et al. (2019) define the entrepreneurial mindset in three dimensions that are crucial, namely the sense-making capacity, the capacity to act fast, and mobilizing resources even in the conditions of disquiet. A growth orientation is also a common trait of this type of mindset whereby it is adaptable and capable of constant change. Haynie et al. (2010) build upon this view and propose a metacognitive framework, when the entrepreneurial mindset is defined as the dynamic capability of feeling, taking actions, and mobilizing resources quickly in the conditions of ambiguity.

Moreover, Shetty G, S., et al. (2024) introduced the entrepreneurial mindset as the term of socio-emotional competence and all-inclusive entrepreneurial consciousness and connected it to the entrepreneurial motivation and a prospect of the future success directly. Lynch, M. P., and Corbett, A. C. (2023) pointed out that the state of entrepreneurial thinking is based on the idea that learning processes can improve the cognitive flexibility of people and allow a mobile shift in thinking under the influence of individual predispositions. Continuing on this basis, Michaelis, T. L., et al. (2021) developed a metacognitive model of the entrepreneurial mindset, in which they conceptualized the entrepreneurial mindset as a result of cognitive skill development and placed it in a situational metacognitive

approach, where adaptability and reflective thinking are considered vital in uncertain and challenging settings. Self-efficacy is declared to be one of the key elements of the cognitive and metacognitive model that is a mandatory condition of the successful formation and strengthening of the entrepreneurial mindset (Hayat, A. A., and Shateri, K. 2019). Being a complex psychosocial phenomenon, self-efficacy is an important aspect of developing entrepreneurial mindset, is formed as a result of personality factors, mental abilities, and metacognition, is found as a useful support in developing entrepreneurship, especially in business-oriented circumstances (Mawson, S., et al. 2023). A summary of these various conceptualizations and their uses in informing research questions, core arguments and theoretical choices are summarized in table 1.

Table 1. Key conceptualizations, corresponding theories, and research questions

concepts	Corresponding theories	Core argument	Exemplary research questions
Self-reflection	Reflective practice	Self-reflection can be conceptualized as the ability to adapt one's mindset and actions in response to internal insights and external feedback.	How does self-reflection, influence the development of an entrepreneurial mindset?
Lifelong learning	Experiential learning	Lifelong learning refers to ability to adapt strategies and behaviors in response to evolving challenges and opportunities.	How does engagement in lifelong learning , influence the entrepreneurial mindset?
Self-efficacy	Social cognitive theory	self-efficacy—the belief in one's capability to perform specific tasks—empowers individuals to take initiative, persist through challenges, and transform uncertainty into opportunity.	Does belief in one's capability to perform specific tasks—significantly influence the entrepreneurial mindset?

Furthermore, as Yu, J., and McLellan, R. (2020) suggested, people have two different mindsets, a fixed mindset and a growth mindset, and these two are usually not exercised concurrently. A fixed mindset shows the view that individual qualities, e.g. intelligence and abilities, are in-built, unalterable, and basically etched in stone. Conversely, the growth mindset presupposes the idea that the latter qualities can be cultivated and enhanced with the help of hard work, education, and persistence. This school of thought focuses more on the idea of personal initiative in realizing growth and change. The kind of mentality one has goes a long way in determining the kind of reaction he/she has to the surrounding environment. It affects their response to difficulties, challenges, efforts, and the achievements of others that tend to act frequently on conscious and unconscious levels (Lou, N. M., et al. 2022).

Self-reflection

Self-reflection is a general method of introspection which enables individuals to critically analyze their thoughts, feelings, actions and experiences. The practice promotes individual and work-related development as it allows individuals to comprehend their strengths, weaknesses, and areas to work on (Kross, E., et al. 2023). Self-reflection is not only a critical element in personal development, but it also has a great role in the organization where it can be used to improve decision-making and leadership qualities as well as workplace relationships (Ardelt, M., & Grunwald, S. (2018). Through awareness, individuals and organizations are able to develop prospects of constant bettering, innovation, and significant interaction (Nowak, A., et al. 2022). Reflective practices can help leaders to be more organized in their actions and address the needs of their organizations and increase the level of trust and morale within a team (Lanaj, K., et al. 2023). Self-reflection involves critical thinking that is used in education, where teachers are encouraged to reflect on their teaching methods to improve the learning process, or in business, where managers are encouraged to evaluate their approaches to improve their effectiveness (Xie, M., and Wang, D. 2020). This principle is vital in developing and improving the entrepreneurial intention, improving the opportunity recognition process by allowing entrepreneurs to gain experience and improve their perception of what a viable opportunity is (Kiersch, C., & Gullekson, N. 2021). It is also an introspective process that makes them better at identifying weak signals and minor changes in market dynamics, customer behavior, and technological developments (Adeoye, M. A., and Omiwole, J. L. (2024). Consequently, this will make the entrepreneurs more timely and observant to be able to identify innovative possibilities earlier than others and make decisions that are more informed and strategic. by promoting a reasonable review of the previous risk-related decisions.

Through this reflective exercise, individuals are able to evaluate the consequences of past decisions, how they were reasoned, and what traps they fell into and what strategies they have worked out (Kross, E., et al. 2023). This ability to differentiate between impulsive and strategic risk-taking will encourage a sensible approach, i.e., not being reckless but having calculated courage (Harold, S. F. D. (2024). Sullivan, T. N., (2020) introduced that Self-reflection raises the level of innovativeness and creativity as it allows thinking critically and questioning the long-existing assumptions, both of which provoke innovative thinking. An analysis of these experiences will make future entrepreneurs more vigilant to the outcomes of the lack of action and more willing to make decisive steps in the future (Arnesen, J. 2025). Moreover, self-reflection facilitates the capacity to predict the occurrence of new situations, anticipate the rising challenges, and also take chances that will arise in the future (Matlhaba, K. (2025). Falon, S. L., et al. (2021) suggest that Self-reflection eases resilience by enabling one to process failures and setbacks in a positive way

to enable individuals to derive meaningful lessons instead of being demotivated. by perceiving challenges as a chance to learn and be open to change it is vital to fosters a culture of resilience and flexibility that can be done through The self-reflection (Ivanova, E. 2023). Falon, S. L., et al. (2022) introduced the idea that Self-reflection is frequently overlapping with mindfulness in which people are conscious of their presence and they non-judgmentally monitor their inner thoughts this can decrease distraction and improve thinking.

Lifelong learning

The idea of lifelong learning has become a pillar in the fast changing environment of a modern organization due to the necessity of adjusting to technological changes, globalization, and workforce dynamics (Ncube, L., ET AL. 2024). it represents a continuous process of learning and refining skills, knowledge and competencies throughout the career of an individual. Not only does this provide employees with the means to be relevant, but it also allows organizations to be innovative, resilient, and strategically adaptable (Kharrat, A., et al. 2024). Concentrates on the personal and professional growth outside of schooling. Includes self direction learning, interest, and flexibility (Liu, B. (2017). It formulates thinking that is essential to innovating processes (Leo, J., and Kalita, J. 2024). Unceasing study expands the knowledge base of an entrepreneur, worsens the richness, and scope of cognitive and experience merchandise (Secundo, G., et al. 2017). Past experiences and learning as they saw others fail give entrepreneurs invaluable experience that greatly enhances their ability to evaluate and treat risks (Lattacher, W., & Wdowiak, M. A. 2020). This reflective learning stimulates the measured risk-taking, as this approach helps the entrepreneur to predict possible outcomes more effectively, compare the advantages and disadvantages of different courses of actions, and find the indicators of failure earlier (Amankwah-Amoah, J., et al. 2022). Moreover, when practicing reflective learning, the strategies of risk mitigation, such as diversification, scenario planning and adaptive execution, are developed to increase business resilience (Lattacher, W., & Wdowiak, M. A. 2020). Moreover, an entrepreneur learns how to plan contingencies better, how to prepare an alternative mode of action in reaction to some unforeseen difficulties (Wang, C. L., and Chugh, H. 2014). This proactive mindset not only builds trust in following ambitious ideas, but it also develops the psychological preparedness and maneuverability that are important qualities of succeeding in unpredictable and unstable business conditions. Gibb, A. (2002). Discovered that by working constantly with new content, entrepreneurs are in a position to disrupt and do not follow the normal lines of thinking and also innovate in their business ideas. This is a dynamic learning practice that promotes the mind set of experimentation, flexibility and constant improvement which are vital features of maintaining creativity and sustained entrepreneurial

performance. Through a constant learning process, keeping everything within the industry around a company and studying the signs of the environment, entrepreneurs learn to notice any new trends and predict all the changes in markets, technologies, consumer attitudes, and competition areas. This preventive mindset will make them think in the long term, imagine several possible futures, and prepare the main elements of strategic foresight (Peterson, A., & Wu, A. 2021). Active learners are also well placed to see opportunities and threats even before they become fully realized so that they place their ventures in a more favorable position. Instead of reacting to external forces or crises, they are able to implement preemptive changes, alter business models, or even divert strategies so as to be in line with what is expected to happen (Brown, A., and Barnard, B. 2019). Entrepreneurs learn to be more competent at making realistic objectives, efficient in resource allocation and planning flexible, which they can adjust when new information is available (Frank, A. I. 2007). Research by Cheng, P., et al. (2025) proposed that a high learning orientation helps entrepreneurs to stay on the right side of the uncertainty, retain a competitive advantage, and remain successful over a long-term period in volatile settings.

Self-efficacy

self-efficacy describes a belief that an individual holds in his capability to effectively shape his or her environment through accomplishing a specific task or resolving an issue (Kodden, B. 2020). This is an essential principle of the social cognitive theory, which was proposed by a psychologist Albert Bandura as a component of the Social Cognitive Theory (Bandura, A. 2014). Self-efficacy is a belief of a person in being able to perform certain tasks, reaching some goals and overcoming difficulties successfully. It affects the perception of challenges by people, how to endure when faced with challenges, and how to come back to life (Tay, J. L., et al. 2020). People who have high self-efficacy are more dedicated to the goals because they are confident in their possibility of success and it is one of the key factors that shape their attitude to the difficulties. This is a strong conviction that drives them internally making them take initiative and perform with confidence (Berkemeyer, L., et al. 2025). This motivation leads to lifelong commitment, thus, becoming more committed to staying focused on the attainment of long-term objectives (Schunk, D. H., and DiBenedetto, M. K. 2021). Not only does this belief in their abilities contribute to persistence, but also the performance of the person is improved, which will become helpful in obtaining success in its personal and professional life (Zhao, W., and Ma, R. 2025). The high levels of self-efficacy of entrepreneurs bring them to the belief in their ability to read and react to hidden signals, weak signals, and new patterns in the environment (Markowska, M., & Wiklund, J. 2020). This increased confidence increases their entrepreneurial sensitivity, which allows them to see opportunities where other people might not and be

surprised that they have overlooked or not regarded them as important. Their self-belief in their problem-solving skills provides them with the impetus to take decisive action in a situation characterized by unpredictability or ambiguity (McCall, A. 2025). self-efficacy is a psychological facilitator that helps them to alleviate their fear of failure and exploratory thinking and business entrepreneurship move towards emerging business opportunities before competitors (Markowska, M., & Wiklund, J. 2020). Self-efficacy decreases the fear of failure and replenishes the perception of control over unpredictable or ambiguous circumstances in an individual (Chuang, Y. T., et al. 2022) by bringing the sense of personal capabilities to control and influence the results. The reason is that entrepreneurs with high self-efficacy feel more confident when making decisions and resilient when facing possible setbacks, which enables them to handle risks more confidently and calmly (Olabimitan, B. A., et al. 2025).

Entrepreneurial Mindset

An entrepreneurial mindset is defined as a cluster of attitudes, behaviors, and talents that help an individual to recognize opportunities, make risks, be innovative, and generate value when operating in a non-deterministic or competitive landscape (Daspit, J. J., et al. 2023). It can also be used in the organizational setting, whereby employees assume an entrepreneurial attitude towards problem discussions and value generation (Amelia, O. 2025). thus, it could be considered essential in both individual and organization-related settings. Shepherd, D. A., and Patzelt, H. (2018) also defined entrepreneurial mindset as the skill to detecting and responding to unmet needs or gaps in the market through the use of creativity, resilience, and strategic thinking to generate innovative solutions. It includes the proactive attitude to challenges, readiness to make calculated risks, and the flexibility to overcome uncertainty. Garg, S. (2025) introduced the idea that entrepreneurial mindset encourages teamwork, failure-driven learning, and a growth-focused mindset in order to establish sustainable success in the dynamic environments. It was perceived that entrepreneurial mindset constitutes the ability to endure disappointments and continue forward despite the obstacles due to a proactive attitude toward recognizing opportunities, making risky decisions, and being innovative (Ibrahim, I. D., and Adeniyi, 2024). It also was viewed as a progression-oriented vision that encourages innovative problem-solving, life-long learning and transformation of challenges into opportunities (Jan, I. 2024). According to Ripollés, M., and Blesa, A. (2024), the active and experiential approaches to learning, including project-based learning, play a significant role in developing an individual understanding of the environment and entrepreneurial abilities. The article by Pache, C., and Glinik, M. (2024) is devoted to promoting the development of entrepreneurial attitudes by building a hands-on learning environment with regards to innovative and creative ideation processes in a workplace and

personal life. Khalil, H., et al. (2024) introduced the idea that entrepreneurial mindset might be Shaped by emphasizing the creation of the curricula which are not only offering the knowledge concerning the entrepreneurship but are also developing the entrepreneurial mindset and orientation of the person. Qurban, S., et al. (2023) perceived that entrepreneurial attitude can be determined by combination of individual factors, cultural and environmental factors. The study by Handayati, P., et al. addresses the impact of entrepreneurship education on entrepreneurial mindset (2020).

Research Methodology

Measuring Internal Reliability

The internal reliability of scale most often reported in the literature is the alpha coefficient, also called Cronbach's alpha. It measures the internal reliability across scale items or the degree of consistency across responses (Klein 2015). Table 2. indicated that four study constructs, i.e. self-reflection, lifelong learning , self-efficacy, and entrepreneurial mindset, exhibited good internal consistency, with the Cronbach alpha coefficients of 0.890 to 0.913. Such values are larger compared to the generally accepted mark of 0.70 which means that the items of the measurement are reflecting their constructs. The findings are an affirmation of the reliability and consistency of the scales employed in the study.

Table 2. Results of testing Cronbach's alpha coefficient

Variables	Number of items	Sequence of items	Cronbach's alpha coefficient
Self-reflection	8	1-8	.890
Continuous learning	6	9-14	.913
Self-efficacy	10	15-24	.900
Entrepreneurial Mind-set	14	25-38	.891

Source: SPSS v.27

Data analysis and results

To test the level of interrelationship, which assumes significant relationship exists between self-reflection and lifelong learning , Pearson correlation analysis was done. The individual items of the Self-Reflection (SERE1- SERE8) and Lifelong learning (COLE1- COLE6) constructs are included in the correlation matrix, which also consists of total composite scores of the two dimensions (SERE and COLE). A further examination of the item-level correlations enhances the construct-level association.

Table 3. results of testing Pearson's Correlation Coefficient

	COLE1	COLE2	COLE3	COLE4	COLE5	COLE6	COLE
SERE1	.605**	.583**	.535**	.486**	.524**	.481**	.646**
SERE2	.727**	.600**	.554**	.665**	.599**	.507**	.725**

SERE3	.649**	.630**	.580**	.618**	.616**	.517**	.734**
SERE4	.397**	.511**	.542**	.500**	.562**	.560**	.639**
SERE5	.574**	.556**	.731**	.804**	.721**	.699**	.814**
SERE6	.471**	.502**	.530**	.666**	.587**	.525**	.660**
SERE7	.339**	.385**	.626**	.523**	.392**	.573**	.578**
SERE8	.530**	.652**	.618**	.640**	.516**	.535**	.708**
SERE	.726**	.752**	.796**	.823**	.761**	.742**	.930**

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS v.27

Result in table 3. As shown, most of the items presented in the SERE dimension show statistically significant and moderate to strong relationships with the items in the COLE dimension. It was also indicated that the regression between the aggregated scores of Self-Reflection and Continuous Learning was determined as $r = 0.930$ which is significant at the 0.01 level (2-tailed). This finding implies that there is a highly positive correlation between the two constructs, and individuals who practice greater amounts of reflective thinking are significantly more likely to engage in lifelong learning processes. To test the hypothesized effects Structural Equation Modeling (SEM) was used. It involves the direct and mediating relationships between Self-Reflection (SERE), Lifelong learning (COLE), Self-Efficacy (SEEF) and Entrepreneurial Mindset (EMIN). The findings, as shown in the table below involve unstandardized and standardized path coefficients, standard errors (S.E.), critical ratios (C.R.), and significance levels (p-values).

Table 4. Results of Structural Equation Modeling (SEM)

			Unstandardized estimate	Standardized estimate	S.E.	C.R.	P
SEEF	<-	SER	0.320	0.346	0.096	3.324	***
SEEF	<-	COL	0.433	0.508	0.089	4.889	***
EMIN	<-	SER	0.277	0.280	0.070	3.982	***
EMIN	<-	COL	0.228	0.251	0.067	3.389	***
EMIN	<-	SEEF	0.497	0.465	0.066	7.540	***

Source: Amos v.27

Table 4 shows the outcomes of the standardized regression coefficients of effect of self-reflection on entrepreneurial mindset are (0.280), which implies that the change in the level of self-reflection by a one unit can influence the entrepreneurial mindset by (28%). This is found to be statistically significant with a critical ratio (C.R.) of 3.982 and p-value of less than 0.01. In the same way, the standardized regression coefficient of the

effect of lifelong learning on the entrepreneurial mindset is 0.251 which ascertains that a unit change in lifelong learning leads to the change of the entrepreneurial mindset by 25 per cent. This also shows significant statistical significance with C.R. of 3.389 and the p-value of less than 0.01. A path diagram (regression paths and parameters) was used as a visual analytical instrument to illustrate the proposed model in a very structured way to enhance its interpretability as shown in Figure (1). It shows the directional relationship between variables in which the variables are linked together by the arrows that allow a more clear explanation of the causal relationships. It also reports the size and the strength of these relationships in standardized coefficients, and this makes meaningful comparison of these coefficients across various paths of the model. In addition, the diagram separates the two kinds of relationships, namely the direct effects and the indirect (mediated) ones to give more insight on the underlying processes through which how variables can affect each other. The combination of these aspects allows the path diagram to increase the readability and understanding of the model as well as complex relationships become more user-friendly and communicate-able in the empirical analysis.

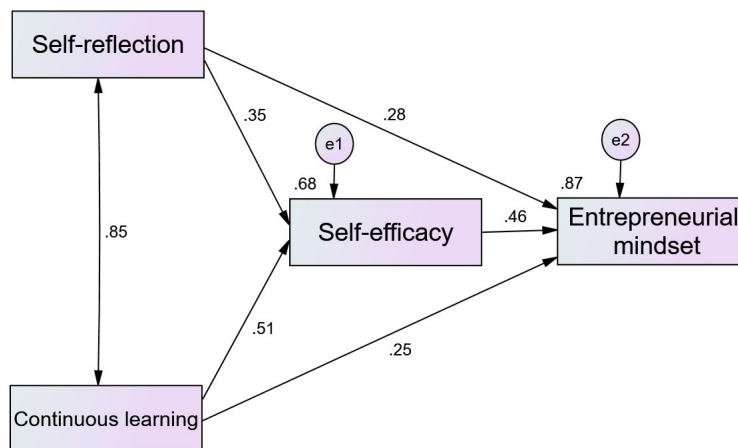


Figure 1. path diagram (Regression paths and parameters).
Source: Amos v.27.

path diagram given in figure (1) indicated that the self-efficacy coefficient of determination (R^2) is 0.68. It implies that self-reflection and lifelong learning can explain 68 percent of the difference in self-efficacy. Moreover, the R^2 value of entrepreneurial mindset is 0.87 and which indicates that 87 percent of the difference in the entrepreneurial mindset is explained by self-reflection, lifelong learning, and mediated by self-efficacy. The rest 13% unexplained variance can be described as other external or internal factors that have not been included in the current study model.

Table 5. shows Paths and estimates of direct, indirect and total effect of study variables.

Paths	Direct effect	Indirect effect	Total effect	P. value
Self-reflection ---> entrepreneurial mindset	.280			
Lifelong learning ---> entrepreneurial mindset	.251		.928	.001
Self-reflection ---> self-efficacy---> entrepreneurial mindset		0.161		
Lifelong learning ---> self-efficacy---> entrepreneurial mindset		0.236		

Source: Amos v.27

The findings of table 5 reveal that both self-reflection and lifelong learning have the significant direct and indirect impact on the entrepreneurial mindset, and self-efficacy is the mediating variable. The direct effect of self-reflection on entrepreneurial mindset is 0.280 with a significant level of 0.01 and its indirect effect on entrepreneurial mindset is 0.161 with an overall effect of 0.441. Equally, the lifelong learning directly influences the learning with a level of significance of 0.01 with an effect of 0.251 and indirectly influences the learning with an effect of 0.236 making the total effect 0.487. The given findings suggest that self-reflection and lifelong learning do not only directly affect entrepreneurial mindset but contribute to it through the reinforcement of self-efficacy. It is important to note that self-efficacy contributes significantly to the meditating effect of the relationship between lifelong learning and entrepreneurial mindset compared to the one between self-reflection and self-efficacy.

Discussion and Conclusion

Discussion

This paper set out to explore the interdependence between self-reflection and lifelong learning, and the influence of both in the development of the entrepreneurial mindset, self-efficacy. The survey was carried out at Al-Qadisiyah university in Iraq. a systematic and quantitative research design was used to analyze the proposed hypothesized relationships. 110 respondents were selected, simple random sampling was utilized to prepare objective and generalized results. The data was gathered by use of a structured questionnaire using 5-point Likert scale between 1 (Strongly Disagree) and 5 (Strongly Agree). The instrument was borrowed using validated scales in previous studies to ensure that it is content valid. Cronbachs alpha was used to measure reliability of the instrument with all constructs having alpha values of above 0.70 which was considered good internal consistency. Pearson correlation coefficient (r) was computed in order to test the strength and direction of the relationships between the variables.

The results of the analysis showed that there were strong positive relationships between self-reflection, lifelong learning to test the hypothesized relationship; Structural Equation Modeling (SEM) was performed with the program like AMOS and SPSS. These findings illustrated that self-reflection and lifelong learning have a positive relationship with one another, whilst overall Pearson correlation coefficient stood at 0.930. This is statistically significant at 0.01 which gives a strong empirical support of a strong interrelationship between the two constructs. The power and stability of the correlations make it possible to believe that people who actively practice reflective thinking will be more likely to exhibit activities that may be seen as related to continuous individual and professional growth. This correlation highlights the theoretical assumption that self-reflection is a cognitive stimulus that increases the orientation of a person to constant learning. This was supported by de Groot, E., and Mastebroek, N. J. J. M. (2017) who proposed that reflective practice would allow people to challenge assumptions and internalize experiential knowledge and further lead to more profound learning. Likewise, Drude, K. P., et al. (2019) noted that reflection was a fundamental element of his lifelong learning cycle, which is central to the process of constant growth. Belenkova, Y. S. (2020) also emphasized the importance of self-reflection to stimulate the process of metacognition that is needed to adapt to new knowledge and skills in the new work conditions. Additionally, Dai, G., and De Meuse, K. P. (2021) determined that reflective behavior contributes greatly to the agility in learning, particularly in leadership. According to Drude, K. P., et al. (2019), lifelong learning is a continual process of knowledge acquisition, application, and updating, and they focus on the reflective capability that enhances the integration and implementation of lifelong learning. Empirically, Maruyama, T., and Inoue, M. (2022) found that those employees who actively consider their work practices exhibit much greater results in lifelong learning behavior.

The research proposes that reflective practices and lifelong learning should be incorporated in leadership training and professional development processes within organizations especially in traditional sectors. This will help employees build their sense of self confidence, initiative and innovation that can eventually create an entrepreneurial workforce that is more capable of dealing with uncertainty and creating sustainable growth. The strong impact of self-reflection on entrepreneurial mind is consistent with the Reflective Practitioner Theory developed by Schoen (Schon, D. A. 2017) and the Experiential Learning Theory according to which learning by experience through self-reflection leads to better critical thinking and self-development (Kolb, D. A., 2014). The research supports this view by empirically confirming that reflective individuals have high chances of being entrepreneurial-based such as attitude towards innovation, adaptability, and initiative. Self-efficacy is a mediating factor used in this study as it has been established by Bandura in his Social Cognitive Theory (Bandura, 1986) that belief in capabilities in influencing behavior and motivation plays an essential role.

The findings verify that a person who possesses a higher self-efficacy has a greater probability to convert the learning experience into entrepreneurial activities, thereby expanding the notion introduced by Bandura to the entrepreneurial domain. The high correlation between life-long learning with entrepreneurial mindset is in favor of the experiential learning of the firm (Grant, 1996), in which knowledge and learning are considered as strategic assets. This observation implies that the higher the employee engages in lifelong learning and acquiring new skills and knowledge, the more well he is equipped to detect and take up entrepreneurial opportunities. The results of the study are consistent with the body of existing empirical studies that demonstrate the usefulness of reflective and learning-based methods in entrepreneurship development (e.g., Rae and Carswell, 2000; Cope, 2005). It also brings in a new value by measuring the effect of these in the setting of an old sector of the industry where such studies are scarce. Besides, the research provides important theoretical understanding due to the extension and the adjustment of the current frameworks and the proposed conceptual lenses on the interdependence between the self-reflection, lifelong learning, self-efficacy and entrepreneurial mindset. According to the theory of Social Cognitive Theory of Albert Bandura (1986), self-efficacy belief in his ability to do things is the key factor in human behavior and motivation. Although the theory has been extensively used in educational and behavioral studies, the study is now adding a new extension of its applicability by empirically validating the mediating nature of self-efficacy between self-reflective and lifelong learning behavior and entrepreneurial mindset.

Conclusion

This paper explored the connections between the four constructs of self-reflection, lifelong learning, self-efficacy, and the entrepreneurial mindset and found empirical support of strong and positive relationships between these constructs. The results indicate that self-reflection and lifelong learning should be viewed as highly related and acting together to develop an entrepreneurial state of mind, whereas self-efficacy can play the significant mediating role in converting the cognitive and behavioral processes to entrepreneurial attitudes and behaviors. These findings have far-reaching implications both in the theoretical and practical world. In theory, the research supports and deepens the existing models in noting the combined nature of reflective thinking and continuous learning to determine the outcomes of entrepreneurship. It is implied that the development of the entrepreneurial mindset is not prompted by the knowledge acquisition only but also by the personal capacity to analyze his/her experiences and develop confidence to use his/her abilities. This helps to gain a deeper overall picture of the interaction between cognitive and motivational factors in the processes of entrepreneurial development.

In practical terms, the findings suggest the need to put more efforts on integrating self-reflection and lifelong learning systems. Individuals self-

efficacy can be improved and be more prepared with the help of structured interventions, which may be reflective exercises, the opportunity to experience something new, and programs of continuous professional development. It is especially relevant to traditional or developing environments, in which innovation and flexibility in the organization should be encouraged to promote economic and organizational development. The outcomes also suggest that policymakers need to focus on the establishment of the favorable learning conditions that promote critical thinking, independence, and competencies development.

However, the model is itself portrayed in a very linear manner and this may not be entirely reflective of dynamism and reciprocity of these constructs. As an example, although self-reflection is placed as a precursor to lifelong learning, it is also possible that continuing experiences in learning would increase reflective capacity. This implies that subsequent studies are supposed to involve more advanced research models that would take into consideration feedback loops, or a mutual relationship. Moreover, the impact of situational aspects, including institutional setting and cultural values, has not been thoroughly considered, even though they may have a significant effect on the development of learning and entrepreneurial behaviors to overcome these limitations, future studies ought to utilize longitudinal designs. Inclusion of other variables, including organizational culture, leadership support, or technological readiness would also help to gain a better picture of factors that affect the development of entrepreneurial mindset. In addition, future research ought to employ more sophisticated quantification to increase the level of theoretical and empirical accuracy. To sum up, although the given research also reveals the necessity of more specific theoretical frameworks and more solid research designs. These suggestions can be addressed to further the development of an improved and context-aware view of entrepreneurial development.

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