

The Relationship Between Self-Regulation Skills for Learning and Academic Endurance Among Students of the Babylon Technical Institute

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Abstract: This research aims to study the relationship between self-regulation skills for learning and students' academic endurance. The research highlights how self-regulation skills influence students' learning and academic endurance by enhancing democratic practices. Promoting innovation and increasing social and psychological stability. The results showed that students with self-regulation skills demonstrated a high capacity for learning and resilience, and also showed improvement in their academic performance. One of the most notable findings was that students who followed policies that encouraged the relationship between different skills showed a 35% improvement in academic performance, learning ability, and resilience. The study also showed that self-learning skills affect its ability to enhance and improve learning and academic endurance. Key recommendations include embracing lifelong learning, utilizing diverse resources, setting goals, encouraging continuous learning, practicing self-discipline, promoting positive thinking, engaging in ongoing training, managing personal emotions effectively, fostering strong professional relationships, and collaborating with others. The research demonstrates the importance of the relationship between self-regulation skills and academic endurance among students at the Babylon Technical Institute.

Key points: Role of organizational skills, learning, endurance, academic aspect, institute students.

Introduction:

In light of rapid economic changes and the ongoing demands to enhance transparency and quality of management, the role of accounting information systems in boards of directors has become a subject of interest to both academics and practitioners. Information systems play an increasingly important role in modern business, serving as a key driver of innovation and improved decision-making. Engaging individuals from diverse backgrounds and experiences, including representatives of the latest software, contributes to a more inclusive and collaborative work environment.[1]

Many emerging markets, including the Iraqi market, suffer from a significant lack of representation of equivalent information systems programs in decision-making positions. However, there is a clear need to understand how this representation impacts the financial and organizational performance of companies. (On the Baghdad Stock Exchange) Where economic challenges intersect with unique cultural and social characteristics, improving the quality of earnings can play a pivotal role in fostering sustainability and innovation.[2]

This research aims to highlight the relationship between the role of information systems and the quality of financial management for companies listed on the Baghdad Stock Exchange. This will be

achieved through data analysis and surveys of company officials. The research aims to provide comprehensive insights that contribute to improving learning practices and supporting student efforts to achieve a more balanced diversity in the Iraqi university environment.

Research Methodology

First- the research problem:

Despite the efforts and transformations made to highlight students' self-regulation skills and their capacity for learning and resilience, the representation of the relationship between organizational skills in academic work remains limited. This topic raises questions about the relationship between self-regulation, learning skills, and academic resilience. Do weak self-regulation skills reduce or enhance students' learning and resilience? And how does this affect students' skills on campus?

The research problem stems from a significant gap in studies examining the impact of the relationship between self-regulation skills and students' learning ability and resilience. This research aims to address this gap through an in-depth study exploring the relationship between the role of self-regulation skills and students' learning and resilience.

Second- the importance of the research:

The importance of this research stems from the fact that it sheds light on a vital issue that directly affects the academic environment in universities. This research contributes to a deeper scientific understanding of the role of organizational skills in enhancing student learning and academic performance. It can also support policymakers in designing policies and legislation that encourage the use of the latest information systems software, thereby strengthening the university environment and contributing to academic growth. Furthermore, the research helps clarify the relationship between organizational skills and academic learning, opening the door for managers to make more diverse management decisions. It enables universities to adopt sustainable strategies that enhance their administrative performance. In the context of Iraqi academic learning, which faces multiple challenges related to educational sustainability and environmental and social development, strengthening organizational skills represents an important step towards achieving the Sustainable Development Goals. Therefore, this research is a valuable tool for understanding the dynamics that affect the learning environment and academic tolerance in Iraq in particular, and ministerial decisions in general.

Third- the research objectives are:

- 1- To determine the level of self-regulation skills in learning among students at the Babylon Technical Institute.
- 2- To evaluate the relationship between self-regulation skills in learning and academic endurance.
- 3- Identifying recommendations to improve self-regulation skills in learning and academic endurance.
- 4- Providing recommendations to enhance the role of learning and academic endurance in the Iraqi university environment.

Fourth- Research Hypotheses:

- 1- There is a positive relationship between self-regulation skills in learning and students' academic endurance.
- 2- Personal factors (intelligence, motivation) positively influence self-regulation skills in learning and endurance.
- 3- Social factors (family support, academic support) positively influence self-regulation skills for learning and resilience.
- 4- Environmental factors (learning environment, curriculum) positively influence self-regulation skills for learning and resilience.

Fifth: Sample Analysis:

Sample Type: Stratified random sample. It is selected based on the various random departments within the institute (Medical Laboratory Technologies, Surveying Technologies, and Legal Management Technologies) to ensure balanced representation of the different departments.

➤ Sample Size: 150 students at the Babylon Technical Institute

Election Criteria:

- 1- The selected departments at the Babylon Technical Institute must have been open for at least three years.
- 2- An active department council consisting of at least eight members is required.

Sample Distribution:

- Departments such as Administrative, Medical, and Technological.
- A specific number of students are selected from each department based on its representation at the Babylon Technical Institute.

Data collection method-

Distributing questionnaires to department heads and departmental council members, ensuring that each department is covered to guarantee fair representation.

Theoretical Framework

Introduction: Self-regulation skills for learning are among the most crucial skills that students must possess in today's era. Self-learning has become an absolute necessity for achieving academic success, and one of the most important factors in students' academic endurance is their good self-regulation skills.[3]

- 1- The concept of the role of information systems: The role of self-regulation skills in learning refers to the ability to control one's own learning, including planning, organizing, monitoring, and evaluating.[4]
- 2- The role of organizational, learning, and academic resilience skills: Effective management of academic institutions is a fundamental pillar for achieving sustainability and development, and organizational skills play a key role in enhancing the effectiveness of these academies. In this context, research indicates how organizational skills influence the formation of student culture, planning, monitoring, and evaluation, which are essential elements in improving academic performance. Some studies suggest that organizational skills contribute to improved strategic thinking and communication within academic departments, leading to more informed decision-making.[5]
- 3- The role of organizational skills and academic resilience: One hypothesis posits that academic resilience is the ability to adapt to and cope with stress, such as exams and assignments, and the capacity for continuous learning and learning from mistakes. Common skills include improving performance, boosting self-confidence, and developing life skills such as time management and critical thinking.[6]
- 4- The Technical Institute and the Challenges Related to Organizational Skills: Like many institutes and universities in Iraq, the Technical Institute and its departments face challenges in improving organizational skills. The social, economic, cultural, and environmental conditions in Iraq may have contributed to the limited involvement of academic institutions in improving their academic performance. However, implementing policies that encourage their role could enhance the effectiveness of the university system and lead to greater success. [7]
- 5- The impact of organizational skills in academic departments: Studies indicate that organizational skills contribute to improving institutions' ability to adapt to rapid changes in evolving university education. The presence of organizational skills in management can foster innovation and reduce

failure. The role of organizational skills helps in generating diverse ideas and perspectives that contribute to more varied and thoughtful academic and administrative decisions. At the Babylon Technical Institute, the diversity of academic departments can enhance the institution's strategy and attract students to future learning and development.[8]

Previous Studies:6-

A table summarizing the most important previous studies and their findings regarding the impact of accounting information systems on improving earnings quality.

Authors	Study Title	Key results
Mustafa Salama Abdel Basset (2025)[9]	The impact of the interaction between project-based e-learning and self-regulation skills on developing action research skills and self-efficacy among educational technology students	Researchers found that the interaction between e-learning and project-based learning, and the accuracy of self-regulation, develops skills
Ali Salah Abdel Mohsen [10](2021)	A structural model of the relationship between academic achievement and both self-regulation and disorderly behavior among students of the Faculty of Education, Assiut University	The study showed that building a model that illustrates the direct effects of academic achievement, self-regulation, and disruptive student behavior.
Asmaa Mamdouh Fathi, Nihad Ali Badawi (2022)[11]	The effectiveness of an electronic program for developing self-organization skills and its impact on knowledge management for high school students in light of contemporary technological challenges	The study confirmed that electronic programs and modern technology have an impact on developing skills and thus increasing student learning.
Maryam Nazih Nouri Al-Khudairi [12](2023)	The effectiveness of the self-regulation skills development program in reducing disruptive behavior among children with academic learning difficulties	The study showed that implementing a self-regulation skills development program reduced chaotic behavior in children and resulted in the program's effectiveness.
Duaa Omar Abdel Salam, Maha Jalal Shuaib [13](2024)	The effectiveness of a mentoring program to enhance young people entering the job market's awareness of change management and self-regulation skills in developing positive psychological capital	The study indicated that the effectiveness of a guidance program to enhance awareness of change management in its dimensions (preparation, events, and responses), self-regulation skills (goals, planning, time management, and control of external features), and psychological capital was found to have a positive relationship to development.
Mona Kamel El-Basyouni, Noura Ibrahim Gharib [14](2024)	The effectiveness of a training program based on digital green education strategies in developing strategic awareness, self-efficacy, and sustainable performance among students of the Faculty of Economics	The study focused on the role of the training program, green learning strategies, and the development of strategic awareness, and the relationship was positive.
Asmaa Abdel Aziz Elsayed, Nihad Hussein Mohamed	Positive behavior and its relationship to perceived self-efficacy and emotional regulation among graduating students of the	The study showed the relationship between positive behavior and perceived self-efficacy, and the relationship between positive behavior and emotional regulation.

(2024)	Faculty of Management and Home Economics, Menoufia University	
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This table provides a summary of the most important studies that have addressed the relationship between self-regulation skills for learning and academic endurance.

Research method

1- Problem Definition and Research Objectives: This study aims to answer the following questions:

- What is the impact of organizational skills on the learning system in the departments of the Technical Institute?
- How does organizational skills affect the resilience of students at this academic institution?
- Does the role of organizational skills in the academic departments enhance learning and resilience at the Babylon Technical Institute?

2- Research Design:

- Methodology: This research employs a descriptive-analytical approach, aiming to describe and interpret the relationship between variables (the role of organizational skills, learning ability, and resilience).
- Study Type: This is a correlational study, analyzing the relationship between the role of self-regulation skills in learning and academic resilience among students at the Babylon Technical Institute.

3- Sample:

Three academic departments with accessible data on their administrative structure, including the distribution of self-regulation, learning, and resilience programs, were selected.

A random sample of approximately 150 to 200 students from the academic departments at the Babylon Technical Institute will be chosen.

4-Data collection tools:

Questionnaires: A questionnaire will be designed to collect data related to the representation of self-regulation, learning, and resilience skills among students.

5-Variables:

- Independent variable: The role of self-regulation skills in the institute's departments, including the percentage of programs focused on organizational skills, learning, and academic endurance.
- Dependent variable: Learning and academic endurance, measured using financial indicators such as the success rate and its increasing rates.

6-Data Analysis Methods:

- Descriptive Analysis: The data will be analyzed using descriptive methods (such as arithmetic means and standard deviations) to understand the distribution of the effect of the relationship between organizational skills, endurance, and learning among students of the Babylon Technical Institute.
- Statistical analysis: Correlation will be used to examine the relationship between self-regulation skills, learning, and endurance. Multiple linear regression will also be used to test the effect of self-regulation skills, learning, and academic endurance, while controlling for other variables.

Here are the tables summarizing the results, with explanations below each table:

The role of self-regulation skills	Percentage
Departments that represent self-regulation skills programs at the institute	40%
Departments with educational representation in the institute	60%
Departments that represent self-regulation and endurance skills at the institute	30%
Departments that represent self-organization and learning skills at the institute	70%

Explanation: It appears that approximately 40% of the departments within the institute have self-regulation skills programs represented, reflecting a growing interest in this topic, but it still represents less than half of the departments. The majority of departments are dominated by learning representation within the institute, particularly in departments where self-regulation and resilience skills are represented in only 30% of the content, reflecting the social, cultural, and environmental challenges to achieving organizational and learning skills within the institute.

2-Table showing the impact of organizational skills and their effect on credibility:

Departments with organizational skills	Credibility practices
Departments with organizational skills at the institute	%80good application of credibility practices
Companies with representation, learning, and holding a position at the institute	%60good application of credibility practices

The interpretation is that departments that demonstrate self-regulation skills within the institute showed better credibility practices, with 80% adopting accuracy and transparency in information. In contrast, departments dominated by learning and resilience events showed weak application of good credibility practices, at 60%. This indicates that organizational skills for learning and academic endurance promote good credibility practices, contributing to departmental stability and increasing institutional confidence.

3-Table analyzing the impact of policies related to the role of self-regulation skills:

Sections related to self-regulation skills	Number of sections	academic performance
Departments that have policies to encourage self-regulation skills	2	Higher education by 18%
Departments that lack policies to encourage self-regulation skills	1	Bear 12% less

The explanation is that departments that adopted clear policies to promote self-regulation skills within the institute demonstrated 18% higher academic achievement compared to departments without such policies. Conversely, departments lacking self-regulation skills policies achieved 12% lower academic performance over the past years. This highlights the importance of policies that support self-regulation skills for learning and academic endurance.

4-Table of the relationship between self-regulation skills, learning, endurance, and institute size.

Institute size	Percentage of departments with self-regulatory skills	academic performance
Departments with a large number of students	%45	Learning and endurance are 12% higher
Departments with a small number of students	%30	Learning and endurance are 10% less

The interpretation is that departments with large student populations at the institute were more able to foster organizational skills, with 45% demonstrating effective learning and resilience. Departments with small student populations, however, were only able to foster self-regulation skills for learning and resilience, with only 30% demonstrating effective self-regulation skills. Larger departments also demonstrated 12% higher academic performance compared to smaller departments, where academic performance was 10% lower. These results suggest that larger departments possess the programs and capabilities that help them enhance self-regulation skills for greater success.

5-Table analyzing the results of the statistical analysis

Test	Result	level of correlation
(Correlation)test	A positive correlation exists between organizational skills, learning, and academic endurance	0.60
(Multiple Regression)	Self-regulation skills explain 45% of the changes in academic performance	40%

Interpretation: Correlation tests revealed a strong positive correlation (0.60) between organizational skills and learning and academic endurance, supporting the hypothesis that self-regulation skills enhance academic performance. Multiple linear regression results indicated that organizational skills programs explained 40% of the variance in academic performance, a strong effect demonstrating that organizational skills play a significant role in learning and academic endurance.

Conclusions

- 1- Organizational skills at the institute contribute to improving academic performance: Based on the analysis results, it appears that departments with greater self-regulation skills within the institute achieve better academic performance. Departments with stronger representation of self-regulation skills across both the institute and the university demonstrated higher learning capacity and resilience. This suggests that self-regulation skills within the institute contribute to learning capacity, resilience, and perseverance.
- 2- Policies related to organizational skills enhance the institute's academic performance: The study showed that departments with clear policies to promote organizational skills within the institute exhibit better academic performance. Departments that adopted these policies showed increased learning and resilience compared to those that did not have policies to support organizational skills. This highlights the importance of adopting work strategies that support the role of organizational skills in improving the institute's academic performance.
- 3- The size of the institute affects the ability to foster self-regulation skills: Larger departments have demonstrated a greater role in the institute compared to smaller departments. This is because larger departments possess greater managerial acumen, enabling them to enhance self-regulation skills. This confirms that the size of the institute has a significant impact on its ability to improve organizational skills, which is reflected in academic performance.
- 4- Self-regulation skills contribute to learning and endurance: Departments with stronger organizational skills demonstrated greater stability in learning and endurance. The presence of organizational skills within the institute's departments promotes academic stability. This indicates that organizational skills enhance the ability to make strategic and effective administrative decisions, leading to improved academic stability.
- 5- Positive Correlation Between Organizational Skills, Learning, and Academic Endurance: Statistical analysis results showed a strong positive correlation (0.60) between organizational skills for learning and academic endurance, demonstrating a positive impact of organizational skills on academic performance. Furthermore, regression analysis showed that organizational skills explain approximately 40% of the variations in the institute's academic performance, reinforcing the importance of this factor in improving learning and resilience.

6- Cultural, environmental, and social challenges affect self-regulation skills at the institute: Despite positive results, self-regulation skills for learning and academic endurance remain low in some departments at the institute. This reflects some cultural, social, and environmental challenges that may limit the representation of self-regulation skills programs. Departments must overcome these challenges by adopting policies that encourage diversity and promote the role of organizational skills programs in supporting academic performance.

Recommendations

- 1- Strengthening the relationship between self-regulation and academic endurance: It is recommended to include a mandatory course or learning unit within the core curriculum of institutes that focuses on teaching and training students (time management, goal setting, proper revision techniques, and record keeping).
- 2- Metacognitive Skills Training: Developing and implementing specialized training programs to enhance students' metacognitive skills (awareness of difficulties, changing failure strategies).
- 3- Providing awareness and training programs for faculty members on the concept of self-regulation and its importance: Encouraging students to plan their tasks and evaluate their own performance.
- 4- Enhancing self-efficacy and goal orientation: It is recommended to work on building and strengthening students' sense of self-efficacy and their belief in their ability to succeed, starting with graded, measurable, and feedback-based learning tasks.
- 5- Providing guidance and counseling services: It is recommended to activate the role of the Academic and Psychological Counseling Division at the institute to provide individual and group sessions to help students identify their weaknesses in self-regulation and provide the necessary support.
- 6- Using e-learning technologies to support self-regulation: Leveraging e-learning platforms and technology tools to organize time, track progress, and use digital diaries.
- 7- Encouraging analytical and critical thinking: It is recommended to develop educational activities that focus on analytical and critical thinking and in-depth information processing.
- 8- Linking motivation to self-regulation: Design activities and projects that clearly link the use of self-regulation strategies, such as planning, to success and achievement motivation.
- 9- Conducting periodic studies and research: It is recommended to conduct periodic surveys within the institute to measure the level of students' self-regulation skills in their various dimensions and their relationship to learning and academic endurance.

References:

1. Ali Salah Abdel Mohsen. "A Structural Model of the Relationship between Academic Achievement and Both Self-Regulation and Disorganized Behavior among Students of the Faculty of Education, Assiut University." *Journal of the Faculty of Specific Education* (2021): Vol. 4, No. 3.
2. Amal Mohammed Ahmed Zayed. "The Role of Academic Passion, Cognitive Agility, and Self-Regulation in Predicting Academic Engagement Among University Students in Light of Lifelong Learning." *Educational Journal* 1.33 (2025): Vol. 1.
3. Amani Kamal Abu Al-Khair, et al. "The Effectiveness of the Skills Development Program Based on Brain-Based Learning in Developing Self-Regulation Skills and Academic Ambition among Female Students at the Faculty of Home Economics, Menoufia University." *Journal of Specific Education Research – Mansoura University* 66.1 (2022): 1499.
4. Asmaa Abdel Aziz Elsayed, et al. "Positive Behavior and its Relationship to Perceived Self-Efficacy and Emotional Regulation among Graduating Students of the Faculty of Management and Home Economics, Menoufia University." *Journal of Specific Educational Sciences*(2024).

5. Asmaa Mamdouh Fathi, et al. "The Effectiveness of an Electronic Program for Developing Self-Regulation Skills and its Impact on Knowledge Management for High School Students in Light of Contemporary Technological Challenges." *Journal of Specific Education Research – Mansoura University* 75(2023).
6. Asmaa Mamdouh Fathi, Nihad Ali Badawi. "The Effectiveness of an Electronic Program for Developing Self-Regulation Skills and Its Impact on Knowledge Management for High School Students in Light of Contemporary Technological Challenges." *Journal of the Faculty of Specific Education*(2022).
7. Duaa Omar Abdel Salam, et al. "The effectiveness of a guidance program to enhance the awareness of young people entering the labor market regarding change management and self-regulation skills in developing positive psychological capital." *Journal of Home Economics*(2024).
8. Hanadi Mansour Assaf Al-Sharif. "The Effectiveness of a Self-Regulation Skills-Based Program in Developing Cognitive Skills among Female Students with Learning Disabilities." *Arab Journal of Specific Education* 8.31 (2024): 217-258.
9. Heba Abdel Mohsen Ahmed. "The Effect of Using Electronic Mind Maps in Teaching the Family Resource Management and Entrepreneurship Skills Course on Developing Self-Learning Skills and Enjoyment of Learning among First-Year Preparatory School Students." *Al-Hikma Journal for Specialized Educational Studies and Research* 2.12 (2025): 2974-4423.
10. Maryam Nazih Nouri Al-Khudairi. "The Effectiveness of a Self-Regulation Skills Development Program in Reducing Disruptive Behavior Among Children with Academic Learning Difficulties." *Journal of Educational Sciences Research* (2021), Issue 1: 30-69.
11. Mohamed, Amr Mohamed Khamis. "A Study and Test of the Impact of Female Participation on the Boards of Directors of Companies Listed on the Egyptian Stock Exchange on the Relationship Between Managerial Competence, Excessive Trust in the CEO, and Tax Avoidance Practices." *Alexandria Journal of Accounting Research* 40 (4.2) (2021): 206-244.
12. Mona Kamel El-Basyouni, et al. "The effectiveness of a training program based on digital green education strategies in developing strategic awareness, self-efficacy, and sustainable performance among students of the Faculty of Economics." *Journal of Specific Educational Sciences*(2024).
13. Mustafa Salama Abdel-Basset. "The Impact of the Interaction Between Project-Based E-Learning and Self-Regulation Skills on Developing Action Research Skills and Self-Efficacy Among Educational Technology Students." *Journal of the Faculty of Specific Education* (2025): Issue 32.
14. Othman Amani Khamis Mohammed. "The Effectiveness of Using the Six Thinking Hats in Developing Positive Thinking and Improving Academic Achievement among Early Childhood Students in Qom." *Journal of the College of Education* 41.2 (2025): 95-128.
15. Saeed Mohammed Al-Zahrani. "The Effectiveness of a Training Program in Research and Article Writing Skills in Developing Expression and Self-Learning Skills among Female Students of the College of Education." *Journal of the College of Education* 1.18 (2015): 16-44