BSU Journal of Pedagogy and Curriculum



2024; 3(6): 38-67

https://bsujpc.journals.ekb.eg/

ISSN: 2812-5851 (Print); ISSN: 2812-586X (Online)



Regular Article

A Vision for Revitalizing Educational Psychology in Egyptian Universities: A

SWOT Analysis and Proposed Roadmap

Dr. Heba Mamdouh Mahmoud Assistant Professor of Educational Psychology Faculty of Education –Beni Suef University **APA Citation** : **Heba**, **M**. (2024). A Vision for Revitalizing Educational Psychology in Egyptian Universities: A SWOT Analysis and Proposed Roadmap, BSU Journal of Pedagogy and Curriculum, 2024; 3(6): 38- 67

redagogy and Curriculum, 2024, 5(6). 38- 67

Received: 4/9/2024; Accepted: 14/10/2024; Published: 01/06/2024

Abstract:

This paper presents a vision for advancing educational psychology in Egyptian universities, aiming to establish it as a leading force in research, teaching, and community service. Drawing upon a comprehensive SWOT analysis, the paper identifies the strengths, weaknesses, opportunities, and threats facing the field. This analysis highlights the complex interplay of factors influencing educational psychology in Egypt, revealing both its potential and challenges. Based on the SWOT analysis, the paper proposes a five-pronged roadmap for development, encompassing: (a) modernization of educational and teaching methods; (b) strengthening research through infrastructure development and interdisciplinary collaborations; (c) promoting community engagement through mental health services and outreach programs; (d) enhancing international standing through research participation and partnerships; and (e) developing academic departments by establishing standards and creating new programs. This roadmap provides a framework for achieving a transformative vision, ensuring the continued relevance and impact of educational psychology in the Egyptian context. The paper argues that by embracing innovative pedagogical approaches, effectively integrating technology, and fostering a culture of research excellence, educational psychology in Egypt can become a driving force for positive change, addressing critical educational challenges and contributing to societal betterment.

Keywords: Educational psychology, Egypt, vision, SWOT analysis, roadmap, development, research, teaching, community service.

Introduction:

Educational psychology occupies a unique niche in the academic landscape, serving as the vital bridge between the disciplines of psychology and education. This field, focused on understanding and applying psychological principles to educational phenomena, plays a critical role in improving learning outcomes and guiding educational practices. It offers educators and practitioners invaluable insights into learner behavior, motivation, and cognitive development, paving the way for more effective teaching strategies and more engaging learning environments.

Educational psychology, an interdisciplinary field merging psychology and education, is pivotal in addressing educational challenges and applying psychological principles to enhance learning outcomes (Abu Al-Maati, 2022). It equips educators and behavior modification specialists with the scientific foundations to navigate the complexities of educational and learning difficulties within the school environment. The significance of educational psychology lies in its ability to foster academic success, social adaptation, and overall improvement of the educational process (Abu Al-Maati, 2022). By understanding the psychological and educational facets of individuals, this field strives to facilitate positive behavioral changes, empowering individuals from childhood to adulthood to acquire the skills, behaviors, and values necessary to become active and productive citizens in a society built on equality, equal opportunities, acceptance of others, and inclusion of individuals with special needs (Abu Al-Maati, 2022). In essence, educational psychology contributes to enhancing the quality of life and preventing divisions and intellectual and behavioral extremism.

The rapid advancements in science and technology necessitate a continuous evolution of educational psychology to remain relevant and effective. As Eaton & Ryan (2020) emphasize, the development of educational psychology is a crucial endeavor for building a better world, particularly in low and middle-income countries. This necessitates a focus on research, investigation, analysis, and the study of new scientific concepts and modern trends within the field, along with its interaction with other scientific disciplines (Abu Al-Maati, 2022). It is also imperative to pay attention to marginalized groups and those most in need of study and services. To achieve this, a developmental vision for educational psychology is required, one that aligns with its nature, the circumstances of Egyptian society, and its current variables. This vision should be in harmony with the field's nature and the specific conditions and ongoing changes within Egyptian society.

However, despite its crucial importance, educational psychology in Egypt faces several challenges that hinder its full potential and limit its impact on the educational landscape. While the field boasts a dedicated community of researchers and educators, a critical gap exists in the

literature concerning a comprehensive vision for the future development of educational psychology within the Egyptian context. This gap highlights the need for a thorough analysis of the current state of the field and a roadmap for overcoming its challenges.

Research Gap and Questions:

While numerous studies have explored specific aspects of educational psychology in Egypt, a comprehensive analysis of the field's current state, including a SWOT analysis and a concrete vision for its future, remains absent. To address this gap, this research aims to answer the following questions:

- 1. What are the strengths, weaknesses, opportunities, and threats facing educational psychology in Egypt?
- 2. How can the identified challenges be addressed to enhance the field's impact on research, teaching, and community service?
- 3. What specific strategies and actions can be taken to achieve a transformative vision for the future of educational psychology in Egypt?

Literature Review:

The literature on educational psychology in Egypt offers a nuanced understanding of the field's current state and the challenges it faces. A comprehensive review reveals several key themes and insights:

Curriculum Modernization: Studies by Al-Feel (2024) and Amareh (2024) highlight the need for curriculum modernization in educational psychology departments across Egyptian universities. Amareh (2024) specifically calls for aligning curriculum with international standards and addressing the issue of overlapping courses. The need for updated content and a focus on applied research is echoed by Al-Feel (2024) who emphasizes the importance of practical skills development. The necessity for curriculum reform resonates strongly in the literature. Nassef (2002) identifies a 'mid-life crisis' in educational psychology, attributing it to factors such as the uncritical adoption of Western theories and a curriculum divorced from societal realities. Abu Al-Maati (2008) echoes this, highlighting the need to address contemporary societal issues and technological advancements in educational psychology curricula. Al-Najar (2011) further advocates for incorporating modern teaching methods, e-learning, and virtual labs into the curriculum. The overarching call is for a curriculum that is dynamic, relevant, and aligned with both local needs and global trends.

Research Enhancement: Several studies underscore the need for enhancing research in educational psychology. Al-Zu'bi & Al-Zu'bi (2019) address the issue of low-quality research publications and a lack of adherence to international research standards. The imperative to elevate

the quality and impact of research is a recurring theme. Al-Zu'bi & Al-Zu'bi (2012) lament the lack of quality and international standards in published research, while Abu Al-Maati (2008) points to the disconnect between research and societal problems. Nassar (2018) categorizes the challenges into those related to research/publication, teaching/learning, and the local community, emphasizing the need for research to be anchored in real-world issues. The consensus is clear: research in educational psychology needs to be more rigorous, relevant, and impactful. Mohamed (2021) further highlights the need for more accurate definitions and concepts within the field, emphasizing the importance of reliable measurement and assessment tools. Nassar (2021) emphasizes the gap between research and practical application, calling for a greater focus on addressing societal issues. The role of financial resources in facilitating research is also acknowledged by Al-Feel (2024) who emphasizes the need for more funding.

Community Engagement: There is a growing call for increasing the engagement of educational psychology with the Egyptian community. Al-Feel (2024) emphasizes the importance of bridging the gap between the academic world and the community, promoting the use of research findings to address practical issues. Nassar (2021) also advocates for a stronger role of educational psychology departments in solving community problems. The literature underscores the need for educational psychology to actively engage with and serve the community. Nassef (2002) and Al-Najar (2011) both stress the importance of applying research findings to solve community problems and provide practical solutions. This call for community engagement reflects a growing recognition that educational psychology should not be confined to academia but should actively contribute to societal well-being.

International Collaboration: The literature highlights the importance of fostering international collaboration in educational psychology. The importance of international collaboration is highlighted, particularly in light of the limited recognition of Arabic research in the global arena (Nassar, 2018). The literature advocates for strengthening international partnerships, encouraging research collaborations, and facilitating the publication of research in international journals. This international outlook is seen as crucial for enhancing the visibility and impact of Egyptian research in educational psychology. Nassar (2021) notes the lack of recognition for Arabic research publications in international scholarship. Strengthening international partnerships and encouraging research collaborations are critical steps to enhance the field's international visibility.

Technology Integration: The emerging field of educational technology, with its focus on integrating technology into education, presents new opportunities and challenges for educational psychology. Amareh (2024) suggests that incorporating digital learning tools and modern pedagogical approaches is crucial for keeping pace with technological advancements.

Technology Integration: The rapid advancements in technology, particularly in the realm of artificial intelligence (AI) and educational technology, present both opportunities and challenges. The literature emphasizes the need to integrate these technologies into teaching, research, and practice. Abu Al-Maati (2022) envisions AI as a tool for early detection, diagnosis, and treatment of learning difficulties, while also highlighting the potential of technology to reduce stigma associated with mental health issues. The integration of technology is seen as key to modernizing the field and preparing future educational psychologists for the digital age.

These studies collectively underscore the urgent need for a transformative vision for educational psychology in Egypt. A vision that is not only responsive to the challenges identified but also proactive in seizing the opportunities presented by technological advancements and the growing demand for psychological services. The literature calls for a comprehensive approach that encompasses curriculum reform, research enhancement, community engagement, international collaboration, and technology integration. This holistic approach is seen as essential for revitalizing the field and ensuring its continued relevance and impact in the 21st century.

These studies collectively paint a picture of a field in need of revitalization. The literature review demonstrates a clear need for a comprehensive vision, grounded in a SWOT analysis, that can guide the development of educational psychology in Egypt.

Educational psychology delves into the study of mental capabilities, cognitive processes, and individual dispositions within educational contexts. It bridges theory and practice, aiming to understand, interpret, predict, and regulate human behavior to achieve educational objectives. Progress in this field is crucial for keeping the educational system aligned with scientific and technological advancements and ensuring its contribution to modern society.

Future Vision for Educational Psychology Development

The researcher has reviewed various Arabic and foreign studies, books, and scientific references to develop a future vision for advancing educational psychology. This vision encompasses the following elements:

- 1. Vision Goals
- 2. Rationale and Justifications
- 3. Current Situation Analysis Vision Goals

The vision aims to achieve the following:

- 1. **Curriculum Modernization:** Integrate modern topics and approaches into educational psychology curricula to keep up with local and global developments.
- 2. Enhancement of Scientific Research Quality: Improve the quality of scientific research in educational psychology and highlight its practical applications in daily life.
- 3. **Community Service and Sustainable Development:** Strengthen the role of educational psychology in serving the community and contributing to sustainable development.
- 4. **Development of Teaching, Research, and Service Aspects:** Develop the field of educational psychology comprehensively in teaching, research, and community service, in line with modern trends.

Rationale and Justifications for the Vision

The proposed vision for the development of educational psychology is in response to several implications and justifications, including:

- 1. **Harnessing Technology in Education:** Promote the use of technology in the educational process and assess learning outcomes, especially after the COVID-19 pandemic.
- 2. **Keeping Pace with Rapid Scientific Development:** Develop research and professional orientations to align with the rapid advancements in science and other educational fields.
- 3. **Enhancing Research Competitiveness:** Improve the quality of studies and research in behavioral sciences and educational psychology to provide solutions to real-world problems faced by learners.
- 4. **Improving Inputs to the Educational System:** Utilize educational psychology to address traditional and modern challenges in the educational system, aiming for the psychological, social, and academic development of learners, teachers, administrators, and parents, with a focus on concepts like psychological capital and personal strengths.
- 5. **Curriculum Development:** Update and develop curricula and course descriptions to attract students and foster their passion for the field. This may include incorporating modern fields in psychology like positive psychology, digital psychology, sports psychology, environmental psychology, peace psychology, and entrepreneurial psychology.
- 6. **Harnessing Advancements in Software and Statistics:** Utilize advancements in software and statistical methods to understand and interpret phenomena and causal relationships between psychological and educational variables.
- 7. **Developing Teachers' Professional Skills:** Enhance training programs for teachers in various disciplines, including educational psychology, both during pre-service and inservice stages.

8. Addressing the Impact of Social Media: Prepare learners in educational psychology to address the challenges posed by social media platforms on values and strengthen the role of educational and social institutions in keeping up with rapid societal changes.

Educational Psychology and its Role in Facing Challenges

Educational psychology is concerned with the study of learning and teaching processes, scientific research, creativity, and innovation. It plays a crucial role in developing these areas to serve society, especially in light of the challenges facing universities. The rapid development in the world necessitates updating the field of educational psychology to keep pace with technology, interdisciplinary sciences, and artificial intelligence. This development includes enhancing scientific research, modernizing curricula, developing teachers' skills, and utilizing technology in education. It aims to improve educational outcomes, enhance learner success and adaptation, prepare them to participate in the knowledge society, and enable the educational system to achieve sustainable development.

Educational psychology delves into the study of mental capabilities, cognitive processes, and individual dispositions within educational contexts. It bridges theory and practice, aiming to understand, interpret, predict, and regulate human behavior to achieve educational objectives. Progress in this field is crucial for keeping the educational system aligned with scientific and technological advancements and ensuring its contribution to modern society.

Future Vision for Educational Psychology Development

The researcher has reviewed various Arabic and foreign studies, books, and scientific references to develop a future vision for advancing educational psychology. This vision encompasses the following elements:

- 1. Vision Goals
- 2. Rationale and Justifications
- 3. Current Situation Analysis

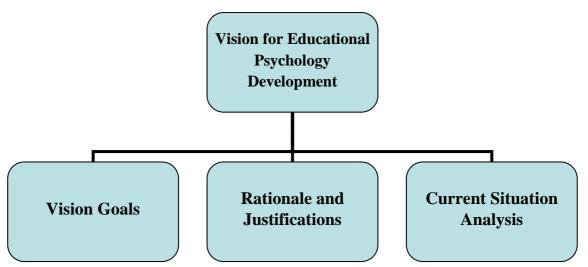


Figure 1. Vision for Educational Psychology Development

The vision aims to achieve the following:

- 1. **Curriculum Modernization:** Integrate modern topics and approaches into educational psychology curricula to keep up with local and global developments.
- 2. Enhancement of Scientific Research Quality: Improve the quality of scientific research in educational psychology and highlight its practical applications in daily life.
- 3. **Community Service and Sustainable Development:** Strengthen the role of educational psychology in serving the community and contributing to sustainable development.
- 4. **Development of Teaching, Research, and Service Aspects:** Develop the field of educational psychology comprehensively in teaching, research, and community service, in line with modern trends.

II. Rationale and Justifications for the Vision

The proposed vision for the development of educational psychology is in response to several implications and justifications, including:

- 1. **Harnessing Technology in Education:** Promote the use of technology in the educational process and assess learning outcomes, especially after the COVID-19 pandemic.
- 2. **Keeping Pace with Rapid Scientific Development:** Develop research and professional orientations to align with the rapid advancements in science and other educational fields.
- 3. **Enhancing Research Competitiveness:** Improve the quality of studies and research in behavioral sciences and educational psychology to provide solutions to real-world problems faced by learners.
- 4. **Improving Inputs to the Educational System:** Utilize educational psychology to address traditional and modern challenges in the educational system, aiming for the psychological,

social, and academic development of learners, teachers, administrators, and parents, with a focus on concepts like psychological capital and personal strengths.

- 5. **Curriculum Development:** Update and develop curricula and course descriptions to attract students and foster their passion for the field. This may include incorporating modern fields in psychology like positive psychology, digital psychology, sports psychology, environmental psychology, peace psychology, and entrepreneurial psychology.
- 6. **Harnessing Advancements in Software and Statistics:** Utilize advancements in software and statistical methods to understand and interpret phenomena and causal relationships between psychological and educational variables.
- 7. **Developing Teachers' Professional Skills:** Enhance training programs for teachers in various disciplines, including educational psychology, both during pre-service and inservice stages.
- 8. Addressing the Impact of Social Media: Prepare learners in educational psychology to address the challenges posed by social media platforms on values and strengthen the role of educational and social institutions in keeping up with rapid societal changes.

III. Educational Psychology and its Role in Facing Challenges

Educational psychology is concerned with the study of learning and teaching processes, scientific research, creativity, and innovation. It plays a crucial role in developing these areas to serve society, especially in light of the challenges facing universities. The rapid development in the world necessitates updating the field of educational psychology to keep pace with technology, interdisciplinary sciences, and artificial intelligence. This development includes enhancing scientific research, modernizing curricula, developing teachers' skills, and utilizing technology in education. It aims to improve educational outcomes, enhance learner success and adaptation, prepare them to participate in the knowledge society, and enable the educational system to achieve sustainable development.

Method

This study employed a comprehensive review of pertinent Arabic and international literature, encompassing research articles, books, and scholarly references. The primary objective was to glean insights into the current state of Educational Psychology in Egypt and the Arab world, identify prevailing challenges, and explore potential avenues for future development. The review process involved a meticulous examination of the literature, focusing on the identification of key themes, trends, and recommendations.

A SWOT analysis was also conducted to provide a structured assessment of the strengths, weaknesses, opportunities, and threats facing the field of Educational Psychology in the region. The

findings from the literature review and SWOT analysis were then synthesized to inform the development of a proposed future vision for the advancement of Educational Psychology in Egyptian universities.

Findings:

This SWOT analysis reveals a complex and evolving landscape for educational psychology in Egypt, with both potential and challenges.

Strengths:

- **Experienced Faculty:** The presence of a large number of experienced professors within Egyptian universities provides a solid foundation for research, curriculum development, and teaching.
- **Technological Advancements:** The increasing accessibility of technology offers opportunities for innovative research, engaging teaching methods, and reaching a wider audience for community engagement.
- **Diverse Curriculum:** The broad range of courses offered in educational psychology departments equips students with a comprehensive understanding of the field, preparing them for diverse roles within the educational sector and beyond.
- **Established Discipline:** Educational psychology is well-established in Egypt, with dedicated departments in most faculties of education, demonstrating its significance within the national educational system.
- **Specialized Journals:** The existence of specialized journals focused on educational psychology provides a platform for researchers to disseminate their findings and contribute to the advancement of knowledge within the field.
- Access to Modern Databases: The availability of modern databases, including the Egyptian Knowledge Bank, enables researchers to access comprehensive information and conduct high-quality research.

Weaknesses:

- **Multiple Departments:** Having multiple psychology departments within the same university can lead to fragmentation and competition for resources, potentially hindering collaboration and research efforts.
- **Curriculum Inconsistency:** Significant differences in curriculum design and course descriptions across universities hinder standardization and create a disjointed learning experience for students.

- **Research Skills Gap:** The lack of sufficient research skills among some graduate students can lead to lower quality research output and difficulty in competing with international scholars.
- Limited Curriculum Updates: Insufficient curriculum review and updates mean some courses may not reflect contemporary developments in the field, hindering relevance and effectiveness.
- Unification of Terminology and Measurement Challenges: The lack of standardized terminology and reliable measurement tools hinders accurate research and consistent data analysis, impacting the overall quality of research findings.
- **Insufficient Resources:** Some universities struggle with a lack of fully equipped laboratories and adequate funding, limiting the scope and quality of research projects.
- Limited Public Awareness: The public is not fully aware of the importance of educational psychology and its potential contribution to individual and societal well-being, limiting its impact on broader societal issues.
- **Research Redundancy:** There may be a tendency for researchers to focus on similar topics, potentially hindering the exploration of new areas and limiting the field's overall progress.
- Limited Infrastructure: Some departments lack adequate infrastructure, including labs, technology, and other resources, hindering their ability to conduct high-quality research.
 Opportunities:
- **Funding Availability:** Several funding agencies offer grants for research projects in educational psychology, providing valuable opportunities for researchers to secure funding and pursue significant research endeavors.
- Artificial Intelligence Applications: The rapidly evolving field of artificial intelligence presents significant opportunities for enhancing teaching, research, and community engagement in educational psychology.
- **Growing Interdisciplinary Research:** The increasing emphasis on interdisciplinary research allows educational psychologists to collaborate with researchers from other fields, enriching the scope of their research and addressing complex societal challenges.
- **Growing Demand for Educational Psychologists:** The increasing need for qualified educational psychologists in various sectors, including education, healthcare, and community development, creates job opportunities for graduates and fosters the growth of the field.

- **Potential Partnerships:** Educational psychology departments can establish partnerships with educational institutions and other relevant organizations, leading to collaborative research projects, training programs, and community initiatives.
- Scholarship Opportunities: There may be opportunities for graduate students to secure scholarships, both domestically and internationally, to pursue advanced studies in educational psychology.

Threats:

- Limited Financial Resources: The economic challenges facing Egypt can limit funding for research projects and program development in educational psychology, hindering progress and limiting the potential impact of the field.
- **Insufficient Research Funding:** Limited funding for research projects can stifle innovative research initiatives, restrict the scope of investigations, and impede the overall advancement of the field.
- Language Barriers: Language barriers can hinder researchers' ability to conduct research and publish internationally, hindering their ability to engage with the global academic community and receive wider recognition for their work.
- Lower Citation Rates: Publications by Arabic scholars often receive fewer citations in international scholarship compared to publications from other regions, impacting the field's visibility and recognition on a global scale.
- **Potential for Misusing Artificial Intelligence:** While AI offers potential benefits, its misuse in education poses risks, such as biases and ethical concerns, which need to be addressed proactively.
- **Intra-University Competition:** Competition among psychology departments within the same university can lead to conflicts and a lack of collaboration, hindering the advancement of the field and hindering the efficient utilization of resources.
- **Prioritization of Natural Sciences:** There may be a tendency to prioritize funding and resources for natural sciences over social sciences, such as educational psychology, impacting the allocation of resources and attention.

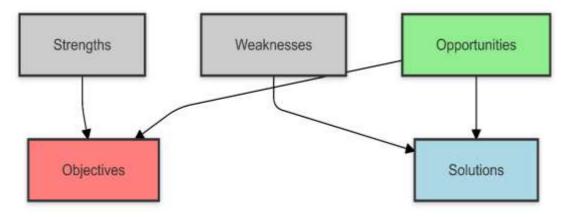
Table 1

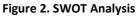
Category	Factors
Strengths	Experienced Faculty, Technological Advancements, Diverse Curriculum,
	Established Discipline, Specialized Journals, Access to Modern Databases

SWOT Analysis Findings

Weaknesses	Multiple Departments, Curriculum Inconsistency, Research Skills Gap, Limited
	Curriculum Updates, Unification of Terminology and Measurement Challenges,
	Insufficient Resources, Limited Public Awareness, Research Redundancy, Limited
	Infrastructure
	Funding Availability, Artificial Intelligence Applications, Growing Interdisciplinary
Opportunitie	s Research, Growing Demand for Educational Psychologists, Potential Partnerships,
	Scholarship Opportunities
Threats	Limited Financial Resources, Insufficient Research Funding, Language Barriers,
	Lower Citation Rates, Potential for Misusing Artificial Intelligence, Intra-University
	Competition, Prioritization of Natural Sciences

The vision for educational psychology in Egypt is to establish it as a leading discipline in the domains of scientific research, education, and community service at all levels. This ambition requires a comprehensive approach encompassing several key areas of development.





Vision Pillars:

The vision for educational psychology can be summarized by four key pillars, as illustrated in Figure (3):

- 1. **Developing Faculty:** Enhancing the research and teaching capabilities of faculty members is crucial to achieving excellence in educational psychology. This involves providing opportunities for professional development, supporting research endeavors, and fostering a culture of innovation within departments.
- 2. **Strengthening Research:** Enhancing the quality and impact of research in educational psychology is vital. This involves supporting researchers through funding, promoting collaboration with international institutions, and aligning research priorities with national needs.

- 3. **Developing Departments:** Strengthening departments is essential to ensure a high-quality educational experience for future educators. This requires a focus on contemporary curriculum development, incorporating modern pedagogical approaches, and equipping students with the skills needed to thrive in the 21st century.
- 4. **Enhancing Community Service:** Educational psychology has a crucial role to play in addressing societal challenges. This necessitates providing impactful psychological services and engaging in initiatives that promote mental health and well-being within communities.

Defining the Mission:

The mission of educational psychology development is to contribute to the advancement of the field through scientific research, education, and community service, thereby producing graduates who are highly competitive in the local and regional job market. This mission also focuses on nurturing researchers who are committed to professional development, upholding ethical principles, and contributing to the betterment of society.

Values Guiding the Vision:

The core values driving this vision are:

- **Integrity and Honesty:** Maintaining ethical principles in all research and teaching activities, upholding transparency and accountability.
- **Transparency:** Ensuring access to information and open communication regarding programs and decisions.
- **Creativity and Innovation:** Embracing novel ideas, promoting original thought, and fostering adaptable approaches to research and practice.
- **Responsibility:** Recognizing individual and collective responsibility for actions and contributing to the well-being of the community.
- Feedback and Evaluation: Regularly assessing the effectiveness of programs and initiatives to ensure continuous improvement.
- **Citizenship:** Promoting national identity and fostering well-rounded individuals who are active and responsible citizens.
- **Mutual Respect:** Valuing human dignity, fostering empathy, and promoting respectful interactions within the academic community and beyond.

Key Strategies:

Several strategies are necessary to realize the vision and its underlying goals:

(a) Fostering International Publication:

- **Training Researchers:** Developing targeted programs to equip Egyptian researchers with the skills necessary for successful publication in high-impact international journals. This should include training on international publishing standards, scientific writing, and effective journal selection.
- **Incentivizing International Publication:** Providing financial and non-financial incentives to encourage researchers to publish in international journals, motivating them to produce high-quality research with global impact.
- **Promoting International Research Collaboration:** Establishing partnerships with leading international universities and research centers to facilitate collaborative projects and knowledge exchange.
- **Subscribing to International Journals:** Providing access to leading international journals to enhance researchers' knowledge base and stay abreast of the latest developments in the field.
- Linking Publication to Promotions: Making international publication a key criterion for promotions to Associate Professor and Professor positions, motivating faculty members to engage with the global scholarly community.

(b) Standardizing Terminology and Translation:

- Establishing Specialized Committees: Creating joint committees comprised of educational psychology experts and Arabic language specialists to establish accurate and consistent Arabic translations of key terms.
- **Publishing Periodic Terminology Lists:** Regularly publishing lists of standardized Arabic terminology online for easy access and ongoing updates.
- **Reviewing Terminology in Research:** Ensuring that all research and dissertations adhere to the standardized terminology by rigorously reviewing the language used and confirming its consistency with the approved lists.
- **Updating Specialized Dictionaries:** The Egyptian Society for Psychological Studies should periodically update dictionaries relevant to educational psychology and general psychology to reflect current scientific and linguistic developments.

This approach aims to create a unified and consistent terminology in Arabic, enhancing communication and collaboration among researchers and practitioners in the field.

(c) Developing a National Research Map:

• **Collaborative Research Planning:** Establishing a national research map for educational psychology, updated annually with input from experts across various universities. This map

should prioritize key research topics and areas aligned with national development goals and societal needs.

- **Developing Specific Research Topics:** Forming committees of educational psychology experts to define specific research topics for postgraduate theses and research projects, ensuring that research focuses on addressing local needs in each region.
- Encouraging Collaborative Research: Promoting research collaborations within the field and across disciplines, breaking down silos and fostering a more interconnected research community across Egyptian universities.
- **Building a National Research Database:** Establishing a comprehensive database of research proposals and findings in educational psychology to guide future research efforts and ensure a more strategic approach to research planning.

(d) Securing Funding for Research:

- Promoting University-Funding Agency Collaboration: Strengthening collaborations between universities and funding agencies, such as the Science and Technology Development Fund and the Academy of Scientific Research and Technology, to secure funding for educational psychology research.
- Encouraging Private Sector Support: Promoting private sector investment in publishing research in prestigious international journals to enhance the visibility and impact of Egyptian research.
- **Developing Marketable Research Outputs:** Collaborating with companies, educational institutions, and community organizations to translate research findings into practical products and services that can be marketed and disseminated.
- Establishing Dedicated Research Support Centers: Creating specialized centers within educational psychology departments to provide financial support for researchers, facilitating research activities and fostering innovation.
- Encouraging Private Sector Partnerships: Fostering partnerships between academic and private sectors to increase private sector investment in research, promoting collaboration and serving national development objectives.
- Engaging with International Researchers: Facilitating joint research projects with universities around the world to enhance knowledge exchange and broaden research perspectives.
- **Organizing Informative Workshops:** Conducting regular workshops for researchers, faculty members, and graduate students to educate them about funding opportunities and enhance their research capabilities.

(e) Developing Researchers' Skills:

- **Providing English Language Training:** Offering specialized English language courses for researchers to enhance their ability to utilize global search engines and access international literature.
- **Developing a Framework for Research Competencies:** Creating a framework for research competencies, akin to the DigCompEdu framework for teachers, to ensure the development of digital skills essential for conducting effective research.
- **Designing Comprehensive Training Programs:** Developing comprehensive training programs for teaching assistants, particularly recent hires, to enhance their digital competencies and make this a requirement for promotion.

(f) Enhancing Teacher Training Curricula:

- **Redefining Curricula:** Revamping existing curricula to be flexible, aligned with the needs of a knowledge-based economy and the job market, and emphasizing the development of higher-order thinking skills. This could include introducing courses like "Creative Thinking" and "Psychology of Giftedness" to cater to diverse learning needs.
- Introducing Applied Courses: Adding practical courses for undergraduate students to learn and apply basic psychometric tools and interpret results, empowering them to individualize instruction and design effective intervention programs for students with diverse learning needs.
- **Developing Modern Training Courses:** Designing modern teacher training programs that prioritize the development of a holistic personality (cognitive, affective, behavioral, social, and professional) and encourage self-understanding and self-improvement through courses like "Critical Thinking."
- **Creating Stimulating Learning Environments:** Developing rich learning environments within and outside the classroom to foster talent development and encourage student participation in innovative projects that apply specialized skills.
- **Modernizing Psychology Labs:** Developing and updating psychology laboratories in universities with the latest technologies and tools.
- Strengthening International Collaboration: Creating a system for innovation that fosters collaborations with regional and international research centers through Egyptian educational psychology departments.
- **Standardizing Educational Content:** Establishing standardized criteria or descriptions for educational content and courses in educational psychology across all Egyptian universities, with continuous evaluation and revision based on global advancements.

Enhancing Community Service:

(a) Developing University Counseling Centers:

- **Providing Psychometric Tools:** Equipping university counseling centers with psychometric tools and resources necessary to provide quality counseling services.
- **Developing Counseling Programs:** Creating a comprehensive program for university students that offers in-person and online counseling services.
- **Developing Training Programs:** Developing training programs based on the specific academic, psychological, and social needs of university students.
- Establishing Management Boards: Creating management boards for counseling centers that include faculty members from the department to leverage their expertise and experience.

(b) Building Partnerships and Collaborative Protocols:

- **Promoting Community Engagement:** Establishing protocols and partnerships between educational psychology departments and diverse community organizations.
- Leveraging E-Counseling and Raising Awareness: Developing e-counseling programs and disseminating them through official channels to increase awareness and accessibility to mental health support.
- **Categorizing E-Counseling Services:** Offering a range of e-counseling services, including informational websites, support groups, educational materials, self-assessment tools, programs for life skill development, and group counseling under expert supervision.
- Marketing Programs and Tools: Promoting training programs, counseling services, and psychometric tools developed through postgraduate theses, dissertations, and research projects.
- Sharing Resources with Educational Institutions: Providing these resources to educational and community organizations for utilization.
- Offering Training Programs: Organizing training courses for target audiences conducted by the developers of these tools.
- (c) Collaborating with Professional Organizations:
 - **Collaborative Development:** Collaborating with relevant professional organizations to exchange expertise, provide training opportunities, and organize joint scientific conferences.
 - **Building Local Partnerships:** Developing partnerships with local organizations, such as the European Digital Competence Framework for Teachers (DigCompEdu), to facilitate collaboration, knowledge exchange, and research development.

- **Establishing Objective Criteria:** Establishing objective criteria for selecting university staff and teaching assistants that go beyond academic performance.
- Enhancing Researcher Skills: Providing regular, mandatory training programs for researchers to develop their skills in utilizing technology as a data source, employing software for research tools, and conducting statistical analysis of research findings.

(d) Leveraging Artificial Intelligence (AI) in Educational Psychology:

- AI as a Tool for Development and Innovation: Recognizing the potential of AI as a vital tool for early detection, diagnosis, and treatment of learning difficulties and educational delays.
- AI in Smartphones and Social Media: Leveraging AI-powered smartphone apps and social media platforms to provide immediate services, improving access to psychological and educational support.
- **AI-Enhanced Diagnosis and Treatment:** Exploring the potential of AI to enhance diagnosis and treatment, potentially reducing the stigma associated with mental health challenges by offering a safe and unbiased environment.
- AI Applications in Educational Psychology: Exploring diverse AI applications, including software, hardware, and hybrid technologies (e.g., artificial neural networks, evolutionary computing, expert systems).
- **Integrating AI in the Field:** Adopting a comprehensive vision for developing educational psychology that incorporates AI into all aspects of the discipline.
- **Developing Digital Competencies:** Enhancing the digital skills of faculty members, promoting AI-driven research for developing innovative tools and techniques, and designing intelligent and personalized learning environments.

(e) Harnessing Cyberpsychology in Education:

- University Education: Developing innovative teaching techniques, analyzing student data, enhancing online communication, and implementing smart learning technologies.
- Educational Psychology: Designing digital learning platforms, promoting e-interactions, applying smart learning technologies, and providing diverse educational resources.

(f) Addressing the Digital Divide and Digital Poverty:

- **Reducing Access Disparities:** Minimizing disparities in access to technology and enhancing digital skills for all members of society.
- **Promoting Soft Technology Transfer:** Utilizing online learning platforms, educational applications, social media platforms, and human-computer interaction techniques.

(g) Leveraging Genomics in Educational Psychology:

- Understanding Individual Differences: Using genomic analysis to understand individual differences, personalize education, study environmental effects, and design innovative programs.
- **Improving Research:** Integrating genomic analysis into research, designing longitudinal studies, evaluating intervention responses, and exploring new research methods.
- **Developing University Education:** Incorporating genomic analysis into educational programs, integrating genomic and educational data, developing genetic intervention techniques, and training faculty members in genomic science.
- (h) Affirming Digital Identity and Self:
 - **Defining Online Identity:** Facilitating the definition and differentiation of individuals online, emphasizing the identity and persona they cultivate through digital media.
- (i) Implementing Holographic Technology:
 - **3D Visualization and Augmented Reality:** Utilizing holographic technology to present 3D models, provide augmented reality experiences, deliver interactive lessons, offer radar presentations, and promote experiential learning.
- (j) Leveraging Active Learning and Augmented Reality:
 - **Creating Stimulating Learning Environments:** Constructing engaging learning environments using active learning techniques and augmented reality technologies.
 - Enhancing Collaborative Learning: Promoting collaborative learning approaches and providing immediate feedback through digital platforms.
- (k) Building Comprehensive Databases:
 - **Data Collection and Analysis:** Creating robust and integrated databases to gather reliable global diagnostic data to fuel AI development.
- (l) Utilizing Technology for Mental Health:
 - **Reaching a Wider Audience:** Harnessing the potential of smartphones, digital platforms, and social media to identify mental health and educational challenges among diverse student populations.
 - **Promoting Awareness and Education:** Using AI technologies to educate students about mental health and provide access to direct services in an optimal manner.

(m) Establishing Integrated Research Centers:

• **Interdisciplinary Collaboration:** Creating integrated research centers within universities that bring together expertise in educational psychology, technology, and AI.

- Early Detection, Diagnosis, and Treatment: Utilizing these technologies to pilot programs for early detection, diagnosis, and treatment of mental health and learning challenges, particularly among youth.
- **Developing Professional Competencies:** Developing the professional skills of educational psychology professionals in managing the use of digital interventions in their field.

(n) Enhancing the Quality of University Education:

• **Developing Digital Competencies for Faculty:** Providing training programs for faculty members to develop their digital competencies, equipping them with the skills and knowledge to navigate the evolving digital landscape.

Implementing the Suggested Vision:

To realize this ambitious vision, several crucial steps are necessary:

- 1. **Building a Collective Vision:** Developing a strong conviction among faculty members about the importance of keeping up with cutting-edge research trends. Faculty should recognize that research is not just an academic pursuit but a vital tool for societal development and problem-solving.
- 2. **Establishing Centers of Excellence:** Creating centers of excellence for educational psychology research within universities, fostering collaboration with regional and international institutions to facilitate knowledge sharing and advancements.
- 3. **Developing National Research Roadmaps:** Creating shared research roadmaps that outline priorities for educational psychology research across universities. These roadmaps should guide research efforts towards areas of greatest need and ensure the most effective use of available resources.
- 4. **Promoting Collaborative Research:** Encouraging the use of research teams (collaborative research), providing the necessary support for offering psychological counseling services to educational and learning institutions. This collaboration will strengthen the relationship between universities and communities, ensuring that research findings translate into tangible benefits.
- 5. **Facilitating Knowledge Exchange:** Promoting knowledge exchange and facilitating academic visits between educational psychology departments in Egypt and leading universities worldwide. This should also include opportunities for collaboration and communication with educational researchers at international institutions.
- 6. **Developing National Research Guidelines:** Establishing a national research roadmap for educational psychology that all departments adhere to while allowing some flexibility for

individual departments to adapt the roadmap to their specific needs. This balance between adherence and flexibility will ensure that research efforts are aligned and integrated.

Conclusion

The SWOT analysis reveals both strengths and weaknesses within the current landscape of educational psychology in Egypt. However, the potential opportunities, coupled with a proactive approach to mitigating threats, provide a compelling case for optimism. By embracing the proposed vision and implementing the outlined strategies, educational psychology in Egypt can not only overcome its internal challenges but also capitalize on emerging opportunities, especially those presented by advancements in technology.

This proactive approach will empower researchers, educators, and practitioners to achieve impactful advancements in research, education, and community service, ultimately positioning educational psychology as a vital force for societal progress. By actively addressing the issues of limited resources, research skills gaps, and public awareness, while leveraging the benefits of AI and interdisciplinary collaborations, the field can contribute significantly to building a more equitable and prosperous future for Egypt.

Discussion

The SWOT analysis reveals a complex interplay of strengths, weaknesses, opportunities, and threats facing educational psychology in Egypt. However, it also provides a roadmap for navigating these challenges and achieving a transformative vision for the field. The following key areas require focused attention:

1. Modernizing Education and Teaching Methods:

Curriculum Updates: A critical first step is to modernize the educational psychology curriculum, incorporating contemporary developments, incorporating new research findings, and aligning with international standards. This process requires a collaborative effort from faculty members, curriculum developers, and experts in the field.

Introducing New Courses: The rise of AI, environmental psychology, and entrepreneurship psychology necessitates the introduction of new courses that equip students with the knowledge and skills necessary to navigate these evolving areas.

Innovative Pedagogical Approaches: To foster active learning and critical thinking, educational psychology departments should adopt innovative pedagogical approaches, such as project-based learning, problem-based learning, and experiential learning.

Technology Integration: Embracing technology in teaching is vital, including the use of interactive learning platforms, virtual reality simulations, and intelligent tutoring systems.

2. Enhancing Research:

Strengthening Infrastructure: Investing in research infrastructure, including laboratories, specialized software, and data analysis tools, is essential for conducting high-quality research.

Securing Funding: Securing more funding for research projects, through government agencies, private foundations, and international grants, is critical for supporting research initiatives.

Interdisciplinary Research: Promoting interdisciplinary research collaborations, bringing together educational psychologists with researchers from other fields, can lead to richer insights and more impactful findings.

International Collaboration: Fostering international collaborations, including joint research projects, conferences, and publications, can enhance the visibility and impact of Egyptian research in educational psychology.

Applied Research: Prioritizing applied research that directly addresses societal challenges in education, such as learning difficulties, student motivation, and teacher training, can demonstrate the practical value of educational psychology.

Conference Implementation: The findings of conferences should be actively implemented, encouraging researchers to translate research into practical recommendations and informing curriculum development.

Using AI for Research: Utilizing AI tools for data analysis, research design, and literature review can significantly enhance the efficiency and effectiveness of research in educational psychology.

3. Promoting Community Engagement:

Mental Health Services: Educational psychology departments should actively provide mental health services to students, educators, and the broader community, addressing issues such as stress, anxiety, and learning difficulties.

Leveraging Online Platforms: Online platforms, such as websites, social media pages, and chatbots, can be used for consultations, providing accessible and timely support for community members.

Community Outreach Programs: Developing outreach programs to educate the public about educational psychology, its importance, and its potential benefits, can raise awareness and build trust.

Technology-Driven Community Services: Technology can play a vital role in expanding the reach and effectiveness of community engagement programs, facilitating online workshops, webinars, and personalized support services.

4. Enhancing International Standing:

International Research and Conference Participation: Encouraging faculty and students to actively participate in international research projects and conferences can enhance the field's visibility and attract international collaborations.

Partnerships with International Institutions: Developing partnerships with leading educational psychology departments and research organizations internationally can facilitate knowledge exchange, joint research projects, and training opportunities.

Scholarship Opportunities: Securing scholarships for graduate students to pursue advanced studies in educational psychology at internationally renowned universities can improve the quality of research and teaching in Egypt.

Promoting International Publication: Encouraging researchers to publish their findings in high-impact international journals can increase the field's visibility and reach, contributing to the dissemination of Egyptian research.

International Collaboration Platforms: Utilizing online platforms and professional networks to connect with international researchers and organizations can enhance communication and foster collaborations.

5. Developing Academic Departments:

Establishing Standards: Developing and implementing clear standards for graduating educational psychologists, ensuring that students acquire the necessary knowledge, skills, and competencies, is crucial.

Technology in Teaching: Integrating technology into teaching practices is essential, leveraging online resources, multimedia content, and digital tools for creating engaging and interactive learning experiences.

Supporting Excellent Research: Developing a culture of research excellence within departments, providing incentives for research activity, and facilitating access to resources can encourage faculty and students to conduct high-quality research.

Creating New Programs: Developing new programs that are responsive to the changing needs of the labor market and the evolving landscape of educational psychology, such as programs focusing on educational technology, entrepreneurship, or environmental psychology, can enhance the field's relevance.

Implications for Pedagogy:

The implementation of this vision necessitates a shift in pedagogical practices within educational psychology departments. Key implications for pedagogy include:

Active Learning: Promoting active learning techniques that encourage student engagement, critical thinking, and problem-solving, rather than passive lecture-based methods.

Technology Integration: Integrating technology into every aspect of teaching, including the use of interactive learning platforms, simulations, and digital assessment tools, to enhance the learning experience.

Interdisciplinary Collaboration: Encouraging collaboration between educational psychology students and faculty with students and faculty from other disciplines to create opportunities for interdisciplinary projects and research.

Community-Based Learning: Engaging students in projects that directly address community needs, such as developing educational resources for disadvantaged communities or conducting research on local educational challenges.

Conclusion

This paper has presented a compelling vision for revitalizing educational psychology in Egyptian universities, driven by a thorough SWOT analysis and a comprehensive roadmap for development. The proposed vision is grounded in extant research highlighting the critical role of educational psychology in fostering positive educational change (e.g., Amareh, 2024; Al-Feel, 2024). This vision emphasizes a commitment to excellence in research, teaching, and community engagement, aligning with the growing recognition of the importance of these areas in achieving impactful educational outcomes (e.g., Al-Zu'bi & Al-Zu'bi, 2019; Mohamed, 2021). The ultimate goal is to establish educational psychology as a leading force for positive change in Egypt, contributing to the improvement of education and the betterment of society.

The realization of this vision necessitates a collaborative effort, engaging not only faculty and students, but also researchers, funding agencies, and the broader community. This collaborative approach is crucial for achieving the desired transformation, echoing the success of similar initiatives in other contexts (e.g., Nassar, 2021). By working together, educational psychology in Egypt can achieve its full potential, contributing significantly to the improvement of education and the betterment of society, as evidenced by the positive impacts of similar efforts in other countries (e.g., UNESCO, 2021; The Council of Ministers, 2023).

It is essential to recognize that this vision is not merely an aspirational goal; it is a call to action. The roadmap presented in this paper provides a practical framework for stakeholders to engage in meaningful dialogue, implement strategic initiatives, and measure progress towards a more vibrant and impactful field of educational psychology in Egypt, guided by established principles of effective program implementation and evaluation (e.g., Al-Zu'bi & Al-Zu'bi, 2019). The future of education in Egypt, and the well-being of its citizens, depends on the collective commitment to realizing this vision, drawing inspiration from the success of similar transformative initiatives in other nations (e.g., Nassar, 2021; UNESCO, 2021).

In conclusion, revitalizing educational psychology in Egyptian universities is not only a matter of academic pursuit but a vital step toward a brighter future for Egypt's educational landscape and its citizens. By actively embracing the proposed vision, stakeholders can work collaboratively to transform the field, leveraging existing resources and adapting successful strategies from other nations. The roadmap presented offers a tangible framework for action, ensuring a measured and impactful journey toward a more vibrant and impactful field of educational psychology in Egypt and by extension to Arab universities. The future of Egypt's educational system and the well-being of its people hinge on this collective commitment to realizing a shared vision for a dynamic and impactful field of educational psychology.

References

- Al-Feel, H. (2024). A Proposed Vision for Developing Educational Psychology in Light of the Sustainable Development Strategy "Vision of Egypt 2030". *Research in Special Education and Inclusive Education*, 2(4), 12-28.
- Al-Zu'bi, S., & Al-Zu'bi, S. (2019). Evaluation of the Quality of Some Research in Educational and Psychological Sciences. *Journal of the Arab Universities Union for Research in Higher Education*, 39(3).
- Amareh, I. (2024). A Proposed Vision for Developing Educational Psychology in Egyptian Universities. *The Comprehensive Educational Journal*, 2(3), 15-30.
- European Commission. (2006). Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. *Official Journal of the European Union*, (394), 10-18.
- European Commission. (2018). Proposal for a Council recommendation on key competences for lifelong learning. Retrieved from <u>https://eur-lex.europa.eu/legal-</u> content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=LT
- Ferrari, A. (2013). Digcomp: A framework for developing and understanding digital competence in Europe. JRC Scientific and Technical Reports. Retrieved from /repository/bitstream/JRC83167/lb-na-26035-enn.pdf.
- Franzoi, I. G., Sauta, M. D., Carnevale, G., & Granieri, A. (2022). Student Counseling Centers in Europe: A Retrospective Analysis. *Frontiers in Psychology*, 13, 894423. <u>https://doi.org/10.3389/fpsyg.2022.894423</u>
- Iansiti, M., & Richards, G. (2020). Coronavirus is widening the corporate digital divide. *Harvard Business Review*. Retrieved from <u>https://hbr.org/2020/03/coronavirus-iswidening-the-corporate-digital-divide</u>.
- INTEF. (2017). Marco común de Competencia digital docente. Retrieved from <u>https://aprende.intef.es/sites/default/files/2018-05/2017_10_20_Marco-Com%C3%BAn-de-Competencia-Digital-Docente.pdf</u>.
- Law, N., Woo, D., de la Torre, J., & Wong, G. (2018). A global framework of reference on digital literacy skills for indicator 4.4. 2. UNESCO Institute for Statistics. Retrieved from <u>http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-referencedigitalliteracy-skills-2018-en.pdf</u>.
- Mohamed, M. (2021). A Proposed Future Vision for Developing the Field of Measurement, Evaluation, and Psychological and Educational Statistics. *Journal of the Faculty of Education, Al-Arish University*, 9(28), 11-32.

- Nassar, N. (2021). Scenarios for Foresight of the Future of Professional Development for Faculty Members in Arab Universities in Light of the Requirements of the Fourth Industrial Revolution. *Journal of the Islamic University for Educational and Psychological Studies*, 29(6), 100-120.
- Ozamiz, N., Santamaría, M., Gorrochategui, M., & Mondragón, N. (2020). Stress, anxiety, and depression levels in the initial stage of the COVID-19 outbreak in a population sample in northern Spain. *The Reports of Public Health*, 36(4), 1-9.
- Reaves, J. (2019). 21st-century skills and the fourth industrial revolution: A critical future role for online education. *International Journal on Innovations in Online Education*, 3(1), 1-12.
- Ryan, G., & Eaton, J. (2020). *Mental health for sustainable development: A topic guide for development professionals*. UK.
- Saha, K., Yousuf, A., Boyd, R. L., Pennebaker, R., & Choudhury, M. (2022). Social media discussions predict mental health consultations on college campuses. *Scientific Reports*, 12(1), 123. <u>https://doi.org/10.1038/s41598-021-03423-4</u>
- Santors, C., Pedro, N., & Mattar, J. (2022). Digital Competence of Higher Education Professors in the European Context: A Scoping Review Study. *International Journal of Educational Technology*, 17(18), 222-242.
- Schleicher, A. (2020). *The impact of COVID-19 on education: Insights from Education at a Glance 2020*. Retrieved from <u>https://www.oecd.org/education/the-impact-of-covid-19on-education-insights-education-at-a-glance-2020.pdf</u>
- Sharma, T., & Parihar, J. (2021). Intelligent chatbot for prediction and management of stress. International Conference on Cloud Computing, Data Science & Engineering (Confluence) Proceedings. <u>https://doi.org/10.1109/Confluence51648.2021.9377091</u>
- Sheikh, S., & Shaban, K. (2020). Finding behavioural and imaging biomarkers of major depressive disorder (MDD) using artificial intelligence: A review. 2020 IEEE International Conference on Informatics, IoT, and Enabling Technologies (ICIoT) Proceedings, Doha, Qatar.
- Shukla, D., Sharma, K., & Gupta, S. (2020). Identifying depression in a person using speech signals by extracting energy and statistical features. 2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science Proceedings, 1-7.
- The Council of Ministers. (2023). Higher Education: Continuing Progress of Egyptian Universities and Research Centers in International Rankings of Universities and International Research Centers. Retrieved February 1, 2024, from <u>https://www.cabinet.gov.eg/News/Details/74575</u>

- UNESCO. (2017a). The global alliance to monitor learning (GAML): Governance and organization. Retrieved from <u>http://gaml.uis.unesco.org/wp-</u>content/uploads/sites/2/2018/10/gaml-governance-organization-2017-en.pdf.
- UNESCO. (2017b). Global alliance to monitor learning (GAML): Concept paper. Retrieved from http://gaml.uis.unesco.org/wp-content/uploads/sites/2/2018/10/gaml-concept_paper-2017-en2_0.pdf.
- UNESCO. (2021). Artificial intelligence and education: Guidelines for policy-makers. UNESCO.
- Valle-Cruz, D. (2019). Public value of e-government services through emerging technologies. *International Journal of Public Sector Management*, 32(2), 533.
- Vescovelli, F., Melani, P., Ruini, C., Ricci Bitti, P. E., & Monti, F. (2017). University counseling service for improving students' Mental Health. *Psychological Services*, 14(4), 470-480. <u>https://doi.org/10.1037/ser0000166</u>
- Zhang, Q., & Zhang, Y. (2021). The impact of climate change on mental health: A systematic review and meta-analysis. *Environmental Research Letters*, 16(10), 104-119. <u>https://doi.org/10.3389/fpsyt.2020.00074</u>