

Researched analysis and critical exposition related to the application of the PRME policy in the UAE Higher Education sector

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Abstract

The PRME policy introduced by the United Nations (UN) in 2007 significantly enhanced practice-based learning environments for business courses across the globe. Institutions faced integration delays of Principles for Responsible Management Education (PRME) because of existing cultural and geographic differences. Students risk missing essential educational opportunities that would build their future leadership skills. Leadership skills development among students enhances their employment opportunities since it boosts their prospects of securing jobs and running successful businesses.

The United Arab Emirates (UAE) made substantial progress in infrastructure and education since its establishment over 70 years ago. However, the difference between UAE educational institutions and Western institutions is not clear when it comes to implementing PRME. Therefore, this study aims to provide a critical examination and analysis of how PRME is integrated into the UAE education system. The research began by evaluating multiple concepts to determine a suitable framework for assessing the implementation of the PRME strategy within UAE educational institutions. The WPR approach offers an analysis of PRME within the UAE educational framework which includes the examination of societal structures linked to relevant stakeholders. The WPR (What is the Problem Represented to be?) theory emerged as an appropriate choice for inclusion in this study.

The results of the WPR research point to two issues with the integration of PRME in UAE education: The PRME curriculum suffers from insufficient practice-based teaching methods and fails to establish connections between PRME policies and the United Nations Sustainable Development Goals (SDGs). The research provides vital insights yet calls for subsequent studies to build on these findings through primary investigations in locations beyond the UAE.

Keywords: UAE; PRME; United Nations; Higher Education; SDGs.

1. Introduction

This study defines policy analysis as the systematic application of formal reasoning to create recommendations that address challenges within government and non-profit organizations. This policy analysis definition has been selected because it applies across multiple industries and disciplines (Ellwood and Smolensky, 2015). The UN's creation of the PRME policy which impacts multiple cultures and countries globally through economic development job creation and environmental sustainability demonstrates the essential function of policy analysis in ensuring regional population benefits and welfare. The UN established the PRME in 2007 to increase student understanding of sustainability in business and management education (PRME, 2024). Table 1 provides a list of the seven guiding concepts of the PRME policy.

Table 1, The PRME Principles
Source. PRME, 2024

Principle	Explanation
Purpose	To advance responsible management education to foster inclusive prosperity in a world consisting of thriving ecosystems.
Values	An emphasis to placed on organisational-based responsibility and accountability to society and the environment.
Teach	A focus on transforming learning environments by integrating responsible management-based concepts and practices into related curriculum and pedagogy.
Research	A focus related to studying people, businesses, and the state of the world to inspire responsible management and education-based practice.
Partner	To engage people from academia, business, and government to support advances in responsible and accountable management-based education practices.
Practice	An aim is to implement responsible as well as accountable management principles by individuals as part of their related governance and operations.
Share	An aspiration to share successes and failures to enable collective learning and to better enhance living and experiencing a group’s common values and purpose.

Through its effective cooperation with the UN along with business and management education institutions globally the PRME policy has gained widespread interest since it remains a voluntary initiative. The PRME policy serves as a vital tool for enhancing graduate employability worldwide while preparing students for future leadership roles (PRME, 2024). Academic partnerships with PRME officials shape curricula that create practice-based learning opportunities for students. The PRME initiative strives to influence management education while building a future workforce of responsible decision-makers committed to sustainability-based development (PRME, 2024).

The PRME Secretariat works in partnership with the UN to encourage management schools and companies to work together towards shared goals while generating collective results (PRME, 2024). Schools, colleges, and universities work alongside UN PRME officials to establish course learning goals aligned with PRME policy elements to integrate PRME principles into educational resources for business management students at every academic level. Academic institutions form partnerships with UN PRME representatives to develop faculty training initiatives which prepare educators to grasp PRME policy application in classroom settings through lecture materials that integrate PRME standards including online courses and physical training sessions (PRME, 2024; United Nations, 2024). Through the PRME strategy, students studying business can become future leaders knowledgeable about the UN Sustainable Development Goals (SDGs) (United Nations, 2024). Since 2007 PRME has become part of university curricula in Western nations (PRME, 2024).

From the authors’ perspective, Human Capital theory provides the foundational basis for PRME policy objectives. The path to societal contribution and personal growth requires citizens to continuously develop their knowledge base and skills while maintaining their health throughout their lifetime. The PRME policy aims to improve student education on global societal matters to empower them to make significant impacts on future generations by boosting their employability and leadership skills (PRME, 2024). Through its initiatives, the PRME transforms current students into future leaders while highlighting the policy's extensive effects, especially in emerging educational centres like the UAE (PRME, 2024).

The American University of Cairo held a regional forum event in November 2011 which introduced the PRME policy to the MENA region (PRME, 2024). The University of Dubai organized the UAE's first PRME forum event in November 2013 (PRME, 2024). Zayed University in the UAE hosted a PRME event during the year 2018. A PRME forum event took place at De Montfort University in the UAE in 2019 according to PRME (2024). The University of Dubai along with De Montfort University Dubai hosted multiple PRME events while PRME's influence extended into the UAE government's Future Roadmap Policy 2036 which prompted the PRME Regional Forum to rebrand as the PRME Middle East Forum.

The PRME policy has become an integral part of UAE educational institutions since 2011, especially at the higher education level which is demonstrated by the comprehensive overview of its historical presence and policy awareness in the nation. This study aims to provide a comprehensive critical examination and research investigation of how the PRME strategy is executed within the UAE higher education system. The research will examine the challenges faced by universities in the UAE when they try to integrate PRME policy-related subjects into their business management programs. The research will assess how effectively PRME policy makes business courses in UAE higher education institutions aware of global challenges by examining factors like culture, geography, language, and learner level.

2. Methodology

The research team employed a systematic literature review (SLR) to identify important studies examining PRME policy functions in the UAE higher education sector. An SLR constitutes a scholarly review of the evidence for a particular issue by applying critical procedures to search for, define and evaluate relevant research. The SLR ensured methodological integrity and evaluation through the incorporation of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Table 2 outlines the various inclusion and exclusion criteria used throughout each PRISMA stage.

Table 2. Exclusion and Inclusion Criteria for Articles in the PRISMA Process

PRISMA Stage	Exclusion-Inclusion Criteria
Identification	53 out of 110 articles were excluded based on them being after the year 2007.
Screening	Review – 31 out of 53 articles’ abstracts did not match the focus of this study.
	Retrieval – the full version of 26 out of 31 articles could not be accessed which may have been attributed to subscription or technical-related challenges.
	Eligibility – Out of the 26 articles, 6 studies were taken out as they did not directly focus on the PRME policy in a UAE context which was the 1 st reason and 5 were removed due to them not focusing education sector which was the 2 nd reason.
Included	15 articles were then reviewed and analysed as per the elements of the selected theories.

The UN established the PRME policy in 2007 which served as a rationale for the selection of articles in Table 2 (PRME, 2024). Carol Bacchi's What is portrayed as the issue? (WPR) approach was applied during the analysis of the 15 publications. The analysis of 15 publications in this study utilized the WPR method. The analysis followed the procedure outlined in Table 3.

Table 3. The Layers of the WPR
Source. Bacchi and Goodwin (2016)

Questions/Steps	Explanation
Question 1	Identify the central issue (e.g., "gender inequality", "drug abuse", "economic development", "global warming", "childhood obesity", "irregular migration" and others) that particular policy or policies address. How does the policy or policies portray a particular issue?
Question 2	What fundamental pre-suppositions or assumptions form the basis of this "problem" representation (problem representation)?
Question 3	What led to this particular understanding of the "problem"?
Question 4	Which elements of this problem representation remain uncontested? Where are the silences? Can the "problem" be conceptualized differently?
Question 5	How does this representation of the "problem" generate discursive outcomes and influence both subjectification and lived experiences?
Question 6	Question 6 - Through which processes and channels has this issue representation been created and then spread and sustained? What is the current status of this representation and how can it be interrupted and substituted?
Step 7	Apply these questions to your area of problem exploration.

The post-structural policy analysis technique WPR (What's the Problem Represented to be?) was created by Carol Bacchi alongside Susan Goodwin. Method (Bacchi and Goodwin, 2016). This approach challenges policymakers to critically analyze the problem representations showcased in Table 3 according to Bacchi and Goodwin (2016b) rather than accepting them at face value. The research team selected the WPR approach because its components listed in Table 3 provided them with a comprehensive and critical perspective on PRME implementations in UAE higher education (Bacchi and Goodwin, 2016b). The WPR method received attention since it offers critical insight into problem creation and representation which helps expose the political aspects of adopting PRME within the UAE higher education system (Bacchi and Goodwin, 2016). The WPR technique offers a six-question framework (see Table 3) that facilitates policy analysis through a sequential process while providing a transparent and solid analytical foundation (Bacchi and Goodwin, 2016).

The WPR technique offers analytical flexibility by functioning as a dynamic framework that merges multiple disciplinary and theoretical perspectives which supports this study's analysis. The analytic method shatters remaining silent areas while reinforcing established categories and assumptions through its focus on marginalized groups and perspectives (Bacchi and Goodwin, 2016). The WPR method analyzes the PRME policy in UAE higher education through a structured and complex critical approach that goes beyond policymakers' perspectives and general effectiveness questions. This method serves to identify how a specific policy generates problems (Bacchi and Goodwin, 2016). The WPR analysis results offer perspectives that help improve PRME education delivery effectiveness in UAE higher education regarding necessary policy research knowledge and skills for national and international PRME policy contexts. The study delivers useful conclusions related to the paper's main topic but the author recognizes the potential for future primary research to extend this work which current constraints did not permit.

3. Analysis and Discussion

Table 4 presents the results of the WPR analysis of the 15 reviewed papers (identified using the SLR and PRISMA methods in Table 2).

Table 4. The WPR analysis of the PRME policy

Questions	Findings
Question 1 - Identify the central issue (e.g., "gender inequality", "drug abuse", "economic development", "global warming", "childhood obesity", "irregular migration" and others) that particular policy or policies address. How does the policy or policies portray a particular issue?	The PRME policy aims to educate citizens about poverty and inequality challenges along with supporting innovation and environment-friendly practices while fostering economic growth which aligns with the UN's 17 Sustainable Development Goals (United Nations, 2024).

Question 2 - What fundamental presuppositions or assumptions form the basis of this “problem” representation (problem representation)?	From the PRME perspective, the problem's presupposition assumes that the growing global individualistic society leads to minimal citizen awareness regarding challenges that could affect the broader population.
Question 3 - What led to this particular understanding of the "problem"?	The United Nations recognized this problem through primary and secondary research by implementing the PRME policy in 2007 (PRME, 2023) and establishing 17 Sustainable Development Goals in 2012 (United Nations, 2024).
Question 4 - Which elements of this problem representation remain uncontested? Where are the silences? Can the “problem” be conceptualized differently?	The PRME policy operates under the premise that all geographic contexts share identical cultural features despite earlier research demonstrating cultural diversity between Western and Eastern societies.
Question 5 - How does this representation of the “problem” generate discursive outcomes and influence both subjectification and lived experiences?	The policy follows seven basic principles which display restricted attention towards different contexts including location, industry and cultural diversity along with situational elements. The PRME policy creators believed their approach would uniformly apply across different populations but this is inappropriate because populations globally exhibit diverse characteristics such as language and cultural differences.
Question 6 - Through which processes and channels has this issue representation been created and then spread and sustained? What is the current status of this representation and how can it be interrupted and substituted?	In 2007 at a global event in Brazil, the UN and the Association to Advanced Collegiate Schools of Business (AACSB) partnered with universities to present the problem of citizen unawareness about major challenges while introducing the PRME policy as a solution to this problem. Universities worldwide adopted the PRME policy which required faculty members to work alongside the UN to incorporate PRME content into their educational programs. The implementation of PRME within university classrooms progressed at a delayed pace in regions like MENA and South Asia when compared to Western countries. The widespread belief exists that university adoption of this policy will produce future leaders who demonstrate stronger leadership qualities and possess enhanced comprehension of global challenges (PRME, 2024).

Table 4 demonstrates that PRME Question 1's response highlighted the policy's statement about global citizens lacking knowledge of global issues they have not personally experienced (PRME, 2024). According to the WPR analysis of Question 1 response, the PRME policy was created to improve resident education about poverty and inequality along with innovation and environmentally friendly practices that support economic growth (PRME, 2024). The UN's 17 Sustainable Development Goals (SDGs) matched the issues which PRME aimed to solve (PRME, 2024; United Nations, 2024). The WPR analysis of PRME Question 2 reveals a PRME assumption which suggests that growing individualism in Western societies as per Hofstede (2011) leads to citizens being less attentive to collective issues since those issues do not personally affect them.

The UN cross-country empirical research presented in Table 4 which addresses Question 3 of the WPR analysis for PRME policy demonstrates how global citizens fail to understand global problems unless they experience them personally. In 2007 the UN addressed this matter by introducing the PRME policy (PRME, 2024). The establishment of the 17 Sustainable Development Goals (SDGs) in 2012 provided substantial guidance for how the issue was presented (United Nations, 2024). According to the WPR analysis results displayed in Table 4 for Question 4, there is a lack of recognition that PRME-related problems may vary based on different cultural contexts as well as geographic locations and business sector environments. The author suggests that recognizing the possibility of unique challenges specific to different cultures or regions in the PRME policy could lead to a new conceptualization of the problem.

The answer to Question 5 in Table 4 reveals that the PRME policy limits itself to seven principles. Previous statements highlight that different settings including geography and sector receive minimal attention along with cultural aspects and situational conditions. The PRME policy's creators operated under the assumption that their policy would universally apply across all populations without adaptation which the author finds inappropriate because, through the WPR analysis, global populations display substantial differences in language, cultural practices, and religious beliefs.

The results for Question 6 mentioned the UN, and a consortium of institutions presenting at a global event in Brazil in 2007 which discussed public unawareness concerning broader societal issues. The same global event witnessed the introduction of the PRME policy as a solution to the identified problem. The PRME policy is now widely embraced by universities around the globe because it includes a collaborative effort between professors and the UN to incorporate PRME material into educational resources. The implementation of the PRME in classroom settings has progressed at different rates across various locations. The adoption timeline for PRME in university classes across MENA and South Asia regions shows a delay compared to Western

countries. Acceptance and implementation of this policy by universities will produce leaders with stronger traits and deeper global challenge comprehension for future generations, as stated by the author although PRME data integration into business management teaching materials varies in speed (PRME, 2024; United Nations, 2024).

The findings in Table 4 demonstrate that the PRME policy effectively integrates SDG-based knowledge and content into business management courses at UAE universities. The outcome of this approach produces graduates and citizens with advanced knowledge about global challenges while establishing a foundation for future leadership. The evaluation indicated that the PRME policy failed to consider the cultural behavioral and socioeconomic variations between different industrial and geographic environments. Academics in UAE universities faced challenges using PRME to create teaching materials for business management students because PRME policy did not account for local cultural and socioeconomic differences.

Implementing PRME-related content into business management programs serves as an AACSB accreditation requirement which could address cultural variation challenges that PRME overlooks in transnational and international academic partnerships with UAE-based educational institutions. AACSB accreditation provides university business schools with the advantage of higher graduate employability compared to other institutions because it represents their achievement of internationally recognized quality standards. The accreditation has attracted an increased number of students. Several higher education institutions in the UAE have achieved AACSB accreditation status while others continue to work toward obtaining it. University business schools which receive AACSB accreditation need to undergo regular renewal of their accreditation status. When PRME-related content becomes mandatory in business courses UAE institutions will need to increase their funding and training to improve PRME content integration into business management programs.

4. Conclusion

Section 1 details the creation of the PRME policy which aimed to provide university business graduates with improved comprehension of global issues while establishing a foundation for future leaders who would guide upcoming generations. The author indicated in Section 1 that PRME policy components and Human Capital theory are aligned due to their shared goal of preparing citizens to support future generations for societal benefit. This study aimed to critically examine and analyze the implementation of PRME within higher education institutions in the UAE.

The research focused on the challenges encountered when trying to integrate PRME policy topics into business management programs at UAE educational institutions. The research evaluated how PRME policy helps UAE higher education business courses teach students about global issues including climate control, gender equality and exploitation through cultural, geographical and linguistic considerations along with student proficiency levels. The study checked if PRME data was integrated into the teaching materials and curricula of business programs at UAE universities.

The research showed that PRME does not sufficiently consider cultural variations across different regions and industries when implementing and teaching curricula to business students. The WPR analysis of 15 papers related to PRME revealed these findings after using SLR and PRISMA methodologies. The author believes this limitation obstructed PRME's ability to enhance business management teaching about educational materials delivery within UAE universities. A critical research study examining PRME policy effectiveness in UAE higher education has been presented through the application of WPR analysis. Nevertheless, the authors have proposed these recommendations based on their previous discoveries.

Innovative Technologies

According to earlier studies, educators and legislators can increase their productivity by incorporating state-of-the-art technology into standard operating procedures (Al Jaghoub et al., 2024; Gilani et al., 2024). Artificial intelligence (AI) and machine learning (ML) have revolutionised business operations across all industries (Aseer et al., 2024; Moussa et al., 2024). The successful adoption of innovative technologies for business growth and survival has been demonstrated in past studies based on other industries (Krupicka et al., 2024; Gilani et al., 2023b).

On the other hand, the leadership style of educators and politicians may influence the acceptance of new technologies, as demonstrated by the findings from studies like Golshan Sorour et al. (2024). However, the adoption of innovative technologies is based on the leadership styles adopted in organisations, especially, during challenging eras like the COVID-19 era (Gilani et al., 2023a; Gilani et al., 2025; Sulthan et al., 2022).

Reliable infrastructure

The writers emphasise how important infrastructure is to a university's ability to continue operating, grow, and incorporate policies into its curricula, especially for stakeholders situated in rural and isolated areas. For example, having access to adequate broadband infrastructure may improve the practice-based learning experience for students (Gilani and Faccia, 2022). However,

because this metric is still not frequently used, Gilani et al. (2022) demonstrate that the rurality of commercial districts may have various infrastructure difficulties, especially for rural-based students desiring to pursue a distant or virtual education.

Partnerships opportunities

The authors recommend that policymakers and universities work closely together while formulating and adopting policies like PRME into the teaching curriculum. For example, the results from Yasin et al. (2023) highlight the advantages of partnerships between businesses and universities which may lead to improvements in staff knowledge and practice-based learning for students.

References

1. Al Jaghoub, J., Suleiman, A., Takshe, A., Moussa, S., Gilani, S.A.M., and Tantry, A. (2024). *The Role of Innovation in Waste Management for Enterprises: A Critical Review of Worldwide Literature*. In: El Khoury, R. (eds) Technology-Driven Business Innovation. Studies in Systems, Decision and Control, vol 223. Springer, Cham. https://doi.org/10.1007/978-3-031-51997-0_38
2. Aseer, J, Gilani, S.A.M., Tantry, A, Armosh, F, Mulla, T, Khan, F and Peel, R. (2024). The Factors that Encourage and Hinder the Tourism Industry's Use of Augmented Reality Technology by UK-Based Clients. In: Mansour, N., Bujosa Vadell, L.M. (eds) Green Finance and Energy Transition. Contributions to Finance and Accounting. Springer, Cham. https://doi.org/10.1007/978-3-031-75960-4_37
3. Bacchi, C., and Goodwin, S. (2016). *Post-structural Policy Analysis: A Guide to Practice*. New York: Palgrave Macmillan US.
4. Ellwood, J and Smolensky, E. (2015). Public Policy Schools. *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*. 0(0), pp.576-579. [Online]. Available at: <https://doi.org/10.1016/B978-0-08-097086-8.75047-1> [Accessed 17 August 2024].
5. Gernal, L., Tantry, A., Gilani, S.A.M., Peel, R. (2024). The Impact of Online Learning and Soft Skills on College Student Satisfaction and Course Feedback. In: El Khoury, R. (eds) Technology-Driven Business Innovation. Studies in Systems, Decision and Control, vol 223. Springer, Cham. https://doi.org/10.1007/978-3-031-51997-0_44
6. Gilani, S.A.M, and Faccia, A. (2022). Broadband Connectivity, Government Policies, and Open Innovation: The Crucial IT Infrastructure Contribution in Scotland. *J. Open Innov. Technol. Mark. Complex. Vol. 8 No. 1*. <https://doi.org/10.3390/joitmc8010001>
7. Gilani, S.A.M., Yasin, N., Duncan, P. and Smith, A.M.J. (2022) 'What is remote-rural and why is it important?', *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 0, No. 0, [Microsoft Word - WREMSD-BP-Gilani et al \(researchgate.net\)](https://www.researchgate.net/publication/360111111)
8. Gilani, S., Gernal, L., Tantry, A., Yasin, N., Sergio, R. (2023a). Leadership Styles Adopted by Scottish Micro-businesses During the COVID-19 Pandemic. In: Alareeni, B., Hamdan, A., Khamis, R., Khoury, R.E. (eds) Digitalisation: Opportunities and Challenges for Business. ICBT 2022. Lecture Notes in Networks and Systems, vol 620. Springer, Cham. https://doi.org/10.1007/978-3-031-26953-0_15
9. Gilani, S. A. M., Copiaco, A., Gernal, L., Yasin, N., Nair, G., & Anwar, I. (2023b). Savior or Distraction for Survival: Examining the Applicability of Machine Learning for Rural Family Farms in the United Arab Emirates. *Sustainability*, 15(4), 3720. <https://doi.org/10.3390/su15043720>
10. Gilani, S.A.M., Tantry, A., Askri, S., Gernal, L., Sergio, R., Mataruna-Dos-Santos, L.J. (2024). Adoption of Machine Learning by Rural Farms: A Systematic Review. In: Zakaria, N.H., Mansor, N.S., Husni, H., Mohammed, F. (eds) Computing and Informatics. ICOCI 2023. Communications in Computer and Information Science, vol 2002. Springer, Singapore. https://doi.org/10.1007/978-981-99-9592-9_25
11. Gilani, S.A.M., Mohamed Hashim, M.A., Tlemsani, I., Tantry, A. and Whitehead, J. (2025), "Gender impact on business growth in Europe and the Middle East and North Africa", *Journal of Islamic Accounting and Business Research*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JIABR-08-2024-0309>
12. Golshan Sorour, M., Subramanian, R., Tantry, A. (2024). The Mediating Impact of Strategic Leadership on the Relationship Between Digitalization and Strategic Planning of Retail Pharmacies. In: El Khoury, R. (eds) Technology-Driven Business Innovation. Studies in Systems, Decision and Control, vol 223. Springer, Cham. https://doi.org/10.1007/978-3-031-51997-0_37
13. Krupicka, O, Gilani, S.A.M., Tantry, A, Askri, S, Mulla, T, Khan, F, Armosh, F and Peel, R. (2024). The Application of Machine Learning in Supporting Supply Chain Management Operations in the Manufacturing Sector Based in England. In: Mansour, N., Bujosa Vadell, L.M. (eds) Green Finance and Energy Transition. Contributions to Finance and Accounting. Springer, Cham. https://doi.org/10.1007/978-3-031-75960-4_39
14. Moussa, M.D., Tantry, A., Gilani, S.A.M., Sergiol, R.P., Gernal, L.M., Kabene, S.M. (2024). Online Counseling Services in the UAE: The Clients and Counselors' Dimensional Perspectives on Counseling Services. In: Khamis Hamdan, R., Hamdan, A., Alareeni, B., Khoury, R.E. (eds) Information and Communication Technology in Technical and Vocational Education and Training for Sustainable and Equal Opportunity. Technical and Vocational Education and Training: Issues, Concerns and Prospects, vol 39. Springer, Singapore. https://doi.org/10.1007/978-981-99-7798-7_3
15. PRME. (2024). *Chapter Middle East*. [Online]. PRME. Available at: <https://www.unprme.me/history-of-the-chapter/> [Accessed 7 June 2024].
16. Sulthan, N, Al Mesned, A, Gilani, S.A.M., Navas, S and Kita, S. (2022). Knowledge, Attitude and Apparent Job Stress Among Clinical Research Associates working at Contract Research Organizations (CRO) in MENA Region during Covid-19. *NeuroQuantology*. 20(22), pp.1079-1092. [Online]. Available at: doi: 10.48047/nq.2022.20.22.NQ10084 [Accessed 30 January 2025].
17. United Nations. (2024). *The 17 Goals*. [Online]. United Nations. Available at: <https://sdgs.un.org/goals> [Accessed 13 May 2024].

18. Yasin, N., Gilani, S. A. M., Nair, G., Abaido, G. M., & Askri, S. (2023). Establishing a nexus for effective university-industry collaborations in the MENA region: A multi-country comparative study. *Industry and Higher Education*, 37(6), 838-859. <https://doi.org/10.1177/09504222231175862>