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Challenges of projectification in an engineering school: Lessons learned and room for improving the whole performance of the institution

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ABSTRACT

The management model in higher education institutions is in continuous change: from an initial hierarchical and functional organization, the subsequent influence of the New Public Management model and more recently project-based management, conditioned among other causes by how a large part of the financing of universities (programs and projects) is being articulated. This management model affects all the activities carried out by universities, particularly teaching and research, as well as the way staff must perform their functions. Like all models, project-oriented management has its opportunities and challenges. This paper examines the implications of project-based learning in the university environment. To explore this topic, the authors conducted a case study involving an engineering school in the Middle East and developed semi-structured interviews. This approach allowed the examination of how academic professionals perceive the increasing trend of projectification across six areas: Teaching and Curriculum, Research and Funding, Doctoral Studies, Administration and Governance, Academic Professional Development, and the overall University Culture. The results reveal that, although projectification benefits the institution in general, it is accompanied by a series of negative implications that affect both individuals and the management. The complexity and the different missions and values of universities highlight the need for a nuanced approach to project management to optimize management without jeopardizing academic excellence, especially in the field of teaching and research. Academic staff is not exempt from the need for permanent training, and it is necessary to incorporate project management and its principles to capacity-building programs to ensure their best performance.

1. Introduction

Over the past decades, there has been an increase in the utilization of projects and similar transient organizational methods across both private and public sectors (Jalocha, 2023).

Widespread adoption of project-based methodologies has been observed in the implementation of regular services under various formats such as pilots, programs, and task forces, representing a substantial administrative transformation often underestimated by observers (Lewis & Decuyper, 2023). This gradual transition is shaped by perceptions of optimal procedures that aim to maximize adaptability and creativity while preserving control (Seckelmann, 2021).

In academic circles and elsewhere, the project format is increasingly being used as a standardized method of managing tasks (Seckelmann, 2021). Currently, higher education institutions are subject to managerialism and government directives and statutes (Baur et al., 2018).

The contemporary university model is undergoing a transitional shift away from its traditional organizational framework and operational practices and is becoming increasingly competitive and market-driven in nature (Du Toit & Havenga, 2021; Lobo & Ambituuni, 2023). The transformation is characterized by the current adoption of project-oriented approaches, which have been termed "Projectification" by Midler (1995). Projectification encompasses two primary aspects, comprising the transformation of tasks into projects and the subsequent modification of the organizational environment. Within educational settings, projectification is characterized by an escalating movement towards compartmentalizing activities, tasks, and initiatives as distinct projects with clearly defined objectives, deadlines, and budget allocations. This approach prioritizes a project-oriented approach to overseeing and implementing educational, research, and administrative goals, frequently incorporating external partnerships and centered on attaining quantifiable outcomes. The process of projectification in

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education can impact how universities set up their operations, allocate resources, and align with their strategic goals. Within this context, project format has become a standardized method for coordinating various activities within a university setting, including research, education, and doctoral training (Dollinger, 2023; Jalocha, 2023). The traditional university format is being altered, and academia's singular pursuit is being redefined as collaborative, funded projects (Lewis & Decuyper, 2023; Lobo & Ambituuni, 2023).

The projectification phenomenon is following a path like that of the New Public Management (NPM) from the 80's, which was based on a management model that Hood (1991) identified as founded on Efficiency, Economy, and Effectiveness principles. The initial principle of the project life cycle is focused on maximizing the resources employed, the second principle pertains to the project's outcomes, and the third, final principle relates to the medium and long-term effects of the project.

Considering the principles of NPM and project management, a framework can be presented that integrates the two approaches (see Fig. 1).

At a university setting, time, space, and work within the context of projectification are perceived as finite, allocated, and quantifiable (Read, 2023; Seckelmann, 2021). The concept of projectification suggests that academic work can be broken down into separate parts and organized into specific tasks, as Dollinger (2020) and Jalocha (2023) have noted. Workloads can be broken down into specific tasks and measured against established performance indicators (KPIs) to gauge their efficiency.

Projectification in academia has led to significant changes in how university staff perceive their work, as stated by Seckelmann (2021). Within the growing emphasis on managerialism in universities, the idea exists that productivity can be enhanced by increased supervision and control, as well as bureaucratic guidance (Smith & Lee, 2023).

A project-based environment encourages students to participate in group projects, gather and analyze data, and produce concrete results (presentations, reports, proposals, etc.) that closely mirror the tasks they may be required to perform in their future careers. In the Middle Eastern context, the focus on projectification within higher education is driven by national development objectives, such as Saudi Vision 2030 and the UAE Vision 2021, as well as funding mechanisms and partnerships that prioritize market-driven projects (Escobar et al., 2023). Centralized administrative systems in the Middle East enable the swift implementation of this project-focused method, which is consistent with national objectives for development (Sabieh, 2023).

In the Lebanese context, the trend of projectification in higher education institutions is shaped by funding systems that give priority to

short-term results and business-led projects. Lebanon, albeit not as heavily governed as some of its Gulf counterparts, still experiences pressure from international bodies and global initiatives to tailor its academic courses to meet market and industry requirements (Jeong, 2024). In Lebanese higher education institutions, decision-making authority often resides at the top, with academic policies and funding choices being largely determined by a combination of partnerships with private entities and international collaborations (Jeong, 2024). Implementing short-term, outcome-focused projects in Lebanon's educational system resonates with the need to equip students for a quickly changing job market; however, it may compromise long-term academic objectives (Escobar et al., 2023). Pressure from institutions to align with market demands, combined with Lebanon's financial limitations, may result in a discrepancy between the objectives of higher education and the overall requirements of society.

Likewise, doctoral studies in the ME and in Lebanon have lately shifted from a traditional model of academic training to a more designed and structured approach (Bengtson et al., 2019; Ivanivna, 2019). This new approach signals a general trend towards formalization and standardization in academia. It accentuates competitive selection processes, intensive coursework, and collective supervision, that permit students to respond to the demands of knowledge-driven economies and ensure timely degree completion (Wagner, 2023).

Despite the numerous benefits of projectification, embracing this approach in higher education might bring negative consequences to the academic work and the university's mission (Lobo & Ambituuni, 2023). Opponents argue that projectification jeopardizes homogenizing academic practices (Aguilar Velasco & Wald, 2022), disregards the intrinsic value of scholarly inquiry (Jalocha, 2023), and ignores the effort behind the intangible output (Dollinger, 2020; Seckelmann, 2021). Moreover, Seckelmann (2021) confirms that the focus on quantifiable outputs and standardized metrics weakens the interdisciplinary nature of academic research and teaching.

Universities carry out activities of very diverse consideration and nature, among which teaching and research stand out. Being of a very diverse nature, it is considered, in view of the bibliographic review carried out, that there is an opportunity and gap to study the negative impact of the projectification phenomenon in these different areas.

To fill the research gap, this study aims to answer two research questions:

RQ1: What are the adverse implications of projectification on **academic individuals** (faculty, staff, and students) within the context of an engineering school in the Middle East?

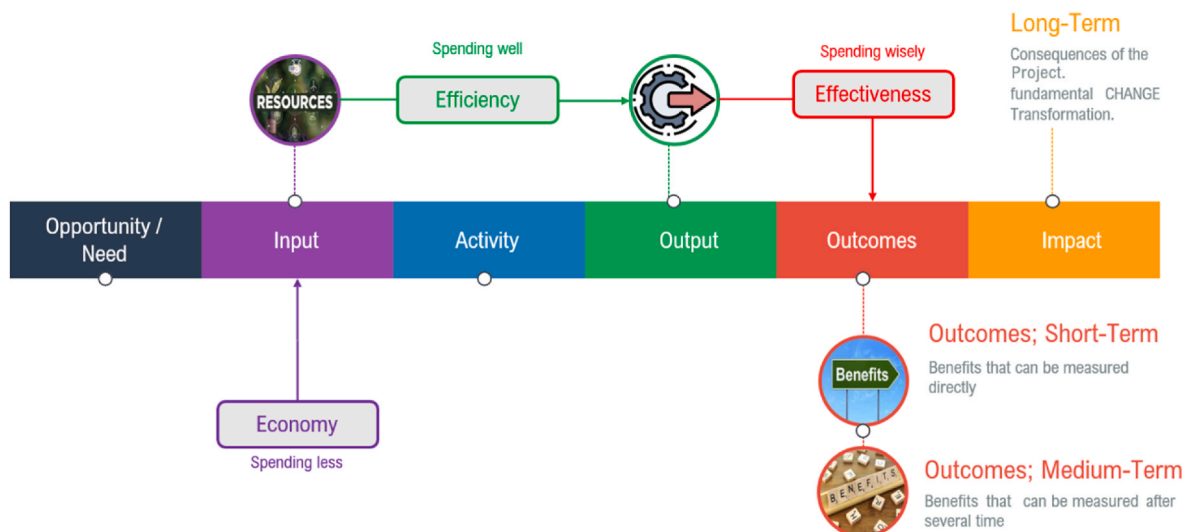


Fig. 1. NPM + PM framework. Source: authors.

RQ2: What are the negative implications of projectification on the organization and management of university activities?

This research is pioneering in its examination of the trend of projectification within higher education, particularly within a prominent Lebanese institution—a field of study that has received relatively little attention in academic literature. The study’s approach, which incorporates semi-structured interviews with a diverse group of academic staff, facilitates the acquisition of comprehensive insights. The problems and conflicts caused by projectification are worsened by the Lebanese context, which frequently experiences substantial financial and political uncertainty in the higher education sector, thereby potentially hindering the prospects for transformative, long-term academic growth (Sabieh, 2023).

2. Methodology

To carry out this research, the authors conducted a literature review followed by a case study, for which the semi-structured interview was used as a research method.

Firstly, the literature review, which is a systematic way of collecting and synthesizing previous research (Baumeister & Leary, 1997), was performed to examine the body of knowledge about the implications derived from the implementation of project-based approaches which allowed to establish a solid foundation on the topic.

After analyzing the sources of information which included journal articles, conference proceedings, published case studies, and online articles, the authors were able to identify the literature gaps, trends, and emerging areas of interest related to projectification.

Upon examining the sources, it was clear that there is no holistic study that focuses on the negative implications of projectification on both individuals and management, as perceived by academic professionals. The study of literature allowed the refine the research questions and led to developing well-formulated semi-structured interviews.

RQ1 aims to examine how projectification affects *faculty, staff, and students* within the university, particularly in terms of their responsibilities, engagement, collaboration, and skill development, and RQ2 addresses how projectification shapes the structural and managerial aspects of universities, such as curriculum organization, research direction, and resource priorities?

The researchers used a case study method in their study because they believed it was the most effective way to address the research question. Researchers often employ case studies at the outset of their subject investigation, as this method enables them to focus on particular phenomena and gain vital insights (Yin, 2018). Studying University-Projectification, a newly emerging field of research, involves conducting an exploratory case study to provide investigators with hands-on and observational access to the actual realities of this subject area (Alvesson and Sköldbberg 2017). According to Jalocha (2023), the effects of projectification on public sector employees, particularly those who are project natives, emigrants, and immigrants, were investigated. It was suggested that case studies tailored to specific jurisdictions are crucial for grasping the subtleties and consequences of projectification across various sectors. The public sector has undergone substantial projectization. A study by Hodgson et al. (2019) examined the consequences of project-based organizational structures within different government agencies and highlighted the need for jurisdiction-specific case studies to grasp the context-dependent outcomes of projectification. The author pointed out that the process of projectification can take on distinct forms in different public sector environments, influenced by specific regulatory, cultural, and organizational elements. Wagner’s 2023 study, A. C. Wagner, looked at projectification in healthcare and highlighted the significance of conducting case studies across multiple countries and different environmental contexts. Our approach is consistent with this, as studying the trend of projectification within a particular academic setting provides a thorough insight into

how such transformations occur within the university system, which is distinct from other regions.

This study focused on one of the largest and most prestigious universities in the Middle East, known for its significant influence in the region. The university has approximately 8,000 students and 900 faculty members. It is highly regarded within Lebanon’s higher education system, consistently ranking first in the country according to the QS ranking and is considered one of the top universities in the Middle East. The engineering faculty at the university comprises more than 1700 undergraduate students, 350 graduate students, and 80 Ph.D. students. The studied university is becoming projectified in various aspects of its operations. The university’s administrative structure is highly centralized, which allows for the rapid implementation of strategic projects. This manifests in multiple forms within the chosen university, ranging from the creation of temporary task forces to the restructuring of long-term academic and research initiatives into project-like components. The adoption of these projectified models may be influenced by external accreditation requirements, particularly in the field of engineering.

The use of the in-depth interview technique involves the selection of a non-probabilistic sample. This means that this selection is not made randomly, seeking individuals who can provide the greatest amount of information and whose accessibility allows the correct development of the interview (Hernández Sampieri & Fernández, 2014).

As for the number of informants, following the recommendations of some authors, we have tried to exceed the number of 20 interviewees, checking whether this would reach the point of saturation or redundancy of information, as has occurred in the research. (Cohen et al., 2018). It can be concluded that the selection of the sample responded to a mixed strategy of purpose, convenience, and heterogeneity (Adeoye-Olatunde & Olenik, 2021).

The interview participants included academic staff, professors, doctoral advisers, lecturers and coordinators from various engineering departments, ensuring representation across different career stages and roles. Sampling involved purposive selection to ensure diversity in engineering disciplines, career stages, and experiences with projectification. The inclusion criteria were primarily based on the participants’ academic roles and their direct or indirect involvement with projectification. The participants’ experiences with projectification were central to their selection because this study explored how this phenomenon manifests in different academic contexts.

A total of 29 participants, including post-doctoral researchers, lecturers, Ph.D. advisors, full professors, assistant professors, and academic staff, participated in the interview, as shown in Table 1. The diversity within the sample is particularly important because it ensures a comprehensive understanding of how projectification impacts various aspects of academic life. The participants’ experiences spanned different engineering disciplines, career stages and academic roles, providing a broad perspective of the phenomenon’s effects.

Considering the positions and experiences of the interviewees, it can be concluded that all possible profiles in the academic field are sufficiently covered, allowing results to be obtained with all points of view and with the necessary perspectives (personnel recently incorporated into the academy together with professors with much more experience).

Participants were informed about the study’s purpose, confidentiality, and withdrawal rights, and informed consent was obtained. The

Table 1
Role and years of experience of interviewees.

Role	Number	Average Years of Experience in Academia
Doctoral Researchers	4	2
Lecturers	5	5
Ph.D. Advisors	7	7
Full Professors	6	10
Assistant Professors	3	5
Research Assistants	4	3
Total	29	

researchers conducted in-depth, 30-min, individual interviews with the participants in their workplaces during the Spring semester of 2024. The interviews were semi-structured and included open-ended questions. Interviews were conducted in person at their workplaces. This face-to-face interaction ensured a deeper connection and allowed the collection of rich, detailed data. Participants consented that interviews were audio-recorded to facilitate transcription and subsequent analysis. This recording process ensured that no information was lost and that the responses could be revisited during the analysis phase. After transcription, the authors sent the notes to the interviewees for validation. Credibility was ensured through member checking and peer debriefing. Member checking included validating and verifying interviewee interpretations, while peer debriefing involved discussing the analysis with two colleagues to ensure comprehensive and rigorous examination.

During the interviews, participants were asked about the alignment of the projectification approach with higher education goals, its efficiency in training students for the workforce, and the impending conflicts with inclusivity in the curriculum. Furthermore, interview questions scrutinized the challenges and inefficiencies emerging from dealing with multiple projects and included discussion on the dedication of time and effort to teaching activities, the balance between meeting project deadlines and interacting with students, and the capability for innovating instructional techniques.

Following data collection, a systematic coding and analysis approach was employed. Thematic analysis was used to identify patterns and themes in the responses to enable a comprehensive understanding of the participants' experiences with projectification in the university setting. This approach ensured that all relevant data were systematically examined, coded, and categorized in a manner that supported the research objectives (Adeoye-Olatunde & Olenik, 2021).

In the first phase of data analysis, a line-by-line coding process was applied to the semi structured interview transcripts. The focus of this phase was to extract initial codes related to various aspects of projectification and assess their impacts on key university functions. The codes were derived directly from the participants' states without the imposition of pre-existing themes to ensure a rich and unbiased understanding of their views. Javadi and Zarea (2016) noted that in the semantic approach, themes are detected at "the surface or semantic appearance" and the researcher is not following something beyond what the participant has said or what is written in the text. In the second stage, the initial codes were organized into broader descriptive themes by comparing similarities and differences among them. This stage was crucial in developing a cohesive thematic structure, and it relied heavily on a collaborative process among researchers to ensure consistency. Through the iterative process of coding and theme development, 6 themes and 24 categories emerged presented in Table 2.

The categorization and coding process provided traceability to these insights, with each code representing a specific aspect of projectification and its impact on university operations. For example, the theme "administration and governance" allowed for a detailed look at how projectified management structures impacted decision-making processes within the institution using codes such as PM structure, governance challenges, and funding allocation, while the theme "academic professional development" provided insight into how faculty members perceive the need for continuous training in project management practices with codes such as capacity building and professional growth.

Apart from the interviews, the researchers also examined documents on the university website related to their strategic initiatives and their approach to project-like activities, interesting findings were revealed and summarized in the results section.

To sum up, departing from previous research on the projectification topic, this research adopts a holistic approach and attempts to examine whether academic participants perceive a difference between a projectified university environment and a traditional university environment and structure. Unlike previous studies, this research examines the negative implications of projectification on two particularly significant

Table 2
Themes and categories of university projectification.

Final Themes	Main Codes	Final Themes	Main Codes:
1. Teaching and Curriculum	- Teaching Effectiveness - Student Participation - Skill Development - Real-world Application - Industry Connections	4. Administration and Governance	- Governance Challenges - Project Management Structures - Time Constraints - Funding Allocation
2. Research and Funding	- Research Focus - Industry-Driven Research - Time Management - Project-Based Funding	5. Academic and Professional Development	- Capacity Building - Faculty Training Programs - Professional Growth - Research and Teaching Integration
3. Doctoral Studies	- Integration of Project-based approach - Skill Development in Research - Impact on Dissertation Work	6. Collaboration and University Culture	- Interdisciplinary Collaboration - Cultural Shifts - Competitive Atmosphere - University Identity

facets of academic life: (1) individual attributes (responsibilities, engagement, collaboration, and skill development) and (2) structural and managerial aspects.

3. Literature review

3.1. Projectification of individuals in academia

Projectification, a concept initially discussed by Milder in 1995, has appeared as a governing paradigm in organizational structures, embracing both private and public sectors. A project-based approach displays different forms and can be examined at numerous levels (Midler, 1995). It is categorized as a progressive process that emphasizes projects and the institutionalization of project management practices and organizational frameworks. Within this evolutionary process, organizations initiate the formal adoption of project management principles and tools (Wagner & Radujković, 2024). Recently, there has been a leaning tendency toward the adoption of increased project governance protocols as well as the development of program and portfolio management initiatives (Müller et al., 2016). This shift has led to a significant transformation in academic work, impacting routines, terminologies, and individual identities (Baur et al., 2018). In the context of doctoral education, projectification aligns with global efforts to enhance the employability and productivity of Ph.D. graduates, as noted by Lobo and Ambituuni (2023). However, the reformation of doctoral programs accompanied by projectification raises concerns about identity crisis and reduced autonomy, potentially affecting the depth of critical thinking essential for doctoral studies, as underscored by Ivanivna (2019) and Sonesson et al. (2023). In summary, while projectification offers benefits in terms of efficiency and adaptability, it also poses challenges to the depth of university research and intellectual freedom, as discussed by Ivanivna (2019) and Wagner (2023). The need to constantly secure funding, meet short-term deliverables and align with institutional priorities reduces autonomy and may limit the depth of critical thinking that doctoral research traditionally demands. The modularization of teaching and research leads to fragmented career paths. The demands of project-based work led to increased stress,

reduced research continuity, and burnout among academic professionals. Despite these challenges, projectification offers multifaceted benefits to academia, including improving the efficiency of the institution, increasing interdisciplinary collaboration, and reinforcing research outcomes (Meijer, 2024). Adding to the above, working in a projectified environment, where all activities are handled as projects, fosters innovation and knowledge sharing by encouraging creative problem-solving and collaboration within a defined timeframe and a structured framework (Seckelmann; 2021). It also enables iterative processes and risk management, fostering experimentation to drive innovation. This encourages students to engage in hands-on experiences and fosters critical thinking exercises, thus improving their motivation. Moreover, engaging students in research studies tailored to their interests and career goals elevates their motivation and induces their adaptability and willingness to create innovative solutions (Read, 2023), which advances the quality of academic outputs.

3.2. Projectification of universities and institutions

At an institutional level, projectification reflects a shift toward managerialism, aligning with the principles of New Public Management (NPM). The concept of NPM developed in the 1990s as a response to inefficiencies in public administration, advocating for market-oriented reforms aimed at enhancing Efficiency, Economy, and Effectiveness (Hood, 1991). This approach introduced principles such as decentralization, performance measurement and accountability and reshaped the governance structures of public institutions, including universities. In the context of university education, NPM principles adoption led to the transformation of universities from traditional knowledge institutions to entities driven by managerialism and performance metrics (Baur et al., 2018), entailing a higher focus performance-based funding models, institutional benchmarking, administrative restructuring, and measurable outputs (research publications, student graduation rates), which resulted in prioritizing short-term objectives over traditional academic values (Baur et al., 2018). These strategies augmented bureaucratic oversight and affected universities' autonomy. Recently, many higher education institutions have focused on project-based funding and temporary research contracts (Jeong, 2024).

Similarly, professors are evaluated based on the amount and number of grants secured and projects delivered (Jalocha, 2023). Under NPM, academic institutions have adopted managerial models that promote structured, goal-oriented initiatives, such as short-term research grants and modular teaching structures, resembling project-based management practices (Meijer, 2024). The synergy between NPV and projectification in the university context appears in the prioritization of externally funded projects over institutionally driven research and the standardization of teaching methodologies to meet performance indicators, which augments the administrative load and risks autonomy. Notwithstanding NPM paybacks, it is accompanied by increased stress among staff members and shifts professors' focus from teaching and research to compliance and performance monitoring (Jeong, 2024), which highlights the importance of a balanced governance model. While projects have been incorporated into human activities, the evolution of projectification precisely stresses future-oriented tasks (Seckelmann; 2021). For example, traditional project management tools like Gantt charts, once used for organizing completed tasks, are now employed for planning future endeavors across various scenarios where planning, scheduling, and tracking are essential (Vogel, 2024).

Pointers on project-based activities within the curriculum can be noticed in numerous practices, such as research objectives, managerial workloads, and teaching-focused roles (Wagner, 2023). However, this lean-to-task-specific, time-limited perspective raises concerns about managerial control, academic flexibility, and autonomy (Pajares, 2023). Notwithstanding the various benefits projectification brings to the university environment, the influence of managerialism on higher education suppresses organizational structures and affects practitioners'

identities (Lewis & Decuypere, 2023). The evolution of projectification is accompanied by bureaucratic processes that jeopardize collegiality and autonomy in the academic environment (Fowler et al., 2015). Projectification can help academics better organize the set of (heterogeneous) activities (Pajares, 2023).

In conclusion, the body of knowledge provided a critical foundation for this study by identifying the ways in which projectification is increasingly permeating academic environments, transforming both organizational structures and individual roles. The literature review also highlighted that projectification is an emerging area of study that has yet to be extensively explored. The literature has focused mainly on the general implications of project-based approaches on organizational structures and industries, while few studies have examined the impact on academic institutions, specifically universities. The literature reveals the importance of previous studies in examining the concept of NPM, yet a detailed qualitative study that assesses the negative impacts of projectification on academic roles, teaching practices, and research productivity remains limited. To the authors' knowledge, there are limited qualitative case studies that delve into the lived experiences of academics or explore the nuanced effects of these changes in specific contexts.

Packendorff and Lindgren (2014) conducted interviews in Sweden to examine how research is affected by the new formal project management methods. Similarly, Dollinger (2023) assessed how the concept of projectification influences university culture. Yet none of the previous studies focused on the dual impact of projectification on both the organization of universities and the individuals within them, particularly through a qualitative case study methodology, and none focused on the negative rather than the positive impact using a case study in the Middle East region.

This study aims to fill this gap and examine, using a case study approach, the dual impact of projectification on individuals and higher education institutions.

4. Results and discussions

The analysis of the university's public documents revealed that it has implemented various systems that encourage the realization of university activities in a project-based manner. The university has designed its research environment to be highly dynamic and integrated, contributing significantly to addressing both local and global community needs. The review of the public documents revealed that the university's International Partnerships Office (OIP) emphasizes the development of international collaborations that help transform academic knowledge into applied projects. These partnerships include faculty and student exchanges, as well as the establishment of inter-institutional agreements for research projects.

These institutional frameworks highlight how projectification at the Lebanese University extends not only to research but also extends to teaching, collaboration, and outreach programs. These activities are managed and executed through interdisciplinary projects that reflect the growing emphasis on pragmatic, outcome-oriented education.

It is worth mentioning that while reviewing the public documents of the university, the authors found that the university has also implemented a Project Management (PM) training course aimed at equipping faculty, staff, and PhD students with the knowledge and skills necessary to understand and apply project management methodologies and terminologies. This course, offered at a discounted price for faculty members and staff, is designed to help them perform their activities in a project-based manner. By offering this course, the university supports the development of key project management competencies deemed essential for managing complex, interdisciplinary activities in academic, research, and administrative domains.

In addition to the documents studied, the results of the interviews revealed six main themes that emerged from semantic analysis, along with 24 categories presented in Table 2. Based on the interview semantic

analysis, the results section will examine the impacts under the six emerging themes: (1) research and funding, (2) doctoral studies, (3) administrative and governance structures (4) academic and professional growth, (5) teaching and curriculum, and (6) collaboration and university culture.

By delving into these areas, this empirical research aims to contribute to the ongoing discourse on projectification in higher education, offering valuable insights for academic institutions, policy-makers and educators. The goal is to better understand the implications of projectification and identify strategies that can help universities leverage its benefits while mitigating its challenges.

4.1. Research and funding

It is worth mentioning that the university studied actively encourages faculty and researchers to seek grants from a range of sources, including local, regional, and international agencies. This funding can come from both public and private sector bodies, including state-level support or funding from European institutions. Additionally, the Research Board (URB) at the university provides opportunities for internal funding, and the university is involved in collaborative projects. This often necessitates aligning academic activities with project-like structures to meet the requirements of these funding bodies, therefore faculty are incentivized to structure their research and academic programs in a way that produces tangible, measurable outcomes, which are characteristic of projectification.

Therefore, participants were asked about the ways project-based work shaped their research focus and output and how projectification has affected their ability to collaborate across different research disciplines. Also, they were asked if they had noticed the impact of projectification while seeking funding opportunities for their research.

Interviewees stated that they are gradually observing the impact of projectification in their work. Respondents concurred that the alignment with project management norms elevates the probability of securing funding by adhering to assessment criteria and facilitates the peer-review process.

From their perception, the strict layout mandated by the funding guidelines sometimes influences the direction of their research projects and limits them from exploring a genuinely pioneering or unconventional path of investigation. Academic practitioners find themselves maneuvering within these accustomed limitations regardless of the unique nature of their engineering projects or research areas. Participant 2 said, *“The emphasis on adhering to predetermined criteria sometimes overshadows the innovative and exploratory aspects of our academic inquiry”*. This confirms the results of [Söderberg and Liff \(2023\)](#) that the strict guidelines of research proposals have a substantial impact on shaping academic institutional practices and that the prevalent implications of project terminology highlight the importance of adapting to the requirements of funding agencies and peer-review processes to facilitate research progress ([Baur et al., 2018](#); [Moreno et al., 2023](#); [Nedzinskaitė-Mačiūnienė & Minelgaitė, 2024](#); [Torka, 2018](#); [Ylijoki, 2014](#)).

Two senior researchers voiced dissatisfaction with the demand to adhere to funding trends and hot research topics and the limitations this imposes on their research agendas as it limits the intellectual autonomy and creativity of researchers and students who may feel obliged to customize and adapt their research topics to meet funding requirements rather than engaging in their educational enthusiasm and chasing their academic pursuits.

Moreover, research assistants highlighted that while projects typically have fixed end dates, they often face the challenge of securing follow-up funding for continued employment in new projects. This uncertainty poses significant risks to academic careers, who must remain adaptable to the varying interests of different funding sources. Two research assistant interviewees stated that constantly shifting between different research topics may hinder the development of a clear research

focus, potentially leading to a fragmented resume later in one's career. Additionally, the research priorities of funding institutions may not always align with those of the academic discipline or community, further complicating the trajectory of project involvement.

Participants mentioned that projectification has shifted their research focus towards more applied and interdisciplinary projects, often driven by external funding opportunities. While this has led to increased collaboration and innovation, it has also caused tensions with traditional, curiosity-driven research, which may be sidelined due to the emphasis on short-term project outcomes.

Participant 4 said: *What funders want to examine is usually different from what I aim to look for. I feel pressured to deliver quick, tangible outcomes. This contradicts the curiosity-driven research that's traditionally been the backbone of academic work. I have to sacrifice some of the originality and depth of my research to fit into project timelines.*

The results imply that in response to these limitations in academic freedom and passion, researchers must balance meeting funding criteria and upholding the integrity and originality of their academic passion. This aligns with the results of [Fowler \(2015\)](#) that despite the endeavors to integrate PM practices into educational research, there persists a deep tension between the principles of PM and the fundamental properties of scholarly research, such as the resistance to hierarchical reporting structures.

4.2. Doctoral studies

The pathways to a doctorate at the chosen university remain significantly similar to the US graduate school model. PhD students conduct their research in a variety of organizational settings. In 2024, 64 % are employed as lecturers or research fellows in funded research projects at the university, 15 % work in non-university research institutes and organize with their advisor within the university, and 21 % are engaged in non-academic organizations' work or industrial company projects and take the results to develop their dissertation. One of the most important key points related to doctoral studies is time. PhD students need to optimize their time management for several reasons: either because they have limited funding (scholarship) or because they are conducting their research on a part-time basis, which makes their time valuable and limited. Considering the influence of projectification on doctoral studies as a starting point, it is possible to identify doctoral studies as being characterized in relation to time and how they develop:

- Given timeframes for new, unique, and unknown activities.
- Predicting future research dynamics in a plan.
- Investing precious research time in planning activities.
- Sequencing interdependent activities (milestones').
- Spending an extended period on one topic and excluding or postponing emerging themes.
- Linear understanding of time that is constantly running out creates time pressure.
- Conflicts between types of time including expected and actual completion times or the duration of research cycles.

Another fundamental aspect that has been presented to the interviewees beforehand is that doctoral programs borrow the already established project form and apply it to all stages of the PhD process ([Torka, 2018](#)):

- Project proposals are required for admission, finding supervisors or progressing to candidature.
- Proposals function as a benchmark for supervision meetings and progress review panels
- Supervisors are assessed in their capacity as project managers.
- Coursework provides project-related skills considered relevant within and beyond academia.

- Trend towards a broader examination process to address the diverse competencies candidates have developed during their project.

The analysis of semi-structured interview results reveals significant deviations from traditional Ph.D. practices. Most interviewees perceived doctoral studies shifting from a product-oriented focus, where the emphasis is on producing a Doctor of Philosophy through original research, to a process-oriented approach emphasizing instruction and skill development for the knowledge-based economy. This shift aligns with [Meniailo \(2019\)](#) but contrasts with [Ivanivna \(2019\)](#), indicating a move towards developing skilled knowledge workers for the global workforce.

Participant 1 said: *“When I started working at this university as an assistant professor, I thought I would have the freedom to explore the topic I want and in-depth, but with time it feels like I’m just chasing quick results to meet project and promotions goals. It feels like we’re losing the traditional emphasis on pure research.”*

The main results related to doctoral studies are grouped into three concepts:

- Institutional and Organizational Changes
- Impacts on Research Focus and Quality
- Ideal Ph.D. Candidates in Projectified vs. Non-Projectified Environments

Related to Institutional and Organizational Changes interviewees expressed that traditional doctoral training has emphasized producing future researchers, even though the global labor market demands highly qualified graduates with diverse skills. Addressing this requires institutional, organizational, and content changes to improve university-industry linkages ([Bengtson et al., 2019](#); [Vogel, 2024](#)). The creation of joint doctoral programs and integration of thesis research into real projects in industrial environments exemplifies this change.

Advisors and academic staff highlighted the necessity of restructuring programs to incorporate collaborations with universities and industries to increase the number of Ph.D. holders outside academia. Through work-based learning, these collaborations aim to ensure employment for doctoral students, in accordance with the recommendation of [Meniailo \(2019\)](#) that universities should incorporate industrial collaboration in doctoral programs.

Regarding the Impact on Research Focus and Quality, interviewees expressed concerns about the potential reduction in research depth and breadth due to the influence of project management principles. Ph.D. candidates increasingly lean toward short-term projects aligned with funding priorities or industry demands, limiting opportunities for long-term, exploratory studies. This intensifies competition for limited funding ([Bengtson et al., 2019](#)) and creates a stressful academic environment that discourages collaboration ([Dollinger, 2020](#)). Participants noted that project commitments often conflict with advancing their Ph.D. theses because projects demand intense effort and involve numerous activities with strict deadlines. Participant 3:

“When working on projects, you have to ensure that you still prioritize your doctoral work because there are always additional tasks to complete. In my Ph.D., I need to carefully manage my time to balance project responsibilities with my thesis.”

This confirms [Vogel’s \(2024\)](#) findings that Ph.D. candidates’ fixed-term contracts and multiple project commitments limit their flexibility and time to develop coherent research lines, impacting knowledge production quality in academia.

Finally, when a comparison between the ideal Ph.D. Candidates in Projectified vs. Non-Projectified Environments were assessed, and all Ph.D. advisors and full professors agreed that the ideal Ph.D. candidate’s characteristics have changed in a projectified environment. The ideal candidate is now seen as someone who can complete short-term projects on time. Principal investigators and advisors tend to select candidates

who can add value to funded projects rather than those suited for long-term academic careers. This shift changes the Ph.D. journey from a transitional research phase to a job-like environment.

It is possible to present a scenario comparison considering the timeframe and ideal candidates:

1. Projectified Environment:
 - o Time Frame: Bounded, coordinated, and predetermined with short intervals for predefined milestones.
 - o Ideal Candidates: Flexible, resilient, able to network and work in groups over several tasks.
2. Non-Projectified Environment:
 - o Time Frame: Unspecific, allowing for more investigations and passion in research, determined by individuals.
 - o Ideal Candidates: Resolute, preferring independent work.

The growing influence of project management principles in university settings presents challenges for undertaking groundbreaking research. Balancing practical project management needs with academic research goals is crucial to ensure vibrant, varied research with implications for both academia and industry.

4.3. Impact on administration and governance

In this section, the participants were asked about the administrative changes that have resulted from the growing reliance on projects in their department and how the project-driven approach has influenced resource allocation and decision-making within their university.

According to the participants, the shift toward a project-driven approach within engineering faculty has significantly impacted their administrative and governance structures. The findings revealed that the growing emphasis on projects has necessitated the development of more intricate administrative frameworks to manage the increasing complexity of tasks. This change has led to a higher demand for project management skills among academic staff who are now expected to juggle project coordination alongside their traditional roles. As a result, administrative processes have become more multifaceted, with greater attention being paid to overseeing project timelines, budgets, and deliverables. This administrative evolution has also introduced a layer of bureaucracy, where decisions are increasingly influenced by project success and visibility rather than by traditional academic priorities.

The interviewees highlighted a lack of specific project management training. Well-planned lifelong learning would help to make this transformation process less traumatic, which is in agreement with the study by [Pajares \(2023\)](#).

Furthermore, the results revealed that projectification has created tension within the university’s governance systems. The allocation of resources and decision-making processes are now swayed by the demands of high-profile projects, sometimes at the expense of other academic activities such as teaching, basic research, and student mentoring (Participant 8, full professor). Likewise, traditional academic activities are prioritized as resources are redirected to meet the needs of lucrative or strategically significant projects. This shift has raised concerns about the potential for academic mission drift, where the core educational and research objectives of the university might be overshadowed by the focus on project outcomes and external partnerships.

Participant 16 stated: *“Every day, I see it more clearly; our university is shifting its focus from the core academic activities we once prioritized. Teaching, research, and mentoring are becoming secondary to the demands of external projects. This isn’t just about a lack of time in my opinion; the real problem is that we’re reshaping the academic experience to fit a model that ranks quantifiable project outcomes higher than research integrity.”*

This aligns with the results of [Söderlund and Müller \(2014\)](#), who documented instances in which project demands clashed with established academic governance, leading to conflicts over priorities and resource allocation.

To sum up, the increased reliance on projects leads to more complex administrative structures, with a growing need for project management skills among academic staff. This has sometimes resulted in conflicts between project demands and traditional academic governance, as resources and attention are often diverted to high-profile projects at the expense of other academic activities.

Also, participants mentioned that in response to this, the studied academic institution provides a training course for the Project Management Professional (PMP) exam, which aligns with the Project Management Institute (PMI) standards, awards PM certificates, and offers project management professional lectures and modules. The course is offered biannually and attracts a diverse array of participants, including faculty members, university administrators, and PhD candidates who are eligible for a reduced price.

Project management education plays an important role in defining the perspectives and practices of academic researchers (Aguilar Velasco & Wald, 2022; Li, 2023)

Upon inquiry into their interest in these PM courses, most interviewees (75.8 %) expressed a keen interest. The participants acknowledged that these courses, inspired by the Project Management Institute (PMI), provide valuable practice-oriented tools and techniques applicable to daily tasks. Furthermore, a significant proportion of respondents (79.3 %) agreed that the university's PM course for faculty members serves as a tool to effectively organize their workload, particularly when handling diverse responsibilities. However, it became clear during the discussions that many participants viewed these courses as valuable additions to their resumes. Participant 5 emphasized, "The course enriches my resume and demonstrates my ability to effectively manage tasks and projects and improve my professional profile." This sentiment reflects a predominant motivation among participants (65.5 %) to enroll in these courses for CV enrichment rather than for prestigious pursuits within academia. Some participants cited a lack of alignment between course content and research practices as a reason for their limited motivation to attend. This misalignment is important, particularly regarding the hierarchical structures and reporting methods taught in PM courses vis-vis academic settings. For instance, in academia, the roles of project leader and manager are often separate, with senior researchers retaining authority over project objectives and resource allocation, while administrative tasks are delegated to entry-level team members.

4.4. Impact on collaboration and university culture

In this section, participants were asked how the project-oriented environment has affected their collaboration with colleagues from other disciplines and what benefits or obstacles they have encountered in interdisciplinary project work.

Human resource management practices support projectification by prioritizing flexible employment arrangements to retain highly skilled and adaptable workers (Begin 1993; Pajares, 2023).

Participants acknowledged that projectification encourages interdisciplinary collaboration and teamwork and promotes a culture of cooperation and knowledge sharing among researchers and academics. This augments the practical applicability of academic endeavors, making research outcomes and educational experiences more meaningful and impactful (Fowler et al., 2015).

The results imply that the focus on project-based activities encourages overspecialization in specific research areas or methodologies, potentially limiting the diversity and breadth of academic inquiry. According to the participants, this results in specialized, and isolated domains and limits the potential for collaboration and knowledge exchange. Additionally, juggling multiple projects simultaneously can result in fragmentation, inefficiencies, and heightened workplace stress. Balancing various responsibilities may pose difficulties for researchers and professors, potentially leading to decreased motivation and diminished organizational dedication. Moreno Escobar et al. (2023) further

underscore the challenges associated with managing numerous projects simultaneously, emphasizing how individuals can become overwhelmed by the sheer volume of tasks.

Participant 19 stated: "I acknowledge the benefits of projectification. this phenomenon boosted the interprofessional interaction and collaboration among everyone. I see it as a catalyst for teamwork. However, I feel I am doing similar tasks in different projects. I am becoming very specific and task-oriented, and I repeat the same task in different contexts. The focus on specific project goals sometimes limits broader academic exploration."

Academic professionals were also asked to reflect on how the transition toward a projectified university influenced the overall culture and identity of their university. Furthermore, they were prompted to consider how projectification aligns with or challenges the institution's core values. The survey showed that engaging in project-based activities cultivates essential capabilities such as critical thinking, problem-solving, and project management, enhancing the professional development of students, researchers, and faculty members. Interviewees said that the emphasis on projects has shifted university culture toward a more entrepreneurial and outcome-oriented approach. This approach can align well with the strategic goals of modern universities, but it also risks marginalizing traditional academic values such as intellectual curiosity and the pursuit of knowledge for its own sake (Bosman & Fernhaber, 2021; Li, 2023).

Participants agreed that in a projectified academic culture, individuals are valued for their agility, adaptability, and ability to navigate swift changes in communication and priorities. Currently, academics are expected to excel in project management, swiftly taking on new projects, shifting their focus, and responding promptly to communications. Ideal employees are flexible, work well in groups, and can adapt to different cultural contexts (Bennett and Burke, 2017). According to the interviewees, failing to meet these expectations in academia can lead to negative perceptions of competence and commitment. This aligns with Escobar et al. (2023), who argued that ideal employees prioritize adaptability over stability, demonstrating the ability to thrive in diverse cultural contexts.

During the discussions, participants lean toward the idea that the relentless pursuit of new projects does not always result in greater efficiency as the pressure to constantly initiate new endeavors focused on specific outcomes may lead to wasted time and resources. Participant 21 said, "The reliance on networking and relationship-building as integral components of projectification are time-consuming and is distracting us from the primary objectives, undermining productivity"

4.5. Teaching and curriculum

In this section, interviewees were asked if projectification influenced their methods of instruction and student engagement.

The results revealed that projectification reshapes how time and work are conceptualized, leading to atomized and quantifiable approaches. It is not easy for faculty accustomed to traditional teaching methods to balance the need for deep student engagement with the requirement to cover a broad range of material within a course. Interviewee 5 mentioned that projectification in academia is accompanied by a structured and goal-oriented work process that requires professionals to change their work habits and adopt an approach that segments the course activities and breaks up the work into discrete components.

Regarding the impact on their teaching session, participants said that this approach endorses dynamic learning and critical thinking, however, it enforces a structured, time-constrained framework. Lecturers agreed that this adds to their workload, who must provide ongoing feedback, manage group dynamics, and assess varied student outputs, often without the clear metrics available in traditional assessments. Their current teaching lecture is defined by a predetermined set of responsibilities and tasks (as mentioned in their course syllabi), such as curating content, delivering lectures, and evaluating assignments, with each task assigned a predetermined and fixed timeframe for completion.

While they have agreed that this approach guarantees compliance with predefined schedules and task completion, 64 % of the lecturers and professors agreed that it is dominating the significance of nurturing meaningful engagements with students and understanding their individual needs. Packendorff and Lindgren (2014) argue that in a projectified environment, academic practitioners tend to focus only on the main goals of the educational endeavor or subject, potentially overlooking major facets of effective teaching. This trend affects teaching practices, curriculum design, and overall university culture (Dollinger, 2020).

Participant 22 added: *"Working in a project-based setting has brought a dynamic and encouraging critical thinking environment, with no doubts. But it also made it rigid on me, I have no time for personalized feedback or deep engagement with students. In the past, I used to know more about my students' passions and future plans."*

Educators who adopt this standpoint may give precedence to adhering to deadlines and achieving quantifiable outcomes over careful consideration of content selection and pedagogical methodologies. Therefore, practitioners need to evaluate their workloads against key performance indicators (KPIs) (Bråthen & Ommundsen, 2018; Dollinger, 2020; Nedzinskaitė-Mačiūnienė & Minelgaitė, 2024). Various KPIs serve as benchmarks for weighing success within this projectified paradigm (Lewis & Decuyper, 2023). This prioritization of measurable success metrics might limit lecturers and professors from rigorously assessing teaching approaches and methodologies and lecture contents, as they concentrate on attaining pre-established goals within set timeframes.

Concerning the impact on the students, students learn to deal with their activities and tasks in a project base manner which often parallels real workplace situations and scenarios. They foster teamwork, real data gathering, and analysis and result in the creation of tangible outcomes such as reports, presentations, or proposals (Pajares, 2023). Participants stated that students in their senior project, master thesis, and PhD journey are complaining that the draft or project proposal is taking a lot of time and is more important than the actual realization of the research. Projectification introduces a specific temporality called "project time," which conflicts with the internal "process time" of research, causing tensions in academics (Ylijoki, 2014) and can lead to stress and illness among graduate students.

4.6. Impact on academic and professional development

The results confirm that engaging in project-based work provides faculty and staff with valuable opportunities to acquire new skills and competencies, including project management, leadership, teamwork, and the ability to collaborate across disciplines. These skills are increasingly essential in academia, where complex, interdisciplinary projects are becoming more common. Participants reflect on how their involvement in project work is accompanied by a sense of growth and career advancement, as these experiences enhance their ability to manage diverse teams, handle complex tasks, and engage in innovative problem-solving.

The results reveal that academic professionals at a projectified university must work on real-world, interdisciplinary projects. Through the continuous process of guiding students to apply theoretical knowledge to practical scenarios, professors stay current with industry trends and emerging technologies, which enriches their academic expertise and keeps their teaching relevant.

On the professional side, projectification opens the door for professors to engage in collaborative research opportunities with both academia and industry, which creates natural pathways for partnerships with external organizations and can lead to funded research or consulting opportunities. Moreover, working on activities handled in a project format encourages professors to develop and refine their mentorship, communication, and leadership skills to ensure project success.

Participant 27: *"The opportunity to work on collaborative real-world projects with both academic colleagues and industry experts makes me feel*

that I have become a better mentor. My students can see that the skills they are learning have practical applications, which increase their motivation and enhance their learning experience."

However, the intensified focus on project outcomes introduces challenges related to work-life balance and job satisfaction. This agrees with Brown and Green (2023) that there are instances where the demands of project-based work led to increased stress and burnout among academic professionals.

To sum up, Table 3 outlines the positive and negative impacts of projectification on the university environment based on the survey outcomes, allowing us to understand the practical contribution of the study.

Once the pros and cons of the projectification that affect all levels and activities developed by the universities are known, it is possible to make a proposal to avoid possible future difficulties and try to maximize the benefit of this new reality.

Training and capacity building of university staff in project management is essential to achieve the best possible results. The OECD has defined Capacity Development as *"the process by which individuals, institutions, and societies increase their abilities to perform core functions, define and achieve objectives, and understand and deal with their development needs in a broad context and in a sustainable manner"* (Enemark and Williamson, 2004).

It will be suitable for the universities to review the current capacities and skills of their workforce related to project management and release a capacity-building plan for reaching the minimum that will make it possible to face the rising phenomenon of projectification. This plan could include the outcomes and indicators, the design of learning activities and materials, the delivery of the training, the evaluation, and the necessary feedback (Horton, 1999).

5. Conclusion and recommendations

This research investigated the effects of projectification on different university functions. Research indicates that although transitioning to project-based work offers numerous benefits, it also presents a variety of intricate difficulties that need to be carefully handled. The research investigated the impact of projectification on job satisfaction, workload, and career advancement of academic staff (RQ1). Academic experts view projectification as a threat that impacts the allocation of research funds and the generation of groundbreaking studies. The challenges include harmonizing multiple projects, establishing consistent assessment standards, and guaranteeing equal access to a variety of learning opportunities. The impact of this limitation is felt in the quality of teaching, as researchers struggle to allocate adequate time to delve deeper into relevant information that goes beyond the project's boundaries. In this setting, instructors may need extra resources, time, and assistance to modify their instructional approaches. The data indicated that projectification has a detrimental effect on academics by escalating workloads, exacerbating stress due to tight deadlines, and cultivating role confusion among faculty, staff, and students. In the Middle Eastern engineering school environment, this can negatively impact both professional growth and academic achievement.

The researchers also examined how projectification affects the functioning of universities (RQ2), finding that this trend can undermine the management of university activities by breaking down processes, overtraining resources, and focusing on short-term projects at the expense of long-term objectives. This frequently results in inefficiencies and difficulties in sustaining a strategic focus. The project-based approach alters the environment of global higher education institutions and the way university activities are managed. The institution gives priority to high-profile research projects that are externally funded, resulting in a shift of focus away from teaching, basic research, and advising students towards tangible project results. Higher education institutions struggle to balance their core academic and research objectives, particularly when dealing with many students. To achieve a

Table 3

Positive and negative impacts of projectification in the university context.

Aspects	Positive Impact	Negative Impact
Teaching	Fosters active learning	Necessitates supplementary resources and time for employees to accommodate.
Methodology	Promotes critical thinking	
Teaching Effectiveness	Enables a structured approach to managing teaching duties, which leads to improved efficiency	Makes it harder to balance the quality and effectiveness of teaching due to the prioritization of effectiveness over educator-student rapport
Student Participation	Boosts student motivation and teamwork	Some students battle with the expanded workload and project management
Skill Development	Develops practical skills pertinent to the workforce	Working on various projects causes students to stress
Real-world Application	Aligns theory and practice and real work challenges	Poorly constructed projects may lack depth or relevance
Industry Connections	Facilitates networking and career opportunities	An excessive dependence on industry alliances may hinder academic independence
Time Management	Offers efficiency and goal-setting benefits for managing teaching responsibilities	Risk of overshadowing relational and nuanced aspects of teaching, potentially reducing student engagement and learning
Academic Research	Presents a structured approach to managing research projects, enchainning coordination	Resistance to adopting PM principles due to the unique challenges of academic research
Funding Dynamics	Provides systematic approaches to acquiring and controlling research funding, which improves transparency	Conforming with the funding trends limits innovation in research and imposes limitations on agendas

balance between efficiency and meaningful educator-student connections, as well as encouraging pedagogical innovation, is essential to make teaching a fulfilling part of academia experience. As project management practices increasingly infiltrate academic settings, it is crucial to develop proactive strategies that facilitate a harmonious integration, thereby supporting, rather than hindering, educational progress and institutional objectives. There is currently a reluctance to fully adopt formal project management methodologies and principles within engineering education. A persistent disparity remains between incorporating project management practices into university environments and the fundamental characteristics of academic research.

One of the key points related to the process of projectification concerns the nature and management of time. Time conflicts have been detected because of the existence of rigid time frames in the development of academic activities that must be solved. Previous authors have reflected on the four Cs of time: commodification, control, compression, and colonization of time (Ylijoki, 2014). Therefore, understanding the nature of time and how its management influences the formulation and development of all activities in the academic environment is essential for achieving the best results in the process of university projectification.

The ever-changing landscape of academic projects, combined with the intricate complexities and priorities of scholarly research, emphasizes the necessity for a nuanced approach to project management. Such an approach must recognize the uniqueness of academic pursuits while acknowledging the potential advantages of structured frameworks. In essence, the effective implementation of projectification demands careful consideration of these factors, prompting institutions to prioritize resource allocation, invest in faculty development, and establish robust support systems that cater to both student and faculty.

To effectively navigate the challenges of projectification, universities must focus on strategic planning and equitable resource distribution. Establishing strong administrative support structures, offering professional development to faculty, and ensuring that projects align with the university's core mission will help institutions capitalize on the benefits of projectification while minimizing potential drawbacks.

This research contributes to the literature by showing how projectification, often viewed as a managerial tool for improving efficiency, can have complex and sometimes detrimental effects on academia, particularly when implemented without careful consideration of the unique characteristics of academic work.

This research examined for the first time projectification at two levels: individual and organizational, offering valuable insights from a case study focused on the Middle East. It contributes to the growing body of literature on the projectification of universities by shedding light on its negative implications for the first time across six key areas: (1) research and funding, (2) doctoral studies, (3) administrative and

governance structures, (4) academic and professional growth, (5) teaching and curriculum, and (6) collaboration and university culture. By highlighting these emerging themes, this research highlights the tension between project-based work and traditional academic functions, adding a crucial dimension to existing studies by exploring how universities are adapting to the increasing pressures of projectification globally. Notably, this area remains under-researched, and this study fills a gap by providing a comprehensive analysis of how projectification impacts universities in diverse contexts.

This study illustrates how universities' academic programs, particularly engineering and research, have been influenced by external funding requirements and pressures to align with national and international development goals. By structuring research and academic activities around using a project manner, the university conforms to these pressures, reflecting a broader trend toward market-oriented education and industry partnerships.

The study allows examining the dynamics of projectification and explores how institutional shifts to structured and projectified activities in HEI, come at the expense of long-term educational goals and autonomy of faculty members and the quality of academic collaboration. This framework can be applied to future studies exploring similar phenomena in different educational settings and disciplines, enriching the discourse around project-based methodologies in academia (Christensen Hughes & Rog, 2008).

5.1. Future recommendations

Future research should explore the projectification of universities in different jurisdictions and compare how cultural, institutional, and governance differences shape the integration of PM practices. Scholars might assess variations in how projectification is implemented across countries and how it impacts academic governance, teaching, and research. In addition, future studies could further explore strategies for balancing traditional academic research with project-driven initiatives. Research should investigate the mechanisms that universities use to ensure that projectification does not lead to mission drift and how to maintain a sustainable focus on long-term, exploration research alongside applied projects.

Apart from the above, there is a need to study the effectiveness of interdisciplinary and cross-sector collaborations in academic settings. Understanding how these collaborations can lead to innovative solutions to social problems will provide practical insights for universities looking to implement project-based approaches in the education setting while addressing global challenges.

Future studies could broaden the scope to include comparisons with other universities in Lebanon or the region to explore the broader

implications of projectification across diverse institutional contexts. Further studies could explore the extent to which the insights from this study can be applied to universities in different regions or educational systems, thus providing a broader understanding of the global implications of projectification in academia. It would also be of interest to analyze the impact of appropriate project-based management and the success rates of the different universities, both in teaching and research (securing funding in competitive calls and obtaining research results of interest to the global community).

5.2. Limitations and future research lines

While this case study offers a detailed examination of projectification in an HEI, it is important to acknowledge that the specific administrative structure, institutional culture and pressures unique to the studied university may not reflect the experiences of all Lebanese universities or HE institutions in the Middle East. The university has approximately 8,000 students and 900 faculty members. It is highly regarded within Lebanon's higher education system, consistently ranking first in the country according to the QS ranking and is considered one of the top universities in the Middle East. The university's large size, excellent reputation, and high position within Lebanon's higher education system contribute to its distinct approach to projectification, which may not be generalizable to smaller institutions with different governance structures.

Additionally, the emphasis on rapid modernization and external funding in the studied university (total award amount for 2023 is 48 million) may be more pronounced (AUB, 2025) compared to universities with less resource availability or different regional priorities. Thus, while the study provides valuable insights into the challenges of projectification at the university under study, its findings should be interpreted with caution when applied to other institutions. For instance, while the studied university's academic structure, resources, and challenges are central to the findings, other institutions, especially those outside Lebanon, may have different experiences with projectification due to varying institutional policies, cultural norms, and governance models. Therefore, it is crucial to note that the conclusions drawn in this study should be applicable primarily to the studied university and similar institutions within Lebanon or other countries with comparable educational systems. For broader generalization, additional studies are necessary, especially those that explore how projectification operates in diverse educational environments.

5.3. Ethical statement

An official waiver letter was received from the University of Granada that the institution does not provide prior authorization for the development of research that does not have bioethical implications. This research and which has resulted in this paper has not required prior approval by the Ethics Committee of the University of Granada.

CRedit authorship contribution statement

Claudette El Hajj: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Germán Martínez Montes:** Writing – review & editing, Validation, Supervision, Methodology, Conceptualization.

Data availability statement

The data used in this research correspond to the results of personal interviews conducted by the researchers and are in the custody of the researchers.

Ethical statement

That the University of Granada does not provide prior authorization

for the development of research that does not have bioethical implications.

That the research developed by Prof. Germán Martínez Montes and which has resulted in the article “*Challenges of Projectification in an Engineering School: Lessons Learned and room for improving the whole performance of the institution*” has not required prior approval by the Ethics Committee of the University of Granada.

This is stated at the request of the interested party and for the purposes required by the journal Social Sciences & Humanities Open for publication.

Declaration of the use of AI

Generative AI and AI-assisted technologies has been used only in the writing process to improve the readability and language of the manuscript. This technology has been applied with human oversight and control and authors has carefully reviewed and edited the result.

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Declaration of competing interest

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