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Article

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Challenges and Support Frameworks for Producing High Quality Business Research: A Case Study of Lebanese Scholars

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Abstract This paper aims at exploring the contexts of academic research outputs faced by Lebanese researchers at four major Lebanese business schools. It analyzes both challenges and support mechanisms at these institutions to suggest improvements to the existing framework considering the researchers' perspectives and opinions. A multiple case study was carried out at four major Lebanese business schools in which 14 individuals involved in research were interviewed. Thematic analysis was carried out to explore the host of challenges faced in the sphere of research output. This study may provide other institutions and researchers in the region and the developing world with a greater insight into necessary alterations to their own research challenges and approaches.

Keywords Challenges · Support Mechanisms · Research Output · Business Schools · Lebanon

JEL Classification I 23

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1 Introduction

This exploratory research paper aims at shedding light on the challenges facing scholars operating at higher education institutions in the third world who wish to publish their work in reputable academic journals, to provide a better support framework. Research output from the developing world is negligible when compared to that emanating from the developed world. Studies on the determinants of research productivity of social scientists have been deficient (Vuong et al. 2019). Similar studies were conducted in other developing countries such as Vietnam and Uganda but fell short from covering the topic in depth (King 2004). Previous works (Balakrishnan 2013; Abouchdid and Abdelnour 2015) tackled the research challenges in the developing world or the MENA region, by zooming on specific institutions or multiple ones, but none provided an in-depth analysis of the situation in a specific country. This research capitalizes on this gap, by highlighting the challenges impeding research output as well as exploring supporting mechanisms, as intimately detailed by concerned and relevant interviewees. The researchers aim to augment existing research support frameworks, for better employment by managers, deans and directors of higher education institutions. This research specifically aims to:

- Explore the research challenges faced by Lebanese scholars in higher education
- Explore support strategies that can facilitate their research endeavors

Production of academic research is a vital task for researchers because it gives them an opportunity to pursue an academic career in an institution of higher education, establish oneself in academic circles, elevate the status of their institution, and make a direct contribution to knowledge (Lu 2015). Most aspiring scholars are aware that publications in respected journals will give them a bargaining chip in a very competitive environment that is modern day academia (Soule et al. 2007). Scholars are also driven by the desire to acquire a standing amongst their colleagues (McGrail et al. 2006). The pressure to publish is specifically strong for scholars in the social sciences (Gao and Zheng 2020). However, there is a host of factors that stand in the way of research production. Creswell (1985) attributed these challenges to individual factors such as intelligence and motivation, and to other environmental factors such as funding and institutional reputation. Musiige and Maassen (2015) similarly argued that, in a global setting, factors that affect research productivity are individual, organizational, funding-related, and research culture-embedded. Balakrishnan (2013) classified barriers as governmental, industry-related, publishing, institutional and individual in nature. However, Santos et al. (2022) argued that research productivity and the researchers' strategic research agendas seem to affect one another concurrently, more than any other external factor such as funding availability. The more scholars excel in research and publication, the more they are motivated to engage in riskier, breakthrough and multi-disciplinary research, and vice versa (Santos et al. 2022).

The following section features the background of the study to acquaint readers with the country's difficulties and the nature of the higher education sector within it. Then, the literature review section tackles different contextual challenges and presents a research support framework. The research methodology section high-

lights the exploratory nature of the study whereby multiple business faculties were chosen to collect data from professorial ranked faculty members. A finding and discussion section follows where challenges and support strategies are categorized in a synchronized manner with the literature. The study ends with a concluding summary of results, limitations, practical implications and future research venues.

1.1 Background

Exploring the issue of research output in a challenged context as Lebanon will shed light on the topic in other challenged areas. Lebanon bears multiple characteristics that define and characterize a developing nation, such as, rampant corruption, ailing infrastructure, inefficient bureaucracy, red tape, fragile economy, and political instability with limited civic involvement in the political process (Helal et al. 2023). A prolonged civil war in Lebanon (1975–1990) caused substantial damage to urban areas, particularly to infrastructure (Ghanem 2019). Despite signing a peace accord in 1989, Lebanon remains a scarred nation, with many blaming rampant sectarianisms for it (Ghosn and Khoury 2011). Constant meddling and manipulation of internal strife by regional and world powers (Kisirwoni 1980) had culminated in the 2005 political assassination of then Prime Minister Rafiq Hariri and the August War of 2006, which had very a negative effect on the Lebanese economy. Currently, Lebanon is facing yet another political and humanitarian crisis, as millions of Syrian refugees put a strain on the multiple sectors of the Lebanese economy. Economic activity declined, and production waned resulting in a downturn in governmental revenues and a surge in public deficit.

Higher education in Lebanon is provided by Technical and Vocational Institutes, university colleges, university Institutes and universities (Ministry of Education and Higher Education 2017). The Lebanese University is the only public university. There are 41 other private institutions of higher learning (Soueied et al. 2014). Both the private and public sectors are administrated by the Ministry of Education and Higher Education. Languages of instructions in Lebanese institutions of Higher learning are Arabic, English and French (MEHE). Despite decent quality of education on offer, enrollment in Lebanese institutions of higher learning remains low (UNESCO 2017). This can be attributed to lack of public universities (with LU being the only public university in the country) and rising tuition fees in the private sector of higher education (Soueied et al. 2014). Six institutions of higher learning were selected due to their rank in the official regional rankings and their language of instruction being English, with a focus on their respective business schools. American University of Beirut (AUB), Lebanese American University (LAU), University of Balamand (UOB), Holy Spirit University of Kaslik (USEK) and Notre Dame University (NDU) account for the lion's share of all research output in the country. The universities included in this study were responsible for more than 70% of total research production in the country (American University of Beirut 2011).

2 Literature Review

The literature review sheds light on the various challenges posed on researchers, whether at macro, meso, or micro levels. The section starts by discussing globally shared challenges, followed by regional and national related obstacles, organization-specific impediments, and concludes with individual hardships pertaining to producing meaningful research. The literature concludes with a suggested support framework that might alleviate these challenges and aid in producing abundant research of higher quality.

2.1 Global Context

The world of academic publishing today is afflicted by several factors that have their toll on global research production. The increasing market concentration in the academic publishing industry, the rise of open access, the increase in the number of predatory journals, and publications with nefarious reputation for being of low quality are plaguing the field of research (Xia et al. 2014).

The academic publishing industry has been one of the fastest growing media industries in the previous decade (Forgues and Liarte 2013). This rapid growth of the academic publishing industry has caused much controversy specifically regarding the astronomically high profits of the major publishers (Larivière et al. 2015). The top tier publishers account for more than 50% of all papers published in 2013. The fields of social sciences have the highest level of concentration (70% of papers from the top five publishers), while the humanities have remained comparatively independent (20% from top five publishers) (Larivière et al. 2015). A majority of academic publishers utilize a system of peer-reviewing or editorial refereeing to select papers for publication, with reviewers and editors working gratis (Forgues and Liarte 2013).

A majority of the articles are not directly available to the public. One can obtain access only through institutions which have purchased a subscription or is able to purchase articles on a per-article basis (Tennant et al. 2016). Such subscriptions to ranked journals are not affordable on individual basis or even on institutional basis (Odlyzko 2006). Subsequently, the articles are not able to realize their full potential impact, thus leaving their authors as well as their funders without proper recognition (Hitchcock 2004). Lack of access to scientific works and international studies is cited as the main obstacle towards research production (Alzahrani 2011).

Predatory journals pose a potent threat to academic publishing. They publish research based on stolen or fabricated content with no peer review process (Ferris and Winker 2017). The increase in numbers of “academic” papers published in predatory journals inflate the number of academic publications coming from the developing world.

Balakrishnan (2013) highlights three barriers pertaining to the publishing industry represented in the peer-review bias, the linguistic barrier, and the small representation of journals and reviewers from developing regions like the MENA region. The former bias is manifested in the work being evaluated on the basis of the researcher’s affiliations rather than the work’s quality and merit, or the experience of

the reviewer (Mullins and Kiley 2002). Many studies have focused on the problems encountered by non-native speakers of English, which has been widely recognized as the international language of scientific publication (Hyland 2012). Researchers from Asia, Africa, Europe and even Canada are reportedly facing obstacles while producing and publishing research (Pho and Tran 2016). University lecturers from Malaysia (Tahir and Bakar 2009), Vietnam (Pho and Tran 2016), Saudi Arabia (Omer 2015), Spain (Burgess et al. 2014) and francophone Canada (Gentil and S  ror 2014) are reported to be struggling with the English Language.

2.2 Regional Context

Despite some progress in terms of research output, the developing world still lags behind the developed world. The developed countries accounted for 47.60% of all documents in the fields of Business, Management and Accounting, compared to just 2.4% from the MENA region (SCImago 2018), and to 1.1% from Africa. Knowledge production in Arab countries is a big concern for officials and academics (Abouch  did and Abdelnour 2015). A Thompson Reuters report showed that only 4% of the world's academic literature is produced by the MENA region. Despite doubling their publication output, Arab States as a Group, accounted for 1% of global R&D expenditure in 2013, up from 0.8% in 2007 (UNESCO Science Report 2015). Lebanon occupies the 68th position in the country ranking with a total of 23,968 published works, with 81% of all research conducted in the field of Physics, 14% in health sciences and a mere 5% in social sciences (SCImago 2018).

Insufficient government funding, regulation, absence of a critical mass of researchers, non-access to information and field-specific factors are identified as key regional and national barriers to research production (Balakrishnan 2013). Insufficient government funding is specified as a key challenge in the MENA region. There is a direct relationship between research output growth rate and the critical mass of researchers (NSF report 2010; UNESCO Science Report 2015). Low doctoral enrollment rates in the MENA countries (Balakrishnan 2013) might be an indicator of the meager number of researchers as research careers usually commence with a doctoral degree (Velho 2006).

The region's unfavorable laws, tight regulations, poor governance and political instability deny researchers the ability to distribute or share knowledge they produce without government approval (Balakrishnan 2013). Successive Arab Human Development Reports have portrayed a rather grim picture of the research production due to bad governance and lack of academic freedoms. Data collection and quality are other common regional barriers (Abouch  did and Abdelnour 2015). Walters (2001) attributes the absence of reliable data to disinterest in research among other cultural factors.

2.3 Organizational Context

Research productivity is highly contingent on the organizational context (Musige and Maassen 2015; McGill and Settle 2012). Organizational factors crucial for research output, include the clarity of research objectives, availability of research as-

sistants, financial incentives and access to both internal and external research funds (Sayyed 2024). Strategic organizational priorities and access to research support are cited as particularly important organizational boosting factors for research production (Balakrishnan 2013). Competence of research assistants is an important factor affecting the research output of professors (Kotrlik et al. 2002). The complex landscape of faculty work, including teaching, service and research has proven to be the biggest challenge to research production (Azad and Seyyed 2007).

Research culture is an equally important factor for research productivity (Clark 1986), exemplified in language, leadership focus, and philosophies behind research policies (Hill 1999). Numerous higher education institutions in the Arab World have not yet attempted to establish a research culture which embraces and motivates faculty research productivity (Saleh 2002). The poor strategic outlook of universities is a key factor behind poor research output in the MENA region (UNESCO 2015).

2.4 Individual Factors

The role of the individual regarding research production cannot be overstated. Many personal attributes were found to be pivotal in research production (Musiige and Maassen 2015), such as interest in the discipline, ambitions, self-esteem, age, career rank, academic qualifications, and a desire to work with others (Lechuga and Lechuga 2012). The confidence of academics in their ability to produce research is vital for research productivity (Kotrlik et al. 2002). Gender, years of experience, teaching versus research time, level of collaboration among different disciplines, the style of the researcher and administrative and teaching load are found to be additional factors impacting research productivity (Jung 2012). Researchers' psychological characteristics as perception, stress and motivation are stressed to be important factors in research productivity by Blackburn and Bentley (1993). Different professorial ranks influenced underlying motivations for research, where professors at high ranks revealed psychologically driven motivations, while professors at lower ranks were materialistically driven (Chen et al. 2006).

2.5 Support Framework

The support mechanism for research production cannot be overstated. Despite multiple studies conducted in developing countries pertaining to research productivity, Balakrishnan (2013) is probably the one and only researcher who provided a set of strategies for improving research production. Balakrishnan (2013) explored a host of barriers and categorized them under governmental, industry-specific, publishing-related, and institutional headings. In parallel, he offered complementary strategies that could be ingrained at every level to counteract these challenges. Table 1 outlines the strategies suggested by Balakrishnan in light of the challenges prevailing in the MENA region.

The above review detailed the literature on the various challenges against research endeavors and reported on possible support mechanisms that can boost research, thus acting as a prerequisite for the key research questions and paving the path for a fitting methodology.

Table 1 Balakrishnan (2013) Conceptual Model of Support Strategies

Barriers	Strategies
<i>Government Barriers</i>	<i>Government Policy Strategies</i>
Funding (Research & Development)	Increase Funding for R&D & Education
Critical Mass of Researchers	Change Labor Laws
Laws/Regulations	Change Laws on Data Collection
<i>Industry Barriers</i>	<i>Industry Level Strategies</i>
Mentorship	Memorandums of Understanding with academic/research institutions
Access to Data at Company and Customer Level	Subsidize data collection/share knowhow/data mining Share insights on market dynamics to reduce relevance gap Formalize as part of CSR in nascent stages
<i>Publishing Barriers</i>	<i>Publishing Strategies</i>
English	Subsidize English translations and editing services
Reviewer Bias	Reviewer and author workshops and recognitions
Ethnocentricity	Ensure composition of editorial boards and some special issues dedicated to those low output regions
<i>Institutional Barriers</i>	<i>Institutional Strategies</i>
Managing Strategic Priorities	Prioritize and focus research streams, systematic recruitment
Access to Research Support	Collaborations with industry/academia and mentorship
Institutional Performance Appraisal	Relevance metrics for performance appraisal and expectations Employee development, education refocus for research and enquiry based learning
<i>Individual Barriers</i>	<i>Individual Strategies</i>
Time	Network with peers (local, international, across disciplines, industry, publishers and students)
Relevance and Quality	Interdisciplinary research and mixed methodology research Focus on volume and quality, conceptual articles and relevance gap

3 Methodology

The aims of the research were the exploration of the research challenges faced by Lebanese scholars, when trying to publish their research in foreign, ranked, and recognized academic journals, as well as the investigation of the support strategies that can facilitate the researchers' endeavors. The study tends to be exploratory in nature as the topic is quite new with little being done on it previously. The research was conducted through semi-structured interviews in four embedded case studies, representing four business schools in top Lebanese universities. These schools are cited as some of the most thought after schools for business education by Lebanese students. All the chosen schools abide by the American system of education, and all use the English language as the main language of instruction. The business schools were selected based on the following criteria: (1) the university is based in Lebanon and has a reputable business school; (2) the university has significant

Table 2 Bibliographic Details of Participants

Interviewee Code	Degree	Rank	Affiliation
A1	PhD	Assistant Professor	American University of Beirut
A2	PhD	Associate Professor	American University of Beirut
B1	PhD	Associate Professor	University of Balamand
B2	PhD	Full Professor	University of Balamand
B3	PhD	Full Professor	University of Balamand
B4	PhD	Full Professor	University of Balamand
B5	PhD	Full Professor	University of Balamand
L1	PhD	Assistant Professor	Lebanese American University
L2	PhD	Associate Professor	Lebanese American University
L3	PhD	Assistant Professor	Lebanese American University
N1	PhD	Full Professor	Notre Dame University
N2	PhD	Associate Professor	Notre Dame University
N3	PhD	Associate Professor	Notre Dame University
N4	PhD	Associate Professor	Notre Dame University

research output as compared to others within the country context; (3) the university officials and researchers were willing to share in-depth information. Data obtained from several case studies can enhance and reinforce the findings obtained from one case study (Yin 1994).

Professorial ranking faculty members were purposively chosen from these schools, either through personal contacts or collegial referrals. Fourteen semi-structured interviews were conducted to shed light on reoccurring similarities and patterns. The interviewing process was halted upon reaching theoretical saturation and no further findings were revealed. Although small samples are more common in qualitative research due to the latter's in-depth approach (Patton 2002), the sampling size might be an issue, since it has the potential to misrepresent the population (Yin 1994). Table 2 reveals the biographic details of the participants, who are all PhD holders, occupying various professorial ranks, and working at embedded business schools within four different universities.

A semi-structured interview guide was designed to explore the various contextual challenges and recommended support strategies. Different questions were posed to investigate the influence of various forces at each contextual level on research productivity. Thus, the interview guide was divided into four sections, with a set of nonleading questions pertaining to each level, to explore the forces at play at each of those levels. Refer to Appendix A for the full interview guide. The interview guide was delivered to participants for revision before consent was confirmed. All the interviews were conducted in English, recorded, and took an average of one hour each. The interviews were later transcribed and analyzed by highlighting common themes. All data was then sorted according to the themes and sub-themes, accompanied by attachment of reflective notes. Sorting was followed by categorization of themes and sub-themes and color coding of relevant data. All findings were then analyzed and re-examined prior to the stage of comparison as per grounded theory approach. By comparing conflicting and converging statements and outlining

Table 3 Derived Support Framework

Barriers	Support Framework
<i>Global Barriers</i>	<i>Global Strategies</i>
Networking and Collaboration	Establishment of research and collaboration networks abroad
Different Forms of Bias	Universities need to better promote themselves to publishers
Nature of the Publishing Industry	Language training and support, provision of editorial and translation services
Lack of Interest in Local Topics	Develop partnerships with universities in other developing nations who are on the right path
Geographic Location	Monitor and marginalize predatory journals
Linguistic Barriers	Provide more funds for travel and data collection from key sources abroad
Inability to Attract Talent	
Predatory Journals	
<i>National Barriers</i>	<i>National Strategies</i>
Lack of Data and Sources	Necessity to establish a collaborative network between government, academia and industry in order to facilitate better access to data (both private sector and public sector)
Lack of Government Funding and Support	Reform research unfriendly government policies
Poor Research Culture	Universities need to campaign for greater access to data
Poor Government Policies and Regulations	Reforms at CNRS for greater efficiency and transparency
Economic and Political Instability	Establish research centers and other infrastructure
Poor Cultural Approach to ethics	Need for creation of government bodies responsible for research production and strategy
Poor Infrastructure	Collaboration between universities for bigger projects
Lack of Government Cooperation with Other Countries	Reforms of the educational system in order to improve research culture in the country
No Collaboration Among Universities	Greater government participation in international treaties concerning education and research
Poor Governance at the National University	
<i>Institutional Barriers</i>	<i>Institutional Strategies</i>
Insufficient Material and Financial Support	Better financial and material support
Heavy Administrative and Teaching Loads	Better access to databases and materials needed for research
Lack of Sufficient Training and Mentorship	Reduction of the teaching load
University Identity	More administrative workers
Poor Research Policies	Mentorship and training programs
Insufficient Interdepartmental Collaboration	Solid PhD programs
Poor Recruitment Policies	Resolution of institutional identity crisis
University Research Culture and Environment	Establishment of research committees

Table 3 (Continued)

Barriers	Support Framework
Department Size	Increase department size to allow for greater collaboration, larger number of research assistants and specialization
Lack of Specialization	More seminars on knowledge creation and ethics to improve research culture and ethics
Immense Pressure to Publish	Improve recruitment policies
Poor Governance	Policy reforms to favor research
<i>Individual Barriers</i>	<i>Individual Strategies</i>
Lack of Motivation	Provide greater financial support to fields that are struggling
Lack of Recognition	Introduce and system of incentives and rewards based on achievement
Difficulty in Maintaining Balance Between Teaching and Research	Fair reward and appraisal system
Lack of Motivational Colleagues	Make policy clear and the goals attainable to reduce pressure and stress
Time	Recruitment of talent is vital for motivation

them versus the theoretical literature, the analysis was informed by principles of the grounded theory (Glaser and Strauss 2017). The most crucial objective when performing qualitative research is to extract hard, comprehensible, and reliable evidence which will be consistent with theoretical literature and will allow to deepen and increase our knowledge of the subject being presented (Patton 2002).

4 Findings and Discussion

Thematic analysis revealed that there are multiple research challenges faced by the participants. Some were discussed more extensively than others. Regardless of the diversity in the interviewees' age, educational background, university affiliation or experience, there was a consensus that difficulties reside at the regional, national, organizational and individual levels. Support strategies were also indicated at every level, to make the research production a more engaging, less cumbersome, and more fruitful endeavor. Both sets of challenges and support strategies were grouped and presented under relevant and common headings. The collected data is summarized in Table 3 at the end of findings presentation section.

4.1 Publisher Indicated Challenges

At the macro level, various challenges were discussed, main of which is the ability to network among Lebanese researchers and their equals abroad, the publishing houses and information sources. "*Journals look at your network, who do you know, and who is who in this small ecosystem*" (A1). 'Forced collaboration' was cited by eight interviewees to be a major obstacle against publication in peer reviewed journals. Interviewees had to share credit with a collaborator affiliated with an institution in the developed world, despite the fact that the latter's contribution is minimal

or nonexistent. Four interviewees emphasized that establishing such a network is a cumbersome task. *“A lot of us, upon finishing our PhD dissertation, return to Lebanon before establishing any networks. Upon return, the heavy teaching loads make nurturing these relations almost impossible”* (N1). Ability to collaborate with top-tier researchers from Lebanese universities is also difficult due to a related cited challenge. Lebanese universities’ difficulty to attract top tier researchers from the Lebanese diaspora, due to lack of competitive salaries and lack of recognition. *“Why would any of them come back when they have better conditions abroad? I came back only because of my family”* (L2).

Different forms of bias were raised by nine interviewees to be another challenging issue. Three of the interviewees accused the publishers of favoring research emanating from top universities in the West, over comparable research from the developing countries. *“The editors are used to their affiliates from top schools, there is simply no room for us”* (B3). Thus, the affiliation of the authors reins superior to the quality of their research. *“When I was affiliated with institutions in the West, work of similar caliber got accepted at a much higher rate”* (N3). Only a minority mentioned discrimination on the basis of ethnicity or religion. *“I could tell from the rejection email that my religion had something to do with the negative decision”* (N1). Two other participants stated that the industry is riddled with cronyism and did not adhere to the high ethical standards championed by the industry. Lingual biases are also at play. Publishers are not interested in articles that cannot be disseminated to the masses. Thus, participants accused the publishing industry of valuing profit over the dissemination of knowledge. Lebanese researchers are multi-lingual, but not necessarily fluent in academic writing. Three interviewees mentioned that they constantly employ editors and pay personally for their services.

Interviewees similarly dwelled on the issue of bias due to the nature of the research topics. Seven interviewees mentioned facing challenges when researching topics of translational nature. Research of local issues is frequently rejected due to lack of interest among potential readers. *“The topic of the research has to be relevant to the readers, and most readers in the developed world are not interested in our issues”* (B3). There is an engrained belief among participants that editors are interested in publishing topics related to a few developed countries such as US, UK and Canada. Four interviewees said that this practice is a major barrier to knowledge dissemination and creation of a global research culture. Time to get published was mentioned to be another impediment.

Six interviewees stressed the severity of the physical and geographic divide. *“The long distance between the developing and the developed world makes it cumbersome to be in touch with key sources and hubs of information”* (B1). Participants spoke of the huge efforts needed to gain access to funding for travel and to acquire necessary visas. *“The funds allocated for conferences and travel expenses by the University are insufficient to cover even one trip per year”* (B5).

4.2 Regional and National Challenges

All interviewees agreed that there are problems with data availability and accuracy. Access to verifiable data, whether public or private, is a prevalent problem

in Lebanon and the MENA region. *“Data is simply unavailable. If it’s available nobody wants to share it, they say oh it’s for the governmental or for professional usage, and when you can get it, it’s probably incorrect or tempered with”* (N1). Most interviewees stated that they resort to data from the developed countries. *“How can we use this data for research when the World Bank and other international organizations states that it is unverifiable?”* (L1). A few also mentioned that companies lack transparent policies.

Lack of government support and funding was mentioned by all participants as a major obstacle. Current support mechanisms such as CNRS (The National Council for Scientific Research) are inefficient. *“CNRS simply funds a limited number of topics, with funds insufficient to buy a data set”* (L2). Insufficient government funding, the partisan nature of bureaucracy and endless amounts of red tape were discussed extensively. Nine interviewees believed that the government neglect to research is manifested in the promotional policies pursued at the largest and only public university in Lebanon, as no research requirements are demanded. Eight interviewees blamed the government for the lack of strategies and policies governing research. Five interviewees spoke of the lack of government participation in international treaties on higher education, thus hindering access to information. Four interviewees underlined the lax policy towards licensing new universities, which led to the institution of more than forty-eight universities in a country of four million people. This practice drastically reduced the quality of research and led to a severe blow to the quality of education. Five interviewees believed that the unstable political and economic situation, coupled with corruption, render research production difficult. *“How can anyone concentrate on research in such an unstable environment?”* (N3). Nine interviewees similarly dwelled on the weak research culture in the MENA region. Six of whom stated that societies in the MENA region are rather focused on their socioeconomic dilemmas rather than the issues of knowledge production and dissemination. *“Both society and government are indifferent towards research production or information sharing”* (B3).

Seven interviewees also stressed the absence of research infrastructure such as research centers, libraries and government bodies responsible for research. Most also mentioned that the infrastructure does not help, especially the poor quality of the internet services. Sharing information and collaboration among universities is minimal, as indicated by five interviewees, rendering large research projects harder to execute.

4.3 Organizational Context

Uniformity of responses regarding organizational forces and challenges is noteworthy. Despite being affiliated with different institutions, all interviewees were in agreement regarding the scarcity of human and financial support. Twelve interviewees stressed that the funding provided for various research activities such as attendance of conferences abroad, purchase of necessary databases, hiring of research assistants, and subscriptions to academic publications were inadequate to carry out high quality research. *“Research assistants are not competent. If I need to spend most of my grant money on an assistant, then I better train him first, or still*

better, do things myself” (N3). Five interviewees blamed this on weak governance and mismanagement of funds.

Six interviewees noted that their institutions suffered from identity crisis, not sure of whether they are more of a research or a teaching institution. They hire teachers and expect them to do high quality research. The absence or lack of effectiveness of research committees to oversee research production is detrimental. *“No research committees imply no research policies or implementation tactics!”* (B3).

Twelve interviewees believed that scholastic duties of teaching and service are too heavy to handle. *“How can anyone expect a researcher to produce research when they are teaching four courses per semester?”* (N2). Eight interviewees claimed that their institutions lacked mentorship and training programs that allow researchers to stay up to date with latest soft wares and technologies. Five interviewees believed that publishing in the field of business was tougher than in other disciplines. Four interviewees believed that the small size of the business school is inversely related to specialization and collaboration opportunities. *“Back in the US, we had a big number of MBA and PhD students specializing in different disciplines. In small departments, that is not the case.”* (N1).

4.4 Individual Challenges

Lack of motivation ranked first among personal challenges, as per eight interviewees. The absence of extrinsic benefits and recognition benefits were the main reasons for the lack of motivation. Balancing teaching and research were extremely hard, as per six interviewees. *“I want to do research but not at the cost of being a good teacher”* (L1). Finding difficulty in locating colleagues with similar research interests was mentioned by five interviewees as another main hurdle for research production. Extended families as part of a high context culture were mentioned by two researchers as being another toll on their time.

4.5 Support Framework

4.5.1 Global Context

Interviewees proposed additional solutions to current challenges, not mentioned in the literature. The suggestions are categorized in the same contextual order as the literature review and research findings. In the context of global challenges, interviewees suggested the following possible remedies. Six interviewees mentioned that universities in Lebanon need to focus on building research networks with universities in the developed countries to boost rates of collaborations and joint projects. Four other interviewees suggested building bridges with reputable universities in the developing world, such as Russia and South Korea. *“We cannot expect to play catch up with the developed countries, we simply cannot do this, we need to learn and build closer ties with other developing nations who are moving in the right direction”* (B4). Five researchers suggested that Lebanese universities need to better promote themselves and make themselves visible to the publishing houses in an effort to help their affiliated researchers.

Much importance was given to language training and support mechanisms, with five interviewees stressing the need for editorial services and training to be provided on campus in order to eliminate the challenges associated with linguistic barriers. In terms of policy, three interviewees suggested that universities should monitor and blacklist predatory journals in order to safeguard their reputation and force their researchers to focus on official refereed publications instead.

4.5.2 Regional/National Context

All researchers stressed the need to solve the issue of data availability and accuracy. They suggested that universities must collectively campaign for greater access to data and statistics. *“No university in Lebanon can do it alone, there needs to be a joint lobbying for better laws and regulations concerning data collection”* (A1). Eleven researchers also suggested lobbying the Ministry of Education for greater reforms and transparency at the CNRS. Eight interviewees mentioned that the government needs to establish some research infrastructures such as research centers and strategizing bodies. *“There needs to be a governmental body helping to bridge the gap between academia and industries and facilitating engaged scholarship”* (N3). In the same line of thinking, four interviewees highlighted the need to set policies and memorandums of cooperation among academia, governmental and the industry sectors. *“It is a win-win for all, for the purpose of not publishing research only but also implementing recommendations”* (B3). Eight interviewees also emphasized the equal importance of collaboration among universities, as a necessary mechanism for conducting large research projects. A few researchers also suggested the need to lobby the Ministry of Higher Education for greater participation in international treaties and agreements concerning education and research.

Seven researchers underlined the importance of nurturing a research culture in the country as a whole, with four interviewees addressing this through amendments to the educational system to emphasize critical thinking rather than memorization and parroting. *“Critical and questioning minds are crucial from a young age”* (N2).

4.5.3 Organizational Context

All interviewees hailed sufficient human, informational, and financial support to be of paramount importance. Greater access to databases and funds is the most important step towards increasing the quality and quantity of research produced. A call to reduce load and administrative tasks was equally echoed. *“Load reduction needs to be seriously considered if we want to improve research productivity”* (L2). Twelve interviewees believed that universities need to employ more administrative staff to allow researchers to focus on research. Mentorship and training programs were acknowledged by eight interviewees for the purpose of sharing best practices and becoming acquainted with the latest tools. Seven interviewees highlighted the need for solid PhD programs which would provide knowledgeable research assistants to boost research production.

Aspiring to be a research institution entails staying true to one's calling, by setting the right strategy and taking the right tactics in that direction as stated by six

interviewees. *“You know the decision is not up to us, but we cannot be both teaching and research universities, we need to make a choice and stay true to that strategy”* (L3). Two interviewees went further to suggest establishing research committees in order to establish working research policies.

Five interviewees suggested the expansion of the departments through the recruitment of more faculty and research assistants in order to allow for more specialization, and greater interdepartmental cooperation. Attracting top-tier researchers entails adopting attractive conditions for work and research. Injecting new blood into the higher echelons of management was also implied as a mechanism for development. Five interviewees thought of workshops on knowledge dissemination and research ethics as essential to develop the research culture at Lebanese universities. Change in the recruitment policies was mentioned as well as the need for complete system restructuring at universities in order to replace the old guard and inject new blood into higher echelons of management.

4.6 Individual Context

Ten researchers believed that social research particularly in the fields of business and management is harder than in other scientific fields. Financial incentives, among other motivators, were suggested by eight interviewees as highly important for boosting research productivity. It is important to show researchers that their research output is highly valued, as indicated by L2. *“We don’t get any form of recognition or any financial benefits for publishing in top tier journals, so why try harder when I can settle for lower ranked journals?”* (N3).

Seven researchers highlighted the need for a fair appraisal and reward system that would be dictated by clear research policies. It is important to note that interviewees revealed different motivational factors based on age and rank among other variables. Younger interviewees were motivated by financial incentives and career advancement. Those at higher ranks were motivated by intrinsic benefits and wariness over their position, whereas the most senior interviewees were motivated by the need to stay relevant, and their need for recognition. Five interviewees suggested the need for having authorities in their fields, in order to motivate and encourage their colleagues. One researcher highlighted the affiliation factor, stating that there were very few worthy universities to be proud of in Lebanon and that university reputation played a big role as a motivator.

The challenges and support strategies mentioned by the participants were echoed with much emotion and out of lived experiences. Many changes were suggested at various levels in the education sector and context to make the research work more flowing and of higher quality. These many suggested changes, if implemented, will no doubt lead to a quality and quantity boost in the research output and knowledge production. These changes are generic in nature, so they might equally apply to all contexts and universities that face similar challenges. Table 3 below summarizes the cited research challenges and recommended support strategies as derived from the collected data.

4.6.1 *Summary of Findings and Discussion*

The specific and detailed nature of the spotted challenges and support strategies serve the purpose of the paper, when it comes to mending the gap in the literature. While many of the cited challenges by Balakrishnan (2013) and other authors were confirmed, new ones were mentioned. At the global context, the challenges of predatory journals (Xia et al. 2014), peer-review bias, linguistic barriers and small representation of reviewers and journals from the developing world (Balakrishnan 2013) were all confirmed by the findings. However, new challenges were mentioned as the absence of networking and collaboration, the lack of interest in local topics by the publishing houses, the inability to attract talents and engage in worldly research conferences due to the far geographic location of the country. At the regional level, new challenges were cited, as the poor research culture, the economic and political instability of the country, poor infrastructure, lack of government cooperation with other countries and absence of collaboration among local universities. At the organizational level, the insufficient financial incentives and scanty internal and external research funds argued for by Sayyed (2024) were confirmed. Moreover, the big loads of teachers mentioned by Azad and Seyyed (2007) were also established by this study. However, lack of sufficient training and mentorship, unclear universities' identities, small departments, insufficient interdepartmental collaboration, and poor recruitment policies were additionally emphasized in this study. On the individual level, this study highlighted the lack of motivation, the absence of recognition and the scarcity of motivational colleagues as key deterrents for research, while the literature stated many other individual attributes that impact research productivity. The support framework that resulted from this study was aligned with the cited challenges, and thus the support strategies were more specific to the real-life challenges of researchers. It is worthy to note that direct and indirect factors were shown to impact research output, and thus any supporting mechanism shall be multi-layered and not restricted to the boundaries of the educational sector and the country per say.

5 Concluding Remarks

This study aimed at exploring the different challenges faced by scholars in the developing nations and suggested some supporting mechanisms from people on the frontline. It has augmented the list of challenges faced by researchers in developing countries by highlighting the perspective of Lebanese scholars. It has also added to the supporting mechanisms mentioned in the literature. This study highlighted the urgent need for customized approaches to overcome the difficulties faced by researchers in developing nations, particularly in areas characterized by political and economic volatility, like the MENA countries. It has advanced knowledge of the challenges faced by Lebanese scholars in their quest of high-quality research output. The study has expanded the toolset accessible to policy makers and stakeholders interested in boosting research productivity. The support framework can be utilized by policy makers for practical solutions.

The study emphasized the necessity of lessening ethnocentrism and promoting inclusivity within the publishing industry. This may give a chance for publishers to take a more proactive role in advancing fair representation and reducing biases. It also addressed the potential advantages of increased collaboration between governmental organizations and academics. Many socioeconomic difficulties can be better dealt with through research, in an effort to transform societies and advance nations.

This study offered a useful starting point for policymakers, academics, and publishers to collaborate on creating a more robust research environment in poor nations. It also acted as a steppingstone for future research endeavors. There is a chance to close the research production gap and promote significant advancement in these areas through a multidimensional strategy that targets both the problems and potential solutions.

The sample of 14 interviewees renders results to be non-conclusive and non-generalizable to the entirety of the developing world. The small sample size highlights the need for caution when extrapolating these results to the larger community of scholars in underdeveloped countries. To provide a more complete picture, future research projects should connect with policy makers at the university level and aim for larger and more varied participant pools, thus yielding more triangulated results.

6 Appendix

6.1 Interview Guide

- Global & Regional

1. What are your general views on research output, in the context of developing vs. developed world?
2. What are the research challenges, if any, in terms of producing and publishing?
3. Which challenges do you consider are the most pressing?
4. What do you think of the academic publishing industry?
5. Do the linguistic differences pose any barrier to getting published?
6. Have you ever felt being discriminated or disfavored when it comes to publishing?
7. Can you think of other different challenges that might play a role against your research endeavors?
8. What changes shall be made to facilitate research work or minimize mentioned challenges?

- Institutional

1. What challenges, if any, are specific to Lebanon?
2. What roles are the government playing to boost research output?
3. What would you change in the current government approach to facilitate the process of research production and dissemination?

- Organizational

1. What organizational factors, if any, are impacting your ability to produce research?

2. What can you say about the research culture in your organization?
 3. Do you feel motivated and supported by your organization?
 4. Does your institution possess a research support framework?
 5. What is your opinion regarding the support mechanism being utilized by your department?
 6. What changes would you suggest incorporating in order to make the research support frameworks more effective?
- Individual
 1. What motivates and drives you towards research production?
 2. How important is research creation to you?
 3. What challenges do you face as an individual?
 4. How do you think you can overcome these individual challenges?

Declarations

Conflict of interest H.K. Yaacoub, L. Yacoub and A. Hanna declare that they have no competing interests.

Ethical standards For this article no studies with human participants or animals were performed by any of the authors. All studies mentioned were in accordance with the ethical standards indicated in each case.

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