Practical paper

Barriers to innovation and knowledge generation: The challenges of conducting business and social research in an emerging country context

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ABSTRACT

The Middle East, as a region, contributes proportionally less to new knowledge generation than other parts of the world. The United Arab Emirates (UAE) has sought to correct this imbalance through efforts to promote a knowledge-based economy and through educational investment. In light of these advances, significant challenges still remain in the promotion and production of high quality research in the social sciences, including business. The current monograph highlights the vital importance of such research to the social and economic development of the UAE. Reflecting on nearly a decade of conducting research in the UAE with varying degrees of success the authors highlight critical incidents, experiences and observations which serve to illustrate the challenges of new knowledge creation in the business and social sciences. Discussions focus on identifiable barriers to high quality research at both the micro and macro levels, within and outside the UAE, with specific recommendations on how such barriers can be overcome.

Introduction

The broader region of the Middle East is variously defined but typically represented by the geographical region including the Black Sea to the north and the Arabian Sea to the south along with Iran and Egypt. Analysis of publications and patents illustrates that the regional member countries tend to underperform in terms of the production for knowledge compared to other developed and emerging regions. Despite demonstrable improvement over the past decade, the creation of new knowledge in the form of patents and published research articles from the Middle East is far less than should be expected (Gul et al., 2015). The Middle East is an extremely diverse sociocultural and political region in terms of ethnicity, language, religion, economy and political structures.

Relative to the turmoil and uncertainty that affects many areas within the Middle East, the United Arab Emirates (UAE) represents a beacon of peace and prosperity that attracts Arab youth from across the region. Proportionally, recent advances from countries such as the UAE and Qatar have highlighted significant advances in knowledge production (Parcero & Ryan, 2016). Such advances largely come from investment in research of strategic national importance in the areas of engineering and science. Contributions in the social sciences, particularly business and management are more modest, offering an opportunity for significant improvement, from both a qualitative and quantitative perspective.

The current study offers an empirical- and experiential-based perspective on some of the challenges facing social science researchers in the UAE and provides recommendations for overcoming these challenges. The examination of challenges ranges from the macro to the micro level and examines issues both within and outside the UAE that impact on research performance and knowledge production in the country.

Challenges at business and social research in the UAE

In order to fully appreciate the rapid rate of advancement in the UAE over the past 50 years a brief understanding of the historical context of education in the UAE and its important influence on knowledge creation in the region is required. Although some traditional Islamic education systems in the UAE can be traced back to the early 1900s, the first efforts at what can reasonably

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be described as a modern education system date from the 1950s (Alhebsi, Pettaway, & Waller, 2015). Following the establishment of the UAE as an independent nation in 1971, the first university, United Arab Emirates University (UAEU) was founded in 1976. While the UAEU is a comprehensive university and knowledge generator through its various research agendas, it has focused largely on knowledge dissemination to the national community, rather than actual knowledge creation. The vital importance of innovation and knowledge intensive activities for economic development are well documented (Palacios-Marqués, Welsh, & Méndez-Picazo, 2016). Such knowledge creation and dissemination goes far beyond the esoteric, with real impacts in designing implementable innovative realities for our social and economic environments (Huarng & Mas-Tur, 2016). It is only in recent years that a focus on indigenous research intensity has led to a strategic redirection of UAE federal higher education institutions toward greater efforts in knowledge creation and innovation.

A lack of research intensive institutions in the education environment

A key factor in the production of knowledge is the existence of research intensive, knowledge producing, institutions. In addition to the federal higher education institutions (HEIs) of the UAE, there are also a large number of private and semi-private HEIs throughout the various emirates. Initiatives such as Academic City and Knowledge Village in Dubai have seen a large number of international Universities establish branch campuses in the UAE. Strategic partnership can also be seen in the establishment of the branch campuses of New York University and Paris-Sorbonne in Abu Dhabi. The proliferation of new entrants to the higher education environment of the UAE offers a welcome diversity to the country's tertiary education offerings. However, the relative long-term value of these institutions in enhancing the degree of knowledge creation in the UAE is yet to be determined. The decision to open branch campuses is often strongly influenced by a goal of increased revenue generation for the home university (Lien & Wang, 2012), with changing economic realities often resulting in the significant downsizing or withdrawal of branch campuses (Croom, 2010). Therefore, the most assured and sustainable way for the UAE to increase knowledge generation in the business and social sciences is through enhancing the research intensity of its own HEIs. Though both major federal government institutions (UAEU and Zayed University) have made strategic decisions to become research intensive institutions, it is still unclear how this new direction will manifest and how the new norm of lower oil prices will affect the investment needed to support research intensive higher education institutions in the country.

Growing and retaining human research capital at the national level

Currently, as with most high-skill professions in the country, the HEIs of the UAE are largely dependent on a mostly itinerant expatriate workforce (Ryan, 2016a). As UAE nationals only account for a small proportion of the UAE population, this dependence is likely to remain for the next several decades. The lack of research intensity in the education environment of the UAE has associated implications for the quality of the research profiles of academic researchers attracted to the UAE. It is quite possible that research focused faculty may self-select themselves out of consideration for employment in the UAE context, as we know that the research environment has a significant influence on research productivity (Ryan & Hurley, 2007; Smeby & Try, 2005).

In addition, the primary approach to attracting faculty to the region is through the provision of generous salary and benefit allowances. There is increasing evidence of the negative association between financial/instrumental motivation and research performance (Ryan, 2014; Ryan & Berbegal-Mirabent, 2016). In light of such research, the use of purely financial incentives for faculty to join HEIs of the UAE may be contributing to attracting the wrong type of faculty, who are less likely to be high performing researchers. There are many motives for why faculty may choose to live and work in the HEI's of the UAE, but what little research exists on this issue questions the relative commitment and dedication of some UAE faculty to a research agenda (Austin, Chapman, Farah, Wilson, & Ridge, 2014). Research on turnover in the academic environment of the UAE is also limited. What research there is suggests that while a leading higher level federal institution of the UAE is accurately identifying and terminating many low performing researchers, there is also evidence that not enough is being done to retain high performing researchers (Ryan & Parcero, 2018).

Understanding the significance of human intellectual capital is a key factor in the promotion of knowledge generation. Unlike science and engineering, social sciences are not heavily dependent on tangible resources such as materials and technology. Rather, the most significant resource requirement for advancing the social sciences is the human intellectual capital dedicated to it. Research examining human intellectual capital in the region is limited (Ordonez de Pablos, 2002), and there is a general lack of appreciation and understanding of the established link between intellectual capital and research performance (Sharabati, Nour, & Eddin, 2013).

An inability to attract and retain high performing researchers is also likely to impact on the productivity of the small number of UAE nationals in academic positions at UAE HEIs. In any performance context a large proportion of relatively low performers is likely to be a significant negative influence on the productivity norms of that context. Low productivity norms reduce the productivity expectations for other organizational members including, in this case, the UAE national faculty in HEIs of the UAE.

A low conflict culture and critical thought

Much like organizational culture and context influence research productivity, the broader cultural context influences dominant forms of thought and action. The leading academic traditions of Europe and North America are built upon the foundation of critical thought processes and rigorous debate, which stem from centuries of social turmoil and intellectual evolution (Grayling, 2016). The transposition of such culturally relativistic schema may not apply universally across diverse cultures (Brenner & Parks, 2001). As with all sciences, critical thought is of central importance to the development of insight from research in the business and social sciences (Gasper & Gardner, 2013). However, the crucial interpersonal intellectual conflict that often occurs as a by-product of critical thought may itself be less valued, or at least less prevalent in a culture favoring low conflict (McBride, Xiang, Wittenburg, & Shen, 2002; McGuire, 2007; Tiwari, Avery, & Lai, 2003). The absence of this constructive conflict might limit the overall quality of business and social science research from the UAE.

The Arab world can broadly be defined as a high-context communication environment (Berger, Silbiger, Herstein, & Barnes, 2015). In such environments conflict handling styles tend to be avoiding and obliging (Croucher et al., 2012), which are contrary to the integrative and sometimes even dominating conflictstyle

prevalent in the critical discourse of academic debate. Research on critical thinking abilities in different cultures suggests that the capacity or prevalence of critical thinking is not globally uniform (Grosser & Lombard, 2008; Shiraev & Levy, 2015). While there has been no direct examination of the prevalence of critical thinking in the UAE, researchers have suggested limitations to the development of critical thought in an Arab context more generally (Sidani & Thornberry, 2010). Such limitations may retard the academic discourse in the country and act as an additional barrier to high quality business and social research.

The challenge of researching in a diverse population

The goal of much business and social science research is the identification of trends and patterns within the sample under study in an effort to generalize understanding of phenomena across larger populations. That goal is made extremely difficult in the multicultural context of the UAE. The UAE is unique in its demographic make-up with UAE nationals comprising less than 20% of the population, and only 2% of the workforce (Yaghi & Yaghi, 2013). The larger proportions of the population come from India, Pakistan, Bangladesh, Philippines, Iran, Egypt, Nepal, Sri Lanka, China and Jordan. However, there are also sizeable communities from countries such as the United Kingdom, Lebanon, Palestine, Ethiopia, Yemen, Indonesia, Sudan, Somalia, Iraq and North America (Snoj, 2015). Such diversity poses unique opportunity for researchers but also raises considerable challenges to the researcher in terms of research design, implementation and interpretation (Muzio & Tomlinson, 2012). As an example, the itinerant nature of the vast majority of the population makes it extremely difficult to conduct any meaningful longitudinal research.

Of particular difficulty is actually obtaining access to participants for quantitative research. Researchers in the US and other developed countries have multiple options to obtain relatively low-cost, reasonable-quality data including students, online commercial panels, and online crowdsourcing platforms (Steelman, Hammer, & Limayem, 2014). These options are much less available within the UAE. For instance, many Western universities have systematic student sampling capabilities, while this practice is not part of the UAE university culture. One only needs to take a cursory look at the literature to understand the advantages of having a research willing and research savvy student population to hand. Similarly, the UAE lacks quality established online commercial panels. These panels are widespread in developed nations. Although sometimes costly they provide social scientists with ready access to more nuanced sampling. To date, the Middle East has no online crowdsourcing platforms similar to the popular Amazon Mechanical Turk which offers the diversity of commercial panels but at the low cost point of student samples (Daly & Nataraajan, 2015). The lack, or underdevelopment, of all three common sampling methods greatly hinders the ability of UAE social scientists to conduct large-scale quantitative research.

Lack of institutional research and norms within UAE organizations

Research in the UAE is evolving with different emirates undertaking different initiatives. At the moment there are weaknesses in the accurate research and reporting of relatively basic information such as population and unemployment statistics (Editorial, 2015). The relative lack of a research culture permeates the organizations and institutions of the UAE. Experience of research participation among the broader population, such as completing surveys, is also limited and the norms of negotiating organizational access for research purposes are not yet established. Even in regions with a long tradition of research, accessing organizations and research participants can be a significant challenge (Cunliffe & Alcadipani, 2016; Taylor & Land, 2014). These challenges become compounded in an international and multicultural context such as the UAE (Fjellström & Guttormsen, 2016). Given the historical lack of research in many UAE organizations, senior organizational members may be unsure as to how research can be approved or who should approve it. In situations where access is secured, organizational members themselves may be suspicious of the motives for the research, lacking in trust of the confidentiality of responses, and/or ambivalent to the relative value of the research. Indeed, in many years of receiving and completing various institutional and governmental surveys the authors can attest to many examples of very weak survey construction and design. Such experiences serve to further undermine confidence in the research process.

In addition UAE specific issues such as a law prohibiting non-government entities from conducting research without express permission from the Dubai Statistics Center also contributes to uncertainty for both academic researchers and organizations as to how and when such permissions can be granted (Mohammed bin Rashid Al Maktoum, 2015). In combination, such unfamiliarity with research participation and production limits the perceived value of research and further challenges researchers in their efforts to conduct sound business and social research.

The inappropriateness of western theory and weakness in research methods

The UAE is a unique context, with an academic and research workforce that is almost exclusively dominated by western trained expatriates. Such an academic workforce brings with it a suite of theoretical frameworks dominated by western theory. Existing research suggests that indiscriminately borrowing theories and recommendations based on studies in western contexts may be a misguided approach (Lages, Pfajfar, & Shoham, 2015). This leads to concerns over the legitimacy of the theoretical foundations for some research conducted in the UAE. At the same time, there is potentially great value in accessing the diversity of the UAE to answer the call for less White Educated Industrialized Rich and Democratic (WEIRD) samples to extend and develop theory (Henrich, Heine, & Norenzayan, 2010).

Much research in the UAE context explicitly assumes the legitimacy of western theory and concepts without questioning or testing their validity. As an example, the concept of transactional leadership is highly influential in the leadership theories of Europe and North America. This leadership concept is also popularly applied in UAE organizational research without determining the constructs validity in the UAE context (Bealer & Bhanugopan, 2014; Jabnoun & Juma Al Rasasi, 2005; Randeree & Ninan, 2011). Research efforts that have questioned the construct validity of the full range leadership model in non-western contexts suggest that transactional leadership as defined and described in western management literature, is not the same as a related, but different, leadership style that manifest in different culture contexts (Al Mansouri, 2016; Ryan & Tipu, 2013). Such contrarian findings may be viewed with some suspicion by journal editors and consequently may have a more difficult route to publication and dissemination in the academic literature. However, the value of such findings is certainly more significant to the development of important organizational insights as well as for evidence-based policy and practices in a context such as the UAE.

The thoughtless application of popular western research constructs to non-western research contexts such as the UAE, serves to undermine the value of business and social science research in the country. Subtle but important variations in cultural understanding, language, behavioral norms and individual expectations can have far reaching consequences for how clearly defined constructs

in one context might be highly ambiguous or irrelevant in another context. Let us consider the examination of work ethic in the UAE context. The multidimensional work ethic profile (MWEP) is a well-validated measure of work ethic that has been applied successfully across a number of different cultures (Chanzanagh & Akbarnejad, 2011; Lim, Woehr, Yeong Mahn, & Gorman, 2007; Woehr, Arciniega, & Lim, 2007). However, results from an examination of the dimensions of the MWEP in the UAE suggest that the specific dimension of 'delay of gratification' relating to life and work values might be extremely difficult to conceptualize and measure in an Islamic context. In such contexts language relating to the concept of delayed gratification may be intrinsically linked to the religious association of reward in the afterlife (Ryan & Tipu, 2016). Confirming the validity of a robust instrument such as the MWEP in one context does not guarantee its validity in another. Far too much business and social science research naively assumes the validity of western concepts in non-western contexts, limiting the development of meaningful understanding of business and social phenomena in such contexts.

Apart from the questionable application of western theory to the UAE context, there are larger concerns within the business and social science domain as to the suitability of dominant research methods in advancing our knowledge in these areas. Woodside (2013, 2016) laments the overreliance on empirical positivistic methods in the business and social sciences. In particular, he questions the reliance on symmetric testing (e.g., regression analysis including structural equation models), which is a dominant analytical approach in business and social science research globally, and particularly in the UAE. This symmetric analysis compounds the inappropriate application of western theory in non-western contexts as it lends itself to the convenient testing of predominately western theories and concepts, which are, often wrongly, assumed to be valid in the UAE context. Woodside (2016) argues for a thoughtful application of alternative analytical techniques, in particular, the use of case based models (e.g., qualitative comparative analysis) as an alternative to variable based models (e.g., structural equation modeling). The current authors also argue for greater variety in research methods and analysis in the UAE context. For example, there has been exponential growth in publications using fuzzy-set qualitative comparative analysis (fsQCA) in business and social science research in the past decade (Roig-Tierno, Gonzalez-Cruz, & Llopis-Martinez, 2017), with many more scholars recently advocating for the usefulness of the approach for new theory building (Lee & Raschke, 2016; Pinazo-Dallenbach, Mas-Tur, & Lloria, 2016; Roig-Tierno, Huarng, & Ribeiro-Soriano, 2016; Ryan, 2017b). The wider application of research tools such as qualitative comparative analysis has the potential to radically improve theoretical and practical understanding of the UAE business and social context.

Research quality and barriers to publication

Factors affecting the quality of research exist across the international academic landscape. Recent article retractions in the field of leadership studies highlights the challenges faced by the peer review system in ensuring quality of academic research (Spoelstra, Butler, & Delaney, 2016). There is increasing discussion on the extent of questionable research practices within the social sciences and common problems with the analysis and reporting of research (Wright, 2016). While it can be argued that the increases in article retractions among leading journals is a sign of health and quality assurance within the respective fields of research, it is also a sign of systemic weakness in the research, peer-review and publication process (List & McDaniel, 2016; Steen, Casadevall, & Fang, 2016). Unscientific research practices such as harking (hypothesize after results are known) are a threat to research quality (Bosco, Aguinis, Field, Pierce, & Dalton, 2016), but concern about this issue

diminishes in comparison to unethical practices such as data falsification (Markowitz & Hancock, 2015), which is also likely to be more widespread than we would like to admit. If such challenges to research quality are being faced by leading journals in mature academic environments, it is highly likely that questionable research and reporting practices also permeate the academic environment of the UAE. While there are many examples of high quality research conducted in the UAE, there are also many examples of low quality research published in predatory journals. This serves to undermine the perceived overall quality of research production in the country and broader Middle East region. Such poor quality research is not listed here to avoid adding credibility to it through citation. However, it is easily identified through a basic web search.

Antonakis (2017) proposes five current diseases that threaten the viability of science. These include *significosis*, *neophilia*, *theorrhea*, *arigorium*, and *disjunctivitis*. *Significosis* is described as the clear bias in published research results toward statistically significant findings. This is a problem evident across many fields of research and it is certainly prevalent in the business and social science research being conducted in the UAE. The problem of *significosis* seems more prevalent in weaker journals with weaker research. Categories into which much research conducted in the UAE and broader Middle East region falls.

Neophilia is the preference toward findings that are novel, innovative and interesting. An examination of journal submission guidelines reflects the insistence of most top empirical journals for such uniqueness. The current authors would argue that this is less of an issue for business and social science research emanating from the UAE. Rather much research from the region is largely derivative and uninspired, while missing the opportunity to conduct research that is genuinely new in a country and region that offers unique contexts and circumstances with the potential to offer real insights and advances on current theory. The current authors would argue that business and social science research in the region suffers more chronically from neophobia than *neophilia*.

The related symptoms of *theorrhea* and *arigorium*, as proposed by Antonakis (2017), address the issues of obsessive advancement of theory while failing to further test the theories advanced, and a general lack of rigor in how business and much social science research is conducted. Within business and social science research in the UAE *arigorium* is much more widespread than *theorrhea*. In fact, theoretical advances are not common within the UAE context. Lamentably so, considering the potential offered by the many under researched contexts on offer. New theoretical contributions from much business and social science research in the UAE context tends to offer little more than *arigorium* infected tinkering on the edges of established western theory with a contemporaneous septicity of *significosis*. Indeed, the current researchers diagnose the general lack of research rigor as the most virulent of diseases affecting regional research.

The final disease of *disjunctivitis* relates to the proliferation of research for the sake of publication with an emphasis of quantity over quality; a larger consequence of the publish or perish mentality that has led to the fragmentation of research endeavors and reporting in academia internationally. The authors note that generally the level of research production in the UAE, relative to other regions, is quite low. This is not to say that a lack of research reflects an emphasis on quality over quantity. Research examining levels of knowledge and research production in the UAE is often drawn from reputable databases such as SCOPUS, which reflect at least some element of quality control on the research publications considered (Ryan, 2016b). However, there is also a larger body of research publications from the broader Middle East region, including the UAE, which is disseminated in less reputable and often predatory journals. Such publication practices can be interpreted as a symptom of *disjunctivitis* within the UAE research community.

As we can see, the many diseases that have come to infect the academic body internationally are also present to greater and lesser degrees in the UAE. To compound research challenges even further, even in the event of high quality research being produced, researchers in the Middle East and Africa have identified potential biases in the publication process which can serve as further barriers to publication for authors based in these regions (Lages et al., 2015; Zahra, 2011). It is often the case that journal editors perceive research conducted in the UAE as having low relevance to their field or journal, or have preconceptions of low quality research from the region. Similar biases are believed to exist among journal reviewers (Lages et al., 2015). It is difficult to quantify the extent of such biases, but there is certainly anecdotal evidence of authors receiving less consideration for research affiliated to HEIs of the UAE than when their work may have been affiliated to HEIs in Europe, North America or Australasia. Similarly, research conducted in the UAE is often dismissed with less consideration on the basis of the population under examination, and UAE based academics may need to work harder to convey the broader relevance of their work on UAE populations and topics to international journal editors and reviewers. Zilber (2015) seeks to exaggerate the position of European management scholars as acting on the periphery of an academic environment dominated by US academic discourse. Even a constrained acceptance of such a proposition for European scholars would surely place UAE scholars in the remotest of academic landscapes.

Overcoming the challenges

Investment in the development of UAE research intensive HEIs

Overcoming challenges in the production and publication of high quality business and social science research in the UAE will be difficult but certainly not impossible. There are already many examples of published, high quality, UAE research across many academic domains. The key to building on these successes is investment. Research intensive knowledge economies spend between 2 and 4% of GDP on research and development. Due to the federal nature of the various emirates that comprise the UAE it is difficult to determine the exact extent of funding for research, but it is believed to be less than 1% of GDP. Investment in federal research intensive Universities (RIUs) are a must. No one else will invest their time and money for the benefit of the UAE with more commitment and vigor than the UAE itself. While international partners and branch campuses of foreign universities can contribute positively to the intellectual landscape of the UAE, the level of investment and involvement of international players will always be guarded by a degree of self-interest that will limit their commitment. Building research intensity in the indigenous HEIs of the UAE is the only way to secure such research intensive environments for the UAEs future.

Balancing the focus and direction of such RIUs is also a delicate consideration. At present the UAEs priority in advancing research intensity is very much on the side of engineering and hard-science (UAE Government, 2015). This is a necessary response to a historic lack of emphasis on these fields within the educational and social context of the UAE. Recent reforms in secondary education limits UAE national student's opportunities to pursue studies in the humanities and liberal arts, in favor of science subjects. Further emphasis on physical sciences and engineering at the secondary education level is not of itself problematic, but educational policy makers must be careful to ensure that sufficient intellectual space is given to the continuing development of social sciences in the UAE context. Considering the extent of economic, political and social turmoil across the Middle East region, the

development of robust business and social research is an important consideration. Social and intellectual advancement of UAE society is as important, if not more important, than technological advancement.

While many excellent researchers currently work within the HEIs of the UAE, the critical mass of research intensity is lacking. A rationalization and integration of existing resources is required. Steps toward such integrations can be seen in the 2017 merger of the Masdar Institute, Khalifa University of Science and Technology and the Petroleum Institute. Certainly more can be done at the federal level to encourage greater cross-collaborations among the existing HEIs of the UAE.

Attracting, retaining and developing top research talent

A key factor in the development of RIUs is the reform of existing HEIs to meet the expectations of a research focused academic community. RIUs require a research focused faculty, and such faculty require organizational and motivational conditions that may not currently be in place in UAE HEIs. Productive researchers are primarily motivated by the ability to conduct interesting and challenging research, rather than an environment directed by financial/instrumental motivators (Ryan, 2014; Ryan & Berbegal-Mirabent, 2016). Creating the organizational conditions that facilitate and appropriately reward such research intensity will require an evolution in managerial thought and practices across the HEIs of the UAE. Changes at the organizational level will require re-examining workload policies, HR practices, management, communication and decision making styles, salaries and benefits, and research support structures. Positive changes in organizational policies and procedure should have the effect of attracting and retaining more high quality researchers. In addition, policy changes for the attraction and retention of high quality researchers may need to be considered at the national as well as institutional level. The current structure of limited term work visas (typically 3-year duration) and associated employment restrictions, also serves as potential barriers to researcher attraction and retention. Policy makers should examine how greater residential and job security can be provided in efforts to attract research specialists (and professionals in other areas of strategic priority) needed to realize the research and development aspirations of the UAE.

This attraction and retention of high quality researchers will in turn create a more conducive research environment for the further development of UAE national faculty. The development of UAE national researchers is a vital requirement to counterbalance the current reliance on expatriate research expertise. The ultimate goal of workforce nationalization (Emiratization) in the UAE is to replace the expatriate workforce with UAE nationals. While Emiratization in all research fields is important, the development of UAE national faculty in the business and social sciences is of particular importance for the progression of important theory development and new insights in these fields. It can be argued that the unique considerations of UAE national faculty can offer more insightful, authentic and profound contributions to understanding UAE business and social contexts than those coming from an expatriate culturally relativistic perspective.

Concomitant benefits of attracting, retaining and developing human research capital

Steps to improve the quality of human research capital will have knock-on effects to help overcome many of the challenges identified in this paper. For example, the current lack of research norms in many UAE organizations occurs in many cases due to poor understanding of the benefits of research to business and

society and inexperience or poor experience with researchers. Higher quality researchers will lead to higher quality research experiences in business and society, with higher quality outputs. This in-turn will reinforce a more positive attitude toward business and social research in organizations, which will serve to open organizational access for researchers, and provide more resources for research.

Retaining business and social researchers in the UAE for longer periods will undoubtedly have positive impacts for theory development. Despite the most diligent application of social scientific methods, all researchers carry an innate culturally relativistic perspective into their work. As HEIs of the UAE become increasingly successful in retaining researchers for longer durations, those researchers become more integrated and sensitive to UAE culture, society and organizations. Such sensitivities will undoubtedly inform their research. This in turn will lead to a more carefully considered application of appropriate research theory and methods, leading to superior research outcomes.

Facilitating greater international collaborations

Promoting an environment for international collaborations will also improve business and social research in the UAE. There is evidence to support the view that journal editors and reviewers may hold tacit and explicit biases toward business and social research from the UAE. Such biases may be, at least partly, due to the insular nature of much research conducted in the UAE. Fostering greater levels of international collaborations will enhance the broader academic community's knowledge and understanding of research and research related issues in the UAE. This should then act to breakdown some barriers to publication. International collaboration also has the potential to address many of the diseases of academic research proposed by Antonakis (2017). Considering the unique context of the UAE, rigorous research collaborations between high quality international academics and UAE based researchers has the potential to add real value to business and social science theory and practice.

Such collaborations can take many forms. Encouraging and facilitating research intensive faculty from leading research universities to pay extended visits to the UAE is one such approach, establishing meaningful faculty exchanges between HEIs of the UAE and other academic environments is also a useful possibility. Facilitating non-resident adjunct faculty whom may be interested in living and working in the region, but perhaps not on a full-time basis is another solution (though this would require changes to current UAE visa regulations). The provision of Professor Emeritus status for senior retiring faculty is also an initiative that federal HEIs should consider, as currently, no such provision exists. Many retiring faculties continue to be research active after official retirement. Establishing a system that would encourage and allow still research active faculty to maintain an affiliation to HEIs of the UAE would serve to further bolster knowledge generation and publication activities.

The current authors perceive a human centered solution to the challenges that exist in conducting high quality business and social research in the UAE. The UAE has proven itself to be a welcoming and open economy and society, as evidenced by its rapid economic advancement and the diversity of its population. In order to move to the next stage of research intensity and intellectual advancement that openness needs to move beyond the transactional. An environment of long-term investment in people and ideas is needed to imbed research as a central pillar of the social and economic development of the UAE.

Conclusion

In conclusion, there are a number of key challenges to the production of high quality business and social science research in the UAE. A current lack of research intensive institutions within the UAE is hindering research performance across all fields, including business and social science. This institutional issue has consequences for the attraction, retention and development of human research capital, which in turn has a logical impact on the relative quality of research produced. Unique contextual issues such as a regional preference for low conflict communications and the relative value and prevalence of critical thought may also be negatively impacting the production of high quality business and social science research. The unique levels of population diversity and a general lack of organizational experience with high quality research are additional challenges for UAE business and social researchers.

Given the reliance of expatriate, western-educated researchers in the UAE there is also a weakness in the overreliance on western-dominated research theory and methods which may not always be appropriate for use in the UAE context.

The authors suggest that the essential first step in overcoming many of the challenges faced in conducting more high quality business and social science research in the UAE is investment in research intensive higher education institutions in the country. Such investment will facilitate the attraction and retention of higher quality researchers with concomitant benefits in all areas. The enhancement of human research capital in the UAE will serve as a key driver for improvements in research context and culture. While the UAE continues to build its indigenous research talent, sustainable investment in the attraction, retention and development of expatriate research talent will require changes to the organizational and management culture of UAE HEI's as well as structural changes to immigration, visa, residency and labor regulations. Such changes are necessary to encourage greater mobility, collaborations, employment security and social security to researchers in order to maximize their contribution of UAE economy and society.

The current authors view the challenges to high quality business and social research in the UAE as surmountable. However, overcoming such challenges will take time, and will require a focused and patient investment in human research capital and the necessary cultural and institutional structures to support high quality business and social scientists in their research endeavors.

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