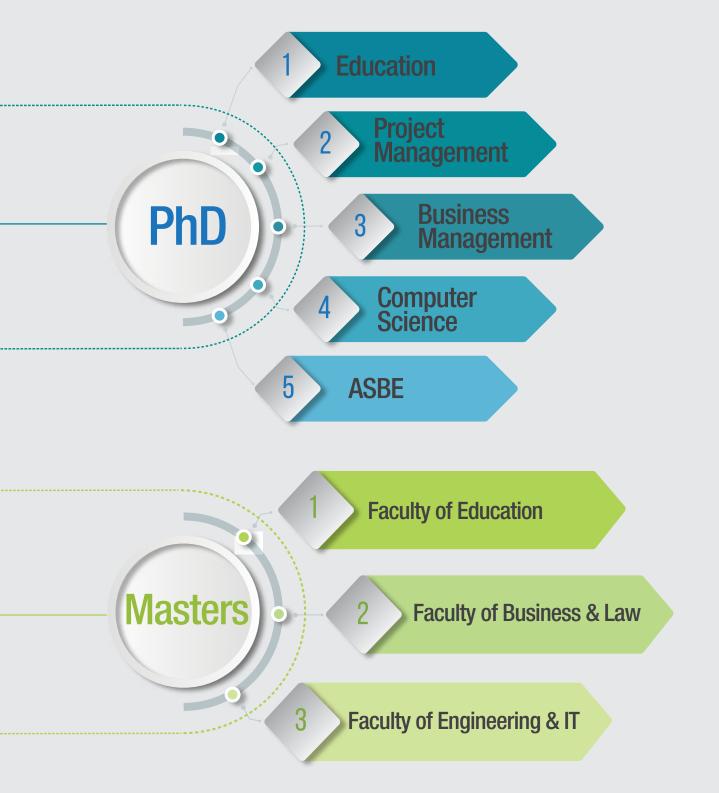


RESEARCH ABSTRACT BOK

2017-2018







EDUCATION

Abeer Naajem Alrasbi

Programme: Doctor of Education

Year of Graduation: 2017

Supervisor: Prof. Eman Gaad

Understanding the factors that influence Emirati women's career development in Higher Education: Case Study from the United Arab Emirates

Several studies have discussed the position of women in higher education institutions internationally through investigating their career progression and the factors that influenced their advancement to senior leadership positions either in academic or administrative paths, yet, this body of literature lacks any studies on Emirati women's career development in higher education in the United Arab Emirates.

The purpose of this research project is to explore the success trajectories of a representative sample of first generation Emirati women in a university case study who are currently in academic and administrative senior leadership positions in order to design a career development model that both accurately describes these paths and inspires Emirati women to pursue leadership positions in higher education institutions in the United Arab Emirates.

This study uses the perspectives of Super's Life Span Life Space theory, Lent, Brown, and Hackett's Social Cognitive Career theory, and Savickas's Career Construction theory to explore early childhood and adulthood experiences, role model influence, mentoring and networking, and education system critical factors in shaping their career development journey, and the nature of their successful leadership experiences using a qualitative exploratory case study approach.

The new model includes family, society, institutional, and governmental influencers. It also investigates other influences like religion, culture, extended family, and self-development.

Elaine Al Quraan

Programme: Doctor of Education

Year of Graduation: 2017

Supervisor: Prof. Sufian Forawi

Exploration of STEM Reforms for Developing an Effective Large-scale, Research-based Policy in the UAE

The purpose of this study was to develop a policy and implementation framework in the UAE by identifying critical elements of an integrated STEM education and key factors related to the implementation of an integrated STEM curriculum in K-12 schools in the UAE. The researcher employed Exploratory Sequential Mixed Methods for this study. The mixed research methods included both qualitative and quantitative methods. These include document analysis, teacher questionnaire survey, teacher and coordinators' interview surveys, school and district leaders' interview survey, and classroom observations.

The findings of this study proposed the policy recommendation framework for integrated STEM implementation in UAE schools.

It can be concluded from the findings that STEM implementation can be categorised into structural and interpersonal implementation dimensions. In addition, Assessment, Connection, Curriculum and Delivery, Leadership, Pedagogical Content Knowledge, Technology and Resources are important factors associated with STEM integration and implementation in UAE schools.

The study proposed policy recommendation based on policy planning, leadership, establishing STEM, professional development of teachers, communities and businesses' role, technology and resources, curriculum design and assessments, pedagogy and learning, capacity building and motivation, awareness and promotion, society's adaptations, and exposure and employment.

It was evident that teachers and school leaders are facing many challenges as they struggled to figure out the best ways to plan and implement STEM in UAE. The isolation that they faced as pioneers in implementing these kinds of courses in K-12 education was also evident. Examination of an integrated policy recommendation for STEM framework could help all educational leaders to understand this phenomenon better.

EDUCATION _____ PhD | 02



Fatemeh Mirshahi

Programme: PhD in Education

Year of Graduation: 2017

Supervisor: Prof. Ashly Pinnington

Leadership Styles and Faculty Job Satisfaction, Moderators and Mediators, in STEM-related Fields

A number of studies on leadership styles and job satisfaction have been conducted in higher education, but there has been less research on leadership styles in relation to faculty job satisfaction. In particular, there is a need for more knowledge about these issues in science, technology, engineering, and mathematics (STEM) disciplines and in developing country contexts.

The purpose of this study is to investigate leadership styles of Heads of Departments (HoDs) for improving faculty job satisfaction, in STEM-related fields. The influences of moderators and mediators on the relationship between HoDs' leadership styles and faculty job satisfaction are investigated and a new model is developed. Based on a predominantly post-positivist perspective, this study adopts an explanatory mixed methods approach. In the first stage, participants respond to a survey questionnaire on factors related to job satisfaction and HoDs' leadership styles. In the second stage, using a nested sequential sampling design, participants are interviewed to explore these two issues.

The results show that the most effective leadership styles practiced by HoDs in improving faculty job satisfaction are transformational leadership and transactional contingent rewards. Practicing laissez-faire and transactional passive management-by-exception behaviours have a significant negative effect on faculty job satisfaction. In addition, leadership styles have significant impacts on faculty job satisfaction and its elements including work and collegiality, supervision, and to a lesser extent, promotion. Moreover, investigation of the indirect impacts of leadership styles on faculty job satisfaction identified one partial moderator including work-life balance and seven partial mediators including achievement, responsibility, advancement, relationships, institutional and administrative culture, feedback, and autonomy on the relationship between leadership styles and faculty job satisfaction. A new model is developed to explain the relationships between leadership styles and faculty job satisfaction. Finally, recommendations are made for stakeholders and for future research.

Sara Salem Al Suwaidi

Programme: PhD in Education

Year of Graduation: 2017

Supervisor: Dr. John McKenny

"I speak four languages, how many do you speak?" How children at the age of four and five become bi-literate writers in a trilingual government KG in Abu Dhabi

"I speak four languages, how many do you speak?" How children at the age of four and five become bi-literate writers in a trilingual government KG in Abu Dhabi' is a case study that explored how children in the Emirate of Abu Dhabi develop bi-literacy skills in Arabic and English. The study focused on understanding how teachers use different pedagogical approaches in both languages to foster the development of students' language skills. It also looked at how the classroom environment is used as a resource and as a 'third teacher' to support development of language. One central question and two sub-questions governed the study.

Main question:

- 1. How do Emirati children at the age of four or five develop bi-literate writing skills in Arabic and English? Sub-questions & rationale:
- 1.1 What strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students' literacy skills in both languages?
- 1.2 How do teachers use the classroom environment to support students' development as bi-literate writers?

PhD | **04**

Shahira El Alfy

Programme: PhD in Education

Year of Graduation: 2017

Supervisor: Dr. Abdulai Abukari

An Investigation of the Role of Market Orientation in Perceived Service Quality in Higher Education Institutions in United Arab Emirates

The research aims at expanding current understanding of market orientation (MO) and service quality (SQ) and the relationship between these two variables within an educational institution in the United Arab Emirates, where two important stakeholders are students and university staff.

The main objectives of the research are exploring students' and staff perceptions of service quality and market orientation, examining the nature and magnitude of the potential relationship between the university market orientation and perceived service quality and investigating the variables that may intervene in the potential market orientation-service quality relationship at the university under study. A three-step research process was used including review of the literature, conducting qualitative interview, and using a quantitative survey. Literature review and in-depth interviews guided the development of the conceptual framework of the research and the adaptation of the measurement instruments utilised. Stakeholder theory was employed as an overarching foundation for the conceptual framework development.

The theory links organisation functioning with environmental influences which explains market orientation influence on organisational activities and hence its service quality. Qualitative and quantitative data were collected from staff and students at the higher education institution under study. For the qualitative phase, in-depth interviews were conducted to revisit service quality from students' perspectives with the aim of uncovering service attributes that are of relatively high importance to students and exploring potential relationships among research variables. At the quantitative stage, data was collected from a sample of 232 students and 47 academic and administrative staff through a questionnaire to measure the direction and magnitude of relationship among variables. Research findings show a narrow perceived service gap between staff and students that is statistically insignificant. Results of the research indicate the emergence of overlooked constructs of both market orientation and service quality. Results support a strong positive relationship between perceived market orientation and service quality and an indirect relationship mediated by performance and employee orientation.



Ahmed Mahmoud Al Rahl

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Sufian Forawi

A Critical Analysis of Education in Palestine: Exploring the Challenges of Politicisation

The present study investigated the impact of the socio-political conditions and challenges of the current educational system in Palestine based on Freire's critical pedagogy theory. A sequential explanatory mixed-methods design was used to collect both quantitative and qualitative data. Data was primarily collected using questionnaires administered to 1,705 students, 623 teachers, and 611 guardians in the West Bank and Gaza Strip. Semi-structured interviews were conducted to collect data from four political leaders and four educational leaders. Descriptive and inferential statistical analysis tests were performed using SPSS while thematic analysis of qualitative data was conducted using NVivo.

The study found that complex and dynamic socio-political conditions in Palestine shaped education negatively with the three main factors currently impacting education in Palestine being the Israeli occupation, international governments, and the Palestinian political parties. The study concluded that the nearly 70-year Israeli occupation led to a highly politicised Palestinian society. Specifically, politicisation has had a crippling effect on the Palestinian educational system in terms of curriculum, policies, and operations. The study underlined the role of the Palestinian political and educational leaders as being crucial in mitigating the negative effects. The efforts of political and educational leaders in unifying the nation and exploring independent sources of funding helped to ensure the establishment of a depoliticised national educational system through a neutral administering body. Finally, the study confirmed that despite all the critical challenges, the Palestinian people were able to achieve tangible success and growth in the field of education.

EDUCATION _____PhD | 06

Amira Khamis Alnaqbi

Programme: Doctor of Education

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

Leading and communicating transformational change: A case study of a higher education institution in the UAE

The UAE needs change leaders in higher education who can work on transforming their institutions to offer quality education and equip their graduates with the skills they need in the current competitive knowledge economy market. This study describes the leadership styles of two leaders from one university in the UAE and determines the effectiveness of the leaders' communication efforts during change implementation.

The main research question guiding this study is: To what extent do leadership style and change communication influence the success of organisational change? Studies on big change failures reveal that failure is related to change resistance, poor leadership, lack of urgency to change, cultural issues and communication. However, there is a lack of empirical studies about change management in the Middle East and the Arab world in general and in higher education institutions in particular.

The literature review examines four subject areas related to the study: organisation change management, leadership, organisation communication, and higher education organisations. The study uses a mixed-method approach: questionnaires and interviews to answer the main study question.

The results assert the importance of having transformational leaders who use effective communication to change their organisations, and university staff prefer face-to-face communication over other channels. The study findings may contribute to the international change management literature and provide valuable information for practitioners.



Areej Elsayary

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Sufian Forawi

The Impact of Designing Transdisciplinary STEAM Curriculum Using Authentic Assessment on Transforming Students Learning: A Case Study in UAE

STEAM education is one of the new reforms in science education that promotes students' scientific, cognitive, social and psychomotor skills. The alignment of a transdisciplinary STEAM curriculum with authentic assessment has a positive impact on transforming students' learning as it cuts across the three types of learning (emancipatory, communicative and instrumental learning) that were used as a conceptual framework to guide this study. The main purpose of the study was to investigate the impact of designing a transdisciplinary STEAM curriculum using authentic assessment on transforming students' learning in a vocational institute in UAE.

A multiphase mixed method design has been used in this study, in two phases. A document analysis of the lesson plans and curriculum developers and teachers' questionnaire were administered in the first phase. The participants were two groups of 21 curriculum developers and 30 teachers in science, technology, engineering, language art, design art, and mathematics. A quasi experiment "pretest posttest control group" using a closed-ended survey was followed by focus group questions that were administered in the second phase of the study. Participants in this phase were 80 students from grade 12 (40 in control groups and 40 in experimental groups). The treatment of the experimental groups was the link between aligning the transdisciplinary STEAM curriculum and authentic assessment, where students were exposed to the three types of learning: emancipatory, communicative, and instrumental learning.

The results revealed that the design of the transdisciplinary STEAM curriculum using authentic assessment had a positive impact on transforming students' learning, where a change in their frames of reference (transformation of perspectives and habits of mind) occurred. The use of authentic assessment tasks allowed students to have several checkpoints to reflect, receive feedback and self-assess their work. There was a significant difference between the pretest and posttest where the combination of the three types of learning helped in transforming students' learning.

The results of the study emphasise the importance that exposing students to the three types of learning while solving complex real-world problems collaboratively and self-assessing their learning has on transforming the students' frames of reference. Strong correlations were found between emancipatory, communicative, and instrumental learning, and students' results. Furthermore, adding art to STEM subjects allowed students to reach the highest level of creativity where they were shifting between divergent and convergent thinking.

EDUCATION _____PhD | 08

Awad Mansour Al Essa

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Dr. Abdulai Abukari

Exploring the effectiveness of Continuing Medical Education programmes accredited by UAE University on health care professional's knowledge: expectations vs. satisfaction

It is common notion that Continuing Medical Education (CME) has positive effects on the knowledge and competencies of health care professionals (HCP), however, this notion has not yet been fully proven in the United Arab Emirates (UAE) health care context as there is very limited research conducted in this area to confirm this notion. The aim of this research study is to investigate the effects of CME on the knowledge and competency of HCP in the UAE based the UAE University (UAEU) accredited postgraduate CME programmes in the Emirates of Abu Dhabi for health care professionals.

Measuring the effectiveness of educational programmes is a consensus by all education theorists. The first two levels of Kirkpatrick training evaluation model were used in this study. Based on a mixed method approach, quantitative data was collected from 302 health care professionals (doctor, nurse, pharmacist, others) who attended 4 CME accredited programmes by UAEU, in Al Ain city. Qualitative data were collected from 14 health care professionals using semi-structured interviews with participants who agreed to be interviewed.

The research results showed that the UAEU accredited CME programmes were effective in terms of exceeding health care professionals' learning expectations, the achievement of educational programmes learning objectives, and significant increase in HCP knowledge in the topics discussed in these programmes. However, the results also indicate that the need for training, patient no compliance and insurance costs were the major barriers to transfer learning from CME experience to their work place; 95% of the participants specified these as barriers.

The study also provides recommendations for improving CME programmes. These programmes should be designed to meet the special and individual learning needs of HCPs, and the outcomes should be evaluated using professional appraisals. The adoption of multimedia and instructional techniques, such as online CME, videoconferencing, virtual education, and self-directed learning by scientific medical associations and community hospitals, is recommended. Comprehensive evaluation methods should be developed to assess the effectiveness of CME programmes.



Bhavana Nair

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Eman Gaad

An exploratory study on the competence and service delivery of undergraduate Arab health science students towards people with observable disabilities during clinical placements in the UAE

Disability as a phenomenon is complex as it involves not only people (with and without disability) but their relationships with each other, the environment, assistive technology and social reactions to a myriad of impairments within public and private programmes and laws. In the United Arab Emirates (UAE), this becomes even more complex because of the diversity of nationalities involved in terms of ethnicity and racial differentiation.

This study has focused on the self-reported competence and service delivery of undergraduate Arab health science students towards people with observable disabilities during their clinical placements. The topic is particularly significant as these students are exposed to people with varying disabilities during their training. Taking pre-conceived notions, values and attitudes will impact their service delivery and hence an understanding of their competence is an essential starting point for preparing students who are entering health science related careers.

In this study a mixed methodology was utilised, following a sequential explanatory approach that included a researcher modified self- perceived competence survey on a convenience sample of 590 Arab health science students from a homogenous population of 4 institutions that are accredited by the Ministry of Education (MoE) in the UAE followed by purposeful sampling that involved semi structured interviews with eighteen clinical tutors and eight people with disabilities. With attitude and knowledge being products of human thought and interaction, the social model of disability was the main framework of this research. The results that were collected were analysed using the SPSS 21 for descriptive and inferential statistics. The NVivo software programme and thematic analysis enabled the researcher to sort, code and analyse the results of the interviews. Analysis of documents like the public health modules of the institutions and clinical workbooks of students were explored as supporting evidence in this study.

Results from the competence scale have indicated moderately positive scores on competence with factors such as gender, mother's education, institution of the student, prior contact with people with disabilities and technology to be statistically significant influences on the competence and service delivery of undergraduate Arab health science students towards people with observable disabilities during clinical placements in the UAE. The interviews revealed the lived experiences of people with disabilities and the clinical preparedness of the health science students to handle people with disabilities during clinical placements. These findings are significant as this is the first study that has been conducted in the United Arab Emirates on this topic.

FDUCATION PhD | 10

Hanadi Kadbey

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Sufian Forawi

Leadership Styles of Principals and Job Satisfaction of Teachers in Abu Dhabi Public Schools: The Role of Organisational Commitment and National Culture

The purpose of this study was to investigate the leadership style of principals and teachers' job satisfaction in Abu Dhabi public schools and the relationship that exists between these variables. The study also examined the organisational commitment of teachers and its role as a mediator in the leadership style-job satisfaction relationship. Also, the study investigated the national culture dimensions of the principals and their links to the leadership styles that they adopt. The theoretical framework draws on The Full Range Leadership Theory of Bass and Avolio (1997), Herzberg's Two Factor Theory (1959), Meyer and Allen's (1991) three-dimensional model of organisational commitment, and Dorfman and Howell's (1988) revised Model of Hofstede.

The study was conducted in 51 public schools in the Emirate of Abu Dhabi by employing a mixed methods explanatory sequential design. Four research questions were answered using quantitative and qualitative data collected from 51 Emirati principals and 438 Emirati teachers. Data cleaning, descriptive statistics and reliability statistics were run using IBM SPSS Statistics Version 22, and structural equation modelling was run using Mplus Version 7.0 software while thematic analysis was used to summarise qualitative data.

The findings indicated that principals tend to be more transformational in their practices and that teachers tend to be more satisfied when their principals display transformational leadership practices and less satisfied when their principals practice the passive avoidant leadership. The intellectual stimulation and inspirational motivation of transformational leadership and the contingent reward of transactional leadership had positive significant relationships with job satisfaction while the laissez faire of passive avoidant leadership had a significantly negative relationship. In addition, the affective dimension of organisational commitment was a significant mediator in some of the leadership styles-job satisfaction relationships. Furthermore, leadership styles and some of their dimensions were linked to all national culture dimensions with the exception of masculinity. Based on these findings, recommendations for educators and policy makers were provided and ideas for further research were identified to explore the topic of interest further.

Kaltham Rashed Alyateem Almehairi

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Eman Gaad

Preparing general teachers to work in inclusive classrooms: An exploratory collective case study of two Elementary and Early Childhood (K-grade 3) teacher education programmes in the United Arab Emirates

This exploratory case study investigated the current state of how teacher programmes in two government universities in the UAE were preparing prospective teachers to work in inclusive classrooms. Curricula used in course work and how inclusive teaching strategies and practices are addressed in these curricula were examined. The study also explored pre-service teachers and faculty views about the contribution of these programmes to prepare prospective teachers to teach in inclusive settings.

This study employed a qualitative research approach and a multi-case study methodology that takes interpretivism as its philosophical foundation. Data was collected by the methods of document analysis, interviews with faculty members in elementary and early-childhood (Pre K-grade 3) programmes, and focus groups with the pre-service teachers.

Findings showed that there were no clear philosophies of inclusive education with regards to students with special needs guiding both programmes' frameworks. There were also major differences between the two cases in the contribution to the process of preparing their teachers for inclusive schools. The differences were mostly in linking theoretical content with practice, the quantity and the quality of field experiences, collaboration between faculty of elementary and special education, and the alignment between course objectives, outcomes, and educational resources regarding inclusive practices. One distinct finding in Programme (A) was that the faculty views about inclusion inclined to consider mainstreaming for students with disabilities rather than full membership to be educated in general classrooms. This view was in contrast with the views of faculty in Programme (B) which showed a strong commitment toward the principles of equity and equality in education which consequently was reflected in teaching practices.

The importance of this study is to raise awareness about the offerings of teacher education programmes in the UAE regarding preparing teachers for inclusion, and the need to make foundational changes in curriculum content to meet this aim and additionally, to pay more attention to the elementary pre-service teachers' opinions about their preparation to teach in inclusive schools.

EDUCATION _____ PhD | 12



Laila Murtadha Mohebi

Programme: Doctor of Education

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

Investigating Perceptions of Pre-Service Teachers and Instructors about TPACK Capabilities of Pre-Service Teachers: An Explanatory Study among Selected UAE Universities

This explanatory mixed-method study aimed at understanding UAE pre-service teachers' perspectives on their preparedness to use technology for future classroom practices, as well as their instructors' perspectives on pre-service teachers' preparedness to use technology for future classroom practices. This study also looks into the pre-service teachers and instructors' suggestions for future action plan to maximise the preparedness and the factors that they believed influenced the acquisition of knowledge and skills regarding technology integration in the classroom. In addition, the study explores research questions that will both address technology readiness and its affecting factors, for which the Technological Pedagogical and Content Knowledge (TPACK) model was used as a framework to reflect on the technology integration skills of pre-service teacher.

The study was conducted in three selective universities in the UAE, where the quantitative data was obtained from a modified survey that was based on Schmidt et al.'s (2009) TPACK survey. A total of 500 surveys were distributed in the three participating universities. Out of these, 359 surveys returned which results in a response rate of 72%. The qualitative data was obtained from interviews with 12 pre-service teachers and 6 instructors.

This study used descriptive analysis for the survey and thematic analysis for the interviews to understand the pre-service teachers' and their instructors' perspectives of TPACK. In addition, thematic analysis was used for suggestions and recommendations. Furthermore, to know the factors that influenced the acquisition of knowledge and skills regarding ICT integration in the classroom, independent samples t-test and One-way between groups ANOVA analysis were conducted. The analyses of the interviews of both pre-service teachers and instructors showed that there were some challenges and points for improvement to be considered.

13 PhD _____ EDUCATION

Lara Nabil Abdallah

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Sufian Forawi

Impact of Combined Explicit Reflective Nature of Science and Inquiry-based Instruction on Middle and High School Lebanese Students' Conceptions of the Nature of Science

The purpose of this study is to examine the impact of a combined explicit reflective NOS and inquiry-based instruction on middle and high school students' conceptions of nature of science. The existing literature has not succeeded in examining the impact of the combined explicit reflective and inquiry-based instruction on students' conception of NOS. Guided by Duschl and Grandy 2013 Explicit NOS Instruction Model, Vygotsky's Social Cognitive Theory, and Lederman's Conceptualization of NOS Model, the sequential explanatory mixed method approach examined the success of the intervention to address the research questions.

The sequential explanatory mixed method research approach was utilised to collect 'pragmatic' data to answer the thesis study questions: (1) What conceptions of the nature of science do Lebanese middle and high school students have?

(2) How does a combined explicit reflective NOS and inquiry-based instruction influence middle and high school students' conceptions of NOS? and (3) How do demographic variables of gender and school level influence middle and high school students' conceptions of nature of science in the context of a combined reflective explicit NOS and inquiry-based instruction? The sample was representative of the whole population and consisted of 116 middle and high school students. Data was collected using the Explicit Reflective Inquiry Based Instruction Nature of Science Questionnaire, reflective journal prompts, field notes from class observations and interviews with students. The quantitative data was analysed using SPSS, while the qualitative data was analysed using thematic coding and peer debriefing.

The combined explicit reflective and inquiry-based instruction has caused a major improvement in students' views of the NOS aspects. This intervention was successful at all levels since it has a curriculum implication and an instructional approach. The intentional explicit discussions of NOS themes using inquiry-based instructional approach caused a change. Three themes emerged as a conclusion: (a) Cultural and Social Development in relation with Implicit Teaching Approach; (b) Combined Curriculum and Instructional Implications; and (c) Communicating Science to Construct Literacy. These results suggest that the intervention had a positive influence in enhancing students' NOS conceptions, but more research is needed to study the relationship between the traditional perceptions of NOS and students attainment in standardised tests.

EDUCATION _____ PhD | 14

Nessrin Mohammad Shaya

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

Adoption and Implementation of Online Learning Systems in Lebanon: Prospects and Barriers

This study aims at obtaining a finer-grained understanding of the primary prospects and barriers to adopt and implement online education systems in Lebanon, through investigating online learning readiness and acceptance among various key stakeholders in higher education. This study started with an assumption that traditional systems govern the processes of the Ministry of Education and Higher Education, depriving the nation of the chance to harness the opportunities brought forth by online education. A multiple case study of mixed-methods research design was conducted with Lebanese higher education students, faculty and senior academic leaders, which revealed adequate readiness levels and increased acceptance of online education among students and faculty.

Data was collected quantitatively through electronically distributed questionnaires and qualitatively through face-to-face semi-structured interviews. Macro and micro levels of analysis took place using statistical testing methods, and thematic analysis led to an emergent status of online education in Lebanon.

Operationally, strong e-learning management capacity and institutional readiness distinguished private institutions, while weak technological infrastructure and geographical complexity characterised the public university. Lack of readiness in the Ministry for abrupt change that online education might cause in pedagogy and instruction surfaced, leading to strategical resistance to full-fledged online programmes.

Diminished state funding for public universities, fears of the mediocrity of the 'no-lecture university', faculty job relevance, doubts in students' self-regulation skills and the possible influence of corruption on student enrollment form major barriers. Prospects lie in the consensus that online education can serve as a catalyst for higher education transformative change supported by embracing a culture of implementation at postgraduate studies, leading to a proposal of a strategic plan for successful implementation. Various statistically tested associations along with sophisticated qualitative stakeholder analysis led to expanding readiness and acceptance models with practical implications for future testing. Limitations were assigned along with valuable and empirical contributions.



Nooreya Al Obeidli

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Prof. Eman Gaad

The effectiveness of existing policies and procedures in the admission of students with SEND in the UAE higher education

Inclusion of students with special needs and disabilities (SEND) in schools would prepare them to gain their rights through a smoother process of access to higher education. Including them in schools raises the expectation they will be included in the next education stage. The number of students with SEND included in schools and completing high school is growing which will increase their demands to enter higher education. Higher education plays an important role in social and cultural development through responding to changes in communities, and meets the requirements effectively. Completion of post-secondary education can help people with special needs and disabilities to get better job opportunities, which influences their life style positively and supports their independence.

The main aim of this study is to explore existing admission processes and services to support students with special education needs and disabilities (SEND), and to examine the effectiveness of the policies and procedures on their admission and enrolment in both public and private universities in the United Arab Emirates (UAE). This qualitative research has used multiple methods such as semi-structured interviews with individuals who are in positions to process students' applications and make the admission decisions for students with SEND in higher education. Document analysis was used as a tool to support the study. Recruitment processes, admission requirements and processes, and criteria to make admission decisions for students with SEND in higher education were also examined.

The main finding revealed an existing gap between what's written in the policies and procedures and real practice, especially in public universities. This gap has direct implications for students with SEND to get access to higher education. The study ends with recommendations to help decision makers in future practices.

EDUCATION _____ PhD | 16

Rihan Mohammed Nasab

Programme: Doctor of Education

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

Cross-Cultural Analysis of Principals' Leadership in Elementary Schools: Case Studies of Government Funded Schools in Abu Dhabi

The thesis explores, through an interpretive framework, school leadership practices in Abu Dhabi Emirate and the embedded school leadership model. The Abu Dhabi School Model is derived from the US and is currently being implemented as a new model of school leadership that includes a cross-cultural dimension. This new approach is based on the assumption that the international literature does not adequately capture the cross-cultural domain and cultural factors that influence leadership practices in Abu Dhabi schools. Four theoretical models are used to explore leadership practices in the UAE: Burns's transforming/transactional leadership theory (1978), Klann's Good Leadership Model (2007), Branine's Arab Organisation Model (2011) and Trompenaars and Hampden-Turner's (2012) Cross-Cultural Model.

The methodology adopted is a qualitative hermeneutic approach designed to capture the authentic, subjective meaning of leadership to the participants. Three sources of data were used in understanding the nature of leadership practices in Abu Dhabi schools: interviews with teachers, head teachers, vice principals, principals and cluster managers; school document analysis; and material culture observations. Several themes are identified as a result of this study that influence leadership practices: cultural influences; the importance of culture building; cross-cultural influences; leadership style/direction; and policy implications. Based on these findings an Emirati model of principal leadership has been developed that includes factors specific to the UAE culture. Further qualitative and quantitative research is recommended to investigate these exploratory findings, which offer a unique cross-cultural perspective as a basis for understanding leadership in UAE schools.



Walid Salameh

Programme: PhD in Education

Year of Graduation: 2018

Supervisor: Dr. John McKenny

Arabic as a foreign language (AFL): Northern UAE AFL Teachers' Perceptions of the Integrated Approach

The purpose of this study was to investigate how teachers perceive an integrated approach for students' communicative competence in Arabic, and whether teachers are receptive to implementing an integrated approach in the TAFL classrooms and if they identify any potential obstacles to implementing an integrated approach at the private universities in the UAE Northern Emirates. The literature reveals that many studies investigated the students' perceptions towards learning Modern Standard Arabic (MSA) but rarely tackled the teachers' perceptions in this regard and what communicative Arabic instruction should involve. The design exploited in this study is a mixed methods research in two sequential phases: a quantitative phase followed by a qualitative phase.

The source of the quantitative data was a survey adaptation of Arabic Teacher Survey (ATS). It is a 45-item survey of 40 participants. Due to the small size of the population who participated in the study, no significant relationships emerged between teachers' perceptions of the integrated approach and its influence on communicative competence. In general, a positive perception of using the integrated approach arose as the right way to go about the teaching and learning of Arabic. The qualitative phase consisted of one-on-one interviews with five Arabic teachers to provide a more descriptive analysis of the survey data. The participating teachers' perceptions of teaching both varieties are to some extent different in the order that they would teach the two varieties despite the fact that they all prefer to implement the integrated approach in their classes. The participants attributed the obstacles in the implementation of an integrated approach to the teachers' mindset, insufficient materials, and choosing which colloquial dialect of Arabic to teach.

This study sought to uncover the teachers' perceptions of the integrated approach and its importance for the TAFL field in promoting the students' communicative competence. Additionally, the study proposes an instructional design that accommodates the integrated approach besides recommendations for further research. The main purpose is to highlight the value of teaching both MSA and a spoken Arabic variety as the underpinning of communicative competence in Arabic.

EDUCATION _____ PhD | 18



PROJECT MANAGEMENT

Afaf Hassan

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

The influence of project managers' competencies on the delivery of successful innovation in projects

This thesis investigates the influence of project manager innovation competencies on the delivery of successful innovation in projects in the United Arab Emirates.

The research employs a quantitative method, as data are collected using online questionnaires from employees working in different companies operating in the UAE. The data analysis is performed using the Statistical Package for the Social Sciences (SPSS) and structural equation modelling (AMOS) by means of multiple-regression, path and mediation analysis. The confirmatory factor analysis (CFA) results indicate that there are four clusters for project manager innovation competencies: impact and influence competencies; cognitive competencies; personal effectiveness competencies; and managerial competencies. There are six clusters for project manager innovation personality traits: alertness and quickness; self-confidence; decision-making; openness to innovation; honesty and integrity; and energy and toughness traits. There are two clusters to measure the delivery of successful innovation in projects: control of new scope; and response to scope change.

The findings indicate that all of the studied project manager innovation competencies have a direct positive impact on the delivery of successful innovation in projects. The results also reveal that the project manager innovation personality traits fully mediate the relationship between the project manager innovation competencies and the delivery of successful innovation in projects. Thus, this research thesis contributes to both the diffusion of innovation theory and the threshold and high performance managerial competencies theory. It is also one of the first empirical studies to establish a relationship between project managers' innovation competencies, innovation personality traits, innovation environment, and the delivery of successful innovation in projects.



Alia Marjan Mubarak

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

The relationship between determinants of risk governance assurance and efficacy of public projects in the Government of Dubai from the perspective of internal audit function

This study addresses a literature gap that exists for such research of global solutions for the local environment. Risk governance issues, approaches and methods specific to Dubai and other emirates are the primary focus of the present study.

The study adopts a quantitative methodology and employs a research philosophy of positivism in order to evaluate the collected data objectively and obtain results that create a visual representation of the identified research problem. As a result, a questionnaire with 148 questions with answers based on the Likert scale was collected from 113 respondents working as the staff from the internal audit and risk management departments in the government of Dubai and some practitioners who were attending the Middle East Risk Management Forum. Then, a reliability test, factor analysis, analysis of variance and correlation analysis were undertaken to assess the answers and relate them to the formulated hypotheses.

The results of the study confirmed the necessity of a specific approach in addressing risk management of the Dubai public sector. The questionnaire revealed that ten possible determinants could be identified in assessing risk governance, including strategy, risk communication, risk culture and financial capacity. By collecting the opinions of managers and executives working in the risk management sector, these factors were appraised and classified. Thus, a model for risk governance specific to the local sector in Dubai was created. This research has multiple practical implications. It may assist policymakers of the Dubai government to develop and implement systematic changes into the current risk management processes. Organisation management may also benefit from the study's results as it presents a number of possible strategies for more successful risk governance.

PROJECT MANAGEMENT PhD | 20

Fatma Hussain Alhashimi

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

Value Co-Creation using Activity Theory: Cord Blood Donor Recruitment in Hospitals

Donor management involves major activities including recruitment, invitation, selection, and donation processes. Donor recruitment is one of the critical stages that ensures sufficient amounts of blood are received at blood collection sites. Donor recruitment and blood strategy management need to be researched according to the culture and social environment of the country concerned. Only a few studies have been conducted on a national scale on cord blood donor recruitment processes. Hematopoietic stem cells donations within public cord blood registries are highly important in Arab countries since, out of 20 million hematopoietic stem cell (HSCs) donors registered globally, less than 50 are registered in the Arabian Gulf countries.

This thesis uses the conceptual resources of cultural-historical activity theory (CHAT) to identify potential mediating instruments between S-D logic and practice-based views. The research problem concerns how to combine these two views. The researcher argues that by using different models and tools of activity theory we will enhance our understanding of issues such as knowledge fragmentation, contradictions and different ambiguities that occur in healthcare contexts. Dubai Cord Blood and Research Center (DCRC) is the only governmental cord blood centre in the UAE. The DCRC provides expectant mothers two main cord blood-banking options which are private (family) banking of newborns' UCB stem cells where the unit is kept for the family use, and public banking where one can donate their newborn's UCB stem cells to be used by others for transplantation.

This is the first study that combines activity-theoretical analysis with value co-creation processes in a particular service where activity theory is used as a tool to expand S-D logic for practice development in cord blood donor recruitment processes in hospitals. In conclusion, several common ingredients emerged between S-D logic and activity theory which include: the role of beneficiary (user), actors as dynamic systems, importance of context as human institutions, and importance of knowledge as an operant resource. This research provides a foundation for improvements to practice in voluntary cord blood recruitment. Knowledge about the importance of public cord blood donation is essential among community, expectant mothers and healthcare providers to develop reliable donor recruitment processes for public cord blood banks.



Ghassan Dabbour

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

The Knowledge-Evolving Project: An Exploratory Study of Knowing Acts in a Digitisation Project

The aim of this research thesis is to explore the knowledge exploitation practices that drive the knowledge evolution spiral of project knowledge management. This is different to the conventional knowledge creation spiral commonly drawn from organisational knowledge management which implies the need for knowledge to grow beyond the organisation.

The argument of this thesis is that while a successful organisation applies knowledge to grow beyond its constraints, a successful project is one that applies knowledge to efficiently meet its constraints by developing and assimilating the guiding knowledge that has been predefined and established at the project outset. Since improvisation and spontaneity of knowing acts in projects are an inherent practice, the primary methodology this research deploys is Glaserian Grounded Theory, supported by qualitative analysis of secondary documents for triangulation.

The empirical research is conducted on a 'Maintenance Digitisation Project' in an organisation that runs real estate and is part of a group of companies. The core categories that emerged were: Inscription, Technological Extension, Discussion, and Redundancy, which are the end products of the study; the knowledge evolving acts. Based on these findings, the study constructs the FRDA (Formalisation, Realisation, Deconstruction, and Assimilation) model – a knowledge management model of the knowledge-evolving project.

PROJECT MANAGEMENT PhD | 22



Maha Mohammad Ibrahim

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

Programme Management Success: A Study of the UAE Utilities Sector

This research aims to understand the phenomenon of programme success in the context of the government organisations based in GCC countries. Programme management is designed to create synergy between various projects and deliver a set of benefits by coordinating between projects. Programmes provide a transformational way for integrating projects as well as organisational strategies. The empirical research focuses on government organisations in the United Arab Emirates examining the various measurement dimensions/criteria used for assessing programme success.

A case study is reported of three different programmes within the Federal Electricity and Water Authority (FEWA). These programmes are 'Water', 'Electricity' and the 'IT Transformational Programme'. A list of six constructs of programme success criteria and nine success factors were identified from the existing literature on programme success and used to guide the exploratory study. The study is based on semi-structured interviews, observations and secondary document analysis. A total number of twenty interviewees were selected from different levels based on their experience within the organisation as well as the programmes under investigation. The interviews covered three main aspects in order to better understand the phenomenon of programme success in the three programmes namely, success criteria, success factors and programme context.

The analysis of the data identified a new success criterion that should be considered when managing public programmes. Moreover, it has been demonstrated that programme context has a great impact on the success of programmes in the government sector, especially when it comes to the external factors related to the executive direction of both the federal and local governments if combined with limited authority and influence of programme managers. Results related to leadership competences are seen as essential for directing and managing programmes successfully.

This research makes a contribution to the theory of programme success through developing a holistic framework for managing complex and technical programmes in the government sector

Mohamed Ali Ahmed Aldhanhani

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

Enablers and Barriers to Knowledge Sharing in the UAE Infrastructural Projects

This thesis aims to examine how knowledge sharing (KS) is utilised to create successful projects in the infrastructure development sector. The research questions concentrate on addressing the integration of the KS process in improving project success within the infrastructure development sector of the United Arab Emirates (UAE).

The data was collected using questionnaire survey method to examine the integration of KS in infrastructural projects in the UAE.

The data was collected through a survey from 112 valid respondents. The respondents were drawn from specific organisations within the infrastructural sectors of the UAE. Several statistical methods were used for the data analysis, including descriptive statistics, reliability analysis, ANOVA analysis, correlation, and regression.

The research outcomes indicate that three enablers influence the level of KS contributions to project success: the ability of social networks to simplify personal relationships and social interactions to facilitate the project KS process; the characteristics of the physical environments such as the shape of the office spaces or relaxed and quiet environment; and loyalty and hard work to increase project success via KS.

The research findings also show that four enablers are important for the benefits of timely KS in infrastructural projects: leadership commitment to support open and honest two-way communication in projects, measurements of knowledge sharing before and after any project activities, implementation of less formal resources such as social media to share embedded project knowledge, and the ability to communicate between project stakeholders regarding the project through specific channels.

In addition, the results support that two enablers were assessed as important for the quality of the timeliness of KS in infrastructural projects, the first of which is a clear policy or strategy for project knowledge sharing, and the second refers to sufficient assets and resources to support project KS processes. The study's conclusions support the vision that there is a need for more organisational commitment, further leadership commitment arrangements to support open and honest two-way communication, a wider range of communication channels organisational commitment to support the uses of KS in the project lifecycle.

PROJECT MANAGEMENT PhD | 24



Sulaiman Rashed Alshebli

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

Modelling Risks for Physical Security Assets Development and Operation in High-Value Retailer Projects in the UAE

The research aims at undertaking a stochastic analysis of the whole ambit of costs associated with PSA (physical security assets) from feasibility to disposal, with the aim of generating output regarding economic and non-economic indicators. This exercise would generate thus a model which can be deployed by both the private and the public sectors for making better decisions regarding PSA investments, and obtaining best value.

Data collection has been done through a survey and other sources, with probabilistic distributions derived for the relevant WLCC cost centres along with validation of the same through statistical tools. Monte Carlo simulation techniques have been used to provide the users with pre-defined parameters. Various sensitivity analysis measures have been incorporated to gauge the variability through changes to crucial inputs.

The proposed WLCC model would enable users to assess the factual overall running costs of investment in PSA, along with risk management parameters, thereby facilitating investment policy implementation. As opposed to deterministic forecasts, it would enable users to quantify the associated risks with a relative level of certainty. It would, therefore, contribute towards the more efficient use of budgets, equipping users with statistical results to confidently make judgment calls regarding various options of investment in PSA.



Taher Al Braik Al Ameri

Programme: PhD in Project Management

Year of Graduation: 2018

Supervisor: Prof. Khaled Shaalan

An Exploratory Study on the Role of Stakeholder Management in the Implementation of Smart Government Projects in the UAE

Using a stakeholder theory framework, this qualitative study investigated the relationship between stakeholder management practices and stakeholder involvement relative to m-government and e-Government smart technologies used in the UAE. Within the organisational context face-to-face interviews were conducted with a sample of 25 diverse stakeholders from three different public-sector organisations. The results of the study presented four themes that underscored the importance of the stakeholder relationship in influencing product or service value among digital consumers.

In addition, the interviews revealed that internal and external stakeholder support is associated with facilitating higher customer usage of mobile and electronic government application technologies. Therefore, the central value of the present research study is that it improves the understanding of how stakeholder management is key to maintaining stakeholder retention and commitment relative to achieving smart government objectives. Given the priority of smart government initiatives in the UAE, stakeholder influence is essential to improving consumer acceptance and satisfaction with new mobile technology applications.

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BUSINESS MANAGEMENT

Nawfal S. Abdul Ghani Al Jourani

Programme: PhD in Business Management

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

Business Engagement and City Branding

There is an abundance of literature on consumer engagement, however, little is known as to how engagement is brought about by organisations. This study addresses this gap by investigating how city brands specifically, (and organisations in general), can make engagement happen. This thesis examines the underlying mechanisms of what makes organisations have brands that are successful in their attempts to be engaging. The analysis identifies components of the business engagement model and how they operate in creating and managing successful brands in general and in city branding more specifically.

This study defines business engagement as the management system in which leadership creates a vision that drives the creation of a collective culture, which in turn adopts innovations for the sake of achieving consistent competitive ability to the entity within which it is applied.

The thesis addresses another gap in the literature which is city branding. There is an abundance of literature on what it is, but not a lot of consensus on how cities can do it. There is a need for a universal framework that can be relatively generalised in addressing how city branding can be successfully implemented. Dubai is chosen as the subject matter of this research. Informed by the literature on city branding, marketing, branding, innovation diffusion, and leadership, this thesis adopts a qualitative research approach that uses interviews and documents as the major sources of primary and secondary data. 24 Dubai Government organisations participated in the interviews, and the four main findings are: 1. leadership, vision, collective culture, innovation, and consistent competitive ability are the ingredients of the business engagement model; 2. city branding is not a promotional activity as commonly perceived, but a business management process that precedes promotion; 3. leadership plays a major role in the process of city branding (and any other branding context), not as a political promotional tool, but as a business management application that makes brands and not only promotes them; and 4. the business engagement model is ubiquitous. Business engagement happens organically whenever there is a brand using situation wherein leadership creates a vision that drives all involved to achieve it.

This study supports existing literature on engagement and city branding and expands it to provide a conceptual framework for city managers and planners, leadership entities, researchers, and marketing specialists that contributes to managing city branding and other brand making endeavours.



Sadi Mohammad Taha

Programme: PhD in Business Management

Year of Graduation: 2018

Supervisor: Dr. Stephen Wilkins

The Influence of Management Practices on Employee Commitment and Food Safety Performance in Food Manufacturing Firms

The study examines the mediation effect of food handlers' commitment on the relationship between the management practices and the food safety performance of the firms. The sample comprised 189 food manufacturing firms operating in the Emirate of Dubai.

This research adopted a positivist philosophy, and a quantitative deductive approach. Two focus groups were conducted to support the literature analysis and to gain more information from the participants to support the research aims.

Data were collected by using a self-administered hard copy survey questionnaire that was completed by five food handlers in each of the 189 firms. It was found that all of the studied management practices have a direct significant positive impact on the food handlers' commitment to implementing safe food procedures. Furthermore, the food handlers' commitment has a significant positive impact on organisational food safety performance.

The food handlers' commitment was found to partially mediate the relationship between organisational management support and food safety performance, and similarly the food handlers' commitment was found to partially mediate the relationship between communication and food safety performance. These results indicate that food handlers' commitment is a mediator in the relationship between all of the studied management practices and the food safety performance of food manufacturing firms.

This study contributes to knowledge by presenting a conceptual model, which builds upon and improves the existing models of food safety management, by introducing commitment theory to the present behavioural theories. It succeeded in explaining the management practices that influence food handlers' commitment to implementing safe food procedures, and how both these practices and the food handlers' commitment may impact upon organisational food safety performance. It is concluded that food handlers with strong commitment are more likely to implement safe food procedures, thus contributing to the organisation's food safety performance. The findings suggest that the managers of food manufacturing firms should analyse the impacts of their management practices and create policies that motivate and improve employee commitment and performance. Further implications of the results and future research directions are also presented.

BUSINESS MANAGEMENT _____PhD | 28

Shireen N. Chaya

Programme: PhD in Business Management

Year of Graduation: 2018

Supervisor: Prof. Ashly Pinnington

Arab Women's Experiences of Careers in Management

This thesis explores the experiences and decisions of young Arab women as they pursue and advance their careers in management or opt out. The main research questions on Arab women's management careers include how they perceive their experiences in organisations, the key elements that contribute to their decision to leave their management career or stay, how they perceive upward mobility in management careers, and the way in which their experiences are qualitatively changed by the overlapping of multiple layers of identity at particular points of intersection. The thesis draws on discourses of gender, intersectionality, and sustainability situated in the paradoxical context of the region in which many Arab women, while young and educated, are not working in management or are unemployed.

The thesis's aim and research questions were explored through hermeneutic phenomenology via the semi-structured life world interview drawing on a sample of 56 women from 17 Arab countries, between the ages of 24-40, holding degrees in management, who are currently working or worked a minimum of 3 years before quitting. An Arab woman was defined as someone for whom both parents are Arab, has lived in an Arab country for at least ten years, obtained at least one degree in a higher education institution in an Arab country, and has previously worked or currently works in an Arab country for a minimum of 3 years.

Several themes emerged that described women's management career experiences specifically from the perspective of their social identities the combination of which produces private and public scripts with multiple intersections qualitatively changing their experiences. Shared among their experiences is the way in which these intersections situated them in what they perceived to be places of "empowerment" or "disempowerment" expressed in the ability to make decisions and seek alternatives as they underwent expected role-performance tensions during daily "power" episodes with multiple actors (especially managers, colleagues, spouses and other family members). Thus, the power framework of Arab women's management careers tells of an active participant and a knowledgeable agent aware of the importance of balancing multiple arenas of power.

Based on this argument and interpretation the thesis makes recommendations on how to transform various elements such that women experience more equitable and empowering decision-making options that encourage them to remain in their careers as well as move upwards facilitated by cultural and policy changes in universities, organisations, and governments.

COMPUTER SCIENCE

Ahmed Omar Al Katheeri

Programme: PhD in Computer Science

Year of Graduation: 2018

Supervisor: Dr. Cornelius Ncube

Framework for Minimising Critical Information Infrastructure Threats from Insiders

This research aims at investigating the scale and the scope of the risks from malicious insider's activities and exploring the impact of such threats on business operations. The developed framework targets minimisation of the insider threats through profiling the user activities using information from the log files of several components participating in these activities, like IDS, IPS, firewalls, network devices, server hosts and workstations.

Malicious activities potentially leave suspicious patterns and references to users which can be used to infer the main actor or actors and mitigate the threat before they actually occur. The analytical backbone of the framework can be built upon Actor Network Theory.

Organisations need to implement multi-layered defensive approaches to combat insider risks; safeguarding sensitive business information from malicious insiders requires an effective security framework that can identify the malicious group members involved and predict their offensive intentions. To explore the intention of insiders, the framework developed here relies on two different security technologies: Security Information Event Management (SIEM) and User Behaviour Analytics (UBA). They allow for extracting the data from different entity logs, and analysing and separating the malicious activities from non-malicious ones on the base of the User Security Profile (USP). On the other hand, the security engine must allow for the formulation of different hypothesis, which have varying degrees of flexibility to address the security requirements and have the ability to identify the main actor and the other participants using analysed information.

Organisations require an effective security policy that communicates widely the consequences of stealing or leaking confidential information in an unauthorised manner. Secondly, logging and monitoring employee activity is essential in detecting and controlling system vulnerabilities. Thirdly, conducting periodic and consistent vulnerability assessments is critical in identifying any gaps in security controls and in preventing insiders from exploiting them. Taking extra caution when dealing with privileged users is important to proactively protect the information infrastructure from insider risks.



Linda Khaled Al Hassan

Programme: PhD in Computer Science

Year of Graduation: 2018

Supervisor: Prof. Khaled Shaalan

Information Technology Disaster Recovery Plan (IT DRP) Framework – A study on IT Continuity for Smart Cities in Abu Dhabi Smart Government

In this research study, the aim was to develop an IT DRP framework to support the Abu Dhabi Government in the initiatives of smart city services to assure its system and IT continuity.

Based on the factors identified in the literature review, a conceptual framework was developed. The concept was reviewed and examined in light of the past literature in the area of IT disaster recovery and the challenges or barriers that restricted their application in smart city services. A quantitative method was adopted as the research design for data collection from experts, IT professionals and policy makers from Abu Dhabi Government as the sample. A detailed statistical analysis was conducted to identify the relationships between the key variables.

As per the findings from the responses of the IT personnel and the analysis of data (distinct from data validation), some additional factors were discovered. Based on this, a few changes were made to the framework which involves the addition of new factors and the removal of less dominant factors from the framework for smart city IT DRP.

After conducting the research and drawing important conclusions, the researcher offered recommendations for policy makers as well as researchers. The government can adopt the proposed framework for analysis of the numerous external factors having the potential to impact the plans in one way or the other and to devise more intelligent plans and strategies accordingly.

For academic researchers, this study suggests how to identify and then manage the identified stakeholders effectively for better results. It is suggested that they should look into the several facets of this smart city project so as to make planning compliant. It is also recommended that organisations and government should constantly monitor their security systems to avoid any sort of data breach.

COMPUTER SCIENCE PhD | 31

Mohammad Khaled Al Hassan

Programme: PhD in Computer Science

Year of Graduation: 2018

Supervisor: Prof. Khaled Shaalan

Smart Safe Cities Technology Architecture to Assure Citizens' Happiness & Future Foresight to Achieve United Arab Emirates 100 Year Vision: Response Readiness, National Resilience & Future Accelerations

In this research, the focus is on the 'safety' aspect within smart cities, bringing forward the implementations requirement to transform a smart city into a safe city for the UAE. The aim of this research is to build a conceptual framework to enable the transformation of smart city into SSC, supporting citizen happiness, future accelerations, and sharing future governments. The case considered for this research was Abu Dhabi Government, with the research questions and objectives set out and achieved through the aid of a quantitative survey questionnaire. The sample selected for the research was the public sector of Abu Dhabi. With a detailed review of the factors (internal and external) of smart cities and e-government (as the base), the study reviewed the benefits and barriers, as well as risks that entail the transformation of smart cities to SSC within the context of the UAE. Based on the findings of the data analysis, the conceptual framework developed was validated followed by a re-conceptualisation to suit the Abu Dhabi Government. Recommendations were built to support the extension of the framework to smart city models in other countries to focus and build on the safety aspect, thus achieving citizen happiness and boosting future development.

ARICHITECTURE AND SUSTAINABLE BUILT ENVIRONMENT ASBE

Muna Mahmoud Salameh

Programme: PhD in Architecture

and Sustainable Built Environment

Year of Graduation: 2018

Supervisor: Prof. Bassam Abu-Hijleh

Courtyards as passive design solution for school buildings in hot areas: the UAE as a case study

This research aims to investigate the integration of a well-designed courtyard as a passive design strategy in buildings in the UAE to reduce the energy consumption required for cooling. In addition, the improvements in the thermal comfort conditions within the courtyards should translate to a more comfortable outdoor space for the students.

This research adopted a qualitative approach based on case studies and computer simulations. The case studies were five present public schools' buildings with different plan templates and different courtyard configurations. The thermal effect of the courtyards on the school buildings was investigated through two stages. The first stage discussed the orientation of the courtyard. The second stage investigated a range of courtyard configurations and designs through five phases, each focused on one of five relevant parameters: courtyard shape factor ratio (W/L ratio); courtyard area to built-up area (CA/BA ratio); courtyard outline shape; courtyard height (number of floors); and finally courtyard vegetation. There was a third stage in this research that investigated the cooling loads for schools (case studies) in relation to orientation and design strategies. The cooling plant sensible load was investigated beginning on specific dates and then it was investigated for the whole academic year.

The outcomes of the research investigations concluded that the design and the properties of courtyards can affect the indoor temperature of the school building, thus the cooling load.

The research results revealed that the optimal design of the courtyard can reduce the temperature of the inner spaces of the school, thus it can reduce the cooling load for the school building in general. Moreover, it can improve the thermal comfort for the outdoor areas. The findings of this study will be important for architects, sustainable developers, educational developers, economic consultants and green buildings designers in the UAE and in areas with similar climate to help them in designing green schools.

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Sundus Luay Shareef

Programme: PhD in Architecture and Sustainable

Built Environment

Year of Graduation: 2018

Supervisor: Prof. Bassam Abu-Hijleh

Urban Geometry: The Effect of Height Diversity and Buildings Configuration on Thermal Performance and Cooling Load at Urban Scale. A Case Study in Dubai/UAE

This research aims to explore the effect of the urban block with different building configurations on energy performance at the urban level. This research attempts to provide alternative methods to achieving the required compactness and increase the shading effect by adapting building height variations and configurations in urban block design.

This study utilised two software packages to simulate a base case urban configuration and to evaluate this case against the proposed suggested scenarios of different configurations. The proposed scenarios depending on the urban configuration sustainable strategies were implemented and simulated to find the effect of adopting these strategies on the building's total energy performance within the case study area, ie the Dubai/UAE local context and weather characteristics. Three groups with 56 proposed scenarios were simulated, wherein different ratios of building height variation were implemented in the first two groups, and different building configurations were adopted for the third group.

The research found that a significant variation in building height reduces the cooling load more than a gradual height variation, and consequently offers more energy saving.

Furthermore, building orientation plays a significant role in the thermal performance of the urban block, and it contributes to the total cooling load energy saving of the urban block by 6.6% at the peak time of cooling demand. Moreover, the research found that the variation in building heights will increase the wind velocity by up to 23%, and this improvement in air flow affects the outdoor air temperature positively.

In addition, the alternative arrangement of the buildings within the block is another geometrical variable that affects the thermal performance of the built environment. Finally, adopting the rectangular shape of the urban block, creating diversity in building heights and alternative building morphology are some of the passive urban design strategies that can be followed for optimised urban block configuration, with high efficient morphology and less environmental impact. This prototype is recommended for the new urban development in the UAE and other areas of the same climate zone.

ASBF PhD | 34



EDUCATION

Dina Hussein El Saadi

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2017

Supervisor: Prof. Sufian Forawi

The Contribution of the UAE School Inspection Framework as a Quality Assurance Tool for School Transformation and Performance Improvement

The study investigates the contribution of the UAE School Inspection Framework (SIF) as a quality assurance tool for school transformation and performance improvements. The study adopts a quantitative approach to help arrive at conclusive relationships between the variables in testing key hypotheses. Data was collected using Google Forms' online data collection platform and analysed using IBM SPSS Statistic Software version 23.

Findings reveal that school quality assurance metrics are good predictors of school transformation and school performance; the UAE Inspection Framework is also a significant predictor of school transformation and school performance. Among the school global transformation indicators, sustainability is the only factor that supports school performance development. Finally, a positive and moderately strong association exists between school quality assurance and the UAE Inspection Framework as a quality assurance metric. It is recommended that American schools in Dubai must fine-tune global school transformation elements in line with school performance indicators so as to remain globally competitive in an increasingly globalised world.

35 | MASTERS ______

Mohamed Ragab

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2017

Supervisor: Dr. Solomon Arulraj David

The Impact of Teachers' Demo Lessons on Improving Teachers' Performance and Lesson Effectiveness: an in-service training initiative introduced in a private American school in Al Ain

The aim of this research is to study the impact of 'teachers' demo lesson programmes' on improving pedagogy and lesson quality. The initiative is a part of the school in-service training programmes for teachers' professional development. Combining retooling, remodelling, and revitalising approaches to teachers' continuous professional development, adopting a more socio-cultural view of teacher training programmes, and using assumptions from various theories of adult learning, the current study presents a training initiative that involves teachers in both teaching and learning, and thus, helps them reconsider their classroom practices.

The study took place in one of the private schools in Al Ain City in the Emirate of Abu Dhabi. The study sample included 139 middle school students and 8 middle school teachers. A mixed type approach was used for the data collection of the study. The results of the quantitative and qualitative research methods employed for the study suggest that the programme has improved teachers' overall performance and has a direct positive impact on lesson effectiveness. In spite of the high benefit of the initiative for teachers' professional development, it cannot replace other in-service development programmes that involve a real classroom learning environment.

EDUCATION _____ MASTERS | 36

Mohammad Nasif Elayyan

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2017

Supervisor: Dr. Abdulai Abukari

Factors Associated with Student Happiness at Wesgreen International School, Sharjah, **United Arab Emirates**

The primary goal of this research is to discover whether the male and female grades 4-6 students at Wesgreen International School in Sharjah, United Arab Emirates, are happy, and to determine which factors have the biggest impact on the students' feelings of happiness. The factors examined in this research are: relationships (human factor); self-confidence and personal safety (personality factor); school activities and facilities; personal and academic achievements; and extra-curricular activities. Furthermore, this research aims to examine the school management and teachers' awareness of the importance of students' happiness in the educational process, as well as their understanding of student needs and opinions.

The results of the research revealed that the majority of the students are happy, with 96% answering 'yes' to the first statement. The students listed the factors that affect their emotional side and what makes them happier. The most important factors in order of importance were: the relationship with their teachers, peers and family; academic achievements; extra-circular activities; the feeling of safety in school; personal achievements and awards; and using the school facilities. The results from the staff survey revealed similar views of the most important factors that have an impact on students' happiness. The results of this research enlighten both teachers and school management on the importance of students' happiness on the overall educational process, and provides them with useful data that will enable them to further plan and improve in the areas that are most important to students while still working on achieving the major goals of the school.



Nur Yacoub Siyam

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2017

Supervisor: Dr. Solomon Arulraj David

The Impact of Using Information and Communication Technology in the Attitudes and Achievement of Grade Three Students in Mathematics and Science

This study aimed to explore the impact of ICT use in mathematics and science classes by investigating the effect of such integration on grade-three students' attitudes towards ICT use, and their achievement in mathematics and science. The participants of this study comprised of 41 grade-three students from a private school in Dubai. Students were divided into two groups: an experimental group where an ICT tool was used for instruction; and a control group where the teacher was the source of instruction. A mixed-method approach was used to collect data via a students' attitudes questionnaire, pre- and post-achievement tests, and classroom observations.

Data analysis of the attitudes questionnaire has revealed that students have positive attitudes towards the use of ICT in the computer lab in both mathematics and science. However, students were found to enjoy the science class more than mathematics when using ICT. The analysis of pre- and post-achievement tests revealed that the use of ICT increased students' achievement scores in both subjects. When compared to the traditional method of teaching, this impact was not considered statistically significant. When comparing students' progress in mathematics and science when using ICT, science was found to benefit from ICT more than mathematics.

The findings of the observation reflected students' confusion at the beginning of the class and their need for clear instructions. Additionally, students needed the teacher's help in some parts of the lessons, especially in mathematics, indicating that the teacher should stay central to the education process. These findings imply that in order to best benefit from ICT in the classroom, pedagogies as well as CAI design should be further investigated.

EDUCATION ____ MASTERS | 38

Amel Mohamed Shaaban

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

The use of streaming as a differentiated strategy in middle school mathematics classes: A Case study of a private American-curriculum school in Dubai

This study aims to examine the advantages and disadvantages of using streaming in mathematics as a differentiated strategy, using the following objectives: a) to explore teachers' perceptions of using streaming; and b) to analyse the impact of streaming on students' performance. Twenty-eight mathematics teachers at a private American-curriculum school in Dubai participated in a survey; then eight teachers and two mathematics coordinators of the middle stage gave semi-structured interviews. Additionally, document reviews were used to investigate the implementation of streaming in middle school mathematics planning, as well as its impact on students' performance.

Triangulation in this study (survey, interview and document review) gives an in-depth understanding of the advantages and disadvantages of the five years of mathematics streaming at this school. Some advantages observed were: it helped higher achievers' critical thinking due to more advanced teaching; it facilitated the integration of technology, which made learning more interesting; and it enhanced students' performance scores in MAP assessment. The obstacles which prevent its successful implementation include the unification of curriculum and assessment among groups; discipline problems due to students' feelings of frustration from being included in lower groups; and inadequate teacher training in streaming practices. This study contributes to the body of knowledge of streaming in mathematics for middle school students. These findings may guide other interested researchers to examine this area from different aspects such as the fixed mind-set, students' attitudes and the role of parents.

39 | MASTERS _____ EDUCATION

Asma Tabassum

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Christopher Hill

Transforming School: Role of School Leadership in Managing Educational Change – A Case Study of an American School in Dubai

This research will focus on the role that school leaders play in school transformation by managing the change process generated by the changing face of economies and political agendas in any given country. School leadership needs to skilfully manage change in order to minimise chaos and ensure sustainability of the process. This study will focus on the intricate process of change and resistance management. School leaders need to exhibit distinct and diverse leadership styles, as demanded by the circumstances, while leading school communities through a time of intense change. According to Stoll and Fink (1996), school leaders today are faced with countless innovations. New ideas have swamped the education industry, and it is important for school leaders to make sense of change, stability, resistance, meaningful and necessary innovations – all at the same time while ensuring the sustainability of such changes.

This study will use an American School in Dubai as a case study for the implementation of theoretical concepts; where the current school principal helped establish a culture of change and innovation. The school was established 25 years ago, hence it has a long-standing culture and managing change is a very complex process due to the nature of its context. In particular, I will focus on how the current principal was able to break the status quo and motivate her team(s) to keep moving forward in the face of intense change.

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Bassam Nabil Saryeddine

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Christopher Hill

Single-gender vs. Coeducational Classrooms in the Primary School: A Comparative and Relational Case Study of Student Engagement and Achievement

The effects of classroom gender composition on students' academic outcomes have been at the centre of a hotly contested discourse. The Al Ain study examines differences in student engagement and student achievement levels between the single-gender and coeducational classroom settings. An assessment of the relationship between student engagement and achievement in the two contexts represents the study's secondary purpose.

Inspired by a worldwide inconsistency in findings on the subject and a dearth of literature on the role of gender composition within classrooms in the Arab world, the quantitative pilot study pins the focus on the primary classroom in two American curriculum private schools in the UAE. Unique in the sense that this causal-comparative design incorporates elements of correlational research, the study relies on a tripartite blend of methods including documentary research, lesson observations, and survey research. MAP® results, student attainment and progress in lessons, and teachers' perceptions of their students, are sought and analysed to gauge student engagement and achievement.

The study's findings show negligible differences between the single-gender and coeducational settings for both student engagement and student achievement. An evidently positive relationship between student engagement and achievement also comes to light throughout the study, although these correlations are unaffected by changes in classroom gender composition. The results of the Al Ain project support a significant body of literature which favours neither single-gender nor coeducational settings. Following an analysis of these findings, implications for wider scale research and potential policy considerations are discussed and recommendations for improved academic outcomes in both gender contexts proposed.

Hanadi Ahmad Saleh

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Abdulai Abukari

A Study of the Effectiveness of the Next Generation Science Standards Implementation at a Private US Curriculum School in Dubai, UAE

This study aims to evaluate the implementation of the Next Generation Science Standards, the latest science education reform in the United States, in order to determine its effectiveness in one private US curriculum school in Dubai, UAE. The school has been chosen based on its good KHDA reputation and low students' achievements in external examinations. Mixed methods approach of both quantitative and qualitative instruments has been adopted. Twenty science teachers have been purposefully selected and participated in the close-ended teachers' questionnaire to evaluate their receptivity and perceptions of the NGSS. Then, nine science teachers have been interviewed and observed in their classrooms to assess the extent of accommodations between the intended, perceived and operated curriculum.

The quantitative data from the questionnaire has been analysed using SPSS while the qualitative data from the interviews and observations have been analysed using the thematic content analysis. The results reflected that the science teachers were convinced about the NGSS curriculum despite the encountered challenges during its implementation. Teachers' descriptions of their instructional practices were compatible with the components and demands of the NGSS though a few teachers have ignored the integration of the cross-cutting concepts in teaching practices. However, the classroom observations have showed that despite well-informed understanding of the NGSS content and structure, the teachers were not able to completely shift their classroom instructions in the way that they have described. This has suggested the presence of gaps between the perceived and implemented NGSS in the classrooms. The results could be utilised for planning professional development sessions to better understand the changes in science teaching that the NGSS are trying to offer and thereby support science teachers to shift instruction towards the three-dimensional model of learning of the NGSS. Lastly, this study would be a precursor for a variety of following research in evaluating the implementation of NGSS from different perspectives in the context of the UAE.

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Mona Ali Mohammed

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Christopher Hill

Transformational Leadership and Successful Practices during Crisis Time: an Exploratory Case Study in the Context of a Private University in Dubai

This case study aims to explore and investigate transformational leadership's most successful practices that led to lifting the probation status according to the Licensure and Academic Accreditation 2011 (CAA) Standards in the context of a private university in Dubai. Also this exploratory case study aims to discover the effects of the transformational leadership style on the change process in order to draw lessons about successful transformations and effective crisis management. The researcher used qualitative methods to collect data: conducting individual semi-structured interviews, open ended interviews, and focus group interviews; analysing documents; and observing classes and educational activities. The sample included the University's President, ten members of the College Council, two groups of students, an educational expert from Zayed University and non-academic members.

The findings indicated the participants' perspectives and experiences about transformational leadership and the effective procedures that led to lifting the probation status, obtaining the CAA accreditation, and improving the overall performance of the educational establishment. Also the participants ranked the factors that led to success according to importance. The study could serve as a road map that helps educational leaders who struggle with overcoming probation status and achieving academic sustainability to benchmark with the best practices of the university under study. It demonstrated the successful procedures of change in order to improve the overall performance of educational organisations during crisis time. The study demonstrated a model for the most effective procedures that could be used to lift probation status and to obtain formal academic accreditation. It also suggested Growth Indicators that could measure overall performance progress. Finally, it provided solutions and recommendations to educational leaders in order to overcome the probation crisis and improve the overall organisational performance.

43 MASTERS EDUCATION

Naureen Shehzad

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Solomon David

Effective Team Communication Stimulates Teacher Effectiveness: A Study of a Private College in Attock City, Pakistan

The aim of this study is to determine the effectiveness of communication that exists between teachers and leaders and its effects on teachers' proficiency. With current researches showing a link between teacher effectiveness and student achievement, it is important to consider how team teachers' communication impact teachers' effectiveness.

The research questions are answered through a mixed methodology approach including both qualitative and quantitative methods of data collection. The survey questionnaire is designed in Qualtrics that includes Likert scale closed-ended questions for quantitative data collection and open-ended questions for qualitative data collection. On this basis, it is revealed that age, gender and years of experience do not affect team communication and teaching efficacy. Qualitative data shows that teachers in this school perceive a high-quality communicative relationship with team leaders, a collegial environment that enhances teacher effectiveness, and faith in the leadership style existing in the college.

The research can be expanded to the whole school and it can include how team communication effects a student's achievement. The research can be generalised to other educational institutions or other campuses in different parts of the country, which would reveal a rich variety of qualitative and quantitative data.

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Nour Abdullah Subri

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Dr. Christopher Hill **Supervisor:**

21st Century Schools' Leaders: the Lead Teachers' Positive Influence on Teachers and Students

This research study investigates the influence of the lead teachers' role on teachers' motivation and professional development, and it explores the influence of the lead teachers' role on the teaching and learning process along with the main challenges that face the lead teachers in their role in a private school in Dubai. The aim of this study is to examine the positive relationship between the effective lead teachers' role with the improvement in the teaching and learning process, teachers' motivation to work, and teachers' professional development. Triangulation method was adopted in research for completeness and conformity purposes; a close-ended questionnaire (quantitative data) was sent to 104 teachers in the school, and standardised open-ended interviews were conducted with 20 lead teachers in different schools in Dubai who are currently in their role. The analysis of the quantitative data of the study shows that there is a positive relationship between the effective lead teachers and the improvement in teaching and learning process, teachers' motivation to work, and teachers' professional development. Corresponding with the analysis of the quantitative data, the qualitative data reconsolidates and confirms the quantitative data findings, and it indicates that lead teachers face many challenges in their role as teachers and leaders at the same time that constrain their work, such as time and resources shortage, work overload and teachers' reluctance. At the end of the study, the research study's limitations were highlighted and a few recommendations were suggested for further studies in the future in order to cover and include other leadership aspects that could affect schools' improvement in the UAE.

45 MASTERS



Suhair Ahmad Bashaireh

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

Appreciative Leadership and Teachers' Subjective Well-being: An Appreciative Tool for an Appreciative Outcome

This study examines the effect of Appreciative Leadership on teachers' subjective well-being through the perspective of teachers (instructional and non-instructional staff). It uses a mixed method approach using both a qualitative and quantitative instrument. It also provides interventions to promote teachers' well-being through Appreciative Inquiry (Al) 4-D cycle. The study targeted 94 non-instructional and instructional staff from different phases (K-12) in 4 schools in Dubai that have different KHDA ratings. However, the Appreciative Inquiry Summit was delivered in one of those schools only for convenience issues.

The current study consulted different theories that Appreciative Leadership is grounded in as social constructionism, Appreciative Inquiry, and positive psychology. The major results of the study indicate that Appreciative Leadership affect teachers' subjective well-being at school. The positive core shared through the Appreciative Inquiry Summit indicates that Appreciative Leadership strategies and practices have a positive effect on teachers' well-being. The Al summit produced several interventions designed collaboratively and positively by teachers and leaders to be delivered within schools to promote teachers' well-being.

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Wadih Tanios Boustany

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

Arab Teachers' Perspectives on Leader-Member Exchange Practices: A Case Study on Arab Leaders' Relationships in a Private School in Dubai

The aim of the study is to establish teachers' perspectives on Leader-Member Exchange (LMX) in a private institution in Dubai. There are numerous theories and frameworks that explain more about the relationship of a leader and member. The transactional, transformational, and social exchange are among the theories that this paper explored. It emerged that the character of the subordinates in an organisation matters most when a leader seeks to choose a certain leadership style. Data collection entailed the use of questionnaires that were presented to the population under study. This entails both qualitative and quantitative data that were analysed through scientific software. The study found that Arab leaders created a positive LMX in the institution. Also, it was evident that adoption of LMX could influence performance in the organisation. On the other hand, the researcher concluded that LMX was essential in the organisation and there was a need for it to be implemented. Another conclusion made by the researcher is that Arab leaders were more effective in comparison to Western leaders and therefore institutions are expected to consider Arab leaders.

47 MASTERS

Zeina Askar

Programme: Master of Education

(Management Leadership and Policy)

Year of Graduation: 2018

Supervisor: Dr. Solomon Arulraj David

The Effects of Organisational Citizenship Behaviour: A Study in a Private School in Sharjah

This study aims to understand Organisational Citizenship Behaviour (OCB) and its effects on teachers in a Sharjah private school in the UAE. The study used a mixed method approach running two questionnaires to analyse results reported by 122 participants. Both qualitative and quantitative approaches were used to collect data using 20 items from the 49-item questionnaire developed by Watson and Tellegen (1985). This method conceptualises the concept of OCB and its effect on teachers in the school, through importance and participant self-reported feelings. The study shows that OCB is important to teachers and "Sportsmanship" was the most important OCB dimension; employees tolerate certain circumstances due to the organisation's decisions without complaining. The positive effect of OCB analysis shows "Courtesy" was the most important dimension of OCB and the feeling "Active" was most expressed. This indicates that teachers resolve and avoid work-related problems. The overall positive implications encourage further research to understand OCB in UAE schools.

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Wael Abou Hawash

Programme: Master of Education

(Science Education)

Year of Graduation: 2017

Supervisor: Prof. Sufian Forawi

The Impact of Inquiry-based Learning and Explicit Instruction of the Nature of Science on Students' Views of the Nature of Science

The purpose of this research is to investigate the impact of the inquiry-based and explicit instruction of the Nature of Science on students' views of the nature of science. It provides insights on how inquiry-based learning and explicit instruction of the NOS can be applied in the context of the UAE to improve learners' views of NOS. A quantitative research method is used and a quasi-experimental approach is adopted ie pre- and post-tests involving 3 groups apart from the control group. The teachers of the three groups are chosen using the instrument to have adequate views of the nature of science. The 3 groups are taught using science textbooks aligned with the next generation science standards (NGSS). All of the students in the school are Emiratis and as the teachers are multinational they needed to have a teaching licence in their area of speciality. A pre-test was conducted with all groups. Similarly, all groups were taught the same science lesson ie the same scientific concepts, however (as the research suggested) using different techniques, namely inquiry-based, explicit instruction while the control group used direct instruction rote learning.

The findings of this study have shown that the combination of both instructional approaches, inquiry-based and explicit teaching of the NOS, bring the best of both to the classroom leading to significantly improved views of NOS. This study recommends further investigation with and combination of both explicit and inquiry-based instruction approaches in teaching science. Science teachers should aim towards determining the optimal mix of both approaches that will result in the best NOS outcomes for their students.

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Hala Abdel Raheem Al Basha

Programme: Master of Education

(Science Education)

Year of Graduation: 2018

Supervisor: Prof. Sufian Forawi

Investigating teachers' perceptions and implementation of STEM Education in the United Arab Emirates

This study was conducted to investigate STEM-related subjects' teachers' perceptions and implementations in American-system schools in the UAE. No research has been conducted in the UAE context on this topic. A mixed-methods approach was used to collect data; a questionnaire was developed to examine the perceptions and practices of STEM education for 144 in-service teachers of science, mathematics, and technology, then it was supported by interviews with some of the teachers. Data analysis was presented.

Results indicated that: STEM education is well-perceived by the majority of teachers in the UAE; STEM is implemented through project-based learning as a part of curricula or as an activity per month or per term; engineering concepts are presented while engineering practices are underrepresented; and successful collaboration and well-informed understanding of disciplines' core concepts are needed. In general it was found that secondary and middle school teachers in the UAE showed positive perceptions and better implementing of overall STEM education than elementary school teachers.

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Amal Hammad

Programme: Master of Education

(Special and Inclusive Education)

Year of Graduation: 2017

Supervisor: Prof. Eman Gaad

Perceptions and Views Regarding the Role of the Special Educational Needs and Disabilities Coordinators (SENDCos) and Challenges Affecting the Role in the United Arab of Emirates (UAE)

This mixed method study aimed to investigate the role of SENDCo from the perspective of teachers in private schools in the UAE. Challenges affecting this role have been explored. Teachers and SENDCos from three private school participated in this study. Qualitative and quantitative data were gathered using a questionnaire and conducting interviews. According to the response of 85 participants, SENDCos' duties include operating day-to-day SEND provisions, overseeing the SEND register, working in liaison with teachers, parents and external agencies, contributing to in-service training, and developing their professional skills. However, these roles, as the findings of this study revealed, are influenced by several challenges related to managing the time of the SENDCo, managing SEND provisions and the SEND register, liaising with teachers, parents and external agencies, developing in-service training, and finally issues related to the UAE context. To overcome these challenges, SENDCos have to be prepared and trained to change attitudes and remove obstacles to full and effective inclusion in mainstream schools.

Amanda Lesley Panzer

Programme: Master of Education

(Special and Inclusive Education)

Year of Graduation: 2017

Supervisor: Prof. Eman Gaad

A study of the awareness, identification, diagnosis and management of Auditory Processing Disorder in children and its impact within a Dubai based private primary school

This investigation focuses on professionals' current awareness, knowledge, identification, diagnosis and management of Auditory Processing Disorder (APD) working with primary-aged English-speaking children in Dubai and explores the impact on one specific child with suspected APD.

It provides an overview of how the deficiency of a comprehensive definition has led to no general conformity in assessment, diagnosis and treatment. This is amplified in Dubai where there is no comprehensive 'care pathway' for non-local, expatriate children. Private schools, in the majority, are profit-making ventures, as are clinics wherein the professionals do not work collectively, and legislation to protect people with Special Education Needs is in its infancy.

It reviews the current practices within a school with regards to identifying a child with suspected APD.

Recommendations are made concerning future professional development, collaboration between parties, including the Ministry of Education.

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Nancy Elkaraan

Programme: Master of Education

(Special and Inclusive Education)

Year of Graduation: 2017

Supervisor: Prof. Eman Gaad

An Exploratory Study on Shadow Teachers' Provision in Mainstream Schools in Dubai: Parents' Perspectives

The purpose of this qualitative phenomenological study is to explore and understand the experiences of parents of children with Special Educational Needs or Disabilities (SEND) with regards to shadow teachers' provision through conducting in-depth semi-structured interviews with 7 parents. Themes emerging from this study will detail what the parents are experiencing throughout their journey, the success factors and challenges that emerge, and their recommendations to improve the practice of shadow teachers' provision. The findings from this study which reflect that the voice of parents should have implications at a policy and practice level in the area of inclusive education in general and shadow teachers' provision in particular.

53 MASTERS EDUCATION

Haytham Morshed Badr

Programme: Master of Education

(Teaching English to Speakers of Other Languages)

Year of Graduation: 2017

Supervisor: Dr. John McKenny

Investigating the Influence of Two Memory Strategies on Long-Term Vocabulary Retention: Semantic Mapping versus Wordlists

The aim of this research is to investigate the effectiveness of semantic mapping and wordlists on students' development and retention of L2 vocabulary. The researcher at the outset of the experiment hypothesises that the students instructed in semantic mapping outperform those who employ wordlists. This is as a result of the network built into students' mental lexicon and the visual aids used in L2 vocabulary teaching.

To test the hypothesis of the research, four ESL classes from two different research sites forming a total of 60 participating 10th graders were randomly chosen as the main sample of this research. Also, the four ESL classes were randomly divided into two control groups and two experimental groups. After that, a pre-test in a multiple-choice format was run to ascertain whether the participants have the same low level of the target words prior to the experiment to assure their homogeneity. The target forty words were selected by the class teachers from the 10th graders' course book and then used by the researcher for the purpose of conducting the research experiment.

Six weeks later, the same test was re-administered but with the content of the test re-organised to measure participants' development and retention of the target words at the end of the experiment. Another test, a delayed post-test, was administered three days after the post-test to enhance the reliability of the research tools and results. The results revealed a big difference in participants' knowledge level of the target words before and after the experiment, and this difference was statistically significant for the participants who employed semantic mapping strategy.

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Waled Mohamed Mohamed

Programme: Master of Education

(Teaching English to Speakers of Other Languages)

Year of Graduation: 2017

Supervisor: Dr. Emad Abu-Ayyash

Positive and Negative Politeness in Egyptian And American Media Discourse (A Contrastive Study)

The current study attempted to examine the use of positive and negative politeness strategies by the American and Egyptian participants in talk shows. A contrastive analysis of both spoken Egyptian Arabic and spoken American English was undertaken. Brown and Levinso's (1987) theory of politeness formed the pragmatic framework of the study. The pragmatic functions of negative and positive politeness strategies utilised by the participants were the main focus of the study. The study results revealed significant similarities between both groups; however, there were certain differences too. Egyptian hosts used more positive politeness strategies while the American hosts used more negative ones. In addition, the use of hedges to avoid disagreement apologies was utilised by the Egyptian hosts exclusively, while the American hosts used assertion or presupposed the guests' knowledge of and concern for the hosts' wants exclusively.

55 MASTERS _____ EDUCATION

Farah Hazim Al-Karaki

Programme: Master of Education

(Teaching English to Speakers of Other Languages)

Year of Graduation: 2018

Supervisor: Dr. Emad Abu Ayyash

Model Texts or Visual Prompts? Which Teaching Strategy Better Influences Students' Creative Writing?

The purpose of this study was to explore two different teaching methodologies, model texts and visual prompts, employed in the creative writing classroom to measure the effectiveness of each on influencing students' creativity. The embedded design of this study encompassed class observations, the rating and analysis of student samples through descriptive statistical scores and written feedback, and a post-production interview with selected students to explore the effect of the teaching methodology as well as external factors that may have influenced their writing choices. The preliminary results revealed that subjecting student writers to a model text prior to exposing them to a writing task results in more creative pieces. To deeper comprehend the influence of each teaching method on students' creativity, further class observations should be conducted, more samples must be analysed, and external influences in addition to achievement level should be unified among participants to yield more rounded results.

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Nishad Chathamkulam Abdulrahman

Programme: Master of Education

(Teaching English to Speakers of Other Languages)

Year of Graduation: 2018

Supervisor: Dr. Emad Abu-Ayyash

Better Speed Better Comprehension: Introducing 'Integrated Reading Comprehension Strategy'

This study introduces 'Integrated Reading Comprehension Strategy' (IRCS) and examines its effectiveness on participants' reading comprehension, reading speed, and reading test-anxiety. The study adopts a non-equivalent guasi-experimental embedded mixed-methods design and uses a sample of 30 teachers selected through convenience sampling from a private Indian school in Ajman, UAE. These participants are divided into two almost equal groups (experimental and control). Both quantitative and qualitative data are collected by means of pre- and post-reading comprehension tests, pre-and post-reading test-anxiety surveys, and semi-structured post-production interviews. After three weeks of intervention, the quantitative data are analysed using descriptive (frequency count, percentage and effect size) as well as inferential (independent and paired samples tests) statistics, whereas content analysis is used for the purpose of analysing the qualitative data.

The findings of the study indicate that IRCS has no statistically significant effects on participants' reading comprehension and reading speed although all the participants interviewed agree that IRCS enable them to read better and faster. On the other hand, the results of both quantitative and qualitative analyses reveal that IRCS plays a significant role in reducing participants' reading test-anxiety levels. The study thoroughly discusses these findings, expounds its limitations, and offers suggestions for teachers, course material writers, and future researchers.

Shatha Al-Khalihi

Programme: Master of Education

(Teaching English to Speakers of Other Languages)

Year of Graduation: 2018

Supervisor: Dr. Emad Abu-Ayyash

The Effects of Integrating Collaborative-Learning-Based Digital Storytelling Videos on Clasroom Creativity in the EFL Omani Classroom

This case study examines the effects of collaborative-based-digital storytelling on classroom creativity in Omani EFL classrooms. Its literature review covers three main topics, which are constructivism, creativity and multimodality. The study adopts an embedded mixed methods approach, QUAL (quan). Convenience sampling, which is a non-probability sampling method, is used to select a sample of 68 participants; 9 English teachers and 59 high school EFL students. The instrument consists of students' and teachers' focus-group interviews, researcher's self-observational notes, students' brainstorming and writing sheets and their digital storytelling videos. Colour-coding and Torrance Tests for Creative Thinking (TTCT) are used to analyse the data. The main finding of this case study is that digital storytelling videos have a positive impact on product, group, process and generation creativity and thus, on classroom creativity. The findings of this study suggest some implications for teachers, supervisors, trainers and researchers.

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PROJECT MANAGEMENT

Amal Ali Algassim

Programme: MSc in Project Management

Year of Graduation: 2017

Supervisor: Dr. Maria Papadaki

Risk Perception in Multicultural Project Teams

In the UAE, cultural diversity in the business environment has been increasing dramatically. Therefore, the main aim of this dissertation is to examine the concept of risk perception in multicultural project teams in the UAE. The relationship between individuals' specific characteristics (culture, gender and personality) and risk perception was examined in real life project teams. Firstly, this was undertaken by thoroughly reviewing the existing literature on several topics including risk perception, decision-making, and culture. Secondly, the study's variables were investigated through a questionnaire.

The major findings indicate that there is a variance in risk perception of team members from different cultural backgrounds. The variance was noted in response to different risk factors and to the probability and impact components of risk. Gender variance was also noted. No relationship has been found between personality and risk perception. The implications of these findings are discussed and recommendations for both practitioners and future research are provided.

Fadi Alhaj Saleh

Programme: MSc in Project Management

Year of Graduation: 2017

Supervisor: Dr. Khalid Al Marri

Risks Allocation in PPP Projects According to Cost of Risk, Partners' Attitude and Partners' Ability in the UAE

This study is devoted to finding out the criteria that influence risk allocation in PPP projects to optimise value for money in public-private partnership projects.

A comprehensive literature review was carried out first and then a critical review and a comparative analysis were employed to identify a list of risks and criteria impacting the risk allocation. Finally, an empirical questionnaire survey was conducted with PPP experts in the UAE to understand and analyse their feedback/opinions about the proposed criteria and their impacts on risk allocation.

The study includes developing a comprehensive list of risk events and a list of criteria that affect the risk allocation. In addition, the findings show that all risks are impacted by partners' ability. Eighteen risks are influenced by partners' attitude, and only twelve risks are impacted by risk cost. The risk allocation is not a static process; as such, the study concludes that the risk allocation should be amended according to the proposed criteria during the performance of the contract to allow the decision makers to re-allocate the risk properly in order to achieve optimum risk allocation.

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Hani Subhi AlGhanem

Programme:

Year of Graduation: 2017

Supervisor: Dr. Khalid Almarri

Critical success factors for public private partnership in the UAE: Impact of Perception on success of PPP projects

The main aim of this study is to know the effect of PPP perception on the success of the PPP project in general, and the effect on groups of critical success factors. The survey results, which were collected from project managers who are working in the UAE, and analysed using SPSS, show a positive relationship between PPP perception and critical success factors in general, and with favourable economic conditions, stable political and social environments, and project implementability.

Joyce Yousef Al Awabdeh

Programme: MSc in Project Management

Year of Graduation: 2017

Supervisor: Prof. Halim Boussabaine

The Role of Project Management Soft Skills in Increasing Project Success

The following research studies the phenomenon of various project management soft skills, which include interpersonal and leadership skills, and it explores the definition and measurement criteria of project success. The presented research is followed by a quantitative analysis through a survey amongst practitioners within the construction industry in the UAE. The aim is to establish and prove that effective project management soft skills can increase the prospects of a successful construction project in the UAE.

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Kamal Ibrahim Barakeh

Programme: MSc. in Project Management

Year of Graduation: 2017

Supervisor: Prof. Halim Boussabaine

The Impact of the BIM Organisational Risks on the BIM Enhanced Project Delivery and Organisation Improvement

This dissertation paper targets the topic of Building Information Modelling (BIM) due to its importance in enhancing the delivery of construction projects as well as the challenges that face its implementation and jeopardise its advantages. It attempts to provide a brief background about BIM and its main differences with the traditional CAD method, then it discusses the topic of risk in general and moves on to explain the main types of BIM challenges that are suggested in the literature.

Furthermore, this research paper uses a number of project case studies reported by other researchers to address the relationship between the risks of BIM and three of the main advantages that it offers to projects and organisations including the reduction of cost and time and the improvement of collaboration. The paper then proposes the main research hypothesis which assumes that the perceptions of the impact of BIM challenges on its advantages are dependent on the demographic attributes of industry professionals. This proposition is tested through a questionnaire. In addition to the survey, an interview with a senior product managers in a major engineering consultancy has been conducted to further elaborate on the challenges of BIM and the possible strategies for managing them.

The discussion of this paper tries to find a relationship between the findings in the literature, the survey and the interview regarding the risks of BIM and their effect on its major advantages; finally, it suggests certain areas for future investigation.

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Kamran Hayat

Programme: MSc in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

Causes of construction reworks and their mitigation strategies

This dissertation is about the causes of project reworks as well as their mitigation strategies. It consists of a literature review and ends with a conceptual model that develops five hypotheses which are the core of my survey questionnaire. The survey questionnaire considered the literature review on project reworks and its mitigation strategies further by considering the views of market professionals. SPSS was used to analyse the professional feedback and three project case studies were tabulated after extensive interviews.

This dissertation shows six causes of reworks and five mitigation techniques to reduce the reworks. Main causes of reworks are poor project management team, less manpower and non-maintained construction machinery, in-country political situation, weak project documents, stakeholders and communication problems, and weak communication between the project team. Mitigation techniques consist of best quality control procedures, competent staff and skilled workers, demand–focused owner(s), reviewing the project documents, and controlled communication.

This dissertation will guide infrastructure managers to achieve project milestones and key performance indicators by keeping in mind end results.

PROJECT MANAGEMENT MASTERS | 64



Mohammad Sabir Habib

MSc in Construction Project Management **Programme:**

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

The influence of Control Strategies on Benefits Realisation in construction organisations

This study aims to distinguish the influence of control mechanisms on the benefits realisation process in construction organisations. This research also investigates the effectiveness of control strategies in organisational management systems and addresses the specific features that contribute to the benefits realisation process.

To assess the information and understanding attained from the literature review, this research study adopted a quantitative approach to obtain the data from the practical viewpoint of professionals, by designing and distributing a research questionnaire. The questionnaire was distributed to professionals who have experience in construction organisations. The research questionnaire was designed in five sections to obtain the respondent view on the benefits realisation process and the relevant types of control mechanisms.

The research findings have expressed that control strategies have a strong relationship with the benefits realisation process. It also verified that strategic control, administrative control and cultural control significantly improve the different stages of the benefits realisation process and enable organisations to efficiently achieve their target benefits.

Mutaz Mohammed Mahmoud

Programme: MSc in Project Management

Year of Graduation: 2018

Supervisor: Dr. Khalid Al Marri

Influence of Benefits Realisation Practices on Organisational Projects Success in UAE

This study was dedicated to examine the association between BRM practices and organisational project success mainly in the United Arab Emirates. A survey was conducted in the UAE collecting data form 72 respondents to reflect their perception of BRM practices and organisational project success and to test the research hypotheses by the use of regression analysis and One Way ANOVA tools found in the Statistical Package for the Social Sciences (SPSS) software. The literature review determined a gap in this field of knowledge inside the UAE and the contribution of this paper is to narrow this gap and recommend further studies in this field of management. This research emphasised the different aspects of organisational project success criteria and benefits realisation practices. The research model contained one independent variable, which is benefits management practices, of six factors and thirteen dimensions, and one dependent variable, which is organisational projects success, of two factors and seven dimensions.

The findings of this paper demonstrate that BRM practices have significant positive impact on organisational project success. Therefore, BRM practices do support organisations to achieve their strategic objectives and enhance their value. The study concluded with research limitations and recommendations on further studies such as contribution of Benefits Realisation Management to organisation governance success, and the critical success factors of BRM. The theoretical and practical implications of the research were also discussed in the conclusion.

PROJECT MANAGEMENT MASTERS | 66

Rehan Ahmad Khan

Programme: MSc in Project Management

Year of Graduation: 2018

Supervisor: Dr. Maria Papadaki

Organisational factors that influence the success of IT projects

This paper presents a comprehensive outlook on the influence of organisational factors on IT projects and their success. The research aimed at exploring the extent to which certain organisational factors, including organisational culture and management style, organisational structure, organisational communication, organisational process assets and enterprise environment factors, can influence the successful implementation and completion of IT projects.

The paper is focused on how the variables used per organisational factor are correlated with real-life scenarios and experiences of different project management teams that have been through project success and project failure.

The rationale behind selecting this research area as a point of focus is that IT projects are widely being implemented across organisations, and that implementing new Information Technologies is mandatory for organisations of today in order to gain competitive advantage and sustainability. A comprehensive literature review was conducted, involving multiple secondary sources, such as peer-reviewed journals, academic sources, organisational websites and periodicals. Primary data were collected and subjected to descriptive analysis, ANOVA and linear regression analysis. Hypotheses testing revealed an insignificant relationship between organisational culture and management styles, enterprise environmental factors and the success of IT projects. On the other hand, the research study revealed that organisational process assets, quality of organisational communication, and organisational structure can serve as effective predictors for the success of IT projects. Overall, the study measures project success of IT projects through organisational factors. The reliable differences of sample data have determined that the organisational factors have a significant relationship in measuring project success.



Saima Islam Mishu

Programme: MSc in Construction Project Management

Year of Graduation: 2018

Supervisor: Dr. Khalid Al Marri

Influence of organisational delay risk factors on project critical success factors in construction projects in the UAE

The goal of this research paper is to identify the influence of the organisational delay factors causing risks on project success in construction projects based in the UAE. Related literature was studied, and the aspects were identified into three vital project bodies such as client, consultant, and contractor. Several organisational risks rooted within these parties were recognised. Additionally, the triple constraints were taken into consideration in order to comprehend the effect that leads to the development of the conceptual framework that incorporates the highlighted factors. This was used as a fundamental base for performing the quantitative analysis through questionnaire. The analysis resulted in various findings such as project time and cost being hindered most of the time. The three hypotheses that stated contractor organisational delay risk factors have a significant influence in time, cost and quality success factors in construction projects in the UAE were accepted by making contractors the highest risk generators. It was concluded that the least number of risks originated from clients who only affected the duration of the project. Lastly, another contradictory factor identified which should be given prominent significance is the contractual documentations that rank as the top risk factor. The paper makes recommendations including advice to project participants and techniques to enhance project success which form a guideline for overcoming the organisational risks in construction projects.

PROJECT MANAGEMENT _____ MASTERS | 68



Saud Ahmed Al Zarooni

MSc in Project Management **Programme:**

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

The Influence of Risk on Benefits Realisation in Project Management Field of the United Arab **Emirates**

The objective of this research was to assess the influence of risk on benefits realisation in the project management field of the United Arab Emirates.

For the purpose of conducting this research, a questionnaire was created and was distributed to the interviewees in order to collect data. With the objective of conducting an analysis of the data, two methods of quantitative analysis were utilised that comprised correlation analysis and descriptive statistics. In particular, correlation analysis was used to test the six hypotheses that are listed at the beginning of the research along with an investigation pertaining to global factors. To provide results for correlation analysis, factor reduction analysis, and reliability, SPSS was used as a tool for data analysis. The results of the research proved that there is a significant positive relationship between the influence of risk and benefits realisation in project management. Moreover, a significant positive relationship between benefits realisation, reporting risk and effect of risk on executing benefits was identified. In addition to this, the findings of the study also established a link benefits realisation and cultural risk.

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Yasser Mohammed Saadeh

Programme: MSc in Project Management

Year of Graduation: 2018

Supervisor: Dr. Khalid AlMarri

The effects of blockchain implementation on cyber risks mitigating strategies in the financial sector in the United Arab Emirates

This study is devoted to finding out the effects of blockchain implementation on cyber risks mitigating strategies, mainly in the financial sector in the UAE.

The study concentrates on the following factors: governance, insider threats, technology and processes.

The quantitative method was used by creating an online questionnaire to collect data. Additionally, a hard copy was distributed to get more feedback. Ethical issues were anticipated and considered in this research. A total of 149 completed and accepted responses were received. The statistical package for social sciences (SPSS) was used to analyse the responses by using different analysis techniques like Cronbach's alpha, correlation test and regression test.

The findings show that there is an influence of blockchain implementation factors on cyber risks mitigating strategies. Therefore, the blockchain supports these factors in mitigating the cyber threats and executing proactive steps to avoid any future threats.

Further studies are required for a better and deeper understanding of the effects of blockchain on insider threats, governance and processes. In addition, it is recommended to extend the study towards the effects of blockchain on other factors of cyber risks.

PROJECT MANAGEMENT _____ MASTERS | 70



Zaid Murad Al Dabbag

Programme:

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

Appraisal Framework for Transportation Infrastructure Projects by Using CBA and WLCC

This paper explores the key literature and best practices worldwide related to the appraisal of transportation infrastructure projects, and develops a framework that includes all the related cost and benefit components along with the required parameters.

The framework will then be used to build a Microsoft Excel® model and examples will be examined within this model to illustrate its capability and flexibility in producing the required reports and charts to support decision makers in prioritising and selecting the projects which have the best value.

Zainab Ahmed Al Hammadi

Programme: MSc in Project Management

Year of Graduation: 2018

Supervisor: Prof. Halim Boussabaine

Being Agile: The Influence of Agile Project Practices on the Project Team Productivity

In this research, both primary and secondary sources are used to collect necessary data concerning the research topic. The secondary data is collected from relevant literatures and selected government departments' websites and their periodic documents, while the primary data is gathered through in-depth semi-structured interviews with employees at different positions and from different departments. The theoretical reviews show that agile project management and practices lead to positives results but also some negative outcomes have been identified.

The study shows the results of the group interviews conducted at three different government organisations based in the UAE with a total of thirteen people from different departments. The findings show that the implementation of agile practices results in positive impacts and outcomes in the three selected projects, although the results vary among the three as the practices are found to be implemented partially in some projects or ineffectively in others. In addition, some negative impacts of using practices have been identified. In terms of productivity, most of the used practices showed positive impact on productivity and some affected the productivity indirectly. Whereas practices such as open office design are found to have both negative and positive impacts on productivity (although actions have been taken to minimise their negative impacts).

The researcher believes that more projects and respondents will add more insight and value to the outcomes. Thus, for future studies, it is recommended to examine more projects and interview more respondents to get more accurate and valid results.

PROJECT MANAGEMENT ______ MASTERS | 72



CONSTRUCTION LAW AND DISPUTE RESOLUTION CLDR

Hossam Elshahat Youssef

Programme: MSc Construction Law and Dispute Resolution

Year of Graduation: 2017

Supervisor: Dr. Abba Kolo

Comparison of Treatment of Contractual Remedies under FIDIC 1999 Red and Yellow Books and UAE Contracts

This study first introduces briefly, the core contractual obligations of the employer and the contractor against each other under FIDIC forms of contract as found in the FIDIC Red and Yellow Books on the one hand, and the UAE Civil Law, in particular the Muqāwala provisions, on the other.

Thereafter it goes on to the main focus of the research, namely the nature of the contractual remedies available to an aggrieved party where there has been a breach of contract. In this research, various remedies are examined within the UAE Civil Law, as the governing law related to construction contracts, and the FIDIC Suite of Contracts, as the most common standard form suite of engineering and construction contracts used for construction projects in the UAE and internationally.

The primary purpose of the study is to assist employers, contractors, engineers, lawyers, international financing organisations and stakeholders in construction projects, using FIDIC forms of contract subject to the UAE Civil Law as the applicable law, to better understand the courses of action available to a contracting party when the contractual obligations of the other party are not complied with.

Since most of the legal systems of the Arab Middle Eastern countries are founded upon Civil Law principles, it is envisaged that this research would support effective and efficient contract administration of construction projects within the region.



Ahmed Said El Gezery

Programme: MSc Construction Law and Dispute Resolution

Year of Graduation: 2018

Supervisor: Dr. Abba Kolo

Construction Delays and Concurrent Delays

This dissertation explores all issues about construction delays, its definitions, causes and impact. Delay is considered as one of the fundamental issues that impinge projects due to its negative impact not only on time of delivery but also due to its associated ramifications, additional cost and losses. Its causes span between the Contractor, Employer, third parties and project conditions.

Concurrent delays are considered as one of the law's notoriously problematical areas and a most complicated and controversial kind of delay disputes. This is due to its unique and complex nature and the fact that there is no one standard and agreed coherent definition or interpretation of concurrent delay. In the author's opinion, the term 'concurrent delays' must have a wider all-inclusive definition to cover all delay situations attributed to both parties that have an effect on time for completion. The author proposes various options for defining concurrent delays, the selection of which depends on how both parties agree to deal with concurrency, along with proposed contractual bespoke amendments to reflect the same.

This dissertation identified and analysed the basis and rules governing the determination of EOT in cases of concurrency under various civil and common law jurisdictions along with the courts' relevant approach. It is concluded that Civil Law countries' (such as the USA, Scotland, Canada and Australia) preferred approach for concurrency is Apportionment. Similarly, UAE Civil Code provisions tend to support Apportionment as driven by Sharia, good faith, fairness and common sense principles. However, there is a lack of reported court cases addressing concurrency in the UAE, and the UAE Civil Code does not have express articles that deal with concurrent delays nor does it recognise concurrent delays on any organised basis.

The author submits that UAE courts can learn from both Scottish and American courts, with respect to the application of detailed CPM delay analysis and application of Dominant Cause if applicable, "time-but-no-money" approach, or Apportionment (preferably Apportionment of Time). Further recommended is the establishment of a UAE dedicated Technology and Construction Court Division that will definitely allow for more efficient resolution of construction industry complex disputes.

CLDR MASTERS 74



FINANCE

Mohammad Yassar Darkal

Programme: MSc in Finance

Year of Graduation: 2018

Supervisor: Dr. Abdel Mounaim Lahrech

The Determinants of the Performance of Commercial Banks Industry Evidence of Listed Commercial Banks at ADX

The current study aims to determine the factors that are probably influencing the performance of listed commercial banks at Abu Dhabi Securities Exchange (ADX). To achieve this objective, the data covering the period 2008-2017 of eight listed commercial banks among twelve listed banks in ADX was collected. The study investigated five internal-based possible determinants, and three potential external determinants of commercial banks' performance. Among the twelve listed banks at ADX, two commercial banks had been excluded because their complete data are not available through the period of the study, and another two Islamic banks were also excluded because the nature of operations in these banks is completely different, and therefore the financial reporting of this type of banks is also different, which restricts the analysis of data.

As a result of the related literature and consideration of prior research, nine hypotheses have been developed and scientifically tested. In addition to simple linear regression method that was used in hypotheses testing, correlation and some descriptive statistics were also applied in the analysis of data.

The findings demonstrate that except inflation rate and GDP, all other determinants have a significant effect on bank performance. In other words, they demonstrate that all of the internal determinants that had been taken into account were found to affect commercial bank performance, and two of the external determinants have no effect. The study recommends that the management of commercial banks give more attention to the assets used in these banks, and focus on increasing the market value of commercial banks. In addition, the management of commercial banks is recommended to give more attention to the way that liquid assets and credit risk are managed.

Omar Lashko Al Balushi

Programme: MSc in Finance

Year of Graduation: 2018

Supervisor: Dr. Husam-Aldin Al-Malkawi

The impact of sovereign rating changes on equity markets: the Case of GCC countries

This study investigates how GCC stock markets react to a change in the domestic currency sovereign credit ratings. This paper makes use of an event study with an underlying market model. The sovereign ratings and stock market prices were retrieved from the Thomson Reuters DataStream database. In total, 83 rating events were tested, 39 of which are upgrades and 44 are downgrades. The period tested spans from 2002 to 2017.

The results coincide with previous literature; concluding that GCC markets do react to sovereign rating changes, with stronger reactions in the case of downgrades. Furthermore, the results also showed that GCC stock markets are indifferent to whether the sovereign rating was of the short term or long term variety. Moreover, GCC stock markets are indifferent to which credit rating agency issued the sovereign rating. Finally, the results show that of the Saudi, Omani, Qatari, and Bahraini stock markets, the Qatari stock market is the most sensitive to a sovereign rating change, particularly in the case of downgrades.

FINANCE _____ MASTERS | 76



SUSTAINABLE DESIGN OF THE BUILT ENVIRONMENT SDBE

Farah Abdulkarim Al-ameen

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2017

Supervisor: Prof. Bassam Abu-Hijleh

Exploring Sustainable Strategies for Shelter Design at Refugee Camps: The Case of Domiz 1 Refugee Camp in Iraq

This study initially reviewed literature already existing on shelter design in refugee camps. Moreover, relevant case studies were presented. Data obtained through direct communication with the UNHCR office in Iraq was utilised to assess the current situation in Domiz refugee camp.

Based on that, a shelter upgrade strategy, referred to as The Incremental Home, is proposed. The Incremental Home is a phased upgrade strategy in which the involvement of the UNHCR and other NGOs is maximised in the beginning, gradually being overtaken by the involvement of the refugee population. Due to the multi-disciplinary nature of the research, a combination of qualitative and quantitative methodologies is utilised.

The first two phases of the Incremental Home strategy focus on the planning aspect of the shelters and the base structural frame. These phases are assessed by referring to the literature review and successful case studies. In the third phase, a wall panel composed of layers of steel mesh, tarpaulin, and sand is proposed in two different configurations as a cost-effective sustainable replacement of the standard tent and the corrugated steel shelters. In the last phase, a sunspace and a roof canopy are proposed as passive heating and cooling strategies to enhance the thermal performance of the shelter. The last two phases are evaluated by conducting thermal simulations using IES-VE software and comparing the results of the proposed strategies to those of the present shelter typologies in Domiz camp.

Results of the study illustrate applying The Incremental Home strategy helps empower the refugee population by providing them with the knowledge and training needed to participate in the construction process and allowing for gradual implementation. As a result, the proposed strategy provides an opportunity for personalisation and deepens the refugees' sense of belonging and dignity. Furthermore, a 42% decrease in cooling loads and a 31% decrease in heating loads were achieved by using the proposed wall panel, the sunspace during winter, and the roof canopy during winter, in comparison to the baseline case, the UNHCR tent.

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Hussam Eldeen Sayed Abdelghany

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2017

Supervisor: Prof. Bassam Abu-Hijleh

Lifecycle Assessment LCA comparison for different prefabricated modular construction systems with the conventional construction system for affordable houses in Egypt

This research aims to assess the prefabricated systems that exist in Egypt and evaluate their impacts on the environment from the perspective of used resources and land emissions over the life cycle of each system, total primary energy consumption and global warming potentials over the life cycle of the building. Five building models, one for each of the previous mentioned construction systems, have been designed and used in the LCA analysis. All five models share the same physical dimensions and the same spatial components for the building under study but vary in their construction materials. The building is composed of four storeys that hold 3 residential units per floor. Athena Impact Estimator was the software used for the LCA assessment tool and eQUEST was the energy analysis software used.

After running the LCA analysis we concluded that among the four construction systems and over the 50 years of their life cycle, both GRC and LGS options showed a reduction in their impacts on environment. With their reduced environmental impacts, these two prefabrication systems are recommended to be used for the affordable housing projects in Egypt. Besides all the environmental benefits of these two systems, their prefabrication process in factories improves quality, reduces construction time and saves cost due to the economy of scale of the large housing projects especially those which are supported by the government.

SDBE _____ MASTERS | 78

Lama Suliman Abu Muaileg

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2017

Supervisor: Dr. Hanan Taleb

Enhancing Thermal Comfort in Urban Communities with Urban Configurations and Green Coverage: A Case Study of Dubai Sustainable City

The case study for this research, the Dubai Sustainable City residential cluster, which is the first development of its type and which complies with Dubai's green building code, was chosen because it contains five clusters typical in their design and content.

The software simulation analysis method was used to conduct the research, which involved using ENVI-met to build a virtual model representing the base existing case after collecting weather data from a site visit and from records held by the National Centre of Meteorology. This model was used to evaluate the thermal behaviour of outdoor urban spaces in four phases. In the fifth phase, indoor energy was studied through simulation by using Design Builder to create a virtual model of the architectural units that were the subject of the study.

The findings indicate that the layout orientation of the master plan has a significant effect on air temperature, wind speed and wind distribution within the site. Wind speed and distribution further affect the relative humidity of outdoor areas and influence user satisfaction. Moreover, courtyard design impacts air distribution and air temperature, which is connected to predicted mean vote values, and green coverage percentage in the courtyard impacts microclimate variables, as it reduces air temperature by increasing relative humidity to a moderate level. Finally, all previous enhancements applied to the outdoor thermal comfort.

79 MASTERS _____ SDBE



Moamin Alsaleem

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2017

Supervisor: Prof. Bassam Abu-Hijleh

Kinetic Double Skin Façade as an Environmentally Responsive Strategy to Reduce Energy and Improve Light Comfort in an Office Building in Dubai – UAE

An existing high rise office building with almost 65 floors was selected as a base case model for this research to demonstrate the dynamic louvre system as a strategic environmental solution by enhancing the energy efficiency and scaling the potential power saving. The building is located in Dubai, UAE which classifies as a hot, arid climate. The study accordingly establishes the baseline model as per the conditions and considering the local climate factors.

The research validates the model by comparing the first energy simulation results against the actual record of the energy demand according to the local authority, DEWA. Subsequently, the study develops the baseline by incorporating the configuration of the dynamic louvre system to all façades. The model has been tested to figure out the optimal louvre configuration with various inclinations starting from 15, 30, and 45 to 180 degrees where the system performed as a second skin scenario. The kinetic louvre position as a double skin has been considered in three various scenarios (600, 1200 and 1800mm). These simulations have been conducted within different seasons, different façade orientations, on three different floors.

The different kinetic skin setting aims to demonstrate the effect of the model on total heat gain and heat loss of the building envelope and enhance the total saving of power consumption by reducing the cooling load in additional to enhancing the daylight level in the office building. The kinetic façade illustration and outcomes compared to the baseline model of existing buildings and the option of baseline with light control scenario.

The results of the research illustrate the kinetic façade system as quite challenged but present promising outcomes within a certain time and during a different season of the year.

SDBE MASTERS | 80



Yumn Mohammed Nanaa

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2017

Supervisor: Prof. Bassam Abu-Hijleh

A Framework for Post-Disaster Reconstruction Planning A Case Study of Aleppo-Syria

The study looked at similar previous situations in a literature review to analyse the weak and strong points of each case. Mega destruction of the scale of Aleppo has also occurred in Germany, Japan, Korea, and Lebanon. From each of these cases lessons were learned and projected to the situation in Syria currently, to develop a framework to start the reconstruction process.

Assessment of the situation in Aleppo was made through several analysed satellite images, where the destruction was classified into 3 major categories.

Based on all of this data a framework was developed by the author, then assessed by experts in the field, through a survey and semi-constructed interviews: open ended questions, where each expert contributed in the way that related to his field of PDR. The main highlights of the framework are: data and assessment; decentralisation and independent reconstruction council; potential donors and funding; recycling disaster waste; infrastructure recovery; urban areas; rural areas; considerations of temporary shelters for returnees; considerations for the historic old city; and building back better.

The framework was rectified to include the suggestions by experts, and to be close to an applicable strategy for the actual reconstruction of Aleppo.

81 MASTERS _____ SDBE

Ahmad Daoud Abbadi

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2018

Supervisor: Dr. Riad Saraiji

The Energy Performance of the Double Skin Façade in a Conventional Residential Building in Irbid, Jordan

This paper aims at investigating the thermal performance of double skin façade (DSF) for a residential building known as 'Amara' in Irbid, Jordan. This city is the second largest city located in the northern part of Jordan and usually experiences a hot dry summer with high solar radiations and a cold wet winter. This paper addresses aspects of applying the DSF on an inhabited building in Irbid considering the window glazing type and cavity thicknesses on the energy consumption of the adjacent conditioned zones. In this work, a comparative study is carried out on a base case and several models of DSF to systematically assess whether this system could work as a passive strategy. This paper also reviews literature from cities which share similar climate conditions. The majority of research results show that the DSF functions efficiently during winter, while the summer overheating between the two skin layers is highly predictable due to the excessive solar gains and its performance is not guaranteed during summer. Hence, special focus was implemented on the different geometry shapes of the DSF to achieve the maximum benefits possible in attaining the thermal comfort zones with the minimal usage of fossil fuel-based equipment.

Simulation using IES VE software confirmed that both the cavity width and geometry of the DSF played a massive role in obtaining a relatively moderate thermal zone during winter seasons and an acceptable indoor temperature during summer seasons. Results of simulations are presented and discussed for several geometry types, cavity widths, and ventilation modes. The results also highlighted the potential of energy saving in comparison with the existing façade (single skin façade). The impact on the occupants' thermal satisfaction is also investigated.

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Aishah Hassan Al Shehhi

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2018

Supervisor: Dr. Riad Saraiji

Priority Index Development for Implementing (LED) Street Lighting System in UAE Federal Roadways

This research aligns with the objectives of the UAE in reducing the incidence of accidents on the network of federal roads associated with the level of lighting at night. Therefor this research examines lighting quality and its impact on car accidents at night by exploring the effects of lighting properties such as boom angle, pole height, number of luminaries, and pole arrangements on the number of night-time accidents. The case study subjects for research and analysis were selected based on a group of factors and examined using quantitative methods to enable the researcher to rank roadway improvements from most to least important.

These improvements include changing the lighting systems on roadways from High-Pressure Sodium (HPS) to Light-Emitting Diodes (LEDs), a conclusion reached by studying lighting measurements and comparing them to British standards applied in infrastructure construction while considering economic and energy consumption factors. The research concludes with the optimum scenario for each proposed parameter and an advanced optimum model created after collecting all optimum scenarios of all phases.

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Mays N. A. Kayed

Programme: MSc in Sustainable Design of the Built Environment

Year of Graduation: 2018

Supervisor: Dr. Riad Saraiji

A novel design technique for generating building form

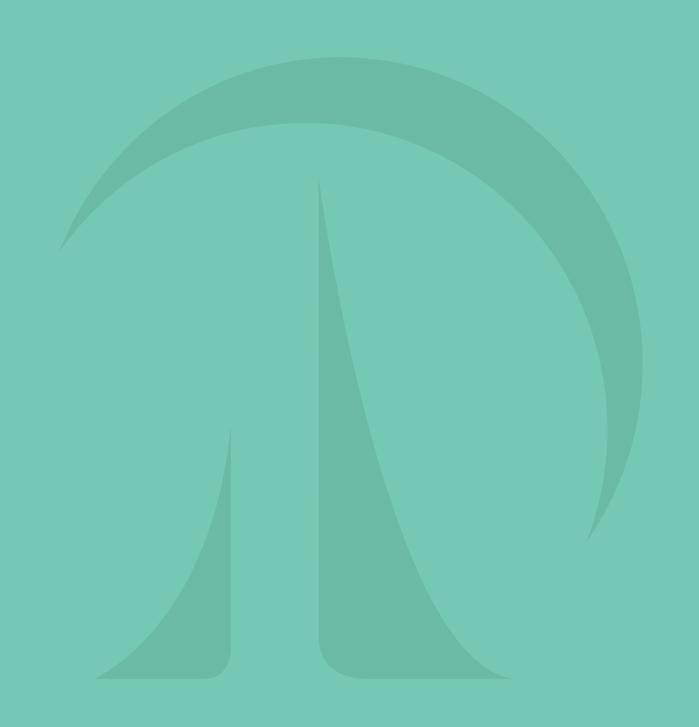
This dissertation sets out to develop a novel design technique for generating building form in the early stage of the design. It recognises the potential of generative design approaches to explore form integrally with instant evaluation process and questions the potential of enabling the generation of creativity aspects of the design process in such a trajectory.

The development of the technique is initiated by proposing an exploratory methodology where a procedural structure for the

The development of the technique is initiated by proposing an exploratory methodology where a procedural structure for the technique is formulated from four stages: "backward triangulation" stage; forward building formation stage; evaluation stage; and selection stage. Each stage contains a number of processes that replace the traditional design tasks. The development of the technique was extended by developing mechanisms to maintain aspects related to design creativity by pure geometric abstraction of basic spatial relations.

The theoretical framework of the technique was successfully tested and validated by implementing it over a series of examples that are categorised into three groups: examples directed to test out the proposed variables in each process; examples directed to validate the ability of whole technique to generate forms for a hypothetical project requirements; and examples of scripting the mechanisms using the algorithmic editor interface and the visual programming language Grasshopper incorporated with Rhinoceros 3D software.

SDBF MASTERS | 84



ENGINEERING



Prathibha Gowrishankar

MSc in Structural Engineering **Programme:**

Year of Graduation: 2018

Supervisor: Prof. Abid Abu-Tair

Critical Review of Reinforced Concrete Design Codes and Their Relevance to the United Arab **Emirates**

This research attempts to carry out a general and parametric comparison of some international design codes followed by a three-tier critical review of ACI 318-14 and BS 8110-97 considering the fact that these codes are widely used within the UAE. The three-tier comparison involves examining the results of literature review, theoretical investigation and practical design of frame elements of a G+40 story building using ETABS software. The results were compared in terms of dead and live loads and their combination, flexural and shear capacity of beams, columns and slabs, deflection and minimum and maximum amounts of longitudinal and transverse reinforcement, to arrive at a more economical solution without compromising strength and stability requirements. The results of the three-tier critical review showed that designs conforming to British Standards are preferred over the ACI Standards owing to their adaptability to the construction industry and environment in the UAE which contribute the best possible solution.

Shaikha Ahmad Alshaikh

Programme: MSc in Engineering Management

Year of Graduation: 2018

Supervisor: Dr. Alaa Ameer

Integrated Water Resources Management Plan for the UAE

This research study aims at examining the current water management approach and challenges through qualitative and quantitative analysis. This paper draws attention to the need for the UAE to accelerate the integration of technology in production and supply, building public awareness, improving the legislative framework on the green building code, and collecting non-revenue water among others. This recommendation stems from a review of several publications on water management, which show that the future of water sustainability in arid regions lies in addressing demand-side problems and not supply-side challenges. It also is based on a survey that was conducted among professionals that work within the water and wastewater sector. More specifically, key tenets of this paper highlight the need for authorities to consider adopting smart water management principles that would see them operate more efficiently and create a greater and more positive impact on the country.

ENGINEERING MANAGEMENT MASTERS | 86





Reem Warrak

Programme: MSc in Information Technology Management

Year of Graduation: 2018

Supervisor: Prof. Sherief Abdallah

A Study on Social Network Analysis: case study of UAE expats' relationship with their home country through social media interactions

This paper studies the influence of social media and displays the significant role social media data is currently playing for the benefit of both research and business contexts. Additionally, this paper discusses social network analysis, and the challenges and benefits of the emerging role of this new field of study.

As the UAE community consists of 88% of expats and is ranked as one of the top countries in mobile social media penetration in the gulf region, it is interesting to analyse how much expats are showing their connection to their home country by interacting with news accounts on social media platforms.

To achieve this, thirteen countries were selected to reflect the diversity of the UAE's demographics. The study used Facebook data and collected 155,694 posts from 65 news accounts; the analysed data extended to use 8,848,404 comments and 4,666,774 identified users.

Results showed that social network analysis can reveal interesting relationships between the countries that reflect current political situations. Additionally, Pakistan was found to be the top nationality among the UAE's expats who have the highest social interactions with their home countries through social media.

Finally, we discussed challenges in this approach and suggested future work to be conducted.

87 MASTERS ______ITM



Ahmed Atta Ahmed Sultan

Programme: MSc in Informatics

(Knowledge and Data Management)

Year of Graduation: 2018

Supervisor: Prof. Khaled Shaalan

Machine Learning Techniques for Pharmaceutical Bioinformatics

This dissertation presents a novel drug classifier to automate the prediction of drug indication and drug interactions with other drugs. The study integrates knowledge visualisation and analysis, as well as developing a predictive model based on the Drug-Drug Interactions (DDIs) as a complex network. DDIs network analysis reveals unique drug features and explains unknown drug behaviours. Each drug molecule has a unique chemical structure and a set of pharmacological features. This set of attributes imposes how each drug performs its action inside a human body. Drug molecules interact with multiple components in the biological system, for example enzymes and proteins among other drugs. The complexity of the chemical and pharmacological features forces the interaction between the drug molecule and all other entities in the biological system to follow specific rules. The full features for each drug are not fully explained by researchers due to the incomplete drug profile description. DDIs network has a significant role in drug repurposing; it uncovers the hidden properties of the drug behaviour. Predicting drug properties is presented as a contribution effort to drug repositioning approach.

To confirm the visual analysis, a binary matrix is drawn from each drug profile based on DDIs dataset. In this matrix, each drug is represented by a vector of attributes from all other drugs. A predictive model is developed to predict drug indication as well as to predict new DDIs using multiple machine learning algorithms.

This dissertation presents a case study of predicted anti-cancer activity for 38 drugs. The proposed Artificial Intelligence approach for drug-related properties prediction demonstrates a high potential in complementing the current computational techniques. The predicted anti-cancer activity is computationally validated by a 10-fold cross validation evaluation technique and clinically supported by an extensive literature review confirming the achieved results. In conclusion, the predicted drug features can provide new directions towards promising candidates for drug repositioning.

IT ______ MASTERS | 88

Bilal Yacoub Siyam

Programme: MSc in Informatics

(Knowledge and Data Management)

Year of Graduation: 2018

Supervisor: Prof. Khaled Shaalan

Deep Learning for Aspect-Based Sentiment Analysis of Government Mobile Apps Reviews

This study focuses on aspect-based sentiment analysis (ABSA) of Dubai government mobile apps reviews. ABSA takes into account analysing various features or aspects stated in the review. This study aims at exploring the use of deep learning techniques in improving the performance of ABSA in the government app reviews domain. Our approach uses the Convolutional Neural Network (CNN) framework, which is one of the deep learning approaches. Deep learning is chosen in this study over other approaches since it requires less human intervention and less effort in features engineering. In addition, it simulates how humans think in representing patterns and simplifying them. The approach utilised word embedding to represent the reviews as vectors and inducted them into the input layer of the deep learning model. The proposed CNN framework consisted of three hidden layers: convolutional; pooling; and classification. Further, several techniques and hyper-parameters have been explored as well as their effect on the accuracy of our framework. The performance measures showed that GloVe outperformed other word embedding models. Additionally, utilising a variety of activation functions, namely Sigmoid, Tanh and Softmax, enhanced the model performance by 6.5%. The proposed framework achieved high performance results with 89.42% accuracy.

This study highlighted several advantages of using deep learning approach. For instance, it does not require much human experience in the domain of the problem compared to the rule-based approach. Further, it needs less effort in identifying features for training.

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Programme: MSc in Informatics

(Knowledge and Data Management)

Year of Graduation: 2018

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Arabic Question Answering from diverse data sources

This paper presents a new design of the linguistic approach to develop a reliable Arabic QA system and data source with the ability to address the following challenges: (i) handle both factoid and complex questions in the Arabic language; (ii) extract the precise answer from available resources; (iii) evaluate the proposed QA system based on a gold standard data set; and (iv) provide an Arabic Corpus of Occupations (ACO) that has been made freely and publicly available for research purposes. Our QA system is a web application that helps us to get an answer to the question posed from different data sources. Accordingly, we conducted experiments on a set of 230 question from the previously published resources, TREC, CLEF, and Arabic Corpus of Occupations (ACO). The system performance shows an average precision of 36%, by answering 72 questions; the Recall was 78% and F-Measure was 51%.

The aim that attracted us to build the Arabic Corpus of Occupations (ACO) was the lack of free, annotated and large-scale Arabic resources that can be used in training and testing Arabic QA systems. In this paper, we provide the ACO of one million words written in Modern Standard Arabic (MSA). The corpus contains seven hundred occupations which are analysed carefully and manually annotated. We use Cohen's Kappa coefficient method to evaluate the reliability of the tagged content. The corpus content has been tagged and assessed by two different groups of taggers. Accordingly, the inter-annotator agreement indicates that the reliability of the ACO is in almost perfect agreement. Also, the content of the corpus is highly confident and reliable according to the result achieved by 90%.

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Using Social Network Analysis to Study Business Partnerships

This paper proposes a new domain for network analysis of analysing business partnerships as an interesting economic aspect. Datasets of business partners featuring trade licences created in 2015, 2016, and 2017 are transformed into graph datasets with nodes representing business partners, links representing a relationship between two partners, and a link's weight representing the number of trade licences shared between the two connected partners. The resulting weighted undirected network is analysed using community detection algorithms. Characteristics of the top seven communities discovered from the 2015 data are discussed for which common social network motifs are captured. The behaviour of the seven discovered clusters are also analysed over the subsequent two years for deeper insights into business partnerships behaviours.



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