

New Venture Creation – Emperical Study on Role of Universities Towards Successful Start-Ups

Mohd Tarique Khan, Rafik Smida

Department of Marketing & E – Commerce, Jazan University, Saudi Arabia

Department of Finance and Banking, College of Business Administration, Jazan University, Saudi Arabia

Date of Submission: 15-08-2023

Date of Acceptance: 25-08-2023

ABSTRACT

Background: This study introduces the fact and figures on the role of Universities towards successful startup and creating potential Entrepreneurs in Saudi Arabia. The research emphasizes on entrepreneurship education in the kingdom.

Methods: This study examines various literature on university endeavors to encourage entrepreneurial programs in the kingdom. The critical examination study model as well as explanatory research design were used with the statistical justification and discussion of results about the effectiveness of the program in the present study. The primary goal of this research is to support the outcomes of entrepreneurship in relation to the construction of virtue in the context of starting a firm. As a result, the research findings indicate that Saudi institutions provide students with sufficient abilities to become entrepreneurs.

Conclusion: It may be concluded that Saudi University's entrepreneurship program is effective enough to prepare students to establish their own businesses. After completing their course, students are seen to be confident and skilled enough to take on the task of starting their own firm.

Keywords: Start –ups, New Venture, Entrepreneurship, Entrepreneurship Education, Entrepreneurial Development, Enterprise, Saudi Arabia, University.

Contribution/Originality: The study will aid in understanding the advantages of an entrepreneurship program for entrepreneurial startups. Academics and entrepreneurs could utilize the study to better understand the structure of Saudi Arabia's entrepreneurship initiative. Students that want to be entrepreneurs will benefit from this research.

I. INTRODUCTION

Entrepreneurship has been recognized effect on society, the economy, and individual citizens in the situation. Saudi Arabia is considered to be among the top 49 countries in providing lucrative and favorable opportunities for the entrepreneurship youth generation population (Edward. B, 2016; Rami H. 2017; Ashri, 2019). Whereas Saudi Arabia's overall infrastructure is developed, ranking it to the position of 36th out of 144 countries (World Economic Forum, 2019). Entrepreneurship in Saudi Arabia positively influence economic growth on economic growth (Yusuf et al., 2020). Small and medium enterprises (SME's) in Saudi Arabia contributes about 22 percent of the total GDP of the kingdom (Abhishek T, 2019). Saudi Arabia is witnessing a social renaissance towards its bright future towards building a more diversified economy with higher knowledge content (Adlah et al. 2017). Higher Education Institutions play a vital role in the development of networks for entrepreneurs (Morgan, 2007; Tipple et al., 2012) and creates a knowledge economy (Mohammed, 2019). To build capacity a series of improved action is required to achieve goal and performance (Indi et.al 2020). Among the top-notch, the Saudi government has taken several initiatives to guarantee the right to education to all its citizens (Mohamed, 2014; Almahdi, 2019) investing exponentially to the infrastructure of the university and education over the last decades (Clark, 2014; El-Katiri, 2016).

The last 4 decades have witnessed, government success in building educational infrastructure (Rasha, 2019). The educational program at universities of Saudi Arabia produces highly skilled and qualified human resources, but they also help to develop new ideas and businesses (Almahdi, 2019). It plays role in encouraging entrepreneurship by developing entrepreneurial

competencies, entrepreneurship abilities and, the comprehensive aptitude building among youth towards business initiatives. In the previous study, it has been mentioned higher education institution need refinement to bridge the gap between the demand changes (Ismie et al., 2020). Educational institutional also increase the nature and activities of sustainable business performance improvement (Kaur, 2015; Festus et.al 2020). Higher education institutions in Saudi Arabia have adopted entrepreneurship programs and by the virtue of these academic programs, they are delivering future entrepreneurial leadership (Arab News, 2019). Ampol et al., 2020, mentioned knowledge and skills in entrepreneurship motivates entrepreneurial intention in students. Through the adoption of these entrepreneurship programs, the universities now introduce new strategies to link academics with the industry and enhance knowledge of entrepreneurship in the country's economy (Farah M, 2016). Despite so many potential benefits of entrepreneurship to the modern economic system, the role of the university and university program in the promotion and developing entrepreneurship is still in argument (Fayolle et al., 2006) and critique sustained whether entrepreneurship program is aligned with the mission of the institution (Mwasalwiba, 2010), in both the context positive (Kuttim et al., 2014; Martin et al., 2013) and negative/neutral (Graevenitz et. al., 2010; Lorz, 2011) effects of the entrepreneurship program. The entrepreneurship education in Saudi Arabia is still in an infant stage Alharbi (2018), no studies have been made upon the Entrepreneurship Program and its effectiveness. Previous studies explored impact of Saudi Universities and its impact on entrepreneurial development but none of the previous studies explored effectiveness of entrepreneurship program to the entrepreneurial development. Saudi Arabia is reducing its dependence on oil by diversifying the economic sectors by developing entrepreneurship, education, infrastructure, and tourism to add value to the national income of the country.

II. LITERATURE REVIEW

The kingdom will close the gap between the outputs of higher education and the requirements of the market. Mehta et al., 2014 argued that the country is still lagging behind the recent global innovation and entrepreneurship leaders despite the kingdom opened many tertiary education institutions. Whereas Efi (2014) explored different ways by which universities and other academic institutions participate in promotion of

entrepreneurship in the kingdom. There are many higher education institutions which are promoting critical thinking ability and strategic ability among the students in Saudi Arabia (Bura.brunel.ac.uk, 2019). There several universities in Saudi Arabia, which are promoting entrepreneurship through training programs at different levels to support entrepreneurs (Team, 2019). University environment plays a significant role in encouraging students in developing traits of innovative business thinking and start up their own business (Durst et al., 2016; Jabeen et al., 2017; Hasan et al., 2017; Aljohara et al., 2019). There are several traits which helps an individual to become an entrepreneur which include passion, listening skills and communication skills (Nambisan, 2017). The National U.S.-Arab Chamber of Commerce (2010), mentioned the kingdom's consistent development in entrepreneurship and entrepreneurial culture towards the growth of the economy. Rapid deployment of entrepreneurship activities in the higher institutions of Saudi Arabia is observed (UNESCO, 2012). Rahatullah (2013) appreciated the government initiatives for developing learning institutions and stimulating the private sector for stimulating the entrepreneurship ecosystem in the country. Moreover, he added that there is still scope for improvement.

Entrepreneurship Institutions

General Organization for Technical, Vocational Education and Training was established by the Saudi Arabian government with the objective of providing entrepreneurship education by conducting training programs. The curriculum was developed with an intention to develop technical skills, vocational knowledge to meet the requirement of the domestic as well as international market (UNESCO, 2013). **The National Entrepreneurial Institute (Riyadh)** was established as a strategic partnership with the Ministry of Oil & Mineral Resources and aligned with other Saudi companies to provide the youth with jobs and empowering them for entrepreneurship (Adlah et al., 2017). **INJAZ Saudi Arabia** is an extension of the Arab Injaz aiming to prepare students for a successful future for entrepreneurship and self-employment through community partnership. INJAZ is associated with the Ministry of Education to promote entrepreneurship and enhance the practical implication of the venture¹ (National Commercial Bank, 2012).

Role of Academic Institutions Towards Entrepreneurship Education

Higher education plays vital role towards development of nation's socio-economic needs and safeguarding democratic values (Punch, 2013; Almahdi, 2019). It influences entrepreneurial self-efficacy and firm innovation improving performance of digital startup firms (Worasak, 2020). Whereas mentorship improves the performance of the people (Agbionu et al., 2015; Hyginus et al., 2020). The country has established several universities aiming to promote innovation and entrepreneurship in the economy, **King Abdullah University of Science and Technology** deserves special mention. This university is designed to facilitate research, development, and bears Innovative Industrial Collaboration Program (KICP) (Nadia et al 2016). The government of Saudi Arabia has taken several measures to enhance tourism in the Kingdom (Syed et al, 2019). The Kingdom plans to help students making them choose their career carefully and facilitating their transition in different educational pathways which is incorporated in Saudi Vision 2030 (Nadia, 2017). Inspired by Saudi Vision 2030, **Prince Mohammad Bin Salman College** increased its entrepreneurial activities and ecosystems in the Kingdom. The institution is providing a world-class education system that is based on the latest pedagogical adapted for entrepreneurship development. MBSC is believed to contribute towards the establishment and growth of SME(s) by leveraging local entrepreneurs through its exceptional educational programs (Almahdi, 2019). Moreover, Education in Saudi Arabia has shown significant progress towards women entrepreneurship (Mona, 2009). Saudi Arabia has made some huge investments in the system of public education. **King Saud University** initiated entrepreneurship education by establishing entrepreneurship institute, King Saud Fellowship was formulated for entrepreneurship projects under

partnership with American University in entrepreneurship (Almahdi, 2019). The university signed MoU with the Leeds University, UK for staff exchanges and joint research program (Mohamed, 2014). Almahdi, 2019 mentioned that **King Fahad University of Petroleum and Minerals** has been incepted for its Entrepreneurship Institute (EI) institute with the vision to support entrepreneurship by providing mentorship programs to the young entrepreneurs. Theory of Acceptance and application of Technology Mode facilitates conditions on learning behavior (Chamaru et al, 2018). The emerging technology-oriented companies also known as Techno Valleys which aims to bridge the gap between higher educational institutions and the business communities on a commercial basis (Abdullah et al., 2013). **Jazan University** educates the entrepreneurs with presentation skills, research, designing, and the handling of laboratory facilities. **King Abdulaziz City for Science and Technology (KACST)** known for establishing in collaboration with the World Bank. KACST setup several institutions for promoting research and entrepreneurship by facilitating the Badir Program for Technology Incubators (BPTI) and the Saudi Business Incubators Network (Mohamed, 2014; Hasan, 2014; Almahdi, 2019). The King Abdullah University of Science and Technology employ many of the best practices from foreign research universities enabling global problem solving skills (Mohamed, 2014). A study conducted by (Hendry, 2000; Plechero, 2009; Mitanoski et al., 2013) mentioned that institutions also provide technical support to young entrepreneurs by helping them assessing their business requirements and adopting technological advancement & innovation, leveraging them to find financiers and investors for their SME's. **King Abdulaziz University** provides Business Accelerator (KAUACC) assistance to the young entrepreneurs to develop Entrepreneurial leadership for executing their enterprises (Almahdi, 2019)

List of Universities / Colleges having Entrepreneurship Courses	Established	Objective
Dar Al-Hekma College	1999	“To support the creation of new businesses from ideation to expansion, through education, incubation & consultation”
Fahd Bin Sultan University	2003	“The MBA program at FBSU aims to provide students with the knowledge and skills that enable them to function as successful managers, leaders and entrepreneurs in the dynamic and globalized Saudi economy during the third millennium.”

King Abdulaziz University	1967	“An event under the title of "Spreading a Culture of Creativity and Entrepreneurship among KAU Students" was organized Monday by the Creativity and Entrepreneurship Centre (CEC).”
King Abudullah University for Science and Technology (KAUST)	2009	“Our mission is to plant the seeds of an ‘innovation ecosystem’ in the Kingdom—a network of startups, entrepreneurs, investors and others, all committed to helping great entrepreneurial ideas succeed.
King Fahd Universality of Petroleum and Minerals (KFUPM)	1963	“To plant and nurture entrepreneurial mindset among KFUPM students.”
King Saud University	1957	https://cba.ksu.edu.sa/en/1438Entrepreneurship
Taibah University	2003	“Internationally, recognized, comprehensive, Saudi university dedicated to excellence in teaching, research and community service.”

*Source: Osama, 2013

Objective of the Study: This study aims to study and analyze the different effects of Entrepreneurship Education in degree courses in KSA and the influence of this teaching on students’ attitudes towards starting a SME’s or their business enterprises.

Research Methodology:

Research Design

The research structure is cross-sectional, descriptive and non-experimental quantitative studies conducted at a single time in a population of 231 participants, which is intended to be represented (panoramic snapshots).

Sampling Plan

The judgmental (purposive) sampling method is being used for selecting the representative sample by including only those universities students where the entrepreneurship programs are in operation at their premises (Saunders et al., 2003). Method of data collection is governed by the conceptual model. So, for this study, the data is collected using a structured questionnaire survey from students enrolled in entrepreneurship to the universities. The purposing sampling aims to get a heterogeneous response from some different regions of Saudi Arabia. The analysis is done on R 4.02 using the library (plsmp).

Data Collection and Data Cleaning

The first step of the data analysis process is to screen the data to ensure it was usable, reliable, and valid to proceed further with statistical analyses. The data is captured on MS-EXCEL, and the information has been collected through a structured questionnaire (Google Doc) by conducting an online Survey. Only completed forms have been selected amounting to 231 useable samples (respondents).

Statistical Perspective of PLS-SEM

Structural Equation Modelling is a second-generation statistical technique used to test causal relationships between latent variables. Two approaches of SEM exist (Hair et al., 2014); the more stringent Covariance-Based SEM and the soft modelling approach PLS-SEM (Wold, 1982) or the Variance - Based approach. The authors chose PLS-SEM for several reasons, including it does not require multivariate normality, measurements are reflective, and also because it lends itself to modelling even with the small sample size

Block Description of the Conceptual Model

The Model Construct (Block) has two kinds of latent variables namely endogenous (dependent) variables and other variables are called exogenous (independent) variables.

CONSTRUCTS	TYPE
COURSE LEARNING OUTCOMES	ENDOGENOUS
INSPIRATION	ENDOGENOUS
UNIVERSITY INCUBATION & RESOURCES	ENDOGENOUS
SUBJECTIVE NORMS	ENDOGENOUS
INTENTION TO START A NEW VENTURE	EXOGENEOUS

Descriptive Statistics of Constructs

Descriptive Statistics is a pre-requisite for a clear conceptualization of the constructs that one wants to study. The table below shows the descriptive statistics mean and standard deviation

of each parameter within each construct (variables). The mean less than 4 can be classified as parameters (questions), which respondents have not agreed much, while others can be said as the respondent on the average (majority) have agreed.

CONSTRUCTS-DESCRIPTIVE STATISTICS		CRONBACH ALPHA	LOADINGS	RELIABILITY AND CONVERGENT VALIDITY OF THE MODEL		
COURSE LEARNING OUTCOMES						
Parameters	Mean± Std. Deviation	Cronbach Alpha	Factor Loadings	Cronbach's alpha	Dillon-Goldstein's rho	Average Variance Extracted (AVE)
Your understanding of the attitudes, values and motivation of entrepreneurs (i.e. why do entrepreneurs act?)	4.73±1.41	0.91	0.75	0.67	0.80	0.43
Your understanding of the actions someone has to take to start a business (i.e. what needs to be done?)	4.78±1.38	0.91	0.46			
Your practical management skills to start a business (i.e. how do I start the venture?)	4.94±1.14	0.91	0.73			
Your ability to develop networks of relations (i.e. who do I need to know?)	4.78±1.24	0.91	0.73			
Your ability to identify an opportunity (i.e. when do I need to act to capture opportunities?)	3.37±1.28	0.91	0.54			
INSPIRATION						
Do you remember any particular event or input during your course that	5.28±1.28	0.91	0.17	0.03	0.67	0.50

caused a dramatic change in your heart and thinking to consider becoming an entrepreneur?						
Do you remember any particular event or input during your study course that made you consider embarking on an entrepreneurial career?	4.97±1.11	0.91	0.99			
UNIVERSITY INCUBATION & RESOURCES						
A pool of entrepreneurial-minded classmates for building a team minimal utilization.	5.22±1.28	0.90	0.82	0.85	0.88	0.43
A pool of university technology.	5.31±1.25	0.91	0.71			
Advice from faculty and experts in the area of incubators.	4.45±1.45	0.91	0.55			
Advice from classmates.	4.07±1.55	0.91	0.69			
Advice from classmates.	3.88±1.43	0.91	0.15			
Research resources (library / web).	5.43±1.32	0.91	0.71			
Networking events and building relationships.	4.90±1.57	0.91	0.69			
Physical space for meetings.	4.64±1.79	0.91	0.58			
Business plan competitions (testing ground for the idea).	4.65±1.73	0.91	0.73			
Seek funding from the university.	5.46±1.26	0.91	0.82			

Referrals to investors.	3.97±1.40	0.91	0.44			
SUBJECTIVE NORMS						
My closed family thinks that I should pursue a career as self-employment.	4.75±1.37	0.91	0.45	0.59	0.76	0.46
I care about the opinion of my family when I decide whether or not to pursue a career as a self-employed.	4.92±1.26	0.91	0.71			
People who are important to me think that I should pursue a career as self-employment.	5.42±1.24	0.91	0.79			
I care what people who are important to me think when I decide whether or not to pursue a career as self-employed.	5.39±1.31	0.90	0.71			
INTENTION TO START A NEW VENTURE						
Are you involved in evaluating a new business idea?	3.69±1.43	0.91	0.49	0.73	0.82	0.43
Are you trying to start a business for real, as opposed to just evaluating an idea out of interest or as part of an academic exercise?	4.81±1.30	0.91	0.68			
You prepared a proper business plan.	4.87±1.37	0.91	0.70			
Organized a start-up team	4.90±1.41	0.91	0.77			
Looked for facilities and	4.05±1.32	0.91	0.60			

equipment.					
Acquired facilities and equipment.	4.08±1.44	0.91			

Reliability of Constructs Internal Consistency

Cronbach’s Alpha is observed to check internal consistency (item-wise) is >0.90, this means that the data is highly consistent and reliable. Further, the loadings are all positive, therefore have been considered in the respective constructs.

positive correlation among the latent variables and the correlation coefficient values between all variables are less than 0.72. Hence, there is no serious issue of multicollinearity between variables (Cooper & Schindler, 2007) in the observed model, and hence, discriminant validity is established. Hence, all variables were retained for further analysis.

Correlation Matrix

The table below is the correlation matrix in the lower-triangular format, which shows a

CORRELATION MATRIX					
Constructs	Intention To Start A New Venture	Course Learning Outcomes	Inspiration	University Incubation & Resources	Subjective Norms
Intention To Start A New Venture	1.00				
Course Learning Outcomes	0.64	1.00			
Inspiration	0.48	0.47	1.00		
University Incubation & Resources	0.66	0.72	0.46	1.00	
Subjective Norms	0.66	0.58	0.53	0.71	1.00

Model Reliability and Discriminant Validity Evaluation

The conceptual model is the reflective model. Following the recommendation in Kock (2015b), measurement (constructs) reliability is assessed with Cronbach's alpha coefficient, and Dillon–Goldstein rho coefficient (DG's rho), also known as the composite reliability coefficient (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). As Chin (1998) considers Dillon-Goldstein’s rho to be a better indicator than Cronbach’s alpha, Dillon-Goldstein’s rho values higher than 0.67 suggests unidimensionality, which we have in the latent constructs. Again, the Average Variance Extracted (AVE) of all the latent variables are is higher than its correlations. Thus the requirement of discriminant validity is also met.

PLS-SEM Model Fit Evaluation

Guidelines suggest that GoF of 0.1, 0.25 and 0.46 represent small, medium and large fit respectively (Kock, 2013; Wetzels et al., 2009). The GoF of the Model is **0.4063**; therefore, based on the result we conclude that the proposed model overall fitted the data.

Structural Model Assessment and Testing of Hypotheses

Structural relations are assessed to determine the explanatory power of the model and the significance of individual paths in the model. Path-coefficients are assessed to evaluate the significance of hypothesized relationships between constructs. Based on the table below, Intention to Start a New Venture has a positive significant relationship towards Course Learning Outcome ($\beta=0.64$, $p<0.05$), Intention to Start a New Venture has a positive significant relationship towards

Inspiration ($\beta=0.48$, $p<0.05$), Intention to Start a New Venture has a positive significant relationship towards University Incubation & Resources ($\beta=0.66$, $p<0.05$) and the Intention to Start a New Venture has a positive significant relationship

towards Subjective Norms ($\beta=0.66$, $p<0.05$). The R^2 values of the endogenous (independent) variable in ranged between 23.1% and 44% indicating moderate explain the variance in students' Intention to Start a New Venture.

PATH CO-EFFICIENTS AND MODEL QUALITY ASSESSMENT										
Path	Hypotheses	(p-value < 0.05)	Path Weight Beta	Hypothesis Acceptance Results	Decision	Direct Effect	Indirect Effect	Total Effect	Relationship	R^2
Intention To Start A New Venture -> Course Learning Outcomes	Higher Intention To Start A New Venture , higher Course Learning Outcomes.	< 0.001	0.64	Yes	Supported	0.64	0.00	0.64	Moderate	0.41
Intention To Start A New Venture -> Inspiration	Higher Intention To Start A New Venture , higher Inspiration.	< 0.001	0.48	Yes	Supported	0.48	0.00	0.48	Moderate	0.23
Intention To Start A New Venture -> University Incubation & Resources	Higher Intention To Start A New Venture , higher University Incubation & Resources.	< 0.001	0.66	Yes	Supported	0.66	0.00	0.66	Moderate	0.44
Intention To Start A New Venture -> Subjective Norms	Higher Intention To Start A New Venture , higher	< 0.001	0.66	Yes	Supported	0.65	0.00	0.65	Moderate	0.43

	Subjective Norms.									
--	-------------------	--	--	--	--	--	--	--	--	--

III. CONCLUSION:

The purpose of this study is to develop a scientific and comprehensive measurement model for the effectiveness of entrepreneurship education. The results of the empirical investigation of this research and its findings support the research model (SEM) and all of its hypotheses. The beta coefficients illustrated that Course Learning Outcome, Inspiration, University Incubation & Resources, and Subjective Norms significantly influence the intention to start the business. Henceforth the entrepreneurship program in the country is found to be having a positive significant impact on new venture creation.

One of the crucial ways in which universities can contribute to a culture of innovation and entrepreneurship is through undertaking entrepreneurship education, with the knowledge spillovers into society than helping stimulate entrepreneurial spirit and innovation beyond the educational setting. Saudi universities consistently engaged in creating a network of research centres, besides producing knowledge and collaborating with domestic and international industries (Salem 2014B). The scholar concludes that Saudi Arabia needs to start new study programs aimed at supporting entrepreneurship throughout the kingdom, develop and strengthen more enable entrepreneurship institutions, and develop a heightened awareness of entrepreneurial activities and entrepreneurship in the Kingdom. Such recommendations point to a need for more involvement in innovation and entrepreneurship promotion by universities. UNESCO considered it an excellent model for entrepreneurship, as well as Saudi Arabia, which supports its educational institutions at all levels in the field of entrepreneurship by organizing specialized conferences and creates a business service foundation in universities. Hassan (2014) states that entrepreneurial education is not particularly or positively related to a start-up business, rather it helps universities and government to introduce activities that will aid in tackling the unemployment issue among youth. The kingdom is frequently revising its policies to bridge the industrial gap and between academic institutions. The government established several universities and started the entrepreneurship program to educate and motivate students towards entrepreneurship.

IV. LIMITATION

Findings of this research could not be generalized; as the study is short samples size that leads to less generalizability factor. Also, more general studies to understand the intention to become future entrepreneurs require consideration of various other demographics.

Future Research

The conceptual model developed in this study provides a fruitful basis for entrepreneurial educators with powerful curriculum development and improvement tools and also provides a standard framework for entrepreneurial education researchers. In terms of potential moderators, future research should include measures of age, education level, academic institution, academic program, course type, gender, previous entrepreneurship experience, previous employment experience, course goal, level, and content.

REFERENCES:

- [1]. Ashri, O. (2019). On the fast track: Saudi Arabia's entrepreneurship ecosystem. Retrieved from <https://www.entrepreneur.com/article/336766>
- [2]. Morgan, K. (2007). The learning region: institutions, innovation and regional renewal. *Regional studies*, 41(S1), S147-S159.
- [3]. Tipple, M.N., Taylor, P., Cumming, M.M., & Tan, M.S.Y. (2012). Interaction between HEIs and SMEs—the student perspective. In *Proceedings of the HEA STEM Learning and Teaching Conference*.
- [4]. Indi D, Susilo T. R, Mirwan S. P., Daryono, Sri S. (2020). Internationalization Model for Increasing the Competitiveness of Local Creative Industries in ASEAN Economy Community. *QUALITY Access to Success*. Vol. 21 (175).
- [5]. Almahdi.H.K (2019). Promotion and Participation of Saudi Universities towards the Development of Entrepreneurial Leadership-An Empirical Study in Saudi Arabian Context. *Journal*

- of Entrepreneurship Education. Journal of Entrepreneurship Education. Vol. 22(6)
- [6]. Edward. B (2016). Business and Entrepreneurship in Saudi Arabia: Opportunities for Partnering and Investing in Emerging Businesses
- [7]. Rami H. Alamoudi and Abdullah A. Bagaafar (2017). How to Encourage Entrepreneurship and New Business in the Kingdom of Saudi Arabia: Research on Regulations, Policies and Obstacles. International Journal of Basic & Applied Sciences IJBAS-IJENS Vol:17 No:03
- [8]. Fayolle A (2007) Handbook of Research in Entrepreneurship Education – A General Perspective. Vol. 1. Cheltenham: Edward Elgar Publishing.
- [9]. Mwasalwiba ES (2010). Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. Education þ Training 52(1): 20–47
- [10]. Kuttim M, Kallaste M, Venesaar U, et al. (2014) Entrepreneurship education at university level and students' entrepreneurial intentions. Procedia - Social and Behavioral Sciences 110: 658–668.
- [11]. Martin BC, McNally JJ and Kay MJ (2013) Examining the formation of human capital in entrepreneurship: a meta-analysis of entrepreneurship education outcomes. Journal of Business Venturing 28(2): 211–224.
- [12]. Graevenitz G, Harhoff D and Weber R (2010) The effects of entrepreneurship education. Journal of Economic Behavior & Organization 76(1): 90–112.
- [13]. Lorz M (2011) The Impact of Entrepreneurship Education on Entrepreneurial Intention, PhD thesis, University of St Gallen, Germany
- [14]. Kaur, R. (2015). Innovation and entrepreneurship: Relational aspect. International Journal of Business and Administration Research Review, 1(5), 93-98.
- [15]. Farah M. (2016). Success Strategies Saudi Entrepreneurs Used to Navigate Through Regulations in Jeddah. Walden University.
- [16]. Mona A.M (2009). Women's Education in Saudi Arabia the Way Forward. Booz & Company.
- [17]. Mehta, J., Vaidya, J., Chaudhary, R., Ramamrajan, V., & Ranjan, A. (2014). Saudi Arabia: Emergence of an innovation kingdom. An Aranca Special Report. Retrieved from <https://s3.amazonaws.com/aranca.s3.images/aranca/Saudi-Arabia-Emergence-of-anInnovation-Kingdom-An-Aranca-Special-Report.pdf>
- [18]. Efi, A. E. (2014). The role of higher institutions in promoting entrepreneurship and small business in developing nations: The Nigerian experience. International Journal for Innovation Education and Research, 2(09), 15-22
- [19]. National U.S.-Arab Chamber of Commerce. (2010). Incubating the future: Entrepreneurship in Saudi Arabia. U.S.-Arab Tradeline, 18(1), 3-40.
- [20]. Nadia. Y, Huda.M (2016). Promoting a culture of innovation & entrepreneurship in Saudi Arabia: Role of the Universities. International Journal of Higher Education Management (IJHEM), Vol. 2 Number 2
- [21]. Salem, M. I. (2014A). Building an entrepreneurial economy: Evidence from developing countries. International Business & Economics Research Journal, 13(3), 629-636.
- [22]. Rahatullah, M, K., (2013). Mapping entrepreneurship ecosystem of Saudi Arabia. World Journal of Entrepreneurship, Management and Sustainable Development, 9(1), 1-14
- [23]. Salem, M. I. (2014A). Building an entrepreneurial economy: Evidence from developing countries. International Business & Economics Research Journal, 13(3), 629-636.
- [24]. UNESCO (2013). Entrepreneurship Education in the Arab States. UNEVOC International Centre for TVET – Bonn
- [25]. National Commercial Bank (2012). Injaz Saudi Arabia Annual Report 2011-2012. Retrieved from www.injaz-saudi.org
- [26]. UNESCO-International Labour Organization (2010). Towards an Entrepreneurial Culture in the 21st Century, "stimulate entrepreneurial spirit through entrepreneurship education in secondary schools. UNESCO-Beirut (in Arabic).
- [27]. UNESCO (2012). Regional Workshop on Entrepreneurship Education in the Arab States, "Country reports prepared and presented during the Workshop" Manama-Kingdom of Bahrain, 10-12 December.

- [28]. Osama M. (2013). Saudi Arabia's Entrepreneurial Ecosystem.
- [29]. Bura.brunel.ac.uk.(2019). Retrieved from <https://bura.brunel.ac.uk/bitstream/2438/13815/1/FulltextThesis.pdf>
- [30]. Team, P. (2019). The new wave of entrepreneurship in Saudi Arabia | Proven. Retrieved from <https://proven-sa.com/2018/05/new-wave-entrepreneurship-saudi-arabia/>
- [31]. Hassan, A. (2014). Promoting entrepreneurs and economic growth through entrepreneurship programmes: A new role of Saudi universities. Brunel University London.
- [32]. Hendry, C (2000). Understanding relationships between universities and SMEs in emerging high technology industries: The case of optoelectronics. *International Journal of Innovation Management*, 4(1), 51-75.
- [33]. Plechero, M. (2009). The Role of Local Universities in Improving Traditional SMEs Innovative Performances: The Veneto Region Case (No. 2009/11). Lund University, CIRCLE-Center for Innovation, Research and Competences in the Learning Economy.
- [34]. Mitanoski, T., Kojic, J., Jakšić, M.L., & Marinkovic, S. (2013). Developing SMEs through University Support Centres: a Comparative Analysis. *Management Journal for Theory and Practice*, 67, 15-27.
- [35]. KACST is Saudi Arabia's national research institute.
- [36]. Klaus. S. (2019). The Global Competitiveness Report 2019. World Economic Forum.
- [37]. Abhishek, T (2019). Smes in Saudi Arabia-An Innovative Tool for Country's Economic Growth. *Sci.Int.(Lahore)*,31(2),261-267, 2019.
- [38]. UNESCO, "Education for All," Global Monitoring Report, 2008, Table 2
- [39]. Prime Ministerial Order, no. 22646; 21 June 2004
- [40]. Ismie. R., Mohamed. J., Nordin Y., Erlane. K. (2020). Higher Education Leadership Competency Framework in Malaysia: A Refinement. *Humanities and Social Sciences Letters*. 2020 Vol. 8, No. 4, pp. 438-449.
- [41]. Ampol.N., Pattarada. (2020). Entrepreneurial Intention of Students in Higher Education Institutions Within the Network of the Upper Central Region of Thailand. *Humanities and Social Sciences Letters*. 2020 Vol. No. 3, pp. 342-353.
- [42]. Mohammed. M., Baslom., Shu. T. (2019). Knowledge Management (Km) Practices in Education and Learning: Establishing A Knowledge Economy in Saudi Arabia. *Humanities and Social Sciences Letters*. Vol. 7(1) pp. 1-9
- [43]. Chamaru. D.A.A., Simmy. K., Dinithi.M.K. (2018). Social Media for Higher Education: A Cross Sectional Study Among Teachers in India and Sri Lanka. *Humanities and Social Sciences Letters* 2018 Vol. 6, (4), pp. 180-188.
- [44]. Festus O. A., Usen F. M., Ekpenyong E., Godfrey E., Esther S., and James. E. (2020). School Management Practices, Teachers Effectiveness, And Students' Academic Performance in Mathematics in Secondary Schools of Cross River State, Nigeria. *Humanities and Social Sciences Letters*. Vol. 8, (3), pp. 298-309.
- [45]. Ali. M, & Syed.M.F.A.K. (2019). Tourist Satisfaction Index in Saudi Arabia. *African Journal of Hospitality, Tourism and Leisure*. Vol.8(1).
- [46]. Durst, S. and Sedenka, J. (2016). Entrepreneurial Intentions and Behaviour of Students attending Swedish Universities. *Global University Entrepreneurial Spirit Students' Survey 2016*. National Report Sweden. Skövde: University of Skövde.
- [47]. Jabeen, F., Faisal, M. & Katsioloudes, M. (2017). Entrepreneurial mindset and role of universities as strategic drivers of entrepreneurship: Evidence from UAE. *Journal of Small Business and Enterprise Development*, 24(1), 136-157
- [48]. Hasan, SK., Khan, E. and Nabi, Md. (2017). Entrepreneurial education at university level and entrepreneurship development. *Education + Training*, 59(7/8), 888-906.
- [49]. Aljohara. K. & Yusuf. O. A. (2019). The Role of Entrepreneurship Education and University Environment on Entrepreneurial Interest of MBA Students in Saudi Arabia. *Journal of Economics and Sustainable Development*. Vol.10(4)
- [50]. Yusuf. O. A., & Adel. A. A.K.A., (2020). Entrepreneurship, Innovation, and Economic Growth: Evidence from Saudi

- Arabia. Eurasian Studies in Business and Economics.
- [51]. Nambisan. (2017). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*. Vol. 41(6).
- [52]. Selkrig, M. (2018). Connections teachers make between creativity and arts learning. *Educational Research*. <https://doi.org/10.1080/00131881.2018.1524715>.
- [53]. Hassan, A. (2014). Promoting entrepreneurs and economic growth through entrepreneurship programmes: A new role of Saudi universities. Brunel University London.
- [54]. Worasak. K., Jakkrit. T., Wasapon. T., and Poksorn. D., Achara. C. (2020). The Influence of Entrepreneurial Self-Efficacy and Innovation On Firm Performance: Evidence from Thai Startup Firms. *Humanities and Social Sciences Letters*. Vol. 8(4), pp. 450-463.
- [55]. Hyginus. E., Joy. N. U., Bebedeth. N. O., Chimeziem. C. U., Ngozi. U. A., and Linus. A. (2020). Employee Mentoring, Career Success and Organizational Success. *Humanities and Social Sciences Letters*. Vol. 8(4), pp. 464-480.
- [56]. Adlah. A. A., & Shayma. H. A. (2017). The development of Saudi Arabian Entrepreneurship and Knowledge Society. *International Journal of Management Excellence*. Vol. 9(3).
- [57]. Rasha. A.E.M., (2019). King Abdullah Economic City: The Growth of New Sustainable City in Saudi Arabia. Springer International Publishing AG, part of Springer Nature.
- [58]. Nadia. Y., (2017). Changes Required in Saudi Universities Curriculum to Meet the Demands of 2030 Vision. *International Journal of Economics and Finance*; Vol. 9, (9).
- [59]. Abdullah. A.S., Mostafa. A.E., Hani. S., Mohamed. F. S., and Mohamed H.A.A., (2013). Bridging the Gap between University and Industry: Efforts Made at Faculty of Engineering – Rabigh - Saudi Arabia. *International Conference on Advanced Information and Communication Technology for Education*
- [60]. Mohamed. I.S., (2014). The Role of Universities in Building a Knowledge-Based Economy in Saudi Arabia. *International Business & Economics Research Journal*. Vol.13(5).
- [61]. Alharbi. J., Almahdi, Hassan; Mosbah, Aissa., (2018). The impact of entrepreneurship education programs (EEPs) on the entrepreneurial attitudes among higher education students in Saudi Arabia. *International Journal of Management, Economics and Social Sciences*. Vol. 7(3), pp. 245-271.
- [62]. Clark. N. (2014). Higher education in Saudi Arabia. *World Education News & Review*, November 3. <https://wenr.wes.org/2014/11/highereducation-in-saudi-arabia>.
- [63]. El-Katiri. L. (2016). Saudi Arabia's labor market challenge. *Harvard Business Review*, July 6.

Acknowledgement:

I am thankful to Jazan University for giving opportunity for research.

<https://injaz-saudi.org/en/programs/>