

**THE ROLE OF UNIVERSITY MANAGERIAL STAFF IN THE PROCESS OF IMPLEMENTING THE CONCEPT OF ENTREPRENEURSHIP AND INNOVATION BY JORDANIAN UNIVERSITIES**

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**ABSTRACT:** *The purpose of this paper is to explore the dimensions of the university managerial staff role in the process of implementing the concept of entrepreneurship and innovation by Jordanian universities. A questionnaire was used as a tool for data collection where 320 questionnaires were distributed to a random sample from seven Jordanian universities managerial staff. The collected data were refined and statistically analyzed. The obtained results clearly denote that the three independent variables (university managerial staff capacities, the university supporting policy and the nature of the general environment) all together have positive impacts on both dependent variables (the university general performance and the expansion of education and professional opportunity for university entrepreneurship graduates, with a correlation coefficient values of 0.908 and 0.890 respectively at 0.01 level of significant.*

**KEYWORDS:** Entrepreneurship, Innovation, Managerial Staff, entrepreneur graduate and general performance.

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## **INTRODUCTION**

Bolstering entrepreneurship concept implementation efforts by universities has never been more necessary than it is now. Paying extra attention to entrepreneurship activities and projects at schools, educational institutions and universities would have a positive impact on the national economy dynamism. Beyond its considerable contribution to the creation of new social enterprises and release of new business, educational entrepreneurship implementation would provide additional embayment opportunities for young people and that would, surely, helping them to be more creative and productive at work.

Therefore, it might be appropriate to conclude that, investing in educational entrepreneurship would yield a worthy return socially and economically. Many field study outcomes have affirm that pupils and students, who have participated in entrepreneurship activities are three to six times more likely starting their own business later on in their life, in comparison with those who did not receive or partake in any entrepreneurship program (European Commission, 2015).

The increasing importance of entrepreneurship and innovation to national economy and society has motivated researchers to be more concerned with educational entrepreneurship to generate new generation of young entrepreneurs. Educational entrepreneurship, actually, helps students to acquire necessary entrepreneurial attributes, encouragement, knowledge, and other essential skills to be able to lunch a successful venture business (Cho, 1998).

It might be substantial to note that educational entrepreneurship is not a universal concept, and it should be implemented in compliance with unique culture context of each country (Lee and Peterson, 2000). For instance, USA high school students are not (Rifai 2010).

In the same context, the local government of the Japanese capital city Tokyo officially announced its plan to commence an education entrepreneurship program directed to high school students for the first time in January 2001. In South Korea only few colleges have developed entrepreneurship curriculum with great majority of colleges offer entrepreneurship related courses as a part of the requirements for the fulfillment of general education qualification (Sang et al 2005).

One of the top priorities of universities teaching and research concerns is how to encourage and promote entrepreneurship. Universities and other educational institutions are concerned with helping their graduates acquiring the necessary entrepreneurial vision.

The fruit of that is the expansion of entrepreneurship curriculum and establishing more entrepreneurial promotion and patronizing entrepreneurship centers in many universities round the world (Rifai 2015). Upholding entrepreneurship has become of the main priorities of the public policy (Luthje and Franke 2003).

The majority of the world government are increasingly concentrating on the role of the universities in providing societies with qualified entrepreneurs and generating new innovative idea to smooth out the process of establishing new businesses, which would contribute significantly to the increase of national wealth and society prosperity (Rifai 2015).

The recent statistics has brought to light that entrepreneurship education has widely refereed academic journals and over 100 established centers (Finkle et al 2006).

## **LITERATURE REVIEW**

Entrepreneurship is an old concept , first defined by Richard Cantillon (1755) as a combination of materials, money and work brought to market as a formation of new company (cited in: Wickham, 2001, p19). According to Adam Smith (1776), entrepreneurship comprises human activities that lead to changes in the pattern of the prevailing division of labour, as noted by Steven Michel (2008). Also, Karl Marx under historical determinism tended to ignore diminish entrepreneurs by minimising the importance of the individual in history and economics (Isaac, 1998).

According to Schumpeter (1934), entrepreneurship is a process of change through the introduction of a new product, process, way, market, and a new source of raw material for processing. In this way, entrepreneurs are the makers of the economy and are constantly evolving. Kirzner (1985) of the Chicago School of Economics suggests that entrepreneurship is awareness of untapped opportunities in current market conditions (Najim et al. 2014).

The importance of entrepreneurship education was discussed by many authors and researchers: by Allan Gibb (2002) at UK level, and by Garavan and O’Cinneide (1994a, b) at a European level; by Gorman et al. (1997) in a ten-year study; by Hannon (2004) in creating foundations for the subsequent National Council for Graduate Entrepreneurship (NCGE) initiatives; by Matlay and Carey (2007) through a ten-year longitudinal study from 1995-2004; by Pittaway and Cope (2007); and by Pittaway and Hannon (2008) in assessing institutional strategies for Higher Education (HE) enterprise education (P. 382).

Many authors have debated about the purpose, goals, values and pedagogies of enterprise education:

- 1- Lewis (2011) concluded that entrepreneurship struggled to gain academic legitimacy at a moral, pedagogical and theoretical level, with the quality and focus of research being constraints. Controversially, Lewis asserted that the unresolved tension of the twin goals of enabling students to become entrepreneurs or to understand and operate within an enterprising society,
- 2- Blenker et al. (2011) proposed a progression from existing paradigms of education to a new one of “facilitating entrepreneurship as everyday practice,
- 3- Jones (2011) argued the importance of entrepreneurship education being underpinned by an explicit teaching philosophy grounded on student learning,
- 4- Jones and Matlay (2011) developed a conceptual framework centred on the student and their dialogic relationships with educator, institution, educational processes and community.
- 5- Carey and Matlay (2012) have reported about Emergent issues and challenges facing educators,
- 6- Rae (2010) proposed that a “new era” of responsible entrepreneurship and related education was required to address the failures of market capitalistic entrepreneurship which contributed to the financial crises of 2008-2011<sup>2</sup>.

However, to stimulate student and graduate entrepreneurship Higher Education has a significant role for that and can play an important role in educating and encouraging the entrepreneurs of the present and the future (P. 381)<sup>3</sup>.

To introduce Entrepreneurial Education and to encourage innovation within universities managers and decision makers have to have the ability for this radical change. Based on literature about management and organization theory (Burns and Stalker, 1961; Daft, 2007; Schermerhorn, 2008) we can most generally postulate typical characteristics of low (or less) innovative organizations (P. 37).

Based on known characteristics of less innovative organizations we can summarize that one of the crucial reasons for lagging behind most developed – also innovative – is a tendency to preserve routine working and lack of innovativeness in those organizations (Dyck and Mulej, 1998; Bucar and Stare, 2002; Mulej, 2006). Thus, less innovative organizations lagging behind, due to the (too) slow change from routine to innovative working (Mulej and Kajzer, 1998; Newman and Nollen, 1998; Mulej, 2006). Less innovative organizations must enhance their innovativeness in order to become more innovative. Thus, the crucial and also most important goal is to move beyond traditional working and thinking to more innovative. Desired change triggers a numerous changes in working and behavior of all members in organization, while of crucial importance is development of holistic understanding needs and demands of working and behavior in modern innovative environment (P. 37-38).

Main obstacles for increasing the level of innovativeness in less innovative organizations are mainly:

- outdated values/culture/ethics/norms (VCEN) of organizational members, and especially those of management (Newman and Nollen, 1998, pp. 57, 109; Nedelko, 2011);
- lack of innovative culture (Potocan and Mulej, 2007);
- negative attitudes towards risk and unwillingness to take risk (Rebernik et al., 2001-2010);
- one-sided understanding of innovativeness (Buc̃ar and Stare, 2002), while innovativeness is often limited only on technical-technological innovations (Mulej, 1994, p. xiv);
- underdeveloped service sector and public administration (Buc̃ar and Stare, 2002);
- low efficiency of investments in research and development and weak cooperation between private/public sector organizations and research institutions (Stanovnik and Kovac̃ic̃, 2000; Mulej, 2007a); and
- Management does not see the entrepreneurship activities as an opportunity for organizational development (Newman and Nollen, 1998, p. 37). (P. 38-39).

## METHODOLOGY

To conduct a field study you should specify the methodology of obtaining the relevant data and use the suitable method for data analysis. Beyond literature review, questionnaire is one of the most commonly used and workable data collection tool especially for field study, therefore it was employed as a mean for data collection.

A literature review was conducted to specify related concepts and to formulate the theoretical framework of the study. Different types of statistical tests were performed as required i.e. (Cronbach's Alpha, Regression analysis, ANOVA analysis, and correlation Coefficient) to determine the impact of independent variables on dependent variables.

- A- The questionnaire: based on the related literature review a four parts questionnaire was designed. It comprises four parts that measuring the sample general characteristics, independent variables and dependent variables. It was reviewed by 5 academics referees before it was finalized and distributed. To assure internal consistency and reliability of the questionnaire Cronbach's Alpha test was carried out and the obtained results are shown in table/1, which clearly indicate that the questionnaire statements are consistence and it is reliable for statistical analysis.
- B- The sample of the study: A random sample of 320 managerial staff members of different managerial levels was withdrawn from eight Jordanian universities (i.e. 40 staff member of each university). 320 questionnaires were distributed and 239 were completed and returned with a response rate of 74.68%. Table/2 portrays the questionnaire distribution and return. Sample Characteristics present in Table/3.

**Table (1): Reliability Statistics:**

The Variables	Cronbach's Alpha
INDEPENDENT ( X1 )	0.86
INDEPENDENT ( X2 )	0.935
INDEPENDENT ( X3 )	0.91
Dependent ( Y1 )	0.85
Dependent ( Y1 )	0.87

**Table 2: Questionnaire Distribution and Return**

Type	University	Questionnaire Distributed	Questionnaire completed and return
Private	Al Zaytoonah	40	31
	Jadara	40	29
	Petra	40	27
	Israa	40	33
	Jerash	40	29
	Total	200	149
Public	Jordan	40	26
	Yarmouk	40	29
	Mutha	40	35
	Total	120	90
Grand Total		320	239

**Table 3: Sample Characteristics**

Description	Category	Frequency	Percentage %
Sex	Male	177	74
	Female	62	26
	Total	239	100.00%
Material status	Married	213	89
	Single	26	11
	Total	239	100.00%
Age	20-39 years	91	38
	over 40 years	148	62
	Total	239	100.00%
Entrepreneurship Experience	with	220	92
	without	19	8
	Total	239	100.00%

Level of Education	Bachelor	208	87
	Master	19	8
	Ph.D.	14	6
	Total	239	100.00%
Tenure	1-5 years	29	13
	6-10 years	88	37
	over 11 years	122	51
	Total	239	100.00%

### C-Variables of the study

- -Independent Variables:

X1 – Problem solving capacity of the university managerial staff to handle problems facing university entrepreneurs,

X2 – Type of university policy that is adopted to maintain an effective implementation of entrepreneurship concept,

X3 – Merits of the general environment under which the concept of entrepreneurship is implementing in Jordanian universities.

- -Dependent variables

Y1 – Improvement of the university general performance.

Y2 – Expansion of the scientific and practical opportunities for the University entrepreneurs graduates.

### D-Hypotheses of the Study:

Ho1 – there is no statistically significant impact of the three independent variables (X1, X2 and X3) altogether on the improvement of the university general performance.

Ho2 – there is no statistically significant impact of the three independent variables (X1, X2 and X3) altogether on the expansion of the scientific and practical opportunities for the university entrepreneurs graduates.

### Hypotheses Testing:

**H01:** The independent variables X1 (Problem-Solving Capacity of university managerial staff to handle problem facing university entrepreneurs), X2 (Type of university policy adopted to maintain an effective implementation of entrepreneurship concept) and X3 (Merits of the general environment under which entrepreneurship concept is implementing), have no statistically significant impact on universities general performance

The result portray by table-4 denote that the three independent variables collectively have a positive impact on the university general performance where the determination coefficient is 0.825 ( $R^2 = 0.825$ ), and the correlation coefficient is 0.908 ( $r = 0.908$ ) at 0.01 level of significant.

These results clearly suggest that the null hypothesis should be rejected and the alternative hypothesis should be accepted.

**H02:** The independent variables X1, X2 and X3 have no statistically significant impact on future opportunities for university entrepreneur's graduates. The results illustrate in table-5 indicate that the three independent variables collectively have a positive impact on the future opportunities of the university entrepreneurs graduates, as the determination coefficient value is 0.793 ( $R^2 = 0.793$ ) and the correlation coefficient value is 0.890 ( $r=0.890$ ) at 0.01 level of significant. These results distinctly mean that the null hypothesis should be rejected and the alternative hypothesis should be accepted.

**Table (4)**

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		0.908 <sup>a</sup>	0.825	0.813	.24235	

a. Predictors: (Constant), X1, X2 , X3

  

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.699	3	4.233	72.069	.000 <sup>a</sup>
	Residual	2.702	46	.059		
	Total	15.401	49			

a. Predictors: (Constant), X1, X2 , X3  
b. Dependent Variable: Y1

  

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant)	-.061	.280		-.218	.829
	X1	.783	.210	.748	3.722	.001
	X2	-.603	.119	-.739	-5.076	.000
	X3	.812	.236	.787	3.441	.001

a. Dependent Variable: Y1

**Table (5)**

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.890 <sup>a</sup>	.793	.779	.24117	
a. Predictors: (Constant), X1, X2 , X3						
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.232	3	3.411	58.645	.000 <sup>a</sup>
	Residual	2.675	46	.058		
	Total	12.908	49			
a. Predictors: (Constant), X1, X2 and X3						
b. Dependent Variable: Y2						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.385	.279		1.381	.174
	X1	.628	.209	.656	3.003	.004
	X2	-.490	.118	-.657	-4.148	.000
	X3	.755	.235	.798	3.213	.002
a. Dependent Variable: Y2						

## DISCUSSION

Entrepreneurship is a very common connotation in business world, but it is not in the field of education. In contrast, educational institutions and universities are, in fact, the main producers of entrepreneurs in our societies, as their most beneficial output which our societies are in critical need for, especially under a very rapidly changing and highly competitive environment. Investing in entrepreneurship implementation is feasible and will yield beneficial outcome for individuals, educational institutions, national economy and society. The results illustrates in the previous table (Table 5 and table 6) plainly clarify that the three independent variables (X1, X2 and X3) collectively have a positive impact on the university general performance and the future opportunities of the university entrepreneurs graduates. This derivation, obviously, should encourage universities and other educational institutions to start implementing entrepreneurship concept in their curriculum if they are not implementing the concept yet, and for those who have already implemented the concept should widen their implementation to cover new areas of their curriculum. It would be a rational practice that would create a beneficial outcomes and feasible return.



**REFERENCES**

- Blenker, P., Korsgaard, S., Neergaard, H. and Thrane, C. (2011), "The questions we care about: paradigms and progression in entrepreneurship education", *Industry & Higher Education*, Vol. 25 No. 6, pp. 417-28.
- Bučar, M. and Stare, M. (2002), "Macroeconomic policy vs innovation policy in the transition countries", *EU Enlargement in a Changing World*, CD edition, Institute for Economic Research, Ljubljana.
- Carey, C. and Matlay, M. (2012), "Emergent issues in enterprise education", *Industry & Higher Education*, Vol. 25 No. 6, pp. 441-50.
- Cho, B. (1998): Study of the effective entrepreneurship education method and its process. *Business Education Research*, 2(1):27–47 Chosun Daily Newspaper, November 29, 2000
- David Rae / Lynn Martin / Valerie Antcliff / Paul Hannon (2012): "Enterprise and entrepreneurship in English higher education: 2010 and beyond", *Journal of Small Business and Enterprise Development*, Vol. 19, Issue 3, P. 380 – 401- Permanent link to this document: <http://dx.doi.org/10.1108/14626001211250090>
- Dugassa Tessema Gerba (2012): "The context of entrepreneurship education in Ethiopian universities", *Management Research Review*, Vol. 35, Issue 3/4, P. 225 – 244 Permanent link to this document: <http://dx.doi.org/10.1108/01409171211210136>
- Dyck, R. and Mulej, M. (Eds) (1998), *Self-transformation of the Forgotten Four-Fifth*, Kendall/Hunt, Dubuque, IA.
- Entrepreneurship Observatory, EPF, Maribor.
- European Commission: *Entrepreneurship Education (2013): A Guide for Educators*, Bruxelles, 2013, Foreword
- Finkle, T.A., Kuratko, D.F. and Goldsby, M.G. (2006): "An examination of entrepreneurship centers in the United States: a national survey", *Journal of Small Business Management*, Vol. 44 No. 2, pp. 184-206
- Garavan, T.N. and O’Cinneide, B. (1994a), "Entrepreneurship education and training programmes: a review and evaluation – part 1", *Journal of European Industrial Training*, Vol. 18 No. 8, pp. 3-12.
- Garavan, T.N. and O’Cinneide, B. (1994b), "Entrepreneurship education and training programmes: a review and evaluation – part 2", *Journal of European Industrial Training*, Vol. 18 No. 11, pp. 13-21.
- Gibb, A. (2002), "Creating conducive environments for learning and Entrepreneurship; living with, dealing with, creating and enjoying uncertainty and complexity", *Industry and Higher Education*, Vol. 16 No. 3, pp. 135-48.
- Gorman et al. (1997): Gorman, G., Hanlon, D. and King, W. (1997), "Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review", *International Small Business Journal*, Vol. 15 No. 3, pp. 56-77.
- Hannon (2004): Hannon, P. (2004), "Making the journey from student to entrepreneur: a review of the existing research into graduate entrepreneurship", National Council for Graduate Entrepreneurship, Birmingham.
- Isaac, A G, (1998) Marx on entrepreneur, <http://archives.econ.utah.edu>
- Jones (2011): Jones, C. (2011), *Teaching Entrepreneurship to Undergraduates*, Edward Elgar, Cheltenham.

- Jones and Matlay (2011): Jones, C. and Matlay, H. (2011), "Understanding the heterogeneity of entrepreneurship education: going beyond Gartner", *Education & Training*, Vol. 53 Nos 8/9, pp. 692-703.
- Lee, S.M. & Peterson, S. (2000): Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35: 401–416.
- Lewis (2011): Lewis, H. (2011), "A model of entrepreneurial capability based on a holistic review of the literature from three academic domains", *Industry & Higher Education*, Vol. 25 No. 6, pp. 429-40.
- Luthje, C. and Franke, N. (2003): "The making of an entrepreneur: testing a model of entrepreneurial intention among engineering students at MIT", *R&D Management*, Vol. 33, No. 2, pp. 135-47.
- Matlay and Carey (2007): Matlay, H. and Carey, C. (2007), "Entrepreneurship education in the UK: a longitudinal perspective", *Journal of Small Business & Enterprise Development*, Vol. 14 No. 2, pp. 252-63.
- Mulej, 2007a: Mulej, M. (2007a), *Innovating Habits of Country and Small Enterprises with Inventions from Research Organizations*, Fakulteta za management, Koper
- Mulej, M. (1994), *Innovating Management*, EPF, Maribor (in Slovene).
- Mulej, M. (2006), "Why in Slovenia there is still not enough innovating – economic and cultural development reasons", *Our Economy*, Vol. 52 Nos 3/4, pp. 39-48 (in Slovene).
- Mulej, M. and Kajzer, S. (1998), "Self-transformation and transition from a pre-industrial to contemporary economy and society", in Dyck, R.G. and Mulej, M. (Eds), *Self-transformation of the Forgotten Four-Fifths*, Kendall/Hunt Publishing Company, Dubuque, IA, pp. 325-31.
- Najim et al. 2014 :Impact of the Entrepreneurial Attributes on Business Performance in a Sample of Jordanian Institutions, *International Journal of Professional Management* Volume 9, Issue 1, 2014 ISSN 20422341
- Nedelko, Z. (2011), *How to Improve Innovativeness as a Value of Management in Transition*, EPF, Maribor (in Slovene).
- Newman, K.L. and Nollen, S. (1998), *Managing Radical Organizational Change: Company Transformation in Emerging Market Economies*, Sage, London.
- Pittaway, L. and Cope, J. (2007), "Entrepreneurship education – a systematic review of the evidence", *International Small Business Journal*, Vol. 25 No. 5, pp. 477-506.
- Pittaway, L. and Hannon, P. (2008), "Institutional strategies for developing enterprise education: a review of some concepts and models", *Journal of Small Business and Enterprise Development*, Vol. 15 No. 1, p. 202.
- Potocan, V. and Mulej, M. (2007), *Transition into Innovative Enterprise*, EPF, Maribor.
- Rae, D. (2010), "Universities and enterprise education: responding to the challenges of the new era", *Journal of Small Business and Enterprise Development*, Vol. 17 No. 4, pp. 591-606.
- Rebernik, M., et al. (Eds) (2001-2010), *Global Entrepreneurship Monitor: Slovenian*
- Rifai, Firas (2010): *Unternehmertum, Humankapital und Innovation in der wirtschaftlichen Entwicklung of Jordans*, Marburg (Lahn) 2010. Dissertation on the Philipps University of Marburg / Germany 2010.
- Rifai, Firas (2015): *Striving to become an entrepreneurial University to bridge the gap between knowing and doing – a study in Al-Zaytoonah University of Jordan*, *European-American Journals*, vol 3, Issue 7, December 2015, P. 47-56.
- Sang et al. (2005): *Impact of Entrepreneurship Education: A Comparative Study of the U.S. and Korea*, in *International Entrepreneurship and Management Journal* 1, 27–43, 2005

Schumpeter, J.A. (1934): *The theory of economic development*, Cambridge, MA: Harvard University Press

Stanovnik, P. and Kovac̃ic̃, A. (2000): "Measuring competitiveness of national economies with emphasis on Slovenia", Working Paper No. 6, Institute for Economic Research, Ljubljana.

Wickham, P A. (2001) *Strategic Entrepreneurship*, Prentice Hall, Harlow

Zlatko Nedelko Vojko Potocan (2013): "The role of management innovativeness in modern organizations", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 7 Iss 1 pp. 36 – 49. Permanent link to this document: <http://dx.doi.org/10.1108/17506201311315590>