ATTITUDINAL AND MOTIVATIONAL DETERMINANTS OF ENTREPRENEURIAL INTENTIONS AMONG UNIVERSITY STUDENTS IN YEMEN

BY

IBRAHIM HIZAM ALI AL-JUBARI

A dissertation submitted in fulfilment of the requirement for the degree of Doctor of Philosophy in Business Administration

Kulliyyah of Economics and Management Sciences International Islamic University Malaysia

FEBRUARY 2015

ABSTRACT

Unemployment, especially among young people, represents a huge challenge not only at the nations, but at the international level as well. Entrepreneurship is regarded as a panacea that can reduce, if not eradicate, the burden of unemployment on individuals and nations as a whole. It has been established that becoming an entrepreneur is an intentional decision that requires intensive cognitive processing and planning. Therefore, it is critically important to understand what motivates people, especially the young, to develop positive attitudes that foster intentions to be entrepreneurs. The main objective of the present study is to integrate Self-Determination Theory (SDT) and Theory of Planned Behaviour (TPB) to better understand motivation, attitudes and entrepreneurial intention of youth. Specifically, it aims at testing the motivational sequence in which Basic Psychological Needs constructs from SDT influence entrepreneurial intention directly and indirectly through the attitudinal constructs from TPB. Further, the study aims at examining the moderation role that gender may play in the relationship between attitudinal factors and entrepreneurial intention. Data were obtained from 622 final year university students representing several study disciplines at two universities in Yemen. Standardized instruments were employed to measure SDT constructs, namely autonomy, competence and relatedness, and TPB constructs, namely attitudes, subjective norms, perceived behavioural control and entrepreneurial intention. Structural equation modeling was used to test the hypothesized model and structural relationships. The findings suggest that firstly: autonomy and competence need fulfilment influenced entrepreneurial intention in unmediated structural model. Secondly, the relationship between entrepreneurial intention and SDT constructs was fully mediated by the attitudinal constructs of TPB. Finally, gender did not play a moderation role between the attitudinal factors and entrepreneurial intention. The contribution of the present study lies in the integration of SDT and TPB, which offers a deeper understanding of the motivational process of students to start their own businesses. SDT and TPB are complementary as SDT constructs explain the origins of TPB. The attitudinal determinants operate as proximal antecedents of intention and motivational determinants operate as distal predictors of entrepreneurial intention through the attitudinal determinants. This provides evidence for the proposed motivational sequence. It is recommended that future research should build upon the current model and consider investigating the link between entrepreneurial intention and behaviour.

ملخص البحث

تُمثل البطالة ، خاصة بين الشباب ، تحديا كبيرا ليس فقط على المستوى المحلى ولكن ايضا على المستوى العالمي. وتعتبر ريادة الأعمال احد اهم المعالجات التي تؤدي الى القضاء على البطالة او حتى التخفيف من وطأتما على الافراد والمجتمعات ككل. ولكي يصبح الفرد رائد أعمال ، فمن المعروف ان قراره يكون مُتعمد ويتضمن معالجة معرفية مكثفة وتخطيط مُسبق. ولذلك، فانه من الاهمية بمكان فهم ما الذي يحفز الافراد وخاصة الشباب منهم على تطوير مواقف ايجابية من شانها تعزيز الميول (النية) الريادية لديهم لكي يصبحوا رواد أعمال. ولذا فقد كان الهدف الرئيسي من هذه الدراسة هو دمج نظرية التقرير الذاتي (Self-Determination Theory (SDT) ونظرية السلوك المخطط (Theory of Planned Behaviour (TPB) من أجل فهم افضل للدافعية والمواقف والميول (النية) الريادية لدى الشباب. فقد هدفت هذه الدراسة تحديدا الى اختبار أثر متغيرات الحاجات النفسية الاساسية من نظرية SDT على متغير الميول (النية) الريادية Entrepreneurial Intention سواء بصورة مباشرة وغير مباشرة عبر المتغيرات الموقفية. كما هدفت الدراسة ايضا الى اختبار دور متغير الجنس في العلاقة بين عامل الميول (النية) الريادية ومحدداتما. وقد اشتملت عينة الدراسة على 622 طالبا وطالبة في المستوى الاخير من الدراسة الجامعية يمثلون عدة تخصصات من جامعتين يمنيتين. وقد تم استخدام ادوات موحدة لقياس متغيرات SDT وهي الاستقلالية والكفاءة والانتماء ومتغيرات TPB وهي الموقف تجاة ريادة الاعمال و المعايير الاجتماعية و التصورات حول القدرات الشخصية للقيام بالسلوك الريادي وكذلك متغير النية للبدء بمشروع ريادي. حيث تم استخدام معادلة النمذجة الهيكلية (Structural Equation Modeling) لكي يتم اختبار النموذج المقترح والعلاقات الهيكلية. وقد توصلت نتائج الدراسة الى ان متغيرا الاستقلالي (Autonomy) والكفاءة(Competence) يؤثران في متغير النية الريادية بصورة غير مباشرة. كما توصلت الدراسة ايضا الى ان المتغيرات الموقفية من نظرية TPB لعبت دور الوسيط الكامل في العلاقة بين متغيرات نظرية التقرير الذاتي و متغير النية الريادية. ايضا خلصت الدراسة الى عدم وجود فروق ذات دلالة احصائية بين الطلاب والطالبات في ميولهم ومواقفهم تجاه ريادة الاعمال. يجدر الاشارة الى ان اسهام الدراسة الحالية يكمن في دمج نظريتي التقرير الذاتي ونظرية السلوك المخطط ، حيث قدمتا فهم اعمق للعملية التحفيزية للبدء بمشاريع ريادية لدى طلاب الجامعة. فقد تبين ان هاتان النظريتان مكملتان لبعضهما حيث يشرح متغيرات SDT متغيرات TPB. بمعنى ان المحددات السلوكية تعتبر متغيرات قريبة للنية الريادية بينما المحددات التحفيزية تعتبر محددات بعيدة للنية. وفي هذا تاكيد على تسلسل الدوافع الريادية الذي تم اقتراحه في هذه الدراسة. ومن توصيات هذه الدراسة ان تقوم الدراسات المستقبلية باستخدام هذا النموذج والبناء عليه لدراسة العلاقة بين النية الريادية والسلوك الريادي.

APPROVAL PAGE

Arif Hassan Supervisor	_
Junaidah Hashim Supervisor	_
	_
Suhaimi Mhd Sarif Supervisor	
Moha Asri Abdullah Internal Examiner	_
Rosli Mahmood External Examiner	_
Mohd Hassan Mohd Osman External Examiner	_

Chairman

DECLARATION

I hereby declare that this dissertation is the result of my own investigation, except

where otherwise stated. I also declare that it h	as not been previously or concurrently
submitted as a whole for any other degree at IIU	JM or other institutions.
Ibrahim Hizam Ali Al-Jubari	
Signature	Date

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

Copyright © 2015 by Ibrahim Hizam Ali Al-Jubari. All rights reserved.

ATTITUDINAL AND MOTIVATIONAL DETERMINANTS OF ENTREPRENEURIAL INTENTIONS AMONG UNIVERSITY STUDENTS IN YEMEN

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below.

- 1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.
- 2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
- 3. The IIUM library will have the right to make, store in a retrieval system and supply copies of this unpublished research if requested by other universities and research libraries.

Affirmed by Ibrahim Hizam Ali Al-Jubari	
Signature	Date

To My Beloved Parents
To My Brother & Best Friend, Abdullah
To All Aspiring Yemeni Youth

ACKNOWLEDGEMENTS

In the name of Allah, the Most Compassionate and the Most Merciful. All praise, thanks and gratitude are due to Allah, the Lord of the Universe, for His countless and endless blessings that He bestowed upon me. Peace and blessings be upon His beloved Prophet and Messenger Mohammed (Peace Be upon Him).

Throughout the course of my PhD journey, I was so fortunate to have the assistance, cooperation and support from many caring people around me that make the completion of this work possible. First of all, I would like to express my sincere gratitude and appreciation to my supervisor Prof. Dr. Arif Hassan for his endless support, continuous motivation, constant mentorship and high inspiration. He has been, as he always is, a great, mentor, communicator and supporter to me. His valuable knowledge, ideas and suggestions have profoundly contributed to the enrichment and eventually the successful completion of this dissertation. To my cosupervisors, Prof. Junaidah Hashim and Dr. Suhaimi Sarif, I am so thankful and grateful to them for their incisive comments and suggestions and for their constant encouragement.

Special thanks are extended to the participants of the study who are students from Sana'a University and University Science and Technology in Yemen. Without their cooperation, this work could not have been completed. The same goes to the management and academic staff of both universities who were of great assistance in facilitating the data collection process. My profound appreciation goes to my best friends; Arhab, Frahan, Himyari, Oqab, Shami, Shabir, Nabil and Abdo Yousif for their support.

Above all, no words would be able to convey my true feelings and heartiest gratitude, appreciation and thanks to my parents for their love, patience, sacrifice, support and for everything else. To my wife, your unconditional love, unfailing support and understanding made it possible for me to keep going especially at tough times. Special thanks to my fantastic children: Arif, Ayah and Ahmed. In addition, I would like to convey my deepest gratitude and appreciation to my brothers and sisters; Abdulrahman, Yousif, Mohammed, Al-Ezzi, Abdullah, Ismail and Ammar for their constant support and encouragement. Mohammed was a key person in the data collection process. Special thanks and appreciation to him for his efforts.

Last but not least, thank you all who have directly or indirectly contributed to the successful accomplishment of this thesis.

May Allah, The Almighty, accept this humble work. I sincerely hope it will render some benefit to someone, somewhere, somehow.

TABLE OF CONTENTS

Abstract		ii
Abstract in	Arabic	iii
Approval F	Page	iv
Declaration	1	V
Copyright	Page	vi
Dedication	Page	vii
Acknowled	lgements	viii
List of Tab	les	xii
List of Figu	ures	xiv
List of Abb	previations	XV
CHAPTE	R ONE INTRODUCTION	1
1.0	Introduction	1
1.1	Background of the Study	2
	1.1.1 The Context of Yemen	7
	1.1.2 Cultural Considerations	12
1.2	Statement of the Problem	15
1.3	Research Objectives	17
1.4	Research Questions	18
1.5	Significance of the Study	19
1.6	Organization of the Thesis	20
CHAPTE	R TWO LITERATURE REVIEW	22
2.0	Introduction	22
2.1	Overview of Entrepreneurship	22
	2.1.1 The Entrepreneurship as a Function of the Market Approach	
	2.1.2 The Entrepreneur as an Individual Approach	25
	2.1.3 The Entrepreneurship as a Process Approach	28
2.2	Who is an Entrepreneur?	32
2.3	Entrepreneurship Education	34
2.4	Entrepreneurial Intention	38
	2.4.1 Theory of Planned Behaviour	41
	2.4.1.1 Attitude toward Behaviour	43
	2.4.1.2 Subjective Norm (SN)	44
	2.4.1.3 Perceived Behavioural Control (PBC)	44
	2.4.1.4 Intention	45
	2.4.2 Entrepreneurial Event Model	46
	2.4.2.1 Perceived Desirability	48
	2.4.2.1 Perceived Desirability	48
	2.4.2.1 Perceived Desirability	48
	2.4.2.1 Perceived Desirability	48 48
	2.4.2.1 Perceived Desirability2.4.2.2 Perceived Feasibility2.4.2.3 Propensity to Act	48 48
	2.4.2.1 Perceived Desirability	48 48 49

	2.4.3.3 Entrepreneurship Education and Entrepreneurial	
	Intention	53
	2.4.3.4 Culture and Entrepreneurial Intention	57
	2.4.3.5 Self-Efficacy and Entrepreneurial Intention	63
2.5	Self-Determination Theory: An Overview	
	2.5.1 Cognitive Evaluation Theory (CET)	70
	2.5.2 Organismic Integration Theory (OIT)	
	2.5.3 Basic Psychological Needs Theory (BPNT)	
	2.5.3.1 Autonomy	
	2.5.3.2 Competence	
	2.5.3.3 Relatedness	
2.6	Integration of Self-Determination Theory and Theory of Planned	
	haviour	85
	The Study Framework and Hypotheses Development	
2.	2.7.1 Hypothesis Development	
	2.7.1.1 Autonomy	
	2.7.1.2 Competence	
	2.7.1.3 Relatedness	
	2.7.1.4 Attitudes toward Entrepreneurship	
	2.7.1.5 Subjective Norms	
	2.7.1.6 Perceived Behavioural Control	
	2.7.1.7 Gender	
	2.7.2 The Entrepreneurial Motivation and Intention Framework	
2.5	Chapter Summary	
۷.0	Chapter Summary	70
СНАРТІ	CR THREE METHODOLOGY	97
3.0	Introduction	97
3.0 3.1	Introduction	97 97
3.0 3.1	Introduction	97 97 97
3.0 3.1	Introduction	97 97 97
3.0 3.1	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination.	97 97 97 99 101
3.0 3.1	Introduction	97 97 97 99 101
3.0 3.1 3.2	Introduction	97 97 99 101 103
3.0 3.1 3.2	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures	97 97 99 101 103
3.0 3.1 3.2	Introduction Research Design	97 97 99 101 103 105
3.0 3.1 3.2	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs	979799101103105
3.0 3.1 3.2 3.3	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection	97 97 99 101 103 105 106
3.0 3.1 3.2 3.4 3.5	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection. Data Analysis	979799101105106111
3.0 3.1 3.2 3.4 3.5	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection	979799101105106111
3.0 3.1 3.2 3.4 3.5 3.6	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection. Data Analysis Summary of the Chapter	97 97 99 101 103 105 106 111
3.0 3.1 3.2 3.4 3.6 CHAPTI	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection. Data Analysis Summary of the Chapter	979799101103105106111112
3.0 3.1 3.2 3.4 3.5 3.6 CHAPTI 4.0	Introduction Research Design	979799101105105111112113
3.0 3.1 3.2 3.4 3.5 3.6 CHAPTI 4.0	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection Data Analysis Summary of the Chapter CR FOUR DATA ANALYSIS Data Preparation and Screening	979799101103105106111112113
3.0 3.1 3.2 3.4 3.5 3.6 CHAPTI 4.0	Introduction Research Design	979799101103105106112112113
3.0 3.1 3.2 3.4 3.5 3.6 CHAPTI 4.0	Introduction Research Design Population Description 3.2.1 Population and Justification for Sample Selection 3.2.2 The Sampling Design and Sample Size Determination 3.2.2.1 Sampling Design 3.2.2.2 Sample Size Determination The Study Measures 3.3.1 The Dependant Construct 3.3.2 The Independent Constructs Data Collection Data Analysis Summary of the Chapter CR FOUR DATA ANALYSIS Overview of the Chapter Data Preparation and Screening 4.1.1 Missing Data 4.1.2 Outliers	979799101103105106111112113113
3.0 3.1 3.2 3.4 3.5 3.6 CHAPTI 4.0	Introduction Research Design	979799101103105106111112113113114
3.0 3.1 3.2 3.4 3.6 CHAPTI 4.0 4.1	Introduction Research Design	979799101103105106112113113113
3.3 3.3 3.3 3.4 3.5 3.6 CHAPTI 4.0 4.1	Introduction Research Design	9797991011051051121131131131141151120121

•	4.3.1 The Measurement Model	126
	4.3.1.1 The Hypothesized Measurement Model	130
	4.3.1.2 The Final Measurement Model	139
	4.3.2 The Structural Model	142
	4.3.3 Hypothesis Testing: Direct Effects	
	4.3.4 Hypothesis Testing: Mediational Analysis (Indirect Effects)	150
	4.3.5 Moderation Analysis	
	Chapter Summary	
CHAPTER	FIVE DISCUSSION AND CONCLUSION	169
	Overview of the Chapter	
	Overview of the Research	
	The Main Objective	
	5.2.1 Study Objective One	171
	5.2.2 Study Objective Two	172
	5.2.2.1 The Relationship between Autonomy Need and	
	Attitude towards Entrepreneurship and Perceived Behavioural	
	Control	172
	5.2.2.2 The Relationship between Competence Need and	
	Attitude towards Entrepreneurship and Perceived Behavioural	
	Control	175
	5.2.2.3 The Relationship between Relatedness Need and	
	Attitude towards Entrepreneurship and Subjective Norms	177
	5.2.2.4 The Relationship between Attitude towards	
	Entrepreneurship and Entrepreneurial Intention	179
	5.2.2.5 The Relationship between Subjective Norms and	
	Entrepreneurial Intention	180
	5.2.2.6 The Relationship between Perceived Behavioural	
	Control and Entrepreneurial Intention	
	5.2.3 Study Objective Three	183
	5.2.3.1 The Mediating Effects of Attitude toward	100
	Entrepreneurship	
	5.2.3.2 The Mediating Effect of Subjective Norms toward	
	Entrepreneurship	184
	5.2.3.3 The Mediating Effects of Perceived Behavioural	104
	Control	
	5.2.4 Study Objective Four	
	Implications of the Study	
	5.3.1 Implications for Theory	
	5.3.2 Implications for Practice Limitations and Recommendations for Future Research	
3.3	Conclusion	193
BIBLIOGE	АРНУ	194
A DDENIDIV	A. DECEADOU INICTDI IMENITO, ENICI ICHI O- ADADIO	
AFFENDIA	A: RESEARCH INSTRUMENTS: ENGLISH & ARABIC VERSIONS	210
V DDEMIJI A	B: ASSESSMENT OF NORMALITY	
	C: MPLUS TABLES AND DIAGRAMS	221 229
/XI		7

LIST OF TABLES

<u>Table</u>	<u>No.</u>	Page No.
2.1	Definitions of Entrepreneurship	31
2.2	Entrepreneurship Education World-views	35
3.1	The Information of Samples from Universities	104
3.2	Summary of Study Measures	109
4.1	The Univariate and Multivariate Normality of Observed Variables	119
4.2	Sample Distribution by University, Faculty and Gender	122
4.3	Summary of Fit Indices used in the Study	127
4.4	Model Fit of Hypothesized Measurement Model	131
4.5	Summary of Reliability and Validity Test Methods of Construct	134
4.6	Reliability, Convergent and Discriminant Validity of the Study Constructs	135
4.7	Standardized Factor Loading, R-Square, Constructs Reliability Convergent and Discriminant Validity	, 136
4.8	Means, Standard Deviations, Cronbach Alphas and Correlation among Study Variables	n 138
4.9	Model Fit of Final Measurement Model	140
4.10	Summary of the Hypothesized and Revised Measurement Models Fit Indices	s 142
4.11	The Model Fit of the Final Structural Model	143
4.12	Standardized Estimates, Covariance, and Squared Multiple Correlations (R^2)	e 145
4.13	Standardized Parameter Estimates for Final Structural Model	149
4.14	Summary of Direct Paths Findings	150
4.15	Summary of Model Fit of the Full Mediation Structural Model	158

4.16	Standardized Total, Total Indirect, Specific Indirect, Direct Effects of Autonomy to Intention via ATE and PBC	159
4.17	Standardized Total, Total Indirect, Specific Indirect, Direct Effects of Competence to Intention via ATE and PBC	160
4.18	Standardized Total, Total Indirect, Specific Indirect, Direct Effects of Relatedness to intention via SN	161
4.19	Summary of Mediation Findings	162
4.20	Standardized Parameter Estimates for Males and Females	167

LIST OF FIGURES

<u>Figure</u>	e No.	Page No.
2.1	Theory of Planned Behavior	46
2.2	Entrepreneurial Event Formation	47
2.4	The Foundation of Sustainable (Autonomous) Motivation	83
2.5	The Proposed Motivational Sequence	86
2.6	The Entrepreneurial Motivation and Intention Framework	96
4.1	The Hypothesized Entrepreneurial Motivation and Intention Measurement Model	on 132
4.2	The Final Measurement Model of Entrepreneurial Motivation an Intention	id 140
4.3	The Final Entrepreneurial Intention and Motivation Structura Model	al 146
4.4	Structural Model-Direct Effects from Autonomy, Competence an Relatedness on Entrepreneurial Intention	id 154
4.5	The Full Mediation Structural Model	156
4.6	Entrepreneurial Motivation and Intention Structural Model-Mal Group	le 164
4.7	Entrepreneurial Motivation and Intention Structural Mode Female Group	l- 165

LIST OF ABBREVIATIONS

ATE Attitude toward Entrepreneurship
BPNT Basic Psychological Needs Theory
CFA Confirmatory Factor Analysis

CFI Comparative Fit Index EI Entrepreneurial Intention

INT Intention

MLR Robust Maximum-Likelihood

PA Perceived Autonomy

PBC Perceived Behavioural Control

PC Perceived Competence PR Perceived Relatedness

RMSEA Root Mean Square Error of Approximation

SDT Self-Determination Theory SEM Structural Equation Modeling

SNs Subjective Norms

SRMR Standardized Root Mean Square Residual

TLI Tucker-Lewis Index

TPB Theory of Planned Behaviour

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

Entrepreneurship is regarded as one of the major factors that positively influences the development of nations' economies and well-being of societies (Praag & Versloot, 2007; Schumpeter, 1934). It is widely accepted that the development of economies, prosperity of countries and growth of wealth of societies are mostly attributed to entrepreneurship via innovation, job creation and increasing competitiveness (Carree & Thurik, 2010; Praag & Versloot, 2007; Shane & Venkataraman, 2000; Wennekers & Thurik, 1999). Not only does entrepreneurship enhances the well-being of societies at large, but it also starts by enhancing the well-being of the people who are involved in venturing and capturing new opportunities (Kayed & Hassan, 2010). In venturing into a new business or project, an entrepreneur not only employs himself, but may create jobs for others as well (Bosma & Levie, 2010; Zwan, Verheul & Thurik, 2011). Within such ventures, any service or product is created to benefit the people and satisfy their needs.

Considered as the engine and the driving force of any given economy; developed, developing or less developed alike, entrepreneurship is believed to be a panacea to some of the problems and challenges countries encounter today such as unemployment (Thurik, 2003; World Bank, 2013b). By creating more jobs, bringing innovation to the market, encouraging competitiveness and enhancing economic efficiencies, the role of entrepreneurship is increasingly becoming more vital to the economy and thus cannot be neglected (Iakovleva, Kolvereid & Stephan, 2011; Nabi & Liñán, 2011; Shane & Venkataraman, 2000).

The importance of entrepreneurship is becoming more recognized globally where it is observed that there are many initiatives by policy-makers, economists, academicians and researchers in promoting entrepreneurship. Also, it is noticeably becoming a subject of interest in many universities and educational institutions (Katz, 2003; Kuratko, 2005; Martin, McNally & Kay, 2013). Every year, many conferences, seminars and workshops take place across the globe as a clear indication of its importance and value to communities (Keat, Selvarajah & Meyer, 2011; Kobia & Sikalieh, 2010).

Given its significance and the fruitful outcomes that entrepreneurship is expected to offer, it is crucial to understand why some people start their own businesses and others do not (Wu, Su & Lee, 2008). Understanding the "why" is the focus of intention based research as it looks at peoples' cognition, perception, motivation and intention (Turker & Selcuk, 2009; Wu et al., 2008; Wu & Li, 2011). Krueger and Day (2010) argue that it is imperative to understand entrepreneurial cognition in order to understand the essence of entrepreneurship. Therefore, identifying who to engage in it and what drives them to be inclined toward it is very important. According to Douglas (2013), it is important to identify individuals with entrepreneurial intention so that public funding and private investment can be efficiently channelled to them.

1.1 BACKGROUND OF THE STUDY

Early entrepreneurship research attempted to differentiate those who start new venture from those who choose other career paths on the basis of their psychological characteristics or personality traits (Gatewood, Shaver, Powers & Gartner, 2002; Scherer, Adams, Carley & Wiebe, 1989). Entrepreneurs are believed to have certain

unique qualities and traits that differentiate them from others (Mueller & Thomas, 2001). For example, a number of factors have been identified and examined as associated traits with entrepreneurial behaviour including need for achievement (Mcclelland, 1965), locus of control (Brockhaus & Horwitz, 1986), risk-taking propensities (Brockhaus, 1980) and tolerance of ambiguity (Scherer et al., 1989). However, most of these factors are found to be common among successful individuals like managers and are not unique traits of entrepreneurs. Therefore, this stream of research has been abandoned due to its inability to reliably differentiate entrepreneurs from others (Boyd & Vozikis, 1994; Brockhaus & Horwitz, 1986; Gartner, 1988) and thus the focus has shifted to intention based research (Carsrud & Brannback, 2011).

Entrepreneurial intention plays a role in subsequent entrepreneurial behaviour and thus understanding the formation of the intention is very essential (Bird & Jelinek, 1988; Boyd & Vozikis, 1994; Krueger & Day, 2010; Krueger, Reilly & Carsrud, 2000). According to Krueger (2009), "The construct of intentions appears to be deeply fundamental to human decision making" (p. 53). Entrepreneurship is, therefore, an intentional process and a planned behaviour (Bird & Jelinek, 1988; Krueger & Carsrud, 1993; Krueger et al., 2000). That is, starting a new business requires and involves planning and planning is one of the first steps in this process (Iakovleva et al., 2011). As such, Lanero, Vázquez, Gutiérrez and García (2011) argue that starting a business is not an automatic action to any stimulus, rather it involves cognitive processing. Many researches have confirmed that intention is the best predictor of voluntary behaviours, including entrepreneurial behaviour (Ajzen, 1991; Armitage & Conner, 2001; Carsrud & Brannback, 2011; Krueger & Brazeal, 1994; Krueger et al., 2000). As Krueger (2009) states, "The construct of intentions appears to be deeply fundamental to human decision making and, as such, it should afford us multiple

fruitful opportunities to explore the connection between intent and a vast array of other theories and models that relate to decision making" (p. 53).

According to the theory of planned behaviour (TPB), behaviour is best predicted by intention and in turn intention is predicted by three attitudinal factors which are attitude or perceived desirability (personal positive/negative assessment of entrepreneurship), subjective norms (approval or disapproval of action by significant others) and perceived behavioural control or perceived feasibility (perception of one's abilities to perform entrepreneurially) (Liñán & Chen, 2009). The stronger these factors are, the greater the effect they have on intention (Ajzen, 1991). TPB has found empirical support in entrepreneurship research (Almobaireek & Manolova, 2012; Autio, Keeley, Klofsten, Parker & Hay, 2001; Douglas & Shepherd, 2002; Douglas, 2013; Iakovleva et al., 2011; Kautonen, van Gelderen & Tornikoski, 2013; Krueger & Carsrud, 1993; Krueger et al., 2000; Liñán & Chen, 2009; Tkachev & Kolvereid, 1999). However, TPB does not distinguish between the beliefs and the evaluation of the behavioural outcomes (Hagger & Chatzisarantis, 2009). That is, do people engage in entrepreneurial behaviour because they choose to or because they are compelled to? Therefore, self-determination theory of motivation could offer explanation to the origins of TPB constructs (Andersen, Chen & Carter, 2000).

Self-determination theory (SDT) views motivation as the core of biological, cognitive and social regulation and it involves the energy, direction and persistence of activation and intention (Deci & Ryan, 2000). SDT distinguishes between two types of motivation: intrinsic or extrinsic motivation. Extrinsic motivation is to expect separable outcomes such as receiving money, pride and prestige or even avoid unemployment. Intrinsic motivation is to start a business because of the personal interest and the enjoyment that can be derived from that entrepreneurial behaviour.

Extrinsic motivation, however, can be internalized and integrated into one's value system so that it becomes identical to intrinsic motivation and called autonomous motivation.

SDT highlights the importance of personal inner-evolved resources for personality development and behavioural self-regulation (Ryan & Deci, 2000a). Three inherent psychological needs are empirically identified, namely need for autonomy, need for competence and need for relatedness (Ryan & Deci, 2000a). It is argued that these needs are necessary for self-motivation and personality integration. If these needs are not supported or fully met by the social contexts, people's intrinsic motivation will be undermined and diminished (Chirkov, Ryan, Kim & Kaplan, 2003; Deci & Ryan, 2000; Ryan & Deci, 2000b). Conversely, if these needs are satisfied, people will likely be more inclined to persistently complete the task with intrinsic motivation (Ryan & Deci, 2000b). That is, intrinsically motivated individuals will likely engage in activities with more quality ideas and persistent behaviours. On the other hand, people whose social contexts do not support their psychological needs will likely be controlled in their motivation and have less quality entrepreneurial ideas and behaviours (Deci & Ryan, 2000; Weinstein & Ryan, 2011; Wilson, Mack & Grattan, 2008). In addition, it has been argued that autonomy motivation is linked to creativity (Sheldon, 1995) and creativity is an essential character of entrepreneurs (Moneta, 2012). Creative people are likely to strive for self-determined reasons and endorse their autonomous entrepreneurial behaviours (Sheldon, 1995).

In a similar view, Carsrud, Brännback, Elfving and Brandt (2009) argue that motivation to start a business can be in different forms but it can come from two places: from within (inside the person) or from external sources to the individual. In line with this argument, Benzing, Chu and Kara (2009) also state that previous studies

suggest that entrepreneurs' motivation falls into the following: (1) extrinsic rewards, (2) independence/autonomy, (3) intrinsic rewards and (4) family security. Extrinsic motivation is related to getting external outcomes such as economic gains whereas intrinsic motivation refers to self-fulfilment and growth.

Motivational factors may differ across cultures and countries and even differ from one person to another. For instance, challenge and achievement were more significant motivators than necessity and security for small business owners in the Vietnamese context (Swierczek & Thai, 2003). In the USA, people are motivated by independence, generating wealth (Hessels, Gelderen & Thurik, 2008a) and selfrealization, financial success, recognition (Manolova, Brush, Edelman & Shaver, 2012). In Romania, extrinsic motivation of income and job security needs were significantly stronger motivators than self-satisfaction and personal needs (Benzing, Chu & Szabo, 2005). According to Benzing et al. (2005), entrepreneurs from Andhra Pradesh, India motivated mostly first the desire were by for interdependence/autonomy, and second, by their desire to increase their income. In China, entrepreneurs were motivated by personal and family security and the need for independence (Pistrui, Huang, Oksoy, Jing & Welsch, 2001), increasing income and being their own bosses (Chu, Kara, Zhu & Gok, 2011). Turkish entrepreneurs were motivated by the desire for work freedom and flexibility, security for themselves and their family, creation of employment opportunities, high income, and personal satisfaction. Turkish female entrepreneurs, however, were motivated by feeling important, meeting the family needs, initiating social contacts and experiencing selfactualization (Benzing et al., 2009). Also, independence and implementation of one's ideas were ranked the most important motivators to start a business in the United States (Shinnar, Pruett & Toney, 2009). In the Middle East context, studies show that women entrepreneurs in the Kingdom of Saudi Arabia were motivated by flexible working time, desire for independence, contributing to society, great market opportunity and providing jobs (Ahmad, 2011). Similarly, Emirati business women were motivated most by self-fulfilment (Naser, Mohammed & Nuseibeh, 2009).

Further, autonomy or independence is an essential motivational factor for starting a business as seen in the above section. It has emerged as a central theme in these studies, among other studies as well. According to Gelderen and Jansen (2006), research on autonomy as a start-up motive is very scarce. Therefore, further investigation is needed.

Based on this background, this study expects that individuals whose psychological needs are satisfied will more likely have positive attitude about entrepreneurship and better perception about their abilities to choose entrepreneurship as a career path. That is, attitudes and entrepreneurial intention will be fostered. Therefore, the current study suggests a motivational sequence that basic psychological needs act as distal constructs on entrepreneurial intention. Stated differently, autonomy, competence and relatedness influence entrepreneurial intention through the attitudinal factors.

1.1.1 The Context of Yemen

Yemen used to be called the *Arabia Felix*, which is translated as fertile, productive, or the fortunate Arabia (Daum, 1987). It is located in the south and southern part of the Arabian Peninsula and covers an area of 555,000 km² with a total population of around 25 million people. It is surrounded from the west and south by the Red and Arabian Seas. To the east and north it is bordered by the Sultanate of Oman and the Kingdom of Saudi Arabia, respectively.

Yemen is one of the least developed countries in the region with a per-capita GDP of US\$1,343 in 2011. Though it is among the oil exporting countries, the percapita GDP is the lowest among its neighbours (e.g. Saudi Arabia (US\$21,196), Bahrain (US\$22,918), Oman (US\$23,572), Kuwait (US\$43,723), the United Arab Emirates (US\$63,626) and Qatar (US\$98,144) (International Monetary Fund, 2012). The GDP has contracted to a negative 10% in 2011 but improved in 2012 to narrowly reduce this number to about 7% (Economist Intelligence Unit, 2012; World Bank, United Nations, European Union & Islamic Development Bank, 2012). The country was also ranked almost the lowest among the 142 nations included in the Global Competitiveness Index (World Economic Forum, 2011). Yemen was ranked 138th while Qatar, Saudi Arabia, the UAE, Oman, Kuwait, Bahrain were ranked 14th, 17th, 27th, 32 th, 34th and 37th respectively. The Global Competitiveness Index indictors are grouped into 12 categories that include institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. Further, according to UNDP, Yemen was ranked 154th (out of 176 countries in the Human Development Index in the year 2011.

Yemen suffers from several political, economic and social issues (Mitchell, 2012) that require immediate attention. The political unrest has resulted in security instability and pressing economic problems in the country. For instance, the country's economy has lost over half a billion USD because of the sabotage on the oil and natural gas pipeline supplies in 2012. People were laid off, many businesses had to shut down and those who resisted were unable to operate properly due to the shortage

of oil, gas and electricity. This situation has really worsened and widened the unemployment gap, especially among youth (World Bank et al., 2012).

Unemployment is a real and huge challenge the whole world has long been encountering, not only Yemen. For example, in the Middle East and North Africa region (MENA) alone, the population has increased by five times since 1950, and is expected to double from today's 350 million in the next 50 years (Eid, 2011). Eid (2011) reports that the average unemployment rate is over 40% among youth of the non-oil-producing economies (MENA). In addition, she also argues that the population will increase by an estimation of 1.9%, and thus the "MENA region must create 47 million new jobs for new entrants to the labour market. An estimated 6.5 million additional jobs would be needed to reduce the regional unemployment rate by half" (p. 1). In Yemen, the unemployment has reached a striking number that immediate remedies to such critical issue are needed. The unemployment rate is estimated to be more than 50% among youth. However, the government is trying to combat the unemployment problem by planning to create about 80,000 jobs in the "already bloated public-sector workforce of 1.2m people" (Economist Intelligence Unit, 2012, p. 17). This may not solve the problem, especially when the country has one of the highest population growth rates globally, at 3% (Al-Batuly, Al-Hawri, Cicowiez, Lofgren & Pournik, 2012).

However, even though Yemen is facing many pressing obstacles, in the heart of them may appear the solutions. Yemen has one of the highest number of young population that may drive the change, where about 50% of the population is under the age of 18 (UNICEF). This represents a tremendous opportunity for the labour force and the market as well (World Economic Forum, 2011). Young people look up to the future with a great hope that the *Arabia Felix* will re-earn her name and retrieve its