Intention to Action:

Bridging the Gap in Youth Entrepreneurship

Authors
Muhammad Azam Roomi, PhD
Konrad Grabiszewski, PhD
Othman AlMoamar

MISK GLOBAL FORUM
منتدى مسك العالمي

MBSC
كلية الأمير محمد بن سلمان للإدارة وريادة الأعمال
Prince Mohammad Bin Salman College
Business & Entrepreneurship

MISK GLOBAL FORUM
منتدى مسك العالمي

MBSC
كلية الأمير محمد بن سلمان للإدارة وريادة الأعمال
Prince Mohammad Bin Salman College
Business & Entrepreneurship

CONTENTS

EXECUTIVE SUMMARY

Preamble

As the world prepares for the "knowledge economy", dominated by innovation and technological advance, it is vital, particularly in developing economies, that the younger generations are prepared, equipped, and willing to participate in it. Stakeholders involved in areas of youth development need to have accurate information, from young people themselves, about the factors that shape and influence the intentions and actions of those considering entrepreneurial ventures. The Misk Foundation has taken a leading role in the development of the **Global Youth Index (GYI)**, to supply that need.

The Methodology

Data have been collected from 25,000 youth aged 18-30, from 25 middle to high income countries with advanced economies, a growing youth population and supportive youth policies. The Global Youth Index (GYI) covers five domains. This paper focuses on results related to Entrepreneurship – specifically entrepreneurial intention and entrepreneurial action. The paper surveys existing literature related to the major factors that **might drive or otherwise influence intention and action and uses quantitative methods to reach its findings.**

Areas of Research:

Factors Affecting Entrepreneurial Intention and Action

The study examines the extent to which following factors and their associated variables have an impact on entrepreneurial intention and action, and measures the direction (positive or negative) and the magnitude (in terms of probability) of any change:

- Demographic variables (age, gender, and geographical location)
- Socio-economic background
- Personal characteristics (attitude towards risk, open mindedness, and optimism)
- Human capital (education, experience, training and exposure to diversified cultures, etc.)
- Social capital
- Macroeconomic environment (level and growth of GDP, unemployment rate, level of ICT usage)

Key Findings

The results and findings are explained in detail and summarised in the accompanying tables.
Of particular note:

- **Entrepreneurial education and level of ICT** use have significant negative impact on both intention and action, suggesting a need to re-examine the types of programs young people are offered.
- Most **personal characteristics**, an area that has previously been a focus for research, have positive effects on intention, but little impact on action.
- Action, on the other hand, is significantly affected in a positive way by effective **communications education**, and wider exposure to entrepreneurship through **overseas study and internships.**

The Importance of This Study

Intention alone, with regard to entrepreneurial activity, is not enough. The value of this study lies in its unique approach. It examines factors that affect intention and subsequent action – something that has not been done before – and it challenges some previously held beliefs about what drives or deters young people from increased involvement in planning and setting out on entrepreneurial ventures. The study's findings have implications for all stakeholders with an interest in preparing young people for participation in their countries' economic future.

GLOBAL YOUTH INDEX (GYI)

THE BACKGROUND

A new age, dubbed "the knowledge economy", is fast approaching and in preparation for its debut, countries, companies, NGOs, and others are lining up to be first movers in the race ahead. It will be run in a world that is constantly shifting, as it enters the 4th industrial revolution, where advances in technology and innovation are changing life in ways never experienced before. Developing economies face multiple challenges as they attempt to leap ahead in the race and contend with developed economies on an equal footing.

Young people make up 50% of the world's population and 90% of these future leaders live in developing countries. Additionally, 1 in 5 young people around the world are not in education, employment, or training (NEET) and more than 75% of the young people in neither education nor work are women. For the majority of youth, therefore, the transition to the knowledge economy remains a distant reality, and its economic opportunities are becoming ambiguous.

As a result, the Misk Foundation has led the development of the Global Youth Index (GYI), which measures the extent to which youth are prepared to participate in the global transition to the knowledge economy. The index aims to inform stakeholders in global youth development – such as NGOs, policy makers, research institutions and the private sector – and to identify areas of success, best practice, and gaps in the arena of youth development. To achieve that goal and to ensure the voice of youth is encapsulated in the findings of the Index, a unique methodology and framework have been developed.

THE METHODOLOGY AND FRAMEWORK

The index utilizes both qualitative and quantitative indicators through the inclusion of a survey and secondary research, respectively. It spans 25 countries and the survey data were collected from 25,000 youth aged 18-30 (1,000 young people per country). The countries were selected using the following three criteria:

1. The largest economies of the world (the G20) were selected, comprising a majority of high-income countries (ten), upper-middle-income countries (seven), and two lower-middle-income countries (India and Indonesia). The focus was on large and advanced economies, as they have greater exposure to the changes brought about by technological disruptions and the transition to a knowledge economy, and also because they are more likely to be developing innovative policies and best practices.

2. Countries that have successful youth policy, showcasing successful regulatory and policy environments for youth education, skills development and labour market integration.

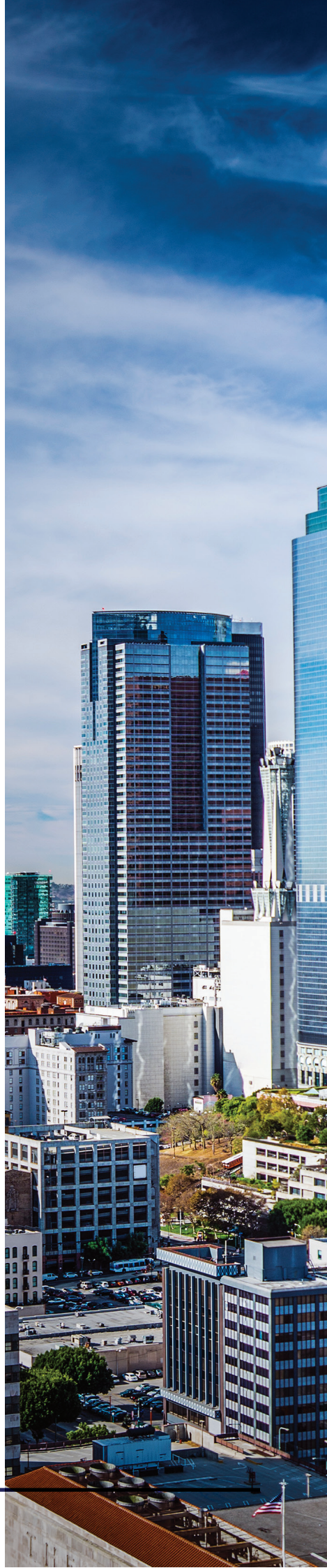
3. Countries with a large and growing share of young people, which, on the other hand, face particularly strong demographic pressures to ensure that these youths are ready to participate actively in their technological and economic transformation.

The GYI measures youth preparedness across five domains: education and skills; employment; entrepreneurship; global citizenship; and enabling environment. Each domain includes 3 focus areas, and each focus area is further comprised of multiple indicators. The domains and indicators have been selected on the basis of their importance to youth development.

The framework was designed to follow a process, involving:

- An initial literature review and expert reviews;
- Further literature reviews, to develop definitions of the key domains of the Index, and to identify key focus areas in each domain, as well as potential metrics within them.

The entrepreneurship domain (in the GYI) measures the extent to which each country fosters youth entrepreneurship and innovation. As well as being prepared for the jobs of the future, youth should be empowered to innovate in the knowledge economy. This involves the development of necessary skills and attitudes, the support of policy and civil society, and the overall ability of the economy to support entrepreneurial activity.



OBJECTIVE

Every action begins with an intention; entrepreneurship is no exception. Before establishing a new firm, someone must have the desire or need, to become an entrepreneur. Starting a new venture is a planned activity (Krueger, Reilly, & Carsrud, 2000; Linan, Rodriguez-Cohard, & Guzman, 2011) and entrepreneurial intention is considered as the precursor that drives behavior towards it (Kautonen, Van Gelderen, & Tornikoski, 2013; Linan & Chen, 2009).

"Entrepreneurial intention represents a cognitive manifestation of individuals materialized in their desire to act in the creation of a new company or within existing firms, prior to the identification of business opportunities" (Fini et al., 2009).

The literature suggests that to determine the entrepreneurship landscape of any country or economy, entrepreneurial intention is not enough. Some authors have emphasized the importance of "action", not mere intention; active performance by the individual shows the true picture of entrepreneurial activity (Carsrud & Brännback, 2011; Frese 2009). Parker & Belghitar (2006) have described that "considerable share of people who have the intention to start a business [and who] can be classified as lethargic dreamers, as the declared intentions might never be followed by actions" (Vancea and Utzet, 2017: 15).

Entrepreneurial intention and action are driven by several common factors, such as:

- Demographic variables (age, gender, and geographical location)
- Socio-economic background
- Personal characteristics (attitude towards risk, open mindedness, and optimism)
- Human capital (education, experience, exposure to diversified cultures, religions, and ethnicities)
- Social capital
- Macroeconomic environment (level and growth of GDP, unemployment rate, level of ICT usage)

Both entrepreneurial intention and entrepreneurial action are dynamic concepts. Intention today (period 1 in Figure 1) together with the factors described above drives the action of tomorrow (period 2). This action builds experience and leads to intention in the future (period 3), which results in further entrepreneurial action. Hence, the serial entrepreneur – an icon of the 21st century.

This white paper analyses the way in which various factors influence both entrepreneurial intention and entrepreneurial action – that is, starting an entrepreneurial venture – and ranks these factors in terms of their relative importance. The objective is to help the actors responsible for the establishment and development of entrepreneurial ecosystem, at national and regional levels, to devise policies and to design and develop action plans to increase the Total Entrepreneurial Activity (TEA).

The present study has two main strengths:

1. It deals with a reasonably large sample, representative of the youth population of 25 countries worldwide.

2. It provides an opportunity for a deeper understanding of the relationship between entrepreneurial intention and various demographic, social, economic, and behavioral variables, as well as their impact on entrepreneurial activity.

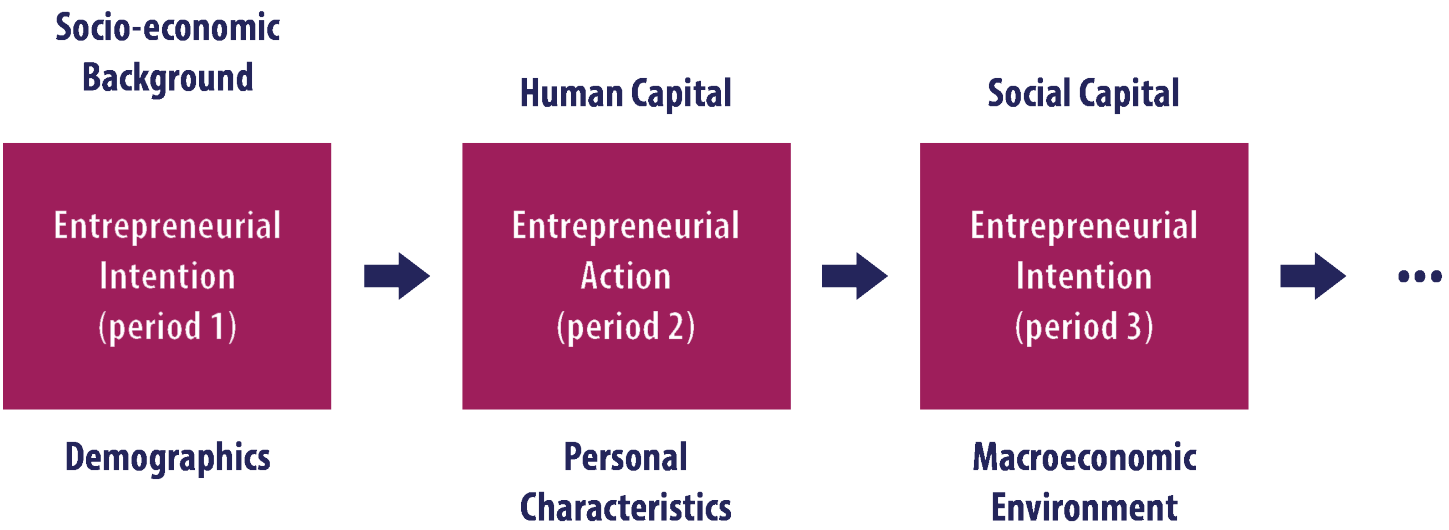


Figure 1: Entrepreneurial Intention and Action Cycle

THEORETICAL BACKGROUND

DEMOGRAPHICS

Entrepreneurial intention is associated with demographic factors such as age, gender and place of residence.

(Kristiansen and Indarti, 2004; Wilson et al., 2007)

AGE

The impact of age on entrepreneurial intention varies in the literature. In most cases, people decide to start their own venture when aged between 25 and 34 years (Choo and Wong, 2006; Delmar and Davidsson, 2008). As people grow older, they become more risk averse and, as their propensity to take risk is reduced, so is their entrepreneurial intention. A number of studies have concluded that age has a negative impact on entrepreneurial intentions (Blanchflower et al., 2001; Hatak et al., 2015; Indarti et al., 2010; Kanodia et al., 1989).

Older people are much less likely to act entrepreneurially (Hart et al., 2004) and to establish a company (Kautonen, 2008). Authors such as Levesque and Minniti (2006), Fung et al. (2001) and Hatak et al. (2015) have found that older people are less willing to invest time and effort in activities with long and uncertain payback time. They are, therefore, less likely to start their own businesses. However, Kelley et al. (2016), Reynolds (1987), Simones et al. (2016) and Schwartz et al. (2009) have found an inverted U-shaped relationship between age and the probability of starting one's own business.

GENDER

Many studies (Bosma and Schutjens, 2011; Indarti, et al., 2010; Langowitz and Minniti, 2007; McGee et al., 2009; Minniti and Nardone, 2007; Schwartz et al., 2009; Verheul, van Stel, and Thurik, 2006) have found a gender gap in entrepreneurial intentions and perceptions, at the aggregate and the individual levels of analysis, regardless of the level of economic development. After reviewing the previous work (Endres et al., 2008; Gatewood et al., 2002; Mueller and Dato-On, 2008; Wilson et al., 2007), Santos et al. (2016) conclude that women tend to have lower entrepreneurial self-efficacy and entrepreneurial intentions when compared with men. Men are more likely to express the intention to start a business, compared with women (Zhao et al., 2005) but are less likely to establish their own businesses (Phan et al., 2002).

The lower number of women starting their own businesses is explained by: their perception of fewer opportunities (Langowitz and Minniti, 2007; Minniti and Nardone, 2007); a higher fear of failure (Santos et al. (2016); and high financial barriers (Becker-Blease and Sohl, 2007; Brush et al., 2002; Carter and Allen, 1997; Fabowale, Orser, and Riding, 1995; Marlow and Patton, 2005; Smith-Hunter, 2006).

PLACE OF RESIDENCE

Possible reasons for a greater number of entrepreneurial opportunities in urban areas, compared with the rural environment are: better infrastructure; and easier access to human, financial and social resources (Mugobo and Ukpere, 2012). Entrepreneurship in the rural communities is more necessity-based, whereas it is more opportunity-driven in urban areas around the world (Orford et al., 2004).

Another study (Malabena and Swanepoel, 2014) has found that those in rural areas face lack of infrastructure and smaller markets, and have lower level skills, which limits their propensity to start opportunity-driven entrepreneurial ventures. This restricts the inhabitants to necessity-based businesses (if any), and smaller profits, compared with those in urban areas

SOCIO-ECONOMIC BACKGROUND

The literature provides useful insights into the effects of social and economic background on entrepreneurial intentions. In earlier work on entrepreneurial intention, Scott and Twomey (1988) found parental influence and work experience to be significant factors.

PARENTAL AND FAMILY BACKGROUND

As well as Scott and Twomey (1988), Begley et al. (1997) have found social status to be a positive predictor for business start-up. Family background was the second most important influencing factor for having entrepreneurial intentions by potential entrepreneurs, according to the study conducted by Henderson and Robertson (2000). Where one (or both) parents, or other close relatives, are entrepreneurs, there is an increased possibility of an individual having entrepreneurial intention (Aslam et al., 2012; Basu and Virick, 2008; Bhandari, 2012; Bosma and Schutjens, 2011; Fairlie and Robb, 2007; Linan et al., 2005; McElwee and al-Riyami, 2003; Nguyen, 2015; Tanveer et al., 2013). One of the reasons could be a greater perception of self-efficacy resulting from exposure to the family business and its positive socio-economic impact on the entrepreneur's life (Hadjimanolis and Poutziouris, 2011). Children of entrepreneurs learn the "tricks of the trade" and consider starting their own business as a natural choice (Cooper et al., 1994; Sandberg and Hofer, 1987).

Carr and Sequeira (2007) and Mueller (2006) have found that family role models have a positive impact on having entrepreneurial intentions. However, Stavrou (1999) has found the reverse effect: the negative impact of family business on entrepreneurial intentions could be because individuals want to avoid the difficulties related to an entrepreneurial career.

PERSONAL ECONOMIC SITUATION

The literature reveals that potential entrepreneurs' social status (their position relative to others in the society or community) is one of the important factors influencing their intention to start a business (Manolova et al., 2008). Desire for higher social status and wanting to generate enough money to survive and thrive are the key motivations for starting one's own business (Perri and Chu, 2012; Segumpan and Zaharai, 2012). The lack of a suitable job can be a "push factor" for instigating the desire to "create one's own world" by starting a business. It can provide individuals the opportunity to secure a better economic future for themselves and for their families (Stefanovic et al., 2010).

PERSONAL CHARACTERISTICS AND TRAITS

Despite criticism in the past, personality traits continue to attract the attention of researchers with regard to entrepreneurial intention and business start-up (Bonnet and Furnham, 1991; Brockhaus, 1980; Foyelle and Linan, 2014; Nga and Shamuganathan, 2010).

Important traits found to have a positive effect on entrepreneurial intention include the following:

- **Risk perception (Ang and Hong, 2000; Segal et al., 2005; Luthje and Franke, 2003)**
- **Innovativeness (Ahmed et al., 2010; Krueger and Carsrud, 1993; Thomas and Mueller, 2000)**
- **Perception of level of opportunity (Turker et al., 2005)**
- **Internal locus of control (Ang and Hong, 2000; Diaz and Rodriguez, 2003; Luthje and Franke, 2003; Zellweger et al., 2011)**

RISK TAKING PROPENSITY

An individual's propensity to take risk has been found to be a compound variable, embodying other personality traits (Nicholson et al., 2005).

"Some authors view the propensity to take risks as a mediator between the variables of tolerance of ambiguity, locus of control (Wee et al., 1994), the need for achievement (Tang and Tang, 2007) and entrepreneurial intention. As a result, there is uncertainty about the role of risk-taking propensity and it is not clear whether the propensity to take risks is an exogenous variable, a mediator or a moderator" (Altinay et al., 2012: 490).

INTERNAL LOCUS OF CONTROL

The literature has found a positive relationship between internal locus of control and entrepreneurial intention (Ang and Hong, 2000; Hansemark, 1998; Khanka, 2009; Gurol and Atsan, 2006; Littunen, 2000).

INNOVATIVENESS

West and Farr (1990:9) have defined innovation as "the intentional introduction and application of ideas, process, products or procedures, new to the relevant unit of adoption". The literature is replete with the idea that that entrepreneurs are more innovative than non-entrepreneurs (Altinay et al., 2012; Gurol and Atsan, 2006; Koh, 1996; Robinson et al., 1991). A variety of studies (Gurel and Atsan, 2006; Gurel et al., 2010; Koh, 1996; Mueller and Thomas, 2001) have found a positive relationship between innovativeness and entrepreneurial intention.

HUMAN CAPITAL

The concept of human capital relates to an individual's ability to allow for 'changes in action' and economic growth, through their knowledge and skills (Becker, 1964). It represents, in particular, the ability to extract an individual's knowledge to get the best solutions for a firm (Bontis et al., 1999). Human capital can also be defined from the social perspective, as the intrinsic abilities, knowledge and skills accumulated in an individual's lifetime (Laroche and Merette, 1997). Edvinsson and Malone define human capital as "the collection of the employee's skills, experience, competence and implicit knowledge" (1997: 34–35); Dakhli and De Clercq (2004) identify it as one of the core constituents of intellectual capital. From the perspective of economic returns, human capital pertains to investments in education and acquisition of job experience and skills that can generate returns in the labour market (Nee and Sanders, 2001: 392). Neergaard et al. (2006) define human capital as the sum of education and experience (both general and specific) possessed by an individual. Authors such as Boden and Nucci (2000), Davidsson and Honig (2003), Camacho and Rodriquez (2005), and Lam et al. (2007) include age as a proxy measure of human capital.

Brush et al. (2004) identify human capital as an important initial "endowment" for entrepreneurs as it provides a platform for securing other forms of resources like organisational, physical and financial capital. In today's rapidly changing scientific environment, technology and knowledge have become the key factors of production. Romer (1986) indicates that "knowledge", in addition to labour and capital, has now become the third factor of production in leading economies. Such economies thrive on scientific discovery and innovation, for which knowledge and technology are the key factors of production; these factors give them competitive advantage. Ucbasaran et al. (2008) observe that entrepreneurs with higher levels of human capital are able to identify considerably more opportunities. They also found evidence that specific human capital is more rewarding than general human capital.

The literature explores the impact of different dimensions of human capital on entrepreneurial intention and entrepreneurial venture creation (start-up) as follows:

EDUCATION (GENERAL)

There are mixed results in the literature. Some studies (Cho, 1998; Donckels, 1991; Gorman et al., 1997; Kuratko, 2003; Mushtaq et al., 2011) have found positive relationship between higher education and entrepreneurial intention. Others, however, have discovered that higher levels of education lead to lower entrepreneurial intention because of alternative opportunities to generate income (Ghazali et al., 2012; Van der Sluis et al., 2004)

ENTREPRENEURSHIP EDUCATION/TRAINING

Pittaway and Cope (2007) performed a systematic literature review of the entrepreneurship education literature and found entrepreneurship education as having a positive impact on entrepreneurial intention; the same results were found by Franke and Luthje (2004), Souitiras et al. (2007), and Foyelle et al. (2006). A number of studies (Degeorge and Foyelle, 2008; Farashah, 2013; Pihie et al., 2009; Shahidi, 2012) investigated the entrepreneurial intention of the participants of entrepreneurship education programs, by means of ex-post measurement, and found a positive impact. However, Osterbeek et al. (2010) found a negative relationship, which has been mentioned by Von Graevenitz et al. (2010) as one of the positive results of attending these programs, as participants were able to gain a realistic view of life as an entrepreneur.

TERTIARY EDUCATION AND STEM

Stewart et al. (1998) and Ghazali et al. (2012) have highlighted the important of higher education but they were unable to find a positive relationship between post-graduate studies and entrepreneurial intentions. However, Quan (2012) found tertiary education had a positive impact on entrepreneurial intention. Black and Gilson (1998) as well as Wang and Wong (2004) have discovered the importance of science and technology education for entrepreneurial ventures, as compared with small business start-up.

EXPERIENCE

The evidence of relationship between individual experience and entrepreneurial intention is weak; experience does not have a clear impact on entrepreneurial choices (Kautonen et al. 2011).
"A possible justification for the absence of a clear direct linkage between prior experience and entrepreneurial intention comes from the important difficulties in measuring and comparing individual experiences. The quantification of prior experience using the number of years worked, or work context categorizations, limits the understanding of prior experience influence on individual intention (Baron, 2009)" (Miralles et al., 2015: 3).

However, researchers such as Barringer et al. (2005) and Lee and Tsang (2001) have found that prior experience of involvement in entrepreneurial ventures provides individuals an opportunity to learn from their mistakes and gain experience, which gives them the self-efficacy to have aspirations and the skills to take action to start their entrepreneurial venture (Phan et al., 2002; Tkachev and Kolvereid, 1999). Shane (2000) has highlighted the importance of prior knowledge of markets and customer-related issues, and skills for providing effective customer services; these play a positive role in discovery of opportunities and, consequently, the start-up of a venture.

OTHER HUMAN CAPITAL VARIABLES

The literature is silent about internship, language skills, international exposure, and opportunities to study abroad, and the relationship between these factors and entrepreneurial intentions or creation of entrepreneurial ventures. This could be one of the major contributions of this study to the literature.

SOCIAL CAPITAL

Social capital is one of those intangible assets that count most in the everyday lives of people. It might include the goodwill, sympathy, fellowship and social interaction that occur among the families and individuals of a social unit (Woolcock and Narayan, 2000). "Social capital is made of relationships, both formal and informal, generated by individuals trying to obtain an expected reward in the market. It is a capital, captured in the form of social relationship" (Linan and Santos, 2007: 446).

The research has highlighted the importance of networking and the development of relationships beyond networking, and has explained how these are critical for economic success, at macro/society level (Putnam, 1993), meso/firm level (Bennet and Richardson, 2005; Lin et al., 2000), and micro/individual level (Fukuyama, 1995; Barros and Alves, 2003). A strong network of individuals, based on trust and values (social capital), can be used to share ideas and access information on the running of businesses, thus reducing transaction costs, facilitating collective decision making (Campbell, 1992; Grootaert and van Bastelaer, 2001) and, finally, allowing access to other forms of capital, such as human capital (Coleman, 1988).

According to Linan and Santos (2007: 447), "it is quite evident that the different contacts and experiences acquired by a person could provide her/him with higher self-confidence so as to estimate becoming an entrepreneur as desirable and/or feasible". The direct influence of desirability and feasibility, have an indirect impact on an individual's entrepreneurial intentions, according to the "theory of entrepreneurial event", as proposed by Shapero and Sokol (1982). Moreover, Azjen's "theory of planned behaviour" (Ajzen, 1991) considers "social norms" as among the key variables for intentions. If an entrepreneurial career is positively valued in individuals' closer circles (bonding social capital), it gives them the confidence to have higher intentions (Davidsson and Honig, 2003; Svendsen and Svendsen, 2004; Woolcock and Narayan, 2000). Furthermore, if individuals feel their closer circles approve their idea for a start-up, they feel they can count on the support of their social capital (Linan and Santos, 2007).

The acquisition of intangible or virtual resources, such as knowledge and information, is particularly important in the start-up and survival of an entrepreneurial venture (Gabbay and Leenders, 1999; Brush et al., 2004; Carter and Shaw, 2006). Although entrepreneurs hold some of these resources themselves, they often complement them by accessing their contacts, or social capital (Aldrich et al., 1989; Aldrich and Zimmer, 1986; Cooper et al., 1995). These resources are generated and/or facilitated by people the entrepreneur knows, or who are known to others the entrepreneur knows. These social contacts carry a level of trust (Gambetta, 1988) and often lead to successful outcomes (Burt, 1992). Their significance derives from the mobilisation of knowledge and the process of learning and innovation they are said to promote; social capital is an important factor in accessing information and, therefore, reducing transaction costs (Metz and Thareneu, 2001). In this way, social capital is a major driver of the "knowledge economy" that most governments are struggling to cultivate. Without it, an individual's abilities can be hindered (Nahapiet and Ghoshal, 1998).

THE MACRO-ECONOMIC ENVIRONMENT

OVERALL ECONOMIC SITUATION

There is strong evidence that a country's overall economic development generates numerous opportunities and encourages potential entrepreneurs to start their own ventures (Carree et al., 2002; Thurik et al., 2008). However, Engle et al., (2011) could not find any support for the proposed relationship between the perceived economic situation and entrepreneurial intention. Thompson (2011) has summed it up, saying a favourable economic situation acts as a "pull factor" for creating opportunity-based ventures, whereas economic recessions serve as a "push factor" to start necessity-based business ventures (Vencea and Utzet, 2017).

GDP PER CAPITA

GDP per capita is considered to be one of the major indicators of economic development (Linan et al., 2013).
A number of studies has been conducted to investigate the impact of GDP per capita growth on entrepreneurship and entrepreneurial activity. The results are contradictory. Although researchers such as Fisman and Sarria-Allende (2004) and Parker and Robinson (2004) have observed a positive impact of GDP per capita development on entrepreneurial activities, others (Bjornskov and Foss, 2006; Linan et al., 2013) have noticed the opposite – consistent with the findings of Griffith et al. (2009) – with regard to entrepreneurial intentions.

YOUTH UNEMPLOYMENT RATE

The literature mentions the possible impact of institutional and personal economic situation (serving as push or pull factors) on individual decisions to start an economic activity. A recent study conducted by Vancea and Utzet (2017) discovered unemployment or precarious working conditions have no impact on entrepreneurial intention (and actual business start-up).

USE OF ICT

The progressive function of ICT with regard to business development, as well as aspects of individual behaviour that influence enterprise activities, has been established by numerous models (Fitzsimmons and Douglas, 2011; Nasurdin et al., 2009; Ramdani et al., 2009; Zaremohzzabieh et al., 2015).

EMPIRICAL ANALYSIS

Our empirical strategy consists of following two stages:

First, we run logit regressions with ENT_Y as the dependent variable (Y = INT, ACT). Here, we estimate $p_i=Pr(ENT\_Y_i \mid x_i)=\Lambda(x_i'\beta)$ where ENT_Y_i is 1 if a respondent i expresses entrepreneurial intention (Y = INT) or has already gone through starting a venture (Y = ACT), and 0 if she/he does not; x_i contains the independent variables describing respondent and her/his macro environment; and $\Lambda(s)=e^s/(1+e^s)$ is the logistic function. More precisely, we use Maximum Likelihood Estimation (MLE) to estimate the parameters of the following standard logit model, $Logit(ENT)=\alpha+\beta X$.

Second, in order to analyse the magnitude of the different explanatory variables, we calculate the marginal effects of dependent variables (evaluated at their mean values). More precisely, for the case of the logit regression, the marginal effect is calculated as $\partial p/(\partial x_j)=\Lambda(x'\beta)\{1-x'\beta\}\beta_j$ where x is the vector of mean independent variables, β is the vector of estimated coefficients, and β_j is the estimated parameter of the variable for which the marginal effect is being calculated.

For data analysis, regression with ENT_INT as a dependent variable includes ENT_ACT as an independent variable, as ENT_ACT captures action from the past. Here, ENT_INT is interpreted as future intention (period 3 in Figure 1 above) while ENT_ACT captures past action (period 2). Regression with ENT_ACT as a dependent variable does not include ENT_ACT due to timeline-consistency.

RESULTS AND DISCUSSION

For the purpose of this study, the impact of independent variables on entrepreneurial intention and entrepreneurial action has been studied in two ways: to determine the direction of change and the magnitude of change.

Direction of change refers to a given independent variable having a positive, negative, or no impact on the dependent variables. Magnitude of change is about marginal analysis: the change in probability of dependent variable being 1 upon change in the independent variable. In simple terms, it explains how a dependent variable or outcome – in this case, entrepreneurial intention or entrepreneurial action – changes when a specific independent variable (or explanatory variable) changes. Other covariates are assumed to be held constant.

DIRECTION OF IMPACT

The independent variables are grouped into categories, as described in the theoretical framework. Table 1 visually represents the results of the findings for the "direction of change" or "direction of impact" for both the dependent variables. The exact significant impact (at 1%) of the independent variables on both dependent variables (based on the detailed results of the regression analysis) has been presented in Table 1.

According to the results, all demographic variables (such as gender, age, location) and only one human capital variable (internship) have the same (positive) directional impact on entrepreneurial intention and entrepreneurial action. Entrepreneurial education and level of ICT use have significant negative impact on both dependent variables.

Past entrepreneurial experience and level of country's GDP have positive significant impact on entrepreneurial intention but do not show any significant impact on entrepreneurial action. One of the noteworthy findings is that all personal characteristic variables (risk taking attitude, internal locus of control, open mindedness and level of optimism) show positive impact on entrepreneurial intention. Most of them, however, have no significant impact on entrepreneurial action; the exception is open mindedness, which has a negative impact.

DIRECTION OF IMPACT

The independent variables are grouped into categories, as described in the theoretical framework. Table 1 visually represents the results of the findings for the "direction of change" or "direction of impact" for both the dependent variables. The exact significant impact (at 1%) of the independent variables on both dependent variables (based on the detailed results of the regression analysis) has been presented in Table 1.

According to the results, all demographic variables (such as gender, age, location) and only one human capital variable (internship) have the same (positive) directional impact on entrepreneurial intention and entrepreneurial action. Entrepreneurial education and level of ICT use have significant negative impact on both dependent variables.

Past entrepreneurial experience and level of country's GDP have positive significant impact on entrepreneurial intention but do not show any significant impact on entrepreneurial action. One of the noteworthy findings is that all personal characteristic variables (risk taking attitude, internal locus of control, open mindedness and level of optimism) show positive impact on entrepreneurial intention. Most of them, however, have no significant impact on entrepreneurial action; the exception is open mindedness, which has a negative impact.

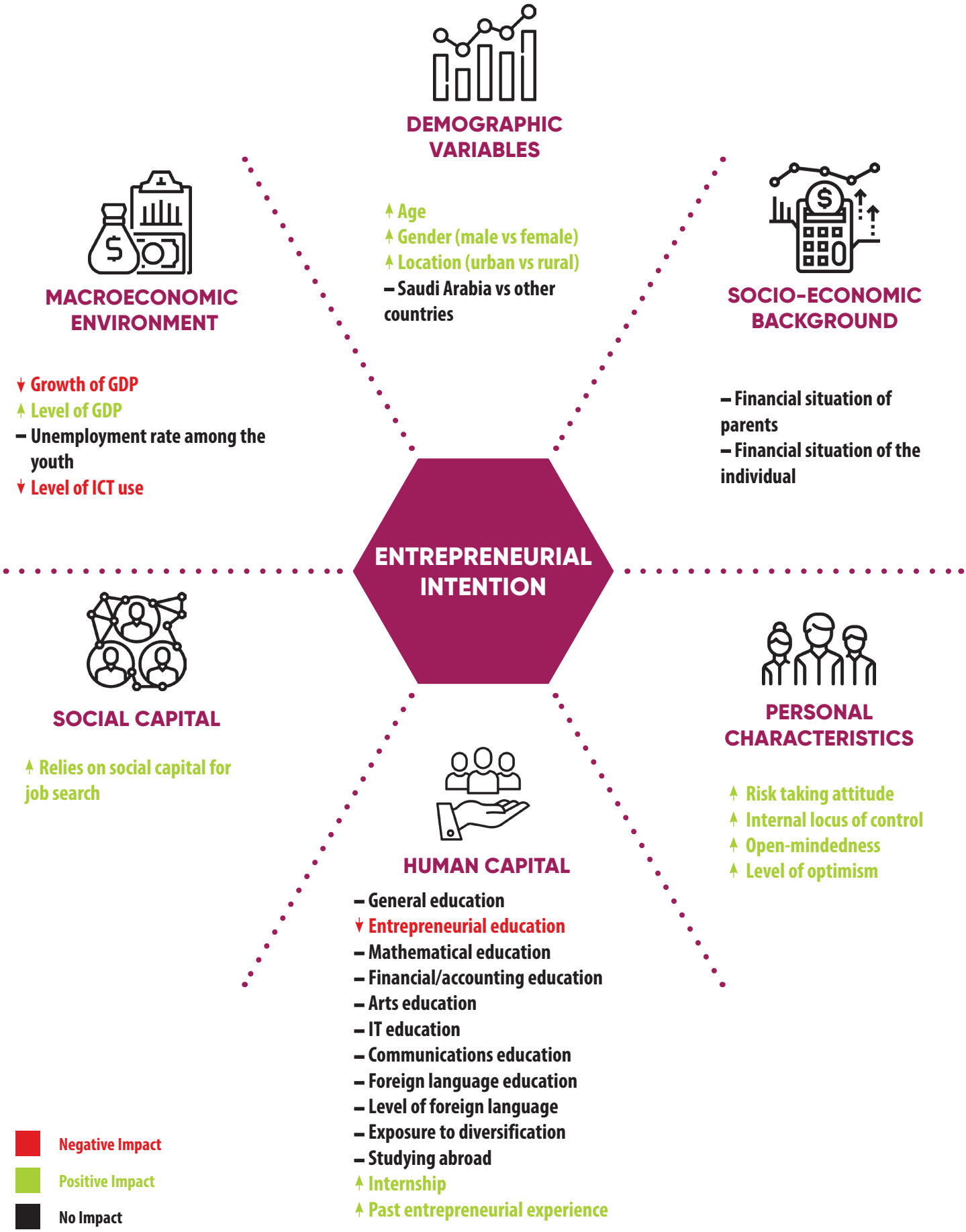
Table 1: Direction of Impact* for Entrepreneurial Intention and Action

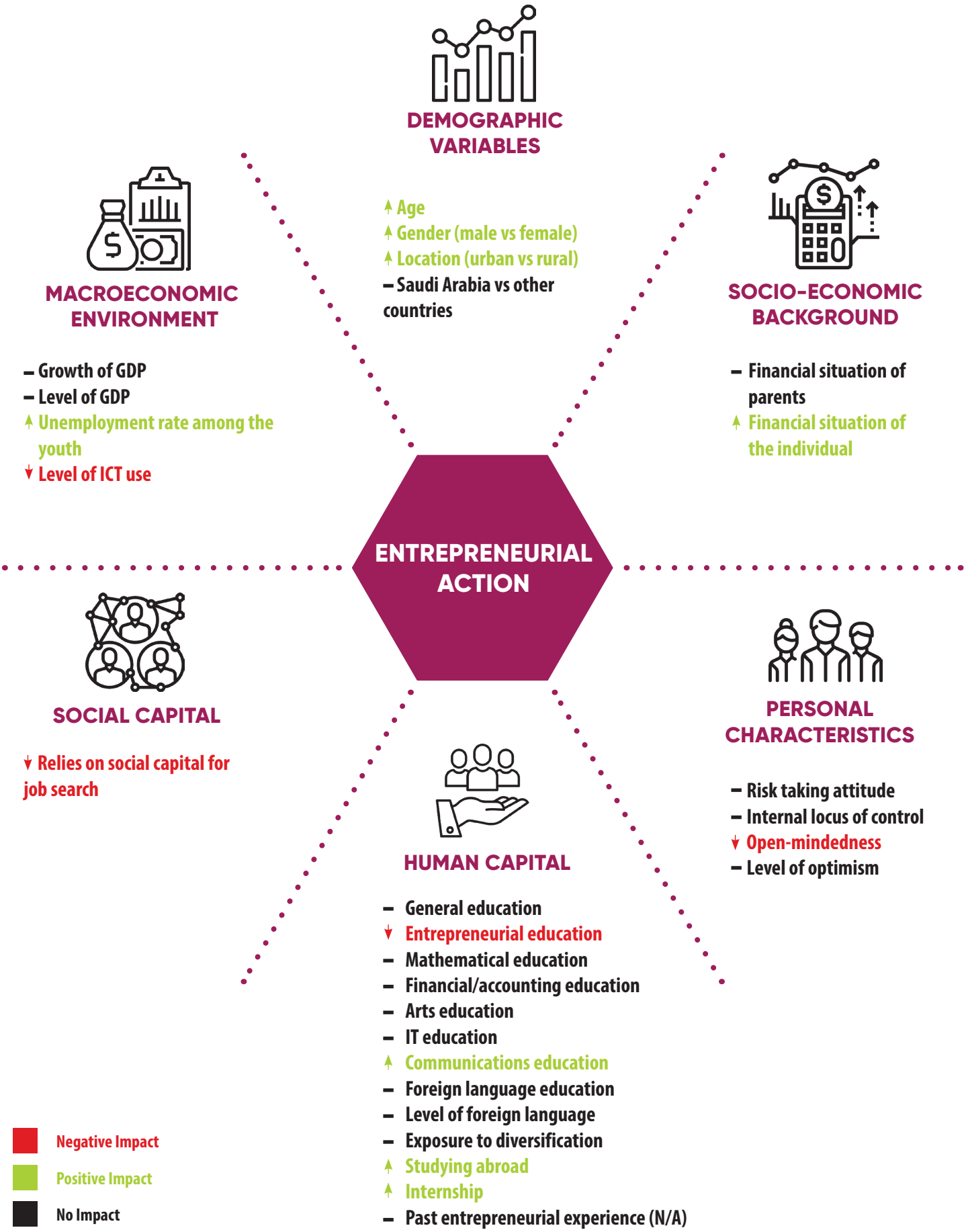
Variable	Intention Coefficient	Action Coefficient
Male (binary)	0.182***	0.305***
Age	0.039***	0.024***
Urban (binary)	0.221***	0.202***
Financial situation of individual		0.132***
Attitude towards risk	0.312***	
Internal locus of control	0.324***	
Education (entrepreneurial) (binary)	-0.483***	-1.211***
Education (communications) (binary)		0.258***
Internship (binary)	0.199***	0.774***
Open-mindedness	0.205***	-0.071***
Optimism	0.151***	
Studying abroad (binary)		0.464***
Level of social capital	0.125***	-0.096***
Growth of GDP	-0.345***	
Level of GDP	0.047***	
Level of ICT access	-0.236***	-0.071***
Level of youth unemployment		0.017***

* Variables that have significant impact (at 1%) only

Another important finding of our study is that individual financial situation, communications education, studying abroad, and level of youth unemployment have significant positive impact on action but not on intention.

Table 2: Direction of Impact




DEMOGRAPHIC VARIABLES
Age
Gender (male vs female)
Location (urban vs rural)
– Saudi Arabia vs other countries
MACROECONOMIC ENVIRONMENT
– Growth of GDP
– Level of GDP
Unemployment rate among the youth
Level of ICT use
SOCIO-ECONOMIC BACKGROUND
– Financial situation of parents
Financial situation of the individual
ENTREPRENEURIAL ACTION
SOCIAL CAPITAL
Relies on social capital for job search
PERSONAL CHARACTERISTICS
– Risk taking attitude
– Internal locus of control
Open-mindedness
– Level of optimism
HUMAN CAPITAL
– General education
Entrepreneurial education
– Mathematical education
– Financial/accounting education
– Arts education
– IT education
Communications education
– Foreign language education
– Level of foreign language
– Exposure to diversification
Studying abroad
Internship
– Past entrepreneurial experience (N/A)
Negative Impact
Positive Impact
No Impact

MAGNITUDE OF IMPACT

Table 5 illustrates the magnitude of impact of independent variables on the entrepreneurial intention and entrepreneurial action of youth. The table is self-explanatory as far as the interpretation of numbers is concerned. An example is open-mindedness. Marginally increasing the level of a person's open-mindedness (a) increases the probability of that person having entrepreneurial intention by 3.9% and (b) decreases the probability of that person's entrepreneurial action by 1.7%.

First, for entrepreneurial intention, we select the top 3 positive and top 3 negative variables in terms of their impact. Table 3 indicates that a marginal increase in the variable "past entrepreneurial action" increases the probability of a person having entrepreneurial intention by 10.3%. This means that young persons who already have an experience of an entrepreneurial activity are more likely to have the intention to do it again. This finding contradicts earlier research (Kautonen et al., 2011; Miralles et al., 2015) and emphasises the importance of prior experiences (Barringer et al., 2005; Lee and Tsang, 2001) and learning gained from first attempts, no matter how small (Tkachev and Kolvereid, 1999) and then applying it, in order to have success in subsequent businesses (Phan et al., 2002).

Table 3: Variables with Positive Impact on Entrepreneurial Intention

Variable	Marginal Impact (INT)
Entrepreneurial action in the past (binary)	0.103
Internal locus of control	0.061
Attitude towards risk taking	0.059

The results further confirm previous work (Ang and Hong, 2000; Diaz and Rodriguez, 2003; Luthje and Franke, 2003; Zellweger et al., 2011) showing that marginal increase in the variable "internal locus of control" (people who believe that they are responsible for their own success) increases the probability of a person having entrepreneurial intention by 6.1%.

A marginal increase in risk taking propensity or "attitude towards risk taking" increases the probability of a young person having entrepreneurial intention by 5.9%. This is not a surprising result, as discussed by authors such as Nicholson et al. (2005) and Altinay et al. (2012).

Other variables that increase the probability of a young person having entrepreneurial intention include: urban location (4.2%), open mindedness (3.9%), male gender (3.4%), internship (3.8%), level of optimism (2.9%) and social capital (2.4%).

Table 4: Variables with Negative Impact on Entrepreneurial Intention

Variable	Marginal Impact (INT)
Education (entrepreneurial) (binary)	-0.09
Growth of GDP	-0.06
Level of ICT access	-0.04

Table 4 displays the top 3 variables that have a negative impact on entrepreneurial intention. Our results show that a marginal increase in the variable "entrepreneurial education" decreases the probability of a person having entrepreneurial intention by 9%. This is one of the important findings of this white paper, as it contradicts the popular belief based on the literature (Franke and Luthje, 2004; Souitiras et al., 2007; Foyelle et al., 2007; Degeorge and Foyelle, 2008; Farashah, 2013; Pihie and Bagheri, 2009; Shahidi, 2012), which says that entrepreneurial education programs create a positive impact on entrepreneurial intention. This finding corroborates the work of Osterbeek et al. (2010) and Graevenitz et al. (2010) showing that these programs provide an opportunity for the participants to have a realistic view of an entrepreneur's life and the skills needed to establish and grow successful ventures. The participants in these programs realise that to create and develop an entrepreneurial venture is not for everyone, as it takes a great deal of effort, hard work and commitment.

The other finding – that the marginal increase in the variable "growth of GDP" decreases the probability of a person having entrepreneurial intention by 6% – is not a surprising one. The growth of GDP can act as an excellent "pull factor" for establishing opportunity-based ventures, but this kind of economic situation generates greater opportunity for employment, and an easier option for young people to step onto the earning ladder.

The finding that the marginal increase in the variable "level of ICT access" decreases the probability of a person having entrepreneurial intention by 4% is unexpected, as the literature (Fitzsimmons and Douglas, 2011; Nasurdin et al., 2009; Ramdani et al., 2009; Zaremohzzabieh et al., 2015) is replete with the opposite results. One of the possible reasons could be the availability of information about alternative opportunities for employment, or the profligate spending of time on social media; these could negatively affect the entrepreneurial intention of young people who make higher use of ICT.

ENTREPRENEURIAL ACTION

Table 5: Magnitude of Impact

One of the pioneering findings of this study is that marginal increase in the variable "internship" increases the probability of a person having entrepreneurial action by 18.1%.

DEMOGRAPHIC VARIABLES

0.7% ↑ Age
3.4% ↑ Gender (male vs female)
4.2% ↑ Location (urban vs rural)
– Saudi Arabia vs other countries

MACROECONOMIC ENVIRONMENT

-6.5% ↓ Growth of GDP
0.9% ↑ Level of GDP
– Unemployment rate among the youth
-4.5% ↓ Level of ICT use

SOCIO-ECONOMIC BACKGROUND

– Financial situation of parents
– Financial situation of the individual

ENTREPRENEURIAL INTENTION

SOCIAL CAPITAL

2.4% ↑ Relies on social capital for job search

PERSONAL CHARACTERISTICS

5.9% ↑ Risk taking attitude
6.1% ↑ Internal locus of control
3.9% ↑ Open-mindedness
2.9% ↑ Level of optimism

HUMAN CAPITAL

– General education
-9.1% ↓ Entrepreneurial education
– Mathematical education
– Financial/accounting education
– Arts education
– IT education
– Communications education
– Foreign language education
– Level of foreign language
– Exposure to diversification
– Studying abroad
3.8% ↑ Internship
10.3% ↑ Past entrepreneurial experience

Negative Impact
Positive Impact
No Impact

DEMOGRAPHIC VARIABLES

0.6% ↑ Age
7.1% ↑ Gender (male vs female)
4.7% ↑ Location (urban vs rural)
– Saudi Arabia vs other countries

MACROECONOMIC ENVIRONMENT

– Growth of GDP
– Level of GDP
0.04% ↑ Unemployment rate among the youth
-1.7% ↓ Level of ICT use

SOCIO-ECONOMIC BACKGROUND

– Financial situation of parents
3.1% ↑ Financial situation of the individual

ENTREPRENEURIAL ACTION

SOCIAL CAPITAL

-2.2% ↓ Relies on social capital for job search

PERSONAL CHARACTERISTICS

Risk taking attitude
Internal locus of control
-1.7% ↓ Open-mindedness
Level of optimism

HUMAN CAPITAL

– General education
-28.3% ↓ Entrepreneurial education
– Mathematical education
– Financial/accounting education
– Arts education
– IT education
6.0% ↑ Communications education
– Foreign language education
– Level of foreign language
– Exposure to diversification
10.8% ↑ Studying abroad
18.1% ↑ Internship
– Past entrepreneurial experience (N/A)

Negative Impact
Positive Impact
No Impact

So far, the literature has been silent about this. In view of the high reliability and validity of this research project, the high number of respondents, and representation of numerous countries, this finding signals the importance of internship for young people.

Table 6: Variables with Positive Impact on Entrepreneurial Action

Variable	Marginal Impact (INT)
Internship (binary)	0.181
Studying abroad (binary)	0.108
Male (binary)	0.071

The third highest variable having a positive impact on entrepreneurial action (as shown in Table 5) was not a surprise; a marginal increase in the variable "male" increases the probability of a person having entrepreneurial intention by 7.1%.
The literature confirms the finding that fewer women start their own businesses because: they perceive fewer opportunities (Langowitz and Minniti, 2007; Minniti and Nardone, 2007); they have a higher fear of failure (Santos et al. (2016); and face high financial barriers (Becker-Blease and Sohl, 2007; Brush et al., 2002; Carter and Allen, 1997; Fabowale, Orser, and Riding, 1995; Marlow and Patton, 2005; Smith-Hunter, 2006).

Two further important variables that have a positive impact on entrepreneurial action are communication education (6%) and urban location (4.7%). This emphasises the importance of the presentation of an idea and a possible plan (to all the potential stakeholders, including investors, employees, suppliers, and customers) and the presence of extensive opportunities (of all kinds) in large cities, compared with rural areas.

This study has found entrepreneurship education has a negative impact on entrepreneurial venture start-up. The results (in Table 6) indicate that a marginal increase in the variable "entrepreneurial education" decreases the probability of a person having entrepreneurial action by 2.8%.The reason, as explained earlier for entrepreneurial intention, is also applicable here. The knowledge and understanding of the required skills, efforts and demands involved in starting an entrepreneurial venture might make it less attractive for young people; this could explain the decline in their number once they have gone through these programs.

Table 7: Variables with Negative Impact on Entrepreneurial Action

Variable	Marginal Impact (INT)
Education (entrepreneurial) (binary)	-0.28
Growth of GDP	-0.02
Level of ICT access	-0.01

High level of social capital also decreases the probability of a person having entrepreneurial action by 2%. The prominence of social capital in the start-up and growth of entrepreneurial ventures cannot be denied (Gabbay and Leenders, 1999; Brush et al., 2004; Carter and Shaw, 2006; Linan and Santos, 2007). The variable we could use for social capital is "relies on social capital for job search"; hence the possibility that young people with higher social capital can utilise their connections for finding employment. The more social capital they have, the less chance there is for them to start their own venture. And last, but not least, the study finds that marginal increase in "level of ICT access" decreases the probability of a person having entrepreneurial intention by 1%.

RESEARCH CONTRIBUTIONS

In the current climate of downsizing, restructuring and technological change, notions of traditional careers and ways of creating value have all been challenged. People depend more upon their own initiative to realise success. Never before, it seems, have more people started their own companies ¬¬– particularly in order to exploit the World Wide Web. There is no single government (in either the developed or the developing world) that does not pay at least lip service to entrepreneurship development. Entrepreneurial intention among youth has gained vast attention of researchers and scholars in the past few years. Most of the studies conducted so far look at the entrepreneurial intention of young people. Entrepreneurial intention, however, is not a true indication of entrepreneurial action (new venture creation) in any society or country. Therefore, there is a need to know to what extent different demographic, social and economic factors or variables affect both entrepreneurial intention and action.

This is a unique research study, which reveals the impact of myriad factors on both entrepreneurial intention and action, at the same time. The data collected from 25,000 respondents in 25 different countries makes this work an exceptional contribution to the literature in the discipline of entrepreneurship. Last, but not least, the number of respondents and countries covered, and the research methodology applied to ensure its validity and reliability, make this study one of the largest in the existing body of knowledge of entrepreneurial intention and new venture creation by young people around the globe.

Many of the results corroborate the findings of previous literature, such as the significant impact of previous entrepreneurial experience (Barringer et al., 2005; Lee and Tsang, 2001; Miralles et al., 2015), gender (Endres et al., 2008; Gatewood et al., 2002; Muller and Dato-On, 2008; Santos et al., 2016; Wilson et al., 2007), location (Orferd et al., 2004; Mugobo and Upkere, 2012), internal locus of control (Ang and Hong, 2000; Hansemark, 1998; Khanka, 2009; Gurol and Atsan, 2006; Littunen, 2000), risk taking propensity (Nicholson et al., 2005; Tang and Tang, 2007), and social capital (Linan and Santos, 2007) on entrepreneurial intention of young people. This study, however, has taken our understanding of the field a step further. The distinctive outcome of the study is the positive impact of internship, open mindedness, and level of optimism, and the negative impact of entrepreneurship education on entrepreneurial intention.

There were no surprises when determining the impact on entrepreneurial action (new venture creation) among young people, of demographic variables such as age (Kelley at el., 2016; Simones et al., 2016; Schwartz et al., 2009), gender (Langowitz and Minniti, 2007) and location (Malabena and Swanepoel, 2014). However, one of the unique findings of the study is that the marginal increase in "internship", "studying abroad" and "communications education" increases the probability of a young person starting an entrepreneurial venture, whereas, "entrepreneurship education" decreases the probability of venture start-up.

IMPLICATIONS

Entrepreneurship has attracted the attention of both policy makers and researchers in the past two decades. One of the main reasons is the importance of entrepreneurial activity and its role in the economic development of countries and regions through generating ideas, creating opportunities and consequently converting these ideas and opportunities into profitable businesses. The study, based on both primary and secondary research, has found numerous studies that investigated the factors affecting the entrepreneurial intention among youth, especially college students. Although, entrepreneurial intention has its advantages, it is not, however, a true indication of entrepreneurial activity in a particular society. This white paper fills the gap, by exploring the impact of different factors on both entrepreneurial intention and action. Our findings suggest some important implications for policy makers, educational institutions and support agencies.

There is a need to create an environment conducive to increasing the perceived attraction and feasibility of entrepreneurship for women (Santos et al., 2016; Kickul et al., 2008). This will have a positive impact on their entrepreneurial intentions and, ultimately, on new venture creation. More supportive policies, including access to finance, provision of technical knowledge, presentation, sales and marketing skills, internship opportunities and scholarship for studies abroad could also open up their perceptions with regard to "creating their own world" with economic freedom and social choices.

Our study has found the negative impact of entrepreneurship education on entrepreneurial intention and action. One of the limitations of the study, however, is that we could not determine which skills were learned and which pedagogies were applied in entrepreneurship education programs. Past studies, such as Linan et al. (2010) emphasise the important role of "appropriate" entrepreneurship education for entrepreneurial intentions and eventual venture creation by youth. Educational institutions and support agencies should understand that knowledge of "business planning" is insufficient as entrepreneurship education.

It can be a wonderful tool to show young people the feasibility of starting a business but will not necessarily increase their desire to do it. Entrepreneurship education should be a policy instrument (at national and regional levels) through which youth should be involved (through participant-centred learning techniques) in developing an entrepreneurial mindset, rather than acquiring a few business management tools.

Our study also unearthed the importance of entrepreneurial characteristics (including risk taking propensity, internal locus of control, open mindedness and level of optimism) and their positive impact on entrepreneurial intention. We propose that policy makers, entrepreneurship educators and support agencies wanting to create more entrepreneurial intention and subsequent activity among youth should change the entrepreneurship education model. The new model should include interactive tools to improve youth's judicious risk-taking propensity and highlight the importance of open-mindedness (creativity and innovation) along-with improving their level of optimism. One of the important ways to develop these characteristics is through a primary focus on increasing entrepreneurial self-efficacy. It also needs to be developed through "following four processes: enactive mastery or repeated performance accomplishments; vicarious experience or modelling; verbal persuasion; and automatic/physiological arousal" (Segal et al., 2005: 54).

One of the exceptional findings of this study is the significance of "internship" (18.1%) and "studying abroad" (10.8%) for entrepreneurial venture creation among young people. The results have implications for governments, policy makers and support agencies to create opportunities for internships for young people, in collaboration with the private sector. This will them a chance to understand the benefits of establishing and develop their own ventures, enlighten them with new ideas and opportunities and make them aware of the skills and tools they need to manage these ventures. Finally, government and support agencies should make a provision for scholarships for deserving and bright students, who can go abroad, bring back entrepreneurial ideas and create opportunities for an entrepreneurial revolution in their motherland.

REFERENCES:

- Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, M. Z., Usman, A., Wasim-ul-Rehman, & Ahmed, N. (2010). Determinants of students' entrepreneurial career intentions: evidence from business graduates. European Journal of Social Sciences, 15(2), 14–22.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50 (2), 179-211.
- Aldrich, H. (1989). Networking Among Women Entrepreneurs. In: Hagan, O., Rivchun, C. & Sexton, D. (eds.) Women-Owned Businesses. New York: Praeger, 103-132.
- Aldrich, H. & Zimmer, C. (1986). Entrepreneurship Through Social Networks. In: Sexton, D. & Smiler, R. (eds.) The Art and Science of Entrepreneurship. New York: Ballinger, 3-23.
- Altinay, L., Madanoglu, M., Daniele, R. and Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. International Journal of Hospitality Management, 31 (2), 489-499.
- Ang, S. H., & Hong, D. (2000). Entrepreneurial spirit among East Asian Chinese. Thunderbird International Business Review, 42 (3), 285–309.

- Aslam, T.M., Awan, A.S. and Khan, T.M. (2012). An Empirical Study of Family Back Ground and Entrepreneurship as Career Chosen among University Students of Turkey and Pakistan. International Journal of Business and Social Science, 3 (15), 118–123.
- Baron, R.A. (2009). Effectual versus predictive logics in entrepreneurial decision making: Differences between experts and novices Does experience in starting new ventures change the way entrepreneurs think? Perhaps, but for now, "Caution" is essential. Journal of Business Venturing, 24(4), pp.310–315.
- Barringer, BR, Jones, FF, Neubaum, DO. (2005). A quantitative content analysis of the characteristics of rapid-growth firms and their founders. Journal of Business Venturing, 20(5), 663–687.
- Barros, C. P., & Alves, F. M. (2003). Human capital theory and social capital theory on sports management. International Advances in Economic Research, 9(3), 218–226.
- Basu, A. and Virick, M. (2008). Family business background, perceptions of barriers, and entrepreneurial intentions in Cyprus. Available at: http://www.lums.lancs.ac.uk/files/PPR113.pdf (accessed on 29 April 2019).
- Becker-Blease, J. R., and Sohl J. E. (2007). Do Women-Owned Businesses Have Equal Access to Angel Capital? Journal of Business Venturing, 22(4), 503–521.
- Becker, G. S. (1964). Human capital. Chicago: University of Chicago Press.
- Begley, T.M., Tan, W.L., Larasati, A.B., Rab, A. and Zamora, E. (1997). The relationship between socio-cultural dimensions and interest in starting a business: a multi-country study. Frontiers of Entrepreneurship Research, Babson Conference Proceedings, available at: www.babson.edu/entrep/fer/papers97/begley/beg.htm
- Bennet, D. & Richardson, P. (2005) Building Relationships and Social Capital Development. Paper presented at the 50th ICSB World Conference, June 15-18, Washington DC.
- Bhandari, N. C. (2012). Relationship between students' gender, their own employment, their parents' employment, and the students' intention for entrepreneurship. Journal of Entrepreneurship Education, 15, 133–144.
- Bjørnskov, C., and N. Foss (2008). 'Economic Freedom and Entrepreneurial Activity: Some Cross-Country Evidence'. Public Choice, 134 (3-4), 307-28.
- Blanchflower, D. G., Oswald, A. J., & Stutzer, A. (2001). Latent entrepreneurship across nations. European Economic Review, 45(4–6), 680–691.
- Boden, R. J. & Nucci, A. R. (2000). On the Survival Prospects of Men's and Women's New Business Ventures. Journal of Business Venturing, 15 (4), 347-362.
- Bonnett, C. and Furnham, A. (1991). Who wants to be an entrepreneur? A study of adolescents interested in a young enterprise scheme. Journal of Economic Psychology, 12 (3), 465-78.
- Bontis, N., Dragonetti, N. C., Jacobsen, K. & Roos, G. (1999). The Knowledge Toolbox: A Review of the Tools Available to Measure and Manage Intabgible Resources. European Management Journal, 17 (4), 391-402.
- Bosma, N., & Schutjens, V. (2011). Understanding regional variation in entrepreneurial activity and entrepreneurial attitude in Europe. The Annals of Regional Science, 47(3), 711-742.
- Brockhaus, R.H. (1980). The effect of job dissatisfaction on the decision to start business. Journal of Small Business Management, Vol. 18 No. 1, pp. 37-43.
- Brush, C. G., Carter, M. N., Greene, G. P., and Hart, M. (2002). The Role of Social Capital and Gender in Linking Financial Suppliers and Entrepreneurial Firms: A Framework for Future Research. Venture Capital: An International Journal of Entrepreneurial Finance, 4(4), 305–323.
- Brush, C., Carter, M. N., Gatewood, J. E., Greene, G. P. & Hart, M. (2004). Clearing the hurdles: women building high growth businesses. Financial Times - Prentice Hall.
- Burt, R. (1992). Structural Holes: The Social Structure of Competition. Cambridge, MA: Harvard University Press.
- Camacho, J. A. & Rodriguez, M. (2005). Services and Regional Development: An Analysis of Their Role as Human Capital Drivers in the Spanish Regions. Service Industries Journal, 25 (4), 563-577.
- Campbell, C.A. (1992). A decision theory model for entrepreneurial acts. Entrepreneurship Theory and Practice, Vol. 17 No. 1, pp. 21-7.
- Career Aspiration in Relation to Entrepreneurship. Journal of Small Business Management, 26(4), 5-13.
- Carr, J. & Sequeira, J., 2007. Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. Journal of Business Research, 60(10), pp.1090–1098.
- Carree, M., van Stel, A., Thurik, R. and Wennekers, S. (2002). Economic Development and Business Ownership: An Analysis Using Data of 23 OECD Countries in the Period 1976-1996. Small Business Economics, 19 (3), 271-90.
- Carsrud, A. L. & Brannback, M. (Eds.), Understanding the entrepreneurial mind (pp. 51–72). New York: Springer.

- Carter, S. & Shaw, E. (2006). Women's Business Ownership: Recent Research and Policy Developments. London: DTI - Small Business Service Research Report.
- Cho, M. H. (1998). Ownership structure, investment, and the corporate value: an empirical analysis. Journal of Financial Economics, 47(1), 103–121.
- Choo, S., & Wong, M. (2006). Entrepreneurial intention: Triggers and barriers to new venture creations in Singapore. Singapore Management Review, 28(2), 47–64.
- Coleman, J. S. (1988). Social capital in the creation of human capital. The American Journal of Sociology, 94, 95–120.
- Cooper, A. C., Folta, T. B. & Woo, C. (1995). Entrepreneurial Information Search. Journal of Business Venturing, 10 (2), 107-120.
- Cooper, AC, Gimeno-Gascon, FJ, and Woo, CY. (1994). Initial human and financial capital as predictors of new venture performance. Journal of Business Venturing, 9(5), 371–395.
- Dakhli, M. & De Clercq, D. (2004). Human Capital, Social capital and Innovation: A Multi-Country Study. Entrepreneurship & Regional Development, 16 (2), 107-128.
- Davidsson, P. & Honig, B. (2003). The Role of Social and Human Capital Among Nascent Entrepreneurs. Journal of Business Venturing, 18 (3), 301-331.
- Davidsson, P. and Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. Journal of Business Venturing, 18(3), 301–331.
- Degeorge, J. M., & Fayolle, A. (2008). Is entrepreneurial intention stable through time? First insights from a sample of French students. International Journal of Entrepreneurship and Small Business, 5(1), 7–27.
- Delmar, F., & Davidson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs. Entrepreneurship and Regional Development, 12 (1), 1–23.
- Diaz, F., Rodriguez, A., 2003. Locus of control and values of community entrepreneurs. Social Behavior and Personality, 31 (8), 739–748.
- Donckels, R. (1991). Education and entrepreneurship experiences from secondary and university education in Belgium. Journal of Small Business and Entrepreneurship, 9(1), 35–42.
- Edvinsson, L. & Malone, M. S. (1997). Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower. New York, NY: Harper Business.
- Endres, M. L., Chowdhury, S. K., & Alam, I. (2008). Gender effects on bias in complex financial decisions. Journal of Managerial Issues, 238-254.
- Engle, R. L., Schlaegel, C., & Dimitriadi, N. (2011). Institutions and entrepreneurial intent: a cross-country study. Journal of Developmental Entrepreneurship, 16(02), 227–250.
- Fabowale, L., R. Orser, and A. Riding (1995). Gender, Structural Factors, and Credit Terms between Canadian Small Businesses and Financial Institutions. Entrepreneurship Theory and Practice, 19(4), 41–65.
- Fairlie, RW, & Robb, A. (2007). Families, human capital, and small business: Evidence from the characteristics of business owners survey. ILR Review, 60(2), 225–245.
- Farashah, A. D. (2013). The process of impact of entrepreneurship education and training on entrepreneurship perception and intention: study of educational system of Iran. Education and Training, 55(8/9), 868–885.
- Fayolle, A., Gailly, B. & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. Journal of European Industrial Training, 30(9), pp.701–720.
- Fini, R., Grimaldi, R., Marzocchi, G.L. and Sobrero, M. 2009. The foundation for entrepreneurial intention. Copenhagen, Denmark: Proceedings of the Summer Conference 2009 of the Copenhagen Business School. (2009 Summer Conference; 17-19 Jun.)
Jun.)
- Fisman, R. and Sarria-Allende, V. (2004). Regulation of entry and the distortion of industrial organization NBER Working Paper No. 10929
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. Journal of Business Venturing, 26(4), 431–440.
- Franke, N., & Luthje, C. (2004). Entrepreneurial intentions of business students – a benchmarking study. International Journal of Innovation and Technology Management, 1(3), 269–288.
- Frese, M. (2009). Towards a psychology of entrepreneurship—an action theory perspective. Foundations and Trends in Entrepreneurship, 5(6), 437-496.
- Fukuyama, F. (1995). Trust: The social virtues and the creation of prosperity. New York: The Free Press.

- Fung, H.H., Lai, P. and Ng, R. (2001). Age differences in social preferences among Taiwanese and mainland Chinese: The role of perceived time. Psychology and Aging, 16(2), 351-356.
- Gabbay, M. & Leenders, R. (eds.) (1999) CSC: The Structure of Advantage and Disadvantage. Boston: Kluwer Academic Press.
- Gambetta, D. (1988) Trust: Making and Breaking Cooperative Relations. Oxford: Blackwell.
- Gatewood, E. J., Shaver, K. G., Powers, J. B., & Gartner, W. B. (2002). Entrepreneurial expectancy, task effort, and performance. Entrepreneurship Theory and Practice, 27(2), 187-206.
- Ghazali, Z., Ibrahim, N. A. and Zainol, F. A., (2012). Factors Affecting Entrepreneurial Intention among UniSZA Students, Asian Social Science, 9(1), 85-107.
- Gorman, G., Hanlon, D., & 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, 15(3), 56–77.
- Griffiths, M.D., J. Kickul, and A.L. Carsrud. (2009). Government Bureaucracy, Transactional Impediments, and Entrepreneurial Intentions. International Small Business Journal, 27 (5): 626–645.
- Grootaert, C., & van Bastelaer, T. (2001). Understanding and measuring social capital: A synthesis of findings and recommendations from the social capital initiative. The World
- Gurel, E., Altinay, L., Daniele, R. (2010). Tourism students' entrepreneurial intentions. Annals of Tourism Research, 37 (3), 646–669.
- Gürol, Y. and Atsan, N. (2006). Entrepreneurial characteristics amongst university students: some insights for entrepreneurship education and training in Turkey, Education+ Training, 48(1), 25-38.
- Hadjimanolis, A., & Poutziouris, P. (2011). Family business background, perceptions of barriers, and entrepreneurial intentions in Cyprus. International Journal of Entrepreneurial Venturing, 3(2), 168–182.
- Hansemark, O.C. (1998). The effects of an entrepreneurship programme on Need for Achievement and Locus of Control of reinforcement. International Journal of Entrepreneurial Behaviour & Research, 4(1), 28-50.
- Hart, M., Anyadike-Danes, M., & Blackburn, R. (2004). Entrepreneurship and age in the UK: Comparing third age and prime age new venture creation across the regions. Paper presented at RENT XVIII, Copenhagen.
- Hatak, I, Harms, R, Fink, M. (2015). Age, job identification, and entrepreneurial intention. Journal of Managerial Psychology, 30(1), 38–53.
- Henderson, R. and Robertson, M. (2000). Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. Career Development International, 5(6), 279-87.
- Kautonen, T. (2008). Understanding the older entrepreneur: Comparing third age and prime age entrepreneurs in Finland. International Journal of Business Science and Applied Management, 3(3), 3–13.
- Kautonen, T., Luoto, S. & Tornikoski, E.T. (2011). Influence of work history on entrepreneurial intentions in "prime age" and "third age": A preliminary study. International Small Business Journal, 28(6), 583–601.
- Kautonen, T., Van Gelderen, M., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. Applied Economics, 45(6), 697–707.
- Kelley, D., Singer, S., & Herrington, M. (2016). 2015/16 global report. GEM Global Entrepreneurship Monitor. Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak, Tecnológico de Monterrey, London Business School, Babson Park, MA, Santiago, London.
- Khanka, S. (2009). Motivational orientation of Assamese entrepreneurs in the SME sector. The Journal of Entrepreneurship, 18 (2), 209–218.
- Koh, H.C. (1996). Testing hypotheses of entrepreneurial characteristics: a study of Hong Kong MBA students. Journal of Managerial Psychology, 11 (3), 12–25.
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial Intention among Indonesian and Norwegian students. Journal of Enterprising Culture, 12(1), 55–78.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: applying the theory of planned behavior. Entrepreneurship and Regional Development, 5(4), 315–330.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. Journal of Business Venturing, 15(5–6), 411–432.

Lam, W., Shaw, E. & Carter, S. (2007). Entrepreneurial Capital: Convertibility, Personal Reputation and Firm Performance. Paper presented at the Institute for Small Business and Entrepreneurship Annual Conference, Glasgow, Scotland.

- Langowitz, N., and Minniti, M. (2007). The Entrepreneurial Propensity of Women, Entrepreneurship Theory and Practice, 31(3), 341–364.
- Laroche, M. & Merette, M. (1997). Measuring Human Capital. Canada: Department of Finance.

- Learned, K.E. (1992). What happened before the organization? A model of organization formation. Entrepreneurship Theory and Practice, 17 (1), 39–48.
- Lee, D.Y., & Tsang, E.W. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. Journal of Management Studies, 38(4), 583–602.
- Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. Journal of Business Venturing, 21(2), 177–194.
- Lin, Z., Picot, G. & Compton, J. (2000). The Entry and Exit Dynamics of Self-Employment in Canada. Small Business Economics, 15 (2), 105-125.
- Liñán, et. al. (2005). Factors affecting entrepreneurial intention levels", 45th Congress of the European Regional Science Association, Paper presented at: Amsterdam, August pp. 23-27.
- Liñán, F., & Santos, F. J. (2007). Does social capital affect entrepreneurial intentions? International Advances in Economic Research, 13(4), 443–453.
- Liñán, F., and Chen, Y. W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. Entrepreneurship Theory and Practice, 33(3), 593–617.
- Liñán, F., Fernandez-Serrano, J. and Romero, I. (2013). Necessity and Opportunity Entrepreneurship: The Mediating Effect of Culture. ReviSta de Econom_ıamundial, 33(1), 21–47.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. International Entrepreneurship and Management Journal, 7(2), 195–218.
- Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. International Journal of Entrepreneurial Behaviour and Research, 6 (6), 295–309.
- Luthje, C. & Franke, N. (2003). The 'Making' of an Entrepreneur: Testing a Model of Entrepreneurial Intent among Engineering Students in MIT, R & D Management, 33(2), 135-147.
- Luthje, C., & Franke, N. (2003). The "making" of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. R&D Management, 33(2), 135–147.
- Malabena, M. J. and Swanepoel, E. (2014). The relationship between exposure to entrepreneurship education and entrepreneurial self-efficacy. Southern African Business Review, 18(1):1-26.
- Marlow, S., and Patton, D. (2005). All Credit to Men? Entrepreneurship, Finance, and Gender. Entrepreneurship Theory and Practice, 29(6), 717–735.
- Mcelwee, G, & Al-Riyami, R. (2003). Women entrepreneurs in Oman: Some barriers to success. Career Development International, 8(7), 339–346.
- McGee, J. E., Peterson, M., Mueller, S. L. and Sequeira, J. M. (2009). Entrepreneurial Self-Efficacy: Refining the Measure. Entrepreneurship Theory and Practice, 33(4), 965– 988.
- Metz, I. & Thareneu, P. (2001) Women's Career Advancement: The Relative Contribution of Human and Social Capital. Group and Organization Management, 26 (3), 312-342.
- Minniti, M., and Nardone, C. (2007). Being in Someone Else's Shoes: The Role of Gender in Nascent Entrepreneurship. Small Business Economics 28(2–3), 223–238.
- Miralles, F., Giones, F., & Riverola, C. (2015). Evaluating the impact of prior experience in entrepreneurial intention. International Entrepreneurship and Management Journal, 12 (3), 791-813.
- Mueller, P. (2006). Entrepreneurship in the region: Breeding ground for nascent entrepreneurs? Small Business Economics, 27(1), 41–58.
- Mueller, S. L., and Dato-On, M. C. (2008). Gender-Role Orientation as a Determinant of Entrepreneurial Self-Efficacy. Journal of Developmental Entrepreneurship, 13(1), 3–20.
- Mueller, S.L., Thomas, A.S. (2001). Culture and entrepreneurial potential: a nine country study of locus of control and innovativeness. Journal of Business Venturing, 16(1), 51–55.
- Mugobo, V.V. and Ukpere, W.I. (2012). Rural entrepreneurship in the Western Cape: challenges and opportunities. African Journal of Business Management, 6(3), 827-836.
- Mushtaq, H.A., Niazi, C.S.K., Hunjra, A.I., and Rehman, K.U. (2011). Planned Behavior Entrepreneurship and Intention to Create a New Venture among Young Graduates. Management and Marketing Challenges for the Knowledge Society, 6 (3), 437–456.
- Naphiet, J., and Ghoshal, S. (1998). Social Capital, Intellectual Capital, and Organizational Advantage. Academy of Management Review 23(2), 242–266.
- Nasurdin, A.M., Ahmad, N.H. and Lin, C.E. (2009). Examining a model of entrepreneurial intention among Malaysians using SEM procedure. European Journal of Scientific Research, 33 (2), 365–373.
- Nee, V. & Sanders, J. (2001). Understanding the Diversity of Immigrant Incorporation: A Forms-of-capital Model. Ethnic and Racial Studies, 24 (3), 386-411.

- Neergaard, H., T., Nielsen, K. & Kjeldsen, J. I. (2006). State of the Art of Women's Entrepreneurship: Access to Financing and Financing Strategies in Denmark. In: Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G. & Hart, M. (eds.) Growth-Oriented Women Entrepreneurs and Their Businesses: A Global Research Perspective. UK: Edward Elgar, 88-111.
- Nga, H.K.J., and Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. Journal of Business Ethics, 95(2), 259–260.
- Nguyen, C. (2015). Entrepreneurial intention in Vietnam: Same as everywhere? Journal of Asia Entrepreneurship and Sustainability, 11(4), 108 -129.
- Nicholson, N., Fenton-O'Creevy, M.P., Soane, E., Willman, P., 2005. Personality and domain-specific risk-taking. Journal of Risk Research, 8 (2), 157–176.
- Oosterbeek, H., van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. European Economic Review, 54(3), 442–454.
- Orford, J., Herrington, M. and Wood, E. (2004). Global Entrepreneurship Monitor 2004, South Africa report. [Internet: http://www.gsb.uct.ac.za/files/GEM2004.pdf; downloaded on 2015-06-02.]
- Parker, S. C., & Belghitar, Y. (2006). What happens to nascent entrepreneurs? An econometric analysis of the PSED. Small Business Economics, 27(1), 81-101.
- Parker, S.C., and Robson, M.T. (2004). Explaining International Variations in Self-Employment: Evidence from a Panel of OECD Countries. Southern Economic Journal, 71 (2), 287–301.
- Phan, P.H., Wong, P.K., Wang, C.K. (2002). Antecedents to entrepreneurship among university students in Singapore: Beliefs, attitudes and background. Journal of Enterprising Culture, 10(02), 151–174.
- Pihie, L., Akmaliah, Z., and Bagheri, A. (2009). Entrepreneurial intention of university students: An analysis of gender and ethnic groups. The International Journal of Knowledge, Culture and Change Management, 9(4), 49–60.
- Pittaway, L. and Cope, J. (2007). Entrepreneurship Education: A Systematic Review of the Evidence, International Small Business Journal 25(5), 479–510
- Putnam, R. D. (1993). Making democracy work: Civic tradition in modern Italy. Princeton: Princeton University Press.
- Quan, X. (2012). Prior experience, social network, and levels of entrepreneurial intentions. Management Research Review, 35(10), 945–957.
- Ramdani, B., Kawalek, P. and Lorenzo, O. (2009). Predicting SMEs' adoption of enterprise systems', Journal of Enterprise Information Management, 22(1-2), 10–24
- Reynolds, P.D. (1987). New firms' societal contribution versus survival potential. Journal of Business Venturing, 2(2), 231-46.
- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. Entrepreneurship Theory and Practice, 15(4), 13-32.
- Romer, P. M. (1986). Increasing Returns and Long-Run Growth. Journal of Political Economy, 94 (5), 1002-1037.
- Thurik, R., Carree, M., van Stel, A. and Audretsch, D. (2008), Does self-employment reduce unemployment? Journal of Business Venturing, 23 (6), 673-686
- Sandberg, WR, & Hofer, CW. (1987). Improving new venture performance: The role of strategy, industry structure, and the entrepreneur. Journal of Business Venturing, 2(1), 5–28.
- Schwartz, E.J., Wdowiak, M.A., Almer-Jarz, D.A., and Breitenecker, R.J. (2009). The Effects of Attitudes and Perceived Environment Conditions on Students' Entrepreneurial Intent. Education + Training, 51(4), 272-291.
- Scott, M.G. and Twomey, D.F. (1988). The Long-Term Supply of Entrepreneurs: Students' Career Aspiration in Relation to Entrepreneurship. Journal of Small Business Management, 26(4), 5-13.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. International Journal of Entrepreneurial Behaviour & Research, 11 (1), 42-57.
- Shahidi, N. (2012). Les jeunes entrepreneurs nécessitent-ils un accompagnement particulier? Le cas français. Journal of Small Business and Entrepreneurship, 25(1), 57–74.
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunity. Organization Science, 11(4), 448–469.
- Shapero, A. and Sokol, L. (1982). The social dimension of entrepreneurship", in Kent, C.A., Sexton, D.L. and Vesper, K.H. (Eds), Encyclopedia of Entrepreneurship, Prentice-Hall, Englewood Cliffs, NJ.
- Smith-Hunter, A. E. (2006). Women Entrepreneurs Across Racial Lines, New Horizons in Entrepreneurship Series. Ed. S. Shane. Cheltenham: Edward Elgar.

- Souitaris, V., Zerbinati, S., & Allaham, A. (2007). Do entrepreneurship programs raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. Journal of Business Venturing, 22(4), 566–591.
- Stewart, W.H. Jr, Watson, W.E., Carland, J.C. and Carland, J.W. (1998). A proclivity for entrepreneurship: a comparison of entrepreneurs, small business owners, and corporate managers. Journal of Business Venturing, 14(2), 189-214.
- Svendsen, G. L. H., & Svendsen, G. T. (2004). The creation and destruction of social capital: Entrepreneurship, co-operative movements and institutions. Cheltenham: Edward Elgar.
- Tang, J., Tang, Z. (2007). The relationship of achievement motivation and risk-taking propensity to new venture performance: a test of the moderating effect of entrepreneurial munificence. International Journal of Entrepreneurship and Small Business, 4 (4), 450–472.
- Tanveer, M.A., O. Shafique, S. Akbar, and S. Rizvi. (2013). Intentions of Business Graduate and Undergraduate to Become Entrepreneur: A Study from Pakistan. Journal of Basic and Applied Science, 3 (1), 718–725.
- Thomas, A. S., and Mueller, S. L. (2000). A Case for Comparative Entrepreneurship: Assessing the Relevance of Culture. Journal of International Business Studies, 31(2), 287–301.
- Thompson, P. (2011). Necessity and Opportunity Entrepreneurs through the Business Cycle. The CIRP.E-Ivey Conference on Macroeconomics and Entrepreneurship.
- Tkachev, A. & Kolvereid, L. (1999). Self-employment intentions among Russian students. Entrepreneurship & Regional Development, 11(3), pp.269–280.
- Turker, D. and Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? Journal of European Industrial Training, 33(2), 142-159.
- Turker, D., Onvural, B., Kursunluoglu, E. and Pinar, C. (2005). Entrepreneurial propensity: a field study on the Turkish university students. International Journal of Business, Economics and Management, 3(1), 15-27.
- Ucbasaran, D., Westhead, P. & Wright, M. (2008). Opportunity Identification and Pursuit: Does an Entrepreneur's Human Capital Matter? Small Business Economics, 30 (2), 153-173.
- Utsch, A., and Rauch, A. (2000). Innovativeness and initiative as mediators between achievement orientation and venture performance. European Journal of Work and Organizational Psychology, 9 (1), 45–62.
- Vancea, M., and Utzet. M. (2017). How unemployment and precarious employment affect the health of young people: A scoping study on social determinants. Scandinavian Journal of Public Health, 45(1), 73–84.
- Verheul, I., Uhlaner, L. and Thurik, R. (2005). Business Accomplishments, Gender and Entrepreneurial Self-Image. Journal of Business Venturing 20(4), 483–518.
- von Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. Journal of Economic Behavior and Organization, 76(1), 90–112.
- Wang, C. K. and Wong, P.-K. (2004). Entrepreneurial interest of university students in Singapore, Technovation, 24(2), 163-172.
- Wee, C.-H., Lim, W.-S., Lee, R. (1994). Entrepreneurship: a review with implications for further research. Journal of Small Business and Entrepreneurship, 11 (4), 25–49.
- West, M.A., and Farr, J.L. (1990). Innovation at work. In: West, M.A., Farr, J.L. (Eds.), Innovation and Creativity at Work: Psychological and Organizational Strategies. Wiley, Chichester, UK, pp. 3–14.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. Entrepreneurship: Theory and Practice, 31(3), 387–406.
- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research and policy. The World Bank Research Observer, 15(2), 225–249.
- Woolcock, M., and Narayan, D. (2000). Social Capital: Implications for Development Theory, Research and Policy. The World Bank Research Observer, 15(2), 225–249.
- Zaremohzzabieh, Z., Samah, B.A., Muhammad, M., Omar, S.Z., Bolong, J., Hassan, M.S. and Shaffril, H.A.M. (2015). Test of the technology acceptance model for understanding the ICT adoption behavior of rural young entrepreneurs. International Journal of Business and Management, 10(2), 158–169
- Zellweger, T, Sieger, P, Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. Journal of Business Venturing, 26(5), 521–536.
- Zhao, H., Hills, G. E., & Siebert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. Journal of Applied Psychology, 90(6), 1265–1272.

AUTHORS

Muhammad Azam Roomi, PhD

Dr. Muhammad Azam Roomi is a Professor of Entrepreneurship and has worked as the Founding Dean of Faculty, Research and Executive Education at MBSC since its inception. A passionate entrepreneurship 'activator', who has successfully conceptualized, designed, and conducted capacity building programs for entrepreneurs worldwide, has been recognized, acknowledged and appreciated globally for his teaching and research. His research interests include, women and youth entrepreneurship, entrepreneurial leadership and family business growth. He can be contacted at **mroomi@mbsc.edu.sa**

Konrad Grabiszewski, PhD

Dr. Konrad Grabiszewski, an Associate Professor of Economics at MBSC is an expert in game theory and decision theory. He is a co-creator of the mobile experiment "Blues and Reds" – a free game available globally on smartphones and tablets – whose objective is to understand how people reason in interactive situations. Dr. Konrad also works on questions like economic espionage, terrorism, and government regulation.

Othman Almoamar

Othman Almoamar is a Research Manager at Misk Foundation managing the development of multiple research projects such as the Global Youth Index. Previously, Othman was a consultant focusing on Education and Strategy Integration and a researcher focusing on innovation and local governance in Saudi Arabia.

MISK GLOBAL FORUM
منتدى مسك العالمي

MBSC
كلية الأمير
محمد بن سلمان
للإدارة وريادة الأعمال
Prince Mohammad
Bin Salman College
Business & Entrepreneurship