



Do young managers in a developing country have stronger entrepreneurial intentions? Theory and debate



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ABSTRACT

We examine whether the young managers in a developing country have stronger entrepreneurial intention than those in a developed country, within the context of the Theory of Planned Behavior. This study is based on the data from two distinct and strategically important countries: India and Japan. We analyze the linkage between entrepreneurial intention, country culture and proactive behavior. We postulate a theoretical model to incite others to pursue further research. Bateman and Crant's (1993) questionnaire was used for the measurement of the aforementioned variables. We found that the managers in a developing country need not have stronger entrepreneurial intentions.

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1. Introduction

Entrepreneurship creates wealth and reduces unemployment. Entrepreneurs contribute to industrialisation as well as to economic growth (Dana, 2001). The antecedents and consequences of entrepreneurship are considered as important topics of academic debate (Dana, 2001; Keupp & Gassmann, 2009). This is also of great importance for policy makers as high levels of entrepreneurial activity in a country are likely to contribute to innovative activities, increase in competition, and employment generation (Paul & Shrivastava, 2015). Many economists claim that entrepreneurship is an important determinant of economic growth and development (Naudé, 2011). Therefore, entrepreneurship has gained increasing respect as a field of research from scholars as well as those concerned with its practical application worldwide (Ma & Tan, 2006). History has proven that with each economic downturn it is entrepreneurial drive and persistence that brings economies back on track (Kuratako, 2006). Entrepreneurship has attained a special importance in the process of economic growth and industrial development, both in the developed and developing countries (Tamizharasi & Panchanathan, 2010), as high growth firms are often characterized by an

entrepreneurial spirit (Chaston & Sadler-Smith, 2012). Fereidouni & Masron (2012) show that political stability and control of corruption are highly significant determinants of entrepreneurial activities. Thus, emerging markets such as China and India provide an opportunity to examine entrepreneurship in relation to contextual factors such as political stability and corruption control (Alon & Rottig, 2013).

The study of entrepreneurship within the context of cultural and institutional framework in developing countries has relevance today, not only because it helps entrepreneurs better satisfy their personal needs, but also because of the economic contribution of new ventures (Terjesen, Hessels, & Li, 2013; Paul & Shrivastava, 2015). i.e., entrepreneurship acts as a catalyst for economic growth by increasing national income and in turn creating new jobs, and by serving as a bridge between innovation and the market place.

Entrepreneurship appears to be widespread in developed countries, although whether young people in developing countries have stronger entrepreneurial intention is debatable. An entrepreneur is an economic person who attempts to maximize their profits by initiatives and innovation. Innovations involve problem solving and entrepreneurs normally achieve satisfaction from solving problems (Higgins, 1964). As the definition would suggest, entrepreneurial activity has evolved over the years from someone who bears risk by buying at a low price and selling at a higher price to someone who creates new enterprises. McClelland (1961) and Say (1963) further describe an entrepreneur as one who brings together the factors of production, management, as well as risk bearing. Schumpeter (1950) envisioned that an entrepreneur is the

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agent who provides economic leadership that changes the initial conditions of the economy and the firm. In short, an entrepreneur is an innovator (Tamizharasi & Panchanatham, 2010).

Witt and Redding (2009) demonstrate how the institutional framework for economic order in a society is affected by the culturally determined sets of meaning and traits by linking national cultures and institutional structures of business systems in Germany and Japan. Cultural differences between countries explain a substantial part of the difference in entrepreneurship (Okamuro, Stel, & Veheul, 2011).

Comparative international entrepreneurship (CIE) involves cross-national comparison of domestic entrepreneurship such as differences in entrepreneurial activity rates across countries. Cross-national research enables comparison and replication and also reduces the risk of nation-specific results that are not generalizable. However, CIE research is still in an 'infancy' stage (Engelen, Heinemann, & Brettel, 2009). CIE research identifies fundamental differences in entrepreneurial activities across countries and investigates their sources as well as their implications (Terjesen et al., 2013). The field of CIE is in desperate need for further theory development (Keupp & Gassmann, 2009).

Entrepreneurs need confidence, capability and competence to meet unforeseen and difficult conditions. Can these traits be linked to proactive personality and culture, as well as other unrelated environmental factors, such as institutional framework, business environment, or seed capital? To answer these questions, in this paper, we compare entrepreneurial intentions of young managers from a developing country (India), with those of a developed country (Japan) within the CIE literature.

This paper is structured as follows. Theoretical background and literature review are covered in the next section. Research objectives are specified in Section 3. We develop a theoretical model to highlight the common factors influencing the entrepreneurial intention in Section 4. Method followed in this study is explained in Section 5. Results are reported in Section 6. Discussion of the results is presented in Section 7. Section 8 is devoted for managerial and social implications. The limitations of this study and directions for future research are given in Section 9. Finally, the findings from the study are summarized as conclusions in Section 10.

2. Theoretical background and literature review

We divide this section into three sub-sections to discuss the linkages and literature.

(i) Theory of Planned Behavior (ii) Proactive Behavior (iii) Country Context and Culture.

2.1. Theory of planned behavior

The Theory of Planned Behavior (TPB) is based on three motivational factors, or antecedents, influencing behavior (Ajzen, 1991; Liñán and Chen, 2009) as given below.

- (i) *Attitude toward Entrepreneurship (Personal attitude, PA)*: This indicates the degree to which an individual holds a positive or negative personal valuation about being an entrepreneur (Ajzen, 2001; Autio, Pathak & Wennberg, 2013).
- (ii) *Subjective norm (SN)* measures the perceived social pressure to carry out or not to carry out entrepreneurial behaviors (Ajzen, 2001).
- (iii) *Perceived behavioral control (PBC)* is defined as the perception of the ease or difficulty of becoming an entrepreneur.

Based on the extended TPB, entrepreneurial intention can be defined as an effort that the person will make to carry out an

entrepreneurial activity. Planned behaviors, such as entrepreneurship are predicted by intentions, which are derived from attitudes (Ajzen, 1991). Attitude is defined as a mental and neural state of exerting readiness, exerting a directive or dynamic influence upon the individuals with regard to all objectives and situations (Allport, 1935). An individual's attitude may change and evolve over a period of time, and thus is not a permanent feature. These attitudes are not same across individuals and are derived from exogenous factors like cultural influences (Crant, 1995; Crant & Bateman, 2000).

Thus, exogenous influences create attitudes, which may predict intuitions, which in turn may predict an individual's behavior (Ajzen, 1987; Ajzen & Madden, 1986). Hence, by studying attitudes and intentions, we may gain insights into entrepreneurship, as entrepreneurial activity is often a planned or intentional behavior that is influenced by attitudes. Subsequent moderators, such as availability of resources along with the final consequences of a behavior and its resulting actions are critical to the viability of the initiation of a new venture (Crant, 1996).

Entrepreneurial orientation or propensity to have entrepreneurial intentions consists of four broad dimensions. These dimensions include achievement, self-esteem, personal control and innovation (Robinson, Stimpson, Huefner, & Hunt, 1991; Tamizharasi & Panchanatham, 2010). An entrepreneur's intention may be interpreted as the desire to start one's own business (Durand & Shea, 1974). Entrepreneurs risk time and money in search of opportunities to transcend horizons with their own business (Paul & Shrivastava, 2015; Robinson et al., 1991). Entrepreneurs are self-confident, emotionally stable pathfinders who change their organization's mission or seek to solve problems, achievement, or autonomy (Brandstätter, 1997; Durand & Shea, 1974; Koellinger, Minniti, & Schade, 2007; Longenecker, McKinney, & Moore, 1989). Normally an increased perception of control and positive attitude, as well as socially accepted norms enhance entrepreneurial intentions of an individual (Goethner, Obschonka, Silbereisen, & Cantner, 2012; Kautonen, Tornikoski, & Kibler, 2011).

Harris and Gibson (2008) examined the entrepreneurial intentions of undergraduate students enrolled in different universities in the USA. Their results indicated that a majority of the students possessed entrepreneurial attitudes. Furthermore, both student characteristics and entrepreneurial experiences were found to be associated with certain entrepreneurial attitudes. Iakovleva, Kolvereid, and Stephan (2011) used TPB propounded by Ajzen (1991) to predict entrepreneurial intentions among students in developing and developed countries. The findings indicate that respondents from developing countries have stronger entrepreneurial intentions than those from developed countries. Moreover, the respondents from developing countries also score higher on the theory's antecedents of entrepreneurial intentions—attitudes, subjective norms, and perceived behavioral control—than respondents from developed countries. Their findings support TPB in developing and developed countries similar to Paço, Ferreira, Raposo, Rodrigues, and Dinis (2011), who deemed the theory an appropriate tool for entrepreneurship model development. Paul and Shrivastava (2015) found that the students in a developing country do not always have stronger entrepreneurial intention, based on the sample from two Asian countries. Dana (2007) has compared the context, policy and practice of Asian models of entrepreneurship: from the Indian Union and the Kingdom of Nepal to the Japanese Archipelago, and shown the differences and found that of two million enterprises in Japan about 99% are small and medium enterprises. On the other hand according to Global Entrepreneurship Monitor (GEM), India has more persons active in start-ups and new firms than any other country in the world (Dana, 2007).

2.2. Proactive behavior

Proactive behavior can be defined as taking initiative to improve the current circumstances or creating new opportunities (Crant, 2000). Extra-role behaviors can also be proactive, such as efforts to redefine one's role within the organization (Crant & Bateman, 2000). For example, employees might engage in specialized management activities by identifying and acting on opportunities to change the scope of their jobs or move to more desirable divisions of the business.

Crant (1996) notes that proactive persons tend to identify opportunities, take initiative, and continually attempt to bring change. He reported the relationship between a proactive personality and entrepreneurial intentions. His results show that a proactive personality is positively associated with entrepreneurial intentions. Proactive individuals may be more successful in entrepreneurial leadership and may contribute more to their organization.

Bateman & Crant (1993) developed the proactive personality index, defining it as a relatively stable measure that differentiates people based on the extent to which they take action to influence their environments (Prieto, 2011). The proactive personality scale measures a personal disposition toward proactive behavior, an idea that intuitively appears to be related to entrepreneurship (Crant, 1995).

2.3. Culture and country context

Davidsson & Wiklund (1997) define culture as prevailing values and beliefs, which is a significant determinant of levels of entrepreneurial activity in a society (Chand & Ghorbani, 2011). These values and beliefs are influenced by a number of factors particular to the country, including the nation's geographical features (Liñán & Fernandez-Serrano, 2014) and economic situation. Cultural impact is a common topic studied in the field of entrepreneurship. Characteristics that result from culture have a significant impact on individual member's ability and desire to engage in entrepreneurial activities. Such characteristics include risk adversity, fate acceptance, and the importance of personal and business networks. Firms and individuals originating from national cultures where cultural norms are not adverse to uncertainty, demonstrate individualism and a low tolerance for hierarchy (Hofstede, 1984); however, they are more likely to be risk-accepting (Mihet, 2013)—a characteristic common amongst entrepreneurs. These values are changing in Japan, as are governmental policies, which are driving more entrepreneurial growth (Futagami & Helms, 2009).

Although policy-based incentives are important for entrepreneurial growth, ethnic minorities in a host market often struggle as these incentives are mostly not sufficient, thus social predictors of entrepreneurship may be more impactful (Abebe, 2012). Stephan & Uhlaner (2010) argue that levels of entrepreneurship in cultures that are socially supportive are based on supply-side variables, such as access to capital; while entrepreneurship in cultures focusing on performance is directly related to demand-side variables, such as opportunities in the market.

Pattie, Parks, and Wales (2012) demonstrate that levels of risk aversion, which can be increased by low access to capital, have a direct impact on firm performance. When the entrepreneur comes from a culture affected by a lesser developed economy, the potential economic gain may not be sufficient to offset the risks involved in engaging in entrepreneurial activity, thus there must be some non-economic incentive for the entrepreneur (Stokes, 1974). This incentive may simply be the desire to be productive or be self-employed, for which entrepreneurship can be a means to an end (Kristiansen & Indarti, 2004).

There are some specific factors influencing entrepreneurial intention among women (Gupta & Bave, 2007). Chaturvedi, Chiu, & Viswanathan's, (2009) studied the literacy levels among the women in India and showed that lower literacy rates and limited resources were positively related to the idea that the individual can negotiate control with their difficult environment—an entrepreneurial perspective. Cultural closeness between market incumbents has proven to be significant for entrepreneurship activity as well, as this promotes the development of business networks. Chinese firms often base relationships solely on ethnic and cultural ties (Dahles, 2005). In the case of Japanese firms, a shared culture increases interpersonal communications and similar value systems, which can increase the productivity of the firm (Erez, 1992). A shared cultural background may drive entrepreneurs to act as others similar to themselves, such as hiring practices (Yang, Colarelli, Han, & Page, 2011). However, it is noted that the economic opportunity may often overcome these practices of ethno-cultural benefit (Claar, TenHaken, & Frey, 2009; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012). Similarly, Ibrahim and Galt (2011) highlight the limitations of both mainstream economic analysis and the cultural approaches to ethnic business formation.

It is important to investigate the various factors underpinning the socioeconomic context in which entrepreneurs live (Ibrahim & Galt, 2011). In tune with this call, our goal is to show the relationship between culture, socio-economic context of the country and entrepreneurial intentions. Therefore, based on the insights from the previous studies, we examined the widely accepted database, Global Entrepreneurship Monitor (GEM). In 2009, GEM categorized countries based on three stages of economic development, as defined by the World Economic Forum's Global Competitiveness Report: factor driven, efficiency driven and innovation driven (Bosma & Levie, 2010). This classification in phases of economic development is based on the level of GDP per capita and the extent to which countries are factor driven. As countries develop economically they tend to shift from one phase to the next, with entrepreneurship being both a driver (Lee, Lim, Pathak, Chang, & Li, 2006) and byproduct of this economic transition. Likewise, as countries evolve and modernize in their perspectives and lifestyles, entrepreneurs are likely to emerge (Papaneck, 1972).

India is a factor-driven economy, whereas Japan falls in the category of an innovation-driven economy as per the GEM 2011 classification (Kelley, Singer & Herrington, 2012). The economic reforms in 1991 and the Information Technology (IT) boom during the second half of the 1990s have been significant factors leading to a wave of entrepreneurship in the Indian sub-continent (Paul, 2010), as a country's economic situation impacts entrepreneur's perception of opportunities (Stuetzer, Obschonka, Brixxy, Sternberg, & Cantner, 2014). On the other hand, entrepreneurship was nurtured for many years in countries, such as USA and Japan, with the support of seed capital and government policy in different ways. Dana (1998) found that small and medium enterprises in Japan are not independent as they get support from different organizations and institutions. The institutional framework in Japan is more favorable for entrepreneurship compared to some European countries such as the Netherlands (Okamuro et al., 2011).

Of the country-specific factors that drive entrepreneurship are high income (Levie & Autio, 2008), and the drive for wealth that may prevail in the society (Hessels, Van Gelderen, & Thurik, 2008). With GDP growth at an average 7 percent during the last 15 years, the Indian economy has also recorded relatively high growth in exports and Foreign Direct Investment (FDI), compared to developed countries (Paul, 2015). India, though a developing country with a population of 1.2 billion people, has emerged as the second fastest growing economy in the world (Paul & Gupta, 2014), despite the lack of venture capital. The institution of venture

capitalism is a difficult one to initiate particularly in developing countries like India with unstable macroeconomic environments (Dossani & Kenney, 2002).

Entrepreneurial waves date back to the 1950s and 1960s in Japan, when society and government undertook efforts for growth with slogans such as “Double the exports” and “Double income” (Kanno & Alfaro, 2008). Dana (1998) found that there were struggles in Japan to build their own enterprises in the early stages after the Second World War. Japan has an ancient and unique culture founded on legends, myths and rituals. Rather than compete with the large firms, entrepreneurs in Japan co-operate with them, serving as suppliers and assemblers, in an intricate relationship revolving around cultural beliefs (Dana, 2007).

According to GEM (2008), one in every 10 Indian has engaged in some form of entrepreneurial activity. One possible reason could be the necessity-based entrepreneurship, as many people start their small business ventures not by choice, but to create their own employment for survival purposes. Consequently, India is ranked relatively high with reference to necessity-based entrepreneurship and 5th from the lowest position in opportunity-based entrepreneurship, in the GEM survey of entrepreneurial countries (Kelley et al., 2012; Monitor, 2008). On the other hand, Japan is relatively high in opportunity-based entrepreneurship and low in necessity-based entrepreneurship (Bosma & Levie, 2010; Monitor, 2008).

Kumar (2013) reveals how Indian knowledge-intensive service firms (KISFs) leverage their entrepreneurial orientations in the pursuit of diverse international market opportunities, and sustain their entrepreneurial orientation through continuous efforts to learn from experience and the host market environment. This study provides empirical insights into early internationalization of Indian KISFs, thus addressing a lacuna in this field. Much entrepreneurship activity is centered on the IT industry in India; however, there are a few outstanding examples

in other fields as well. This new breed of entrepreneurs seems to make their own rules and revolutionize the way business was done (Kumar, 2013).

To a large extent, Indian society appears to be risk averse, which may limit an individual's entrepreneurial capacity (Fairlie & Holleran, 2012). Social attitudes, lack of capital, inadequate physical infrastructure and lack of government support are major factors of hindrance. The combination of historical factors—including the caste system, British occupation, cultural values, and government regulations—has limited the degree of entrepreneurship in India. There are efforts taken in the recent years to change the cultural outlook in India (Dana, 2000).

Japan is the third largest economy in the world and the second largest economy in Asia, whereas India is ranked as Asia's third largest economy. On the other hand, India, with its abundant supply of talent in IT and management, has become the hub of outsourcing of services from developed countries (Kedia & Lahiri, 2007). Besides, the Indian entrepreneurs have gone global in the recent years whereas several Japanese firms went global and grown global in the 1970s and 1980s. The recent spate of global acquisitions by Indian firms has forced the business community the world over to sit up and take notice of multinational firms from that sub-continent (Paul, 2013). The policy changes enabled a scalable and sustainable model for creating a new breed of entrepreneurs in the years to come, as transnationalism holds a crucial effect on the growth of entrepreneurship (Ilhan-Nas, Sahin, & Cilingir, 2011). It is worth noting that although the concept of entrepreneurial competencies is used widely by government agencies and others in their drive for economic development, the core concept of entrepreneurial competencies, its measurement and relationship to entrepreneurial performance and business success are in need of further rigorous research and development in practice (Mitchellmore & Rowley, 2010).

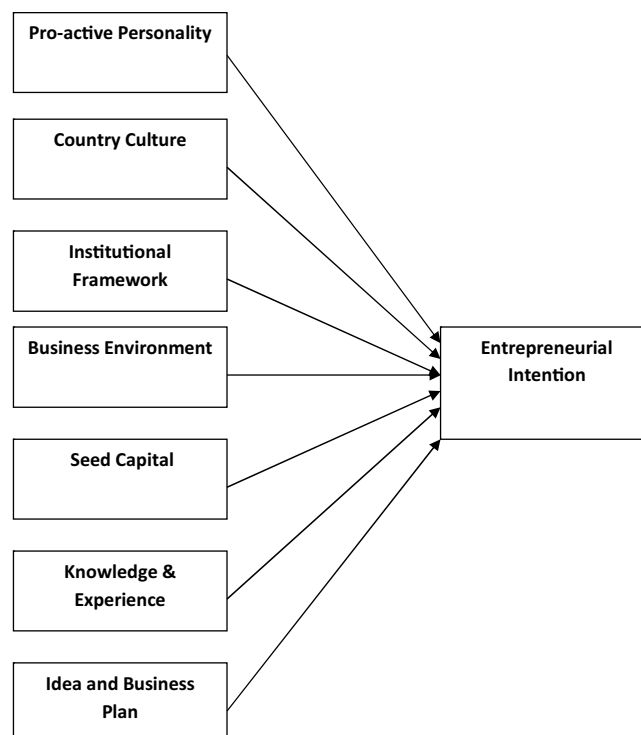


Fig. 1. Theoretical Model depicting factors Influencing Entrepreneurial Intention.

Table 1

Theoretical basis of factors/concepts in the model introduced in Fig. 1.

Pro-Active Personality (Behavior)	Bateman and Crant (1993), Crant (1996), Crant (2000)
Country Culture	Hofstede et al. (2010), Okamuro et al. (2011), Liñán and Fernandez-Serrano (2014)
Institutional Infrastructure (framework)	Witt and Redding (2009)
Business Environment	Dana (2000), Paul (2010)
Seed capital	Other Studies in general
Knowledge & Experience	Kumar (2013), Paul and Gupta (2014)
Ideas	Kumar (2013)

3. Research objectives

Following Witt and Redding's (2009) path of analyzing the national cultures and institutional structures by comparing executives in two different countries, we decided to analyze the entrepreneurial intentions of people in two culturally and economically different countries. They selected Germany and Japan for the comparison, for pragmatic reason. We compare entrepreneurial attributes of managers in a developed country (Japan) with those of a developing country (India) with a strong rationale. Our main research question is to examine whether the young managers from a developing country have stronger entrepreneurial intentions than those of a developed country, within the context of TPB. We aim to analyze the role of proactive behavior and country culture to answer this pertinent question. Based on the results of the analysis, we put forward a theoretical framework to denote the linkage between entrepreneurial intention, country culture, and proactive personality.

The literature reviewed reveals the following postulates:

1. A reciprocal relationship between institutional framework and culture exists ().
2. Cultural difference leads to difference in entrepreneurial intentions (Okamuro et al., 2011).
3. Entrepreneurial intentions predict entrepreneurial behavior (Ajzen, 1991).
4. Entrepreneurial behavior is based on attitude (Harris & Gibson, 2008).

However, past research lacks an established relationship between entrepreneurial and proactive behavior, with respect to developing versus developed countries. The theoretical rationale for selecting these countries comes from the classification of countries as factor driven (developing country) and innovation driven (developed country) economies in GEM (Bosma & Levie, 2010). We had to select a factor-driven country and an innovation-driven country for this comparative study. We chose Japan, being one of the 20 innovation driven economies (GEM, 2008; Bosma & Levie, 2010) and India, being a factor-driven economy (GEM, 2008). Our hypothesis development and country selection criteria are also based on the findings of Dana (1998, 2000), who found that entrepreneurship and culture in Japan and India are different. Thus, following the previous studies discussed in the literature review, particularly, Crant (1996, 2000), we establish the following hypothesis:

Hypothesis 1. Proactive personalities are positively associated with entrepreneurial behavior.

Following previous studies, particularly, Dana, (1998, 2000) and Okamuro et al. (2011), Liñán and Fernandez-Serrano (2014), we posit:

Hypothesis 2. Country culture and context, influence attitude, behavior, and entrepreneurial intentions.

4. theoretical model

Based on the insights from the review of literature, we draw a theoretical framework (see Fig. 1 and Table 1) to highlight the common factors influencing the entrepreneurial intention and behavior. We include not only proactive personality (following Bateman & Crant, 1993; Crant, 1996, 2000) and country culture (following Dana, 2000; Hofstede, Hofstede, & Minkov, 2010; Liñán & Fernandez-Serrano, 2014; Okamuro et al., 2011) but also other contributing factors such as institutional infrastructure (following Witt & Redding, 2009), business environment (following Dana, 2000; Paul, 2010), seed capital (following other studies in general), knowledge and experience (Paul & Gupta, 2014), ideas (following Kumar, 2013), in our multi-factor framework. Though all these factors influence the entrepreneurial intention somehow or other, there is interdependency between these elements/variables. Therefore, we decided not to use measurement instruments for all the influencing factors stipulated in our model. Taking into account that institutional framework, business environment and seed capital shape the country culture, we focus on the culture as a variable for positing our hypothesis. Similarly, knowledge and ideas facilitate pro-active behavior and therefore, we consider it as part of the variable—proactive behavior (see Table 1). To illustrate further, one can state that people with proactive behavior tend to get involved in networking, which in turn helps in grooming themselves as entrepreneurs.

5. Method

As our main focus is comparative international entrepreneurship, we collected primary data from 190 young managers in the age group of 25–35 from India and Japan. Young managers are considered to be the most appropriate people for studying entrepreneurial intentions and resultant behavior (Engelen et al., 2009; Jones, Coviello, & Tang, 2011; Autio et al., 2013), compared to the sample based on full-time students, as seen in some studies (Harris & Gibson, 2008; Iakovleva et al., 2011; Paul & Shrivastava, 2015). All the managers who participated in our survey hold MBA degrees from premier schools in those relevant countries as our criteria to classify the respondent as a young manager was a person with at least three years of work experience in managerial position besides holding an MBA degree. Details of the sample are shown in Table 2.

Participants were contacted in person, as each of the researchers undertook the responsibility of collecting the data from their respective countries of employment or birth. We had approximately 85 percent males and 15 percent females in our sample from Japan. The same ratio of male and female managers was 90:10 in India. This could be because female managers are minority in both the countries. The response rate was over 85 percent in Japan and 90 percent in India. The data was collected completely off-line (one-to-one interaction). All the respondents in both India and Japan were citizens of their respective countries.

Table 2

Details of young managers (respondents = sample).

Criteria to be included	MBA with atleast 3 years work experience
Survey Procedure	Offline
Manager's Industries	Automobile, Banking, Insurance, Chemicals, Information Technology, Electrical and pharmaceuticals
Response Rate	90% (India) 85% (Japan)

More than 95 percent of the managers were employees of domestic/local firms.

Our goal was to choose a developed country and another developing country to compare the degree of entrepreneurial intention. We selected Japan because it is a developed country with a unique business culture (based on the insights from Dana, 1998, 2007; Hofstede et al., 2010; Okamuro et al., 2011; Paul & Shrivastava, 2015; Raringer, 2013). We selected India, as it is a developing country with a different cultural context (Hofstede et al., 2010). Both the countries are creditworthy economies when we take into consideration their population and total GDP (India—1.237 billion, Japan—127.6 million) or total GDP in terms of current US dollars (India—1.9 trillion, Japan—6 trillion, according to the World Bank data for 2014).²

The cultural traits that influence our definition 'young manager' are their work experience and MBA degree. Since we selected managers in the age group of 25–35 years, majority of them had at least four years of work experience, which help them to understand how the enterprises operate in real life. This tenet helps them to decide whether they should groom themselves as entrepreneurs, while the studies based on the sample from the students do not have this advantage. Besides, in comparison to the senior managers, the degree of motivation to take initiatives is likely to be higher in the case of young managers.

Following Bateman & Crant (1993) and Crant (1996, 2000), a structured questionnaire with 17 items measuring proactive personalities, was administered to young managers in India and Japan. This self-report measure of proactive behavior was developed by Bateman & Crant (1993) to measure a person's disposition toward proactive behavior, as a general construct that predicts behaviors intended to effect change, such as entrepreneurial intention. An individual's total score range is between 17 and 119 on this instrument. The higher the respondent's score, the stronger the proactive personality they have. Previous work by Bateman & Crant determined that the aggregate index scores above 85 indicate fairly high proactivity. We have used Statistical Package for Social Sciences (SPSS version 16.0) for the statistical analysis. We estimated the mean value of each response, and computed the sum of those average scores to arrive at the index score. Reliability and validity of the Bateman & Crant scale for Indian and Japanese sample is confirmed using Cronbach's alpha and principal component analysis. Group statistics are calculated to compare the samples of both the countries. The group statistics Table 10 provides useful descriptive statistics for the two groups, including the mean and standard deviation.

We performed Independent Sample t-test on both the groups to uncover any statistically significant difference that may exist between each item of Bateman & Crant's personality index. P value

is the probability of getting the observed score from the sample groups. If $p \geq .05$ then difference is not significant. If $p \leq .05$ then difference is significant. Levene's Test for Equality of Variances determines if the two conditions have about the same or different amounts of variability between scores. Under the heading Levene's Test for Equality of Variances significance level associated with the value is used to assess whether the variances of the two groups are equal or unequal. A value ($<.05$) in the column labeled Sig. indicates that the groups have unequal variances, the value $>.05$ in that column indicates that the variance of the two groups is equal. Accordingly, the t-test in the row labeled Equal variances not assumed and equal variance assumed is considered. The SPSS output reports a t-value and degrees of freedom for all t-test procedures. Every unique value of the t-test and its associated degrees of freedom have a significance value that indicates the probability that there is no difference or significant difference between the two groups (India and Japan) on 17 items of Bateman & Crant scale.

The reliability of the scale is established by estimating Cronbach's alpha, following Gliem and Gliem (2003). The alpha value 0.79 found to be more than the acceptable threshold limit (see Table 3).

We conducted principal component analysis to validate the scale. The ratio of cases to variables in a principal component analysis should be at least five to one. With 17 variables and 190 respondents, the ratio of cases to variables for the two countries exceeds the requirement for the ratio of cases to variables. KMO and Bartlett's test establishes that the sample is adequate as the value of KMO for India is 0.592 and for Japan it is 0.575 both are greater than the required measure of 0.5 for the two countries. The results for both the countries in Tables 4 and 5 show that we do have patterned relationships amongst the variables.

Factor analysis requires that the probability associated with Bartlett's test of sphericity be less than the level of significance. The probability associated with the Bartlett's test for both the countries satisfies this requirement (See Tables 4 and 5) Factor analysis indicates that in case of India there are six groups of variables among the 17 items of the used scale. The cumulative proportion of variance criteria can be met with five groups to satisfy the criterion

Table 4

KMO and Bartlett's test for India.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.592
Bartlett's Test of Sphericity	Approx. Chi-Square
	Df
	Sig.
	660.425
	136
	.000

Table 5

KMO and Bartlett's test for Japan.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.575
Bartlett's Test of Sphericity	Approx. Chi-Square
	Df
	Sig.
	621.711
	136
	.000

Table 3

Reliability test.

Country	Cronbach's Alpha	N of Items
India	.791	18
Japan	.794	18

² Source: www.data.worldbank.org accessed on 17th September 2015.

Table 6

Total variance explained for India.

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%
1	3.553	20.901	20.901
2	2.067	12.161	33.062
3	1.987	11.691	44.753
4	1.970	11.586	56.339
5	1.693	9.960	66.299
6	1.576	9.273	75.572

Extraction method: Principal component analysis.

Table 7

Total variance explained for Japan.

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%
1	2.722	16.013	16.013
2	2.559	15.055	31.068
3	2.523	14.840	45.908
4	1.877	11.044	56.952
5	1.416	8.329	65.281

Extraction method: Principal component analysis.

of explaining 60 percent or more of the total variance. A six-component solution would explain 75 percent of the total variance, as shown in Tables 6 and 7. A five-component solution in case of Japan would explain 65 percent of the total variance.

The component matrix indicates factor loading for each variable. As shown in Tables 8 and 9, there are 17 items (Total number of variables) loaded for this analysis. This establishes the validity of the scale for Indian as well as Japanese sample, as it meets the criteria that have average factor loading greater than 0.4.

6. Results

The estimated overall average score for young managers in India on the Bateman & Crant index is 83.7. A score of 85 is considered as a fairly high proactivity score on this Index. Accordingly, India's score is close to this threshold score. On the other hand, the managers in Japan scored an average of 87.52 on the same index, which is higher than the Indians. The empirical

finding reported in Table 10 shows the index sum scores of managers from both the countries (N = 190).

6.1. Group statistics

The group statistics of samples from Japan and India are presented in Table 10. This Table describes the means and standard deviations of different items for the measurement of entrepreneurial intention of each group: i.e., young managers in India and Japan. The mean represents the average score of each item with the overall scores of the groups on a seven-point scale. Fig. 2 depicts means of different items for the measurement of entrepreneurial attitude of India and Japan.

Fig. 3 depicts variance of different items for the measurement of entrepreneurial attitude of India and Japan.

6.2. Independent sample t-test

We performed a t-test at a 95 percent confidence interval to verify whether there are any statistically significant differences between the scores on each item, between the two groups of Indian and Japanese managers.

Table 11 shows the Independent Sample t-test in which we examined the statistical significance of the result to arrive at conclusions regarding the difference in level of entrepreneurial intentions between each sampled group of managers.

There are 17 items in Bateman & Crant scale. For example item 1 i.e., "I am constantly on the lookout for new ways to improve my life" and item 2 refers to "I feel driven to make a difference in my community and may be, the world" and so on.

An independent samples t-test was conducted to examine whether there was a significant difference in items of entrepreneurial attitude between India and Japan (see Table 11). The results describe the estimated t-values to ascertain whether there is a significant difference between the two groups in their entrepreneurial attitude. Before carrying out the t-test, we must decide whether we can assume equal variances or not. Below the section of t-test for equality of means, we need to focus on the sig (2-tailed) column – the p-value.

The test revealed a statistically significant difference in the following items:

Item 1: I am constantly on the lookout for new ways to improve my life.

Table 8

Rotated component matrix for India.

Rotated Component Matrix		Component					
S. No.	Variables	1	2	3	4	5	6
1	I am constantly on the lookout for new ways to improve my life.	.674	−0.179	.217	.309	−0.019	.163
2	I feel driven to make a difference in my community and maybe the world.	.441	.305	.311	.496	.211	.318
3	I tend to let others take the initiative to start new projects	−0.027	.041	.142	.915	−0.151	−0.025
4	Wherever I have been, I have been a powerful force for constructive change.	.758	.080	.185	.073	.123	.054
5	I enjoy facing and overcoming obstacles to my ideas.	.147	−0.171	−0.165	.028	.871	−0.021
6	Nothing is more exciting than seeing my ideas turn into reality.	.309	.640	−0.318	.084	.008	.281
7	If I see something I don't like, I fix it.	.765	.196	−0.087	.178	−0.090	−0.227
8	No matter what the odds, if I believe in something, I will make it happen.	.722	−0.154	.174	.077	.337	.025
9	I love being a champion for my ideas, even against others' opposition.	.190	−0.726	.016	.242	.175	.224
10	I excel at identifying opportunities.	.174	.735	−0.066	.000	.184	.247
11	I am always looking for better ways to do things.	.234	.091	.009	.056	−0.063	.856
12	If I believe in an idea, no obstacle will prevent me from making it happen.	.279	−0.353	−0.059	.797	.210	.014
13	I love to challenge the status quo.	.770	.169	.138	−0.123	−0.056	.161
14	When I have a problem, I tackle it head-on.	−0.060	.404	.275	−0.031	.771	−0.118
15	I am great at turning problems into opportunities.	.230	−0.021	.857	.154	−0.070	.050
16	I can spot a good opportunity long before others can.	.213	−0.188	.846	.012	.087	−0.184
17	If I see someone in trouble, I help out in any way I can.	.462	−0.077	.265	.057	.081	−0.628

Extraction method: Principal component analysis, rotation method: Varimax with Kaiser Normalization.

Table 9
Rotated Component Matrix for Japan.

Rotated Component Matrix						
S. No.	Variables	Component				
		1	2	3	4	5
1	I am constantly on the lookout for new ways to improve my life.	.407	.356	.484	.159	−0.231
2	I feel driven to make a difference in my community and maybe the world.	.302	.055	.622	.124	.569
3	I tend to let others take the initiative to start new projects	−0.085	−0.055	−0.080	−0.029	.836
4	Wherever I have been, I have been a powerful force for constructive change.	.532	.516	.266	−0.018	−0.049
5	I enjoy facing and overcoming obstacles to my ideas.	.360	.073	.609	.387	−0.136
6	Nothing is more exciting than seeing my ideas turn into reality.	.120	.612	.309	−0.067	−0.179
7	If I see something I don't like, I fix it.	−0.150	.179	.013	.700	.188
8	No matter what the odds, if I believe in something, I will make it happen.	−0.032	.099	.809	.162	−0.074
9	I love being a champion for my ideas, even against others' opposition.	.593	.006	.385	−0.268	−0.249
10	I excel at identifying opportunities.	.263	.788	−0.018	.173	.193
11	I am always looking for better ways to do things.	−0.297	.679	.403	.309	−0.101
12	If I believe in an idea, no obstacle will prevent me from making it happen.	.035	.111	.227	.695	−0.096
13	I love to challenge the status quo.	.569	.112	.077	.487	−0.248
14	When I have a problem, I tackle it head-on.	−0.016	.670	.016	.416	−0.069
15	I am great at turning problems into opportunities.	.845	−0.063	.032	.152	.209
16.	I can spot a good opportunity long before others can.	.677	.160	−0.002	−0.213	−0.028
17.	If I see someone in trouble, I help out in any way I can.	.038	.393	.577	−0.077	.127

Extraction method: Principal component analysis, Rotation method: Varimax with Kaiser normalization.

The *p*-value (sig.) for item 1 for the Levene's Test is .516. As it is more than .05, hence we assume equal variances, and the *T* value is 4.542. The *p*-value is .513 for the *t*-test for equality of means, here we are checking on the sig (2-tailed) column – the *p*-value. This *p*-value is related to the independent samples *t*-test and shows that there is no significant difference between the two nationality groups with respect to item 1. For instance, Table 10 shows the average score or means of item 1 as 5.37 for Indians and 5.24 for Japanese managers. This finding indicates that Japanese as well as their Indian counterparts are actively involved in finding out new ways that improves life.

Item 2: I feel driven to make a difference in my community and maybe the world.

The *p*-value (sig.) for item 2 for the Levene's Test is .000. As it is below .05, hence we cannot assume equal variances, and the *T* value is 6.626. The *p*-value is .000 for the *t*-test for equality of means; here we are checking on the sig (2-tailed) column – this is the *p*-value. This *p*-value is related to independent samples *t*-test and shows that there is a significant difference between the two nationality groups with respect to item 2. Table 1 shows the average score or means of item 2 as 4.42 for Indians and 5.62 for Japanese. Thus, the Japanese managers score significantly higher than the Indians. The findings reveal that Indians are not so driven to make an impact in the community in comparison to Japanese.

Item 3: I tend to let others take the initiative to start new projects.

The *p*-value (sig.) for item 3 for the Levene's Test is .854, it is more than .05, hence we assume equal variances, and the *T* value is 3.358. The *p*-value is .001 for the *t*-test for equality of means; here we are checking on the sig (2-tailed) column – this is the *p*-value. This *p*-value is related to independent samples *t*-test and shows that there is a significant difference between the two nationality groups with respect to item 3. Table 1 shows the average score or means of item 3 as 3.79 for Indians and 4.63 for Japanese. Thus, the Japanese managers score significantly higher than the Indians. The result indicates that Indians do not take initiatives as much as Japanese do.

Item 4: Wherever I have been, I have been a powerful force for constructive change.

The *p*-value (sig.) for item 4 for the Levene's Test is .484, it is more than .05, hence we assume equal variances, and the *T* value is

1.861. The *p*-value is .064 for the *t*-test for equality of means. Here we are verifying the sig (2-tailed) column – the *p*-value. This *p*-value is related to independent samples *t*-test and shows that mean is not significantly different between the two nationality groups with respect to item 4. Table 10 shows the average score or means of item 4 as 4.68 for Indians and 5.02 for Japanese. Thus, the Japanese score significantly higher than the Indians. Thus, we infer

Table 10
Mean Score for the Young Managers and Group Statistics (N 190).
Group Statistics

	Country	N	Mean	Std. Deviation	Std. Error Mean
Item 1.	India	101	5.37	1.405	.140
	Japan	89	5.24	1.323	.140
Item .2	India	101	4.42	1.518	.151
	Japan	89	5.62	.948	.100
Item 3.	India	101	3.79	1.722	.171
	Japan	89	4.63	1.708	.181
Item 4.	India	101	4.68	1.174	.117
	Japan	89	5.02	1.340	.142
Item 5.	India	101	5.70	.995	.099
	Japan	89	4.89	1.283	.136
Item 6.	India	101	4.85	1.276	.127
	Japan	89	5.69	1.345	.143
Item 7.	India	101	4.34	1.458	.145
	Japan	89	5.08	1.290	.137
Item 8.	India	100	5.44	1.131	.113
	Japan	89	5.53	1.045	.111
Item 9.	India	101	4.49	1.514	.151
	Japan	89	5.76	.930	.099
Item 10.	India	101	4.52	1.262	.126
	Japan	89	4.83	1.400	.148
Item 11	India	101	4.53	1.293	.129
	Japan	89	5.70	1.027	.109
Item 12	India	101	4.92	1.339	.133
	Japan	89	4.89	1.133	.120
Item 13.	India	101	4.21	1.194	.119
	Japan	89	4.38	1.113	.118
Item 14.	India	101	4.89	1.199	.119
	Japan	89	4.83	1.131	.120
Item 15.	India	101	4.91	1.350	.134
	Japan	89	4.73	1.259	.133
Item 16.	India	101	4.95	1.090	.108
	Japan	89	5.39	1.073	.114
Item 17.	India	101	5.69	1.189	.118
	Japan	88	5.31	1.197	.128

Index Score (Sum) for India–83.70, Index Score (Sum) for Japan– 87.52.

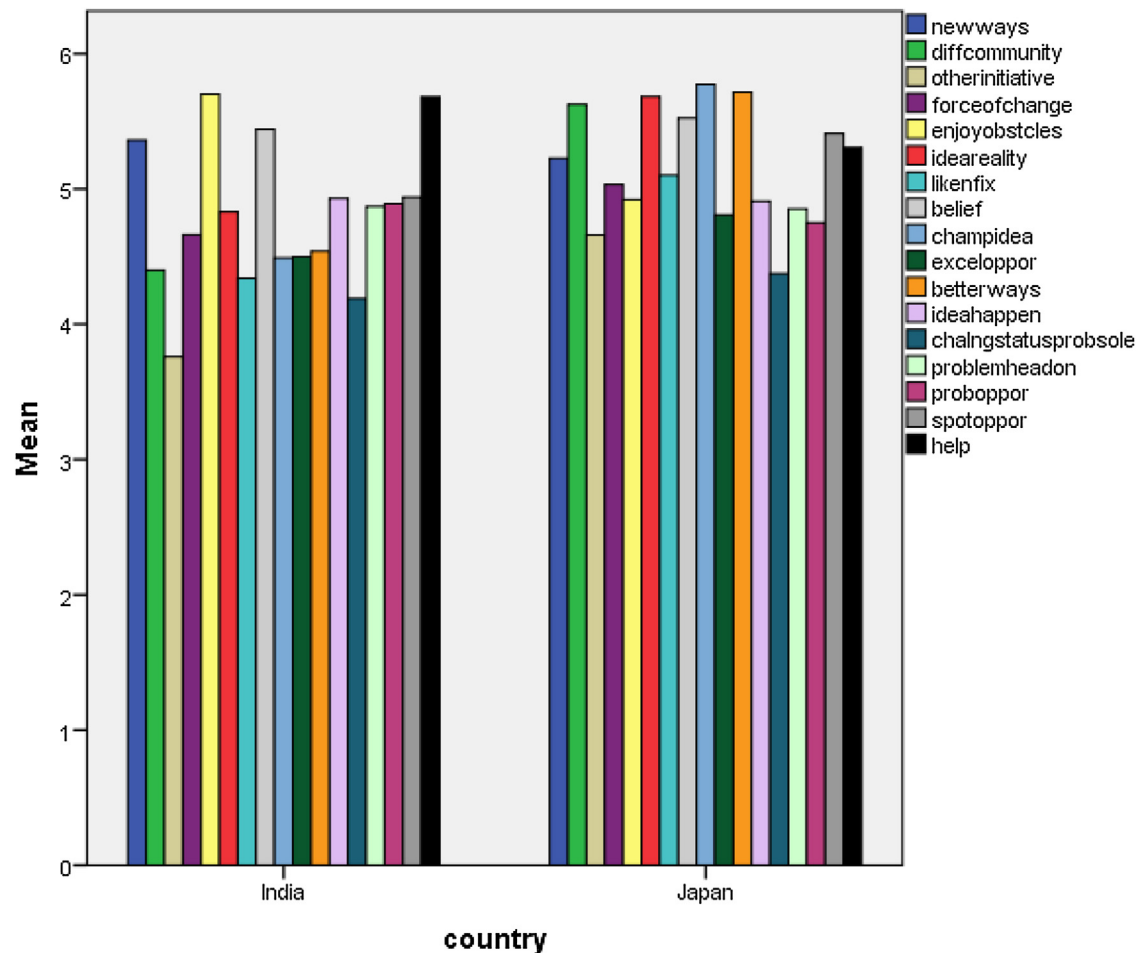


Fig. 2. Graphical Representation of the Means for India and Japan.

that the Japanese channelize their energy for constructive change at their work place.

Item 5: I enjoy facing and overcoming obstacles to my ideas.

The p-value (sig.) for item 5 for the Levene's Test is .006, it is below .05, hence we cannot assume equal variances, and the T value is 4.846. The p-value is .000 for the t-test for equality of means. Here we are verifying the sig (2-tailed) column – the p-value. This p-value is related to independent samples t-test and shows that mean is significantly different between the two nationality groups with respect to item 5. Table 10 shows the average score or means of item 5 as 5.70 for Indians and 4.89 for Japanese. Thus, it is interesting to know that the Indians score significantly higher than the Japanese. The Indians like to face challenges more than their Japanese counterpart.

Item 6: Nothing is more exciting than seeing my ideas turn into reality.

The p-value (sig.) for item 6 for the Levene's Test is .915, it is more than .05, hence we assume equal variances, and the T value is 4.383. The p-value is .000 for the t-test for equality of means, here we interpret based on the sig (2-tailed) column – this is the p-value. This p-value is related to independent samples t-test and shows that there is significant difference in the mean of the two nationality groups with respect to item 6. Table 10 shows the average score or means of items 6 as 4.85 for Indians and 5.69 for Japanese. This fact emphasizes that when the idea of the managers

turns into reality, the intensity of excitement is more in Japanese than the Indians.

Item 7: If I see something I don't like, I fix it.

The p-value (sig.) for item 6 for the Levene's Test is .688, it is more than .05, hence we assume equal variances, and the T value is 3.693. The p-value is .000 for the t-test for equality of means, here we interpret based on the sig (2-tailed) column—this is the p-value. This p-value is related to independent samples t-test and shows that there is significant difference in the mean of the two nationality groups with respect to item 7. Table 10 shows the average score or means of items 7 as 4.34 for Indians and 5.08 for Japanese. Japanese make more changes in the system when they do not like it than the Indians.

Our results reveal that on the following items there is no significant difference between managers in India and Japan.

Item 8: No matter what the odds, if I believe in something, I will make it happen.

Item 10: I excel at identifying opportunities.

Item 12: If I believe in an idea, no obstacle will prevent me from making it happen.

Item 13: I love to challenge the status quo.

Item 14: When I have a problem, I tackle it head-on.

Item 15: I am great at turning problems into opportunities.

It is interesting to note that Indians have scored more on items 12 and 15, but those are not statistically significant. However, the

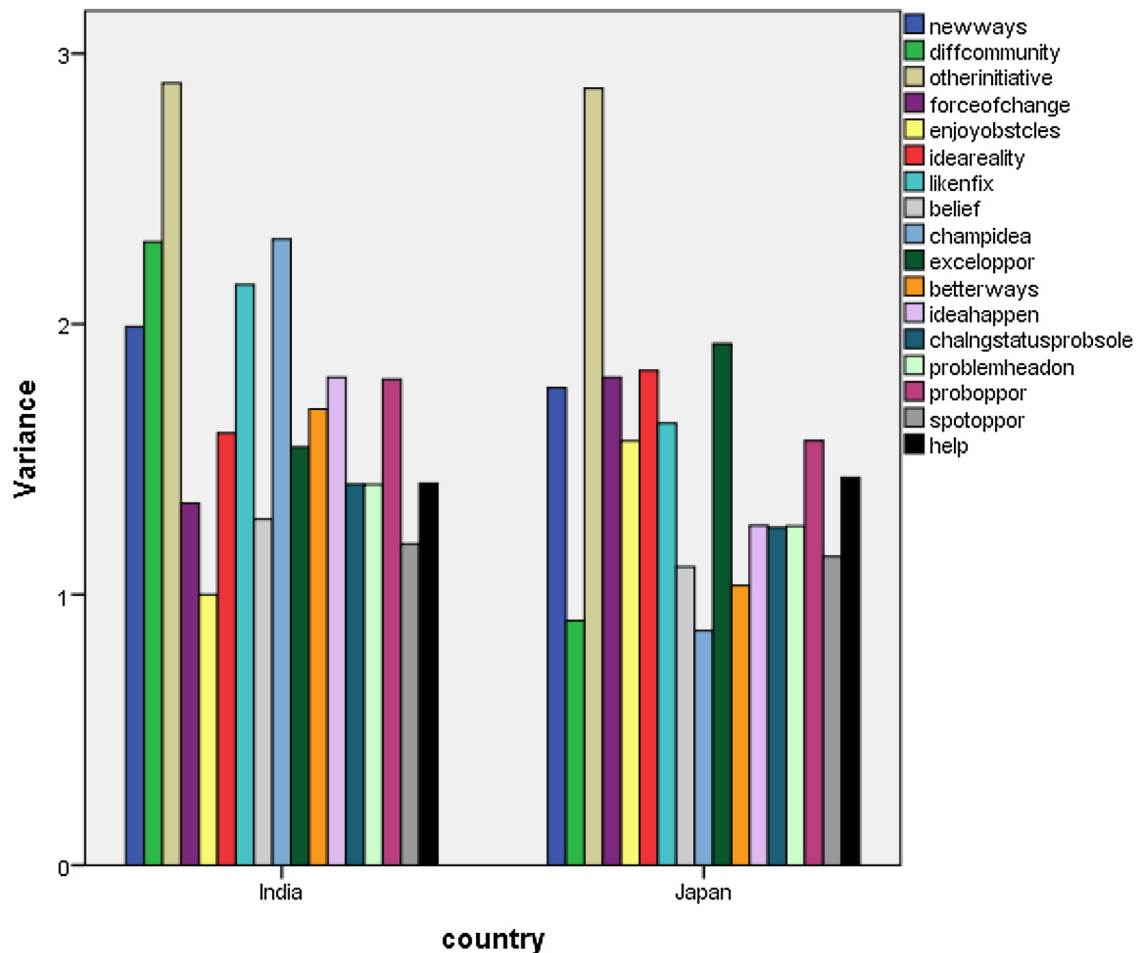


Fig. 3. Graphical Representation of the Variance for India and Japan.

Indian score is significantly more than the Japanese on the following items:

Item 17: If I see someone in trouble, I help out in any way I can.

Item 5: I enjoy facing and overcoming obstacles to my ideas.

The Japanese managers scored significantly more on items 9, 11 and 16. Table 10 shows the average score or means of item 9 for Indians is 4.49 and for Japanese it is 5.76. The average score of item 11 for Indians is 4.53 and for Japanese it is 5.70. The Japanese average score of item 16 is 5.39 more than 4.95 that Indians scored. The p-value is .005 for the t-test for equality of means; here we interpret based on the sig (2-tailed) column. This p-value is related to independent samples t-test and shows that there is significant difference in the mean of the two nationality groups with respect to item 16.

Item 9: I love being a champion for my ideas, even against others' opposition.

Item 11: I am always looking for better ways to do things.

Item 16: I can spot a good opportunity long before others can.

It is worth noting that although young Indian and Japanese managers showed overall proactive personality score of 83.7 and 87.52, respectively, on Bateman & Crant's index they had such strong differences on individual items. However, the aggregate score indicate that young managers from India did not score as high on the proactive personality index as those from Japan.

7. Discussion

The overall average scores on the Bateman & Crant index in the case of young managers from India (a developing country), is less than that of Japan (a developed country). This implies that the managers in developing countries do not always have stronger entrepreneurial intentions, compared to their counterparts in developed countries. Our findings do not corroborate the results of Iakovleva et al. (2011) who argue that the students in developing countries have stronger entrepreneurial intention than those of developed countries, following TPB. Hence, we infer that the theory of planned behavior does not hold true in the case of people from all developing and all developed countries. The index score of India should have been higher than that of Japan to corroborate the findings of Iakovleva et al. However, our results are in line with the findings of Paul and Shrivastava (2015) who found that the students in a developing country do not always have stronger entrepreneurial intentions based on the sample from full-time students (similar to Iakovleva et al., 2011). As students without work experience do not constitute a matured sample to measure entrepreneurial intention, our findings based on young managers would be more appropriate as a basis for future research. Therefore, researchers can further take up this topic for extension of research with samples from different developing as well as developed countries, estimate the index score and compare them.

Table 11
Independent sample t-test.

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
1	Equal variances assumed	.423	.516	.656	188	.513	.130	.199
	Equal variances not assumed			.658	187.15	.511	.130	.198
2	Equal variances assumed	15.18	.000	6.444	188	.000	−1.202	.187
	Equal variances not assumed			6.626	170.15	.000	−1.202	.181
3	Equal variances assumed	.034	.854	3.356	188	.001	−0.837	.249
	Equal variances not assumed			3.358	185.37	.001	−0.837	.249
4	Equal variances assumed	.491	.484	1.861	188	.064	−0.339	.182
	Equal variances not assumed			−1.845	176.34	.067	−0.339	.184
5	Equal variances assumed	7.666	.006	4.923	188	.000	.815	.166
	Equal variances not assumed			4.846	165.20	.000	.815	.168
6	Equal variances assumed	.011	.915	−4.383	188	.000	−0.834	.190
	Equal variances not assumed			−4.368	182.11	.000	−0.834	.191
7	Equal variances assumed	.162	.688	−3.693	188	.000	−0.742	.201
	Equal variances not assumed			−3.722	187.99	.000	−0.742	.199
8	Equal variances assumed	1.169	.281	−0.554	187	.580	−0.088	.159
	Equal variances not assumed			−0.556	186.72	.579	−0.088	.158
9	Equal variances assumed	31.52	.000	−6.903	188	.000	−1.279	.185
	Equal variances not assumed			−7.104	168.76	.000	−1.279	.180
10	Equal variances assumed	1.049	.307	−1.588	188	.114	−0.307	.193
	Equal variances not assumed			−1.578	178.55	.116	−0.307	.194
11	Equal variances assumed	16.49	.000	−6.797	188	.000	−1.162	.171
	Equal variances not assumed			−6.895	186.07	.000	−1.162	.169
12	Equal variances assumed	5.118	.025	.183	188	.855	.033	.181
	Equal variances not assumed			.185	187.69	.854	.033	.179
13	Equal variances assumed	.319	.573	−1.035	188	.302	−0.174	.168
	Equal variances not assumed			−1.040	187.39	.300	−0.174	.167
14	Equal variances assumed	.207	.650	.351	188	.726	.060	.170
	Equal variances not assumed			.353	187.12	.725	.060	.169
15	Equal variances assumed	.074	.786	.949	188	.344	.181	.190
	Equal variances not assumed			.954	187.37	.342	.181	.189
16	Equal variances assumed	.007	.932	−2.815	188	.005	−0.443	.157
	Equal variances not assumed			−2.818	185.69	.005	−0.443	.157
17	Equal variances assumed	.077	.782	2.220	187	.028	.386	.174
	Equal variances not assumed			2.219	183.14	.028	.386	.174

It makes sense to state that the differences in the characteristic features of sample will influence the score in the Bateman & Crant Index.

An important explanation for the differences in the aggregate index score could be because the young managers in India have a less favorable business environment (i.e. weak institutional framework, the degree of difficulty for the entrepreneur, and degree of bureaucratic obstacles in India), which in turn discourages the young managers from venturing as entrepreneurs. Our results (higher index for Japanese) are in tune with the findings of Dana (1998) who shows that Japanese small firms are not independent, as they are not stand-alone entities. It is normal in Japan for enterprises to participate in several types of business alliances as Japan reinforces an important notion of harmonial culture for the common good (Dana, 1998). Young people would take initiatives to be entrepreneurs if they are aware of the opportunities for reducing their risk, by getting involved in strategic alliances with other firms, which is easier in Japan and relatively difficult in India. This corroborates with the findings of Dana (2000) who shows that the combination of historical factors, social structure and government regulations has constrained entrepreneurship in India. In sum, it is worth noting that the variation in the aggregate scores also indicates that entrepreneurial intention is greatly influenced by one's country culture and business environment. However, since the aggregate mean scores are near or above the threshold of 85 on the index, it is possible to include both country culture and proactive behavior factors, along with other variables as determinants of entrepreneurial intention.

The aggregate index scores show that regardless of the differences, both groups – young managers in India and Japan–

exhibit overall proactive, entrepreneurial attitudes (85 being the threshold score). Therefore, we validate hypothesis 1 and 2, and conclude that in general, the young managers from both countries have strong entrepreneurial intentions; particularly the respondents from Japan. However, how those attributes are then demonstrated or pursued may be driven by cultural realities and other factors, specified in Fig. 1. Thus, we conclude with a mathematical equation to explain this relationship:

$$\text{Entrepreneurial Intention (EI)} = f(\text{cc, pb, ii, be, sc, k\&e, i})$$

where cc stands for country culture, pb stands for proactive behavior, ii stands for institutional infrastructure, be stands for business environment, sc stands for seed capital, k&e stands for knowledge & experience, and i stand for ideas. As there is interdependency between some of these variables (for instance, institutional infrastructure, business environment and seed capital shape the country culture, similarly, knowledge, experience and ideas are part of proactive behavior), we can assume that the last five variables are constant. Therefore, we derive our final formula as $EI = f(\text{pb, cc})$. This can be specified as $EI = \alpha + \beta \text{ PB} + \gamma \text{ CC}$. This relationship can be called as EIPBCC model and it is worth examining this empirically in different country contexts.

8. Managerial, theoretical and societal implications

The literature review and the results show the direct linkage between proactive personality and entrepreneurial intention. This leads us to believe that people with proactive behavior have better prospects of success as entrepreneurs. On the other hand, country culture (including socioeconomic factors) facilitates the ideas and

networking, which directly or indirectly helps the entrepreneurs to generate better business opportunities. It is important for entrepreneurs to understand these tenants so that they can try to compete and succeed regardless of whether they are in a developing or developed country.

The EIPBCC theoretical model we developed would be useful for researchers, academicians and practitioners to formulate and test hypothesis in a single country context among the managers and compare them with that of another country. The countries can be selected using the criteria – developing versus developed country – or culturally different countries. Theoretical implications can be analyzed within the context of two developed countries as well. For instance, Germany and France or USA and Spain. It is also possible to examine the theoretical relationship between the dependent variable Entrepreneurial intention and one of the independent variable in our model, for instance, Proactive Behavior using the same Bateman & Crant's scale in different country contexts.

The development of any society requires entrepreneurs that have the capability to bring change. Entrepreneurs improve the living standards and the tax revenue from their enterprises contributes to government treasury (Dana, 2001). In a developing country there is a need to have an ecosystem to encourage, support and nurture entrepreneurship. The research is useful to decision makers in framing policies to create conducive environment in developing countries to groom entrepreneurs. The study reveals significant difference in the degree of entrepreneurial intentions of young managers in Japan vis-à-vis India. The findings are also useful from the point of view of grooming managers with proactive personality so that they would be more entrepreneurial in future.

9. Limitations and directions for future research

This study is based on the assumption that entrepreneurial intention has its roots in proactive personality and behavior. We derived this tenet based on the findings from other research studies. The entire study is based on this relationship. Besides, we assume the differences in the culture amongst the countries we studied based on the significant differences in the aggregate score in the Bateman and Crant index. This can be considered as a methodological limitation.

There are opportunities for research based on the sample from more than two countries. It would be also interesting to look at the entrepreneurial intention among women in different countries. The degree of entrepreneurial intention among managers from different industries can also be studied. It would also be prudent to extend the existing theoretical models in the context of developing countries to examine the entrepreneurial intentions among people. There is also potential to develop and validate new scales taking into account the dynamic capabilities created due to greater access to information in this digital age. Researchers can also test our model based on the mathematical equation specified above, using different econometric methods such as multiple regression with dummy variable, Vector Auto Regression, Granger causality etc. Finally, based on the analysis, we arrive at our main proposition for further research as specified below.

“Entrepreneurial intentions are significantly influenced by one's country culture and pro-active personality traits.”

10. Conclusions

Entrepreneurship is critical for the long-term success and growth prospects of a country. The scores generated in our statistical analysis are significantly different in the case of India, a

developing country compared to Japan. Since there is variation in the index scores, the influence of country culture on entrepreneurship cannot be ignored. Our results indicate that respondents from developing countries do not always have stronger entrepreneurial intentions than those from developed countries. Additionally, we found that countries like India fall behind developed countries, such as Japan, in terms of the level of entrepreneurship. The relatively low index score in the case of India implies that institutional frameworks in the country are not yet fully developed for the benefit of entrepreneurs, as compared to Japan. There is still need for developing entrepreneurial skills and culture in countries such as India. This corroborates with the results of Okamuro et al. (2011) who shows that the institutional framework in the Netherlands is considerably less favorable to entrepreneurship compared to Japan. Thus, developing countries, such as India, need to improve institutional framework to encourage entrepreneurs in order to aid in further economic development. Besides, we found that the integration of traits like national culture and individual constructs such as proactive personality helps in creating an entrepreneurial business environment, which in turn, leads to overall growth in long run.

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References

- Abebe, M. A. (2012). Social and institutional predictors of entrepreneurial career intention: evidence from Hispanic adults in the US. *Journal of Enterprising Culture*, 20(01), 1–23.
- Ajzen, I. (1987). Attitudes, traits, and actions: dispositional prediction of behavior in personality and social psychology. *Advances in Experimental Social Psychology*, 20(1), 1–63.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior & Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52(1), 27–58.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal oriented behavior: attitude, intentions and perceiving behavioral control. *Journal of Experimental Social Psychology*, 22, 453–474.
- Allport, G. W. (1935). Attitude. In C. Murchison (Ed.), *Handbook of MA* (pp. 798–884). Worcester, MA: Clark University.
- Alon, I., & Rottig, D. (2013). Entrepreneurship in Emerging Markets: New Insights and Directions for Future Research. *Thunderbird International Business Review*, 55, 487–492.
- Autio, E., Pathak, S., & Wennberg, K. (2013). Consequences of cultural practices for entrepreneurial behaviors. *Journal of International Business Studies*, 44, 334–362.
- Bateman, T., & Crant, M. J. (1993). The proactive component of organizational behaviour: a measure and correlates. *Journal of Organizational Behaviour*, 16(2), 103–118.
- Bosma, N. S., & Levie, J. (2010). Global entrepreneurship monitor 2009 executive report. Babson College and Global Entrepreneurship Research Association.
- Brandstätter, H. (1997). Becoming an entrepreneur—a question of personality structure? *Journal of Economic Psychology*, 18(2), 157–177.
- Chand, M., & Ghorbani, M. (2011). National culture, networks and ethnic entrepreneurship: A comparison of the Indian and Chinese immigrants in the US. *International Business Review*, 20(6), 593–606.
- Chaston, I., & Sadler-Smith, E. (2012). Entrepreneurial cognition, entrepreneurial orientation and firm capability in the creative industries. *British Journal of Management*, 23(3), 415–432.
- Chaturvedi, A., Chiu, C. Y., & Viswanathan, M. (2009). Literacy, negotiable fate, and thinking style among low income women in India. *Journal of Cross-Cultural Psychology*, 40(5), 880–893.
- Claar, V., TenHaken, V. R., & Frey, R. (2009). Entrepreneurial attitudes of MBA students in the United States relative to the CIS: the case of Armenia. *International Business & Economics Research Journal*, 8(2), 67–76.
- Crant, J. M. (1995). The proactive personality scale and objective among real estate agents. *Journal of Applied Psychology*, 80, 532–537.
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34, 42–49.

- Crant, J. M. (2000). The proactive personality scale in organizations. *Journal of Management*, 80, 435–462.
- Crant, J. M., & Bateman, T. S. (2000). Charismatic Leadership Viewed from Above: The Impact of Proactive Personality. *Journal of Organizational Behaviour*, 21, 63–75.
- Dahles, H. (2005). Culture, capitalism and political entrepreneurship: transnational business ventures of the Singapore-Chinese in China. *Culture and Organization*, 11(1), 45–58.
- Dana, L. P. (2007). *Asian models of entrepreneurship: from the Indian Union and the Kingdom of Nepal to the Japanese Archipelago: context, policy and practice*. New Jersey: World Scientific.
- Dana, L. P. (1998). Small but not independent: SMEs in Japan. *Journal of Small Business Management*, 36(4), 73.
- Dana, L. P. (2000). Creating entrepreneurs in India. *Journal of Small Business Management*, 38(1), 86.
- Dana, L. P. (2001). The education and training of entrepreneurs in Asia. *Education + Training*, 43(8/9), 405–416.
- Davidsson, P., & Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology*, 18(2), 179–199.
- Dimitratos, P., Voudouris, I., Plakoyiannaki, E., & Nakos, G. (2012). International entrepreneurial culture—toward a comprehensive opportunity-based operationalization of international entrepreneurship. *International Business Review*, 21(4), 708–721.
- Do Paço, A. M. F., Ferreira, J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship*, 9(1), 20–38.
- Dossani, R., & Kenney, M. (2002). Creating an environment for venture capital in India. *World Development*, 30(2), 227–253.
- Durand, D., & Shea, D. (1974). Entrepreneurial Activity as a function of achievement motivation and reinforcement control. *The Journal of Psychology*, 88(1), 57–63.
- Engelen, A., Heinemann, F., & Brettel, M. (2009). Cross-cultural Entrepreneurship research: current status and framework for future studies. *Journal of International Entrepreneurship*, 7(3), 163–189.
- Erez, M. (1992). Values, productivity and innovation: the case of Japanese corporations. *Applied Psychology: An International Review*, 41(1), 43–64.
- Fairlie, R. W., & Holleran, W. (2012). Entrepreneurship training, risk aversion and other personality traits: Evidence from a random experiment. *Journal of Economic Psychology*, 33(2), 366–378.
- Fereidouni, H. G., & Masron, T. A. (2012). Governance matters and entrepreneurial activities. *Thunderbird International Business Review*, 54(5), 701–712.
- Futagami, S., & Helms, M. M. (2009). Emerging female entrepreneurship in Japan: a case study of Digitom workers. *Thunderbird International Business Review*, 51(1), 71–85.
- GEM (2008). *Executive report global entrepreneurship monitor*. Babson College.
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. *2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education*.
- Goethner, M., Obschonka, M., Silbereisen, R. K., & Cantner, U. (2012). Scientists' transition to academic entrepreneurship: economic and psychological determinants. *Journal of Economic Psychology*, 33(3), 628–641.
- Gupta, V., & Bave, N. M. (2007). The influence of proactive personality and stereotype threat on women's entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 73–85.
- Harris, M., & Gibson, S. (2008). Examining the entrepreneurial attitudes of US business students. *Education and Training*, 50(7), 568–581.
- Hessels, J., Van Gelderen, M., & Thurik, R. (2008). Entrepreneurial aspirations, motivations, and their drivers. *Small Business Economics*, 31(3), 323–339.
- Higgins, B. (1964). *The Economic Development*. New York: Harper and Row.
- Hofstede, G. (1984). *Culture's Consequences: International Differences in Work-related values*, vol. 5.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations. Software of the mind*, 2005. New York: McGraw-Hill.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education+Training*, 53(5), 353–370.
- Ibrahim, G., & Galt, V. (2011). Explaining ethnic entrepreneurship: an evolutionary economics approach. *International Business Review*, 20(6), 607–613.
- Ilhan-Nas, T., Sahin, K., & Cilengir, Z. (2011). International ethnic entrepreneurship: antecedents, outcomes and environmental context. *International Business Review*, 20(6), 614–626.
- Jones, M. V., Coviello, N., & Tang, Y. K. (2011). International entrepreneurship research (1989–2009): a domain ontology and thematic analysis. *Journal of business venturing*, 26(6), 632–659.
- Kanno, A., & Alfaro, L. (2008). Kinyuseisaku: Monetary policy in Japan. *Harvard Business School Case. Prod. #: 708017-PDF-ENG*.
- Kautonen, T., Tornikoski, E. T., & Kibler, E. (2011). Entrepreneurial intentions in the third age: the impact of perceived age norms. *Small Business Economics*, 37(2), 219–234.
- Kedia, L. B., & Lahiri, S. (2007). International Outsourcing of Services: A Partnership Model. *Journal of International Management*, 13(1), 22–37.
- Kelley, D. J., Singer, S., & Herrington, M. (2012). The global entrepreneurship monitor. 2011 Global Report. *GEM*, 2011, 7.
- Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: a review and suggestions for developing the field. *Journal of Management*, 35, 600.
- Koellinger, P., Minniti, M., & Schade, C. (2007). I think I can, I think I can: overconfidence and entrepreneurial behavior. *Journal of Economic Psychology*, 28(4), 502–527.
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(01), 55–78.
- Kumar, N. (2013). Internationalisation of Indian knowledge-intensive service firms: Learning as an antecedent to entrepreneurial orientation. *Management*, 12, 503–523.
- Kuratako, D. (2006). A Tribute to 50 years of Excellence in Entrepreneurship and Small Business. *Journal of Small Business Management*, 44(3), 483–492.
- Lee, S. M., Lim, S. B., Pathak, R. D., Chang, D., & Li, W. (2006). Influences on student's attitudes toward entrepreneurship: a multi-country study. *The International Entrepreneurship and Management Journal*, 2(3), 351–366.
- Levie, J., & Autio, E. (2008). A theoretical grounding and test of the GEM model. *Small Business Economics*, 31(3), 235–263.
- Liñán, F., & 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. (2014). National culture, entrepreneurship and economic development: different patterns across the European Union. *Small Business Economics*, 42(4), 685–701.
- Longenecker, J. G., McKinney, J. A., & Moore, C. W. (1989). Egoism and independence: Entrepreneurial ethics. *Organizational Dynamics*, 16(3), 64–72.
- Ma, H., & Tan, T. (2006). Key components and implications of entrepreneurship: a 4-P Framework. *Journal of Business Venturing*, 21(5), 704–725.
- McClelland, D. C. (1961). *The achieving society*. New York: D. Van Nostrand Co. 210–215.
- Mihet, R. (2013). Effects of culture on firm risk-taking: a cross-country and cross-industry analysis. *Journal of Cultural Economics*, 37(1), 109–151.
- Mitchellmore, S., & Rowley, J. (2010). Entrepreneurial Competencies: A Literature Review and Development Agenda. *International Journal of Entrepreneurial Behaviour and Research*, 16(2), 92–111.
- Monitor, G. E. (2008). *Executive report*. Babson College.
- Naudé, W. (2011). Entrepreneurship is not a binding constraint on growth and development in the poorest countries. *World Development*, 39(1), 33–44.
- Okamuro, H., Stel, A., & Veheul, I. (2011). Understanding the Drivers of Entrepreneurial Economy: Lessons from Japan and the Netherlands, No. 36. *CCES discussion paper series*. Center for Research on Contemporary Economic Systems, Graduate School of Economics, Hitotsubashi University, Tokyo.
- Papanek, H. (1972). Pakistan's Big Businessmen: Muslim Separatism, Entrepreneurship, and Partial Modernization. *Economic Development and Cultural Change*, 21(1), 1–32.
- Pattie, M., Parks, L., & Wales, W. (2012). Who Needs Security? Entrepreneurial Minorities, Security Values, and Firm Performance. *Journal of Management Inquiry*, 21(3), 319–328.
- Paul, J. (2010). *Business environment*, 3rd ed. New York: McGraw-Hill.
- Paul, J. (2013). *International business*, 5th ed. New Delhi: Prentice Hall.
- Paul, J. (2015). Does the WTO increase trade and cause convergence? *The International Trade Journal*, 29, 291–308.
- Paul, J., & Gupta, P. (2014). Process and intensity of internationalization of IT firms: evidence from India. *International Business Review*, 23(3), 594–603.
- Paul, J., & Shrivastava, A. (2015). Comparing entrepreneurial communities: theory and evidence from a cross-country study in Asia. *People and Places in the Global Economy*, 9(3), 206–220.
- Prieto, L. (2011). The influence of proactive personality on social entrepreneurial intentions between African-American and Hispanic undergraduate students: the moderating role of hope. *Academy of Entrepreneurship Journal*, 17(2), 77–96.
- Raringer, S. (2013). *Entrepreneurship and small business management*. Cape Town: Pearson Education South Africa Ltd..
- 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), 13–31.
- Say, J. B. (1963). *Treatise on Political economy or the production, distribution and consumption of wealth*. Boston: Harvard University [Translated from French by C. R. Prenerp].
- Schumpeter, J. (1950). *The theory of economic development*. Cambridge: Harvard: University Press.
- Stephan, U., & Uhlaner, L. M. (2010). Performance-based vs. socially supportive culture: a cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies*, 41(8), 1347–1364.
- Stokes, R. G. (1974). The Afrikaner industrial entrepreneur and Afrikaner nationalism. *Economic Development and Cultural Change*, 22(4), 557–579.
- Stuetzer, M., Obschonka, M., Brix, U., Sternberg, R., & Cantner, U. (2014). Regional characteristics, opportunity perception and entrepreneurial activities. *Small Business Economics*, 42(2), 221–244.
- Tamizharasi, G., & Panchanatham, N. (2010). Entrepreneurial attitudes among entrepreneurs in small and medium enterprises international journal of innovation. *Management and Technology*, 1(4), 353–356.
- Terjesen, S., Hessels, J., & Li, D. (2013). Comparative International Entrepreneurship: A Review and Research Agenda. *Journal of Management*, 39(4), 1–46.
- Witt, M. A., & Redding, G. (2009). Culture, meaning, and institutions: Executive rationale in Germany and Japan. *Journal of International Business Studies*, 40(5), 859–885.
- Yang, C., Colarelli, S. M., Han, K., Page, & R (2011). Start-up and hiring practices of immigrant entrepreneurs: An empirical study from an evolutionary psychological perspective. *International Business Review*, 20(6), 636–645.

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