Determinants of Entrepreneurial Intentions: A Systematic Review

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Abstract

Entrepreneurial intentions have received enormous attention from the research scholars, entrepreneurs, policy makers and practitioners. Entrepreneurial intentions are an evolving area within the field of entrepreneurship and its importance is evident from increasing number of publications and citations even in the top tier journals. Researchers have developed a number of models that evolved with the passage of time and generated new knowledge. But, as the new knowledge emerges, it also raises question that needs to be addressed. There is a need to systematically analyze the stock of studies into consideration. Therefore, aim of the study is to carry out a systematic literature review in order to do citation and thematic analysis. For this purpose, 110 research papers focused on entrepreneurial intentions published between 2005 and 2012 in the renowned electronic databases were considered for analysis. Citation analysis was carried out by the researcher to segregate the main themes emerging from the previous studies. Thematic analysis was also conducted by the researcher for dividing papers into diversified categories and subcategories. Five main themes along with an additional theme that cannot be easily adjusted to any other theme were recognized. A number of research gaps were identified that can provide fresh new perspectives and future directions for the researchers in the field of entrepreneurship.

Keywords: entrepreneurial intentions, systematic literature review, citation analysis, thematic analysis, research gaps.

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Introduction

Number of studies have been conducted to emphasize that intentions are best predictors of behavior rather than personality traits and demographics, psychological factors. Intention of becoming an entrepreneur is a planned behavior but transforming these intentions into reality or behavior was not determined (Kolvereid, 1996; Krueger et al., 2000). There might be a possibility that those having strong EIs never started their own businesses because other factors affected their EIs negatively. Thompson (2009) found that those people having higher EIs had higher chances of starting their own ventures as compared to people having lower EIs. Some other factors also influence EIs like previous business or management experience (Van Auken, 2006). Students having business experience had plans to build their own venture or already had one. A study consisting of over 1million students found that they prefer working for someone immediately after completion of their education and this priority changes almost after 5years of their education (Sieger et al., 2011). Therefore, it can be considered that intentions are good predictor of human behavior, when there exists time gap between stated intentions and actual behavior.

The literature on EI has expanded since the publishing of research work by Shapero (Shapero and Sokol, 1982). Literature as well as practitioners have developed interest in this area from few past years. Theories from other fields like social psychology have also contributed towards the expansion of this dimension (Bandura 1982; Ajzen, 1991). In the 1990s, bundle of researches relevant to EI were observed using basic theoretical frameworks and ensuring the robustness of the TPB in different contexts. In the presence of different integrated models, less compatibility of these model have been found (Krueger et al., 2000). As the number of publications increased in this area (Krueger and Day, 2010). After examining extant literature review, it was observed that an integrated model based on core category has been combined with entrepreneurial

process. Similarly, EI core model using TPB could be used with contextual one in order to investigate the stability of the model. In addition, the literature also shows that context can also be pivatol in each stage of the entrepreneurial process. Such as: how Institutions affect intention/behavior link? What factors are responsible for exit intentions? Personality traits definitely affects EIs and has been proved through empirical researches. Integration of personality traits with contextual factors is an area which is still underdeveloped and needs to be explored for further research. Considering methodologies adopted by the researchers in previous research papers is quantitative approach. Increasing number of publications in this area lacks categorization and systematization to provide direction for new researchers. There are chances that this lack of direction may lead towards stagnation (Fayolle and Linan, 2014). Therfore, now there is a need for providing some sequence and order to the literature relevant to EI. Consequently, this study has been completed to cover the systematic literature analysis on entrepreneurial intentions, its determinants, also identify themes, research gaps in the existing literature and direction to the future research.

Literature Review

Emergence of Entrepreneurship

It has been observed that in last few years due to financial crises an unemployment is increasing. This growing unemployment is creating some serious problems for the economy, such as it resulted in crimes, law and order situation, and some other economic and social problems. The economist suggested the entrepreneurship or self-employment is best solution of unemployment (Ahmed, Nawaz, Ahmed, Shoukat, Usman, Rehman & Ahmed, 2010).

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Entrepreneur

The entrepreneur is defined as a person who acts as a change agent, finds new ways and brings new idea into business (Schumpeter, 1934)

Entrepreneurial Intentions

Bird (1988) defined Entrepreneurial intention as an individual's thoughtful state of mind that guide and direct an individual to achieve the goal of launching a new business. It is important to identify the factors that drives the young people towards entrepreneurial intentions (Krueger et al., 2000), a lot of research has been conducted on the role of individual, self- efficacy and perceived social norms in becoming entrepreneur. Going back to the start of literature relevant to Entrepreneurial Intentions (EI), two basic components gave birth to EI. One was from social psychology, stemming from cognitive processes and analyzing behaviors of the people in general. Ajzen and Fishbein (1980), which became Theory of Planned Behavior (TPB) is most widely used theory by the researchers in this area. A study conducted by entrepreneurship field expert (Shapero, 1984) also made huge contribution by introducing theory known as Entrepreneurial Event Model (EEM). These two were major contribution for initiating the EI research through psychology. Krueger and Carsrud (1993) made TPB as reference theory to be attached with EI. Two major contributions by Kolvereid (1996a, b) were responsible for ensuring applicability of TPB in the entrepreneurship field. Sustainable entrepreneurial intentions (SUEIs) focused on individual values for explaining a change in them (Avasilcai and Hutu, 2010). A few of the papers in this sub-theme considered sustainable orientation and its impact on EIs (Kuckertz and Wagner, 2010). Social entrepreneurial intention (SOEIs) have emerged the most recent researchable topic. Analyzed relationship between EE and SOEIs (Smith and Woodworth, 2012). One of the research papers made use of empathy as predictor of SOEIs and another used higher secondary school sample respondent for measuring SOEIs (Prieto, 2011). A few of the research papers investigated the impact of specific variables like entrepreneurial commitment and assessment of opportunities to explain EIs (Gregoire and Shepherd, 2012). No specific pattern was observed using published articles. Although entrepreneurial intentions is not an emerging concept but still trend of increased publications in this area have been observed after 2010. The literature was examined and classified in to groups, the explanation of each group is as follows.

Group 1

This group deals with theoretical models, issues relevant to theory and methodologies for 5papers. Zhao et al. (2005) used self-efficacy as mediating variable and found full mediation of this variable. Hmieleski and Corbett (2006) used tendency for creativeness as construct in the conventional Entrepreneurial Intention model. Gelderen et al. (2008) applied the traditional model using TPB for determining EI of students. Two remaining papers addressed methodological issues in the EI questionnaire. They developed and validated EI Questionnaire (EIQ) for measuring TPB constructs (Thompson, 2009; Linan and Chen, 2009).

2.3.2 Group 2

This category contains largest number of research articles addressing the influence of experience, demographics, psychological variables and personal traits on EI. Impact of some psychological

Variables, such as risk taking are analyzed using EI model (Segal et al. 2005). These papers analyzed the effects of background variables on EI. Carr and Sequeira (2007) made extensive use of family background as explanatory variable and measured its effects on EI. Gird and Bagraim (2008) validated these results through their research. Impact of entrepreneurship education in university students was determined. Linan and Santos (2007) considered social capital for conducting their study. Papers focused on gender issues like Wilson et al. (2007) utilized entrepreneurship education and its effects were higher on women's self-efficacy as compared to men and through this it affects their EI. Gupta et al. (2008, 2009) clearly verified the gender stereotypes in entrepreneurship.

Group 3

This category focused on assessing effectiveness of Entrepreneurship Education Programmes (EEP) and its impact on EI. Pittaway & Cope (2007) conducted systematic literature review on the EEP and found generally positive impact on EI of the respondents. Fayolle et al., (2006) evaluated the impact of EEP on EI using engineering and sciences as respondents.

Papers in this category concentrated on impact of macro environment factors like culture and institutional on the formation of EI in the different regions of the world. These papers compared the samples taken from different geographical locations of the world. Veciana et al., (2005) compared respondents from Puerto Rico and Spain, De Pillis and Reardon (2007) analyzed samples from USA and Ireland, Engle et al., (2010) made comparison among samples of 12 countries.

Group 4

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Group 5

This category considered entrepreneurial thinking as a whole process and tried to predict actual behavior of the individuals regarding EIs. For this purpose, Kolvereid and Isaksen (2006) carried out a longitudinal study on Norwegian university students to verify EIs. Sample respondents who showed their EI, did they started a new venture? Nabi et al. (2006), analyzed research literature between the stages of being a student and starting up a new venture and identified many gaps that can be fulfilled.

Research Methodology

Literature relevant to EI has reached peak point and now is the time to analyze and categorize the main themes from it. For this purpose, researchers performed systematic literature review of the recent research articles published in impact factor journals on EI. Only research articles were considered and conference papers, chapters, books were excluded to validate knowledge (Podsakoff et al. 2005). Different databases like emerald insight and others were used by the researchers to find research article relevant to EI using two keywords "intent" and "entrep". Reason for selecting these database was wide coverage of the journals. 132 in total papers were found and 110 papers were considered after eliminating duplicated papers. All the abstracts of 132 were read by the researcher and all the paper was read for confirmation whether it was relevant to EI. After going through these articles, 22 were eliminated because they were irrelevant. At the end, 110 research papers were included for analysis. Publications between 2005 to 2012 were considered for this purpose.

For starting, citation analysis was used for finding out most influential research publications during this time period. A frequently cited paper is an indication of the importance and value of the research work to the scientific knowledge that can be used for advancement in the field (Casillas and Acedo, 2007). This methodology was also used by Gundolf and Filser (2013) for making citation analysis. The main categories which emerged from these articles were considered as base or reference for thematic analysis. According to Ryan and Bernard (2003), categories or themes represent the main concept of the research article used by researchers. Themes and sub-themes represent arguments, core ideas, research questions, concepts, constructs, their measurements and conceptual linkages among the expressions given in the articles (Thorpe et al., 2005). Themes were derived from these articles according to researcher's understanding of the articles.

Results and Analysis

Citation Analysis

By analyzing cross-citations from the sample papers, were found to be influential ones which received most citations. Researcher analyzed these 19 papers on the basis of similarities in content. Researcher thoroughly read all these papers to identify main categories from them. After conducting analysis, main categories were identified by the researcher. Majority of the papers 15 were published between time period of 2005 and 2008. Only 4 were published between time period of 2009 and 2010. These papers got quick acceptance by the researcher academic community.

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Thematic Analysis

Thematic analysis started with considering all papers as already discussed in the citation analysis. All the papers were independently reviewed by the author and categorized into five categories and sub-categories within a category. There were some papers having more than objective and fell in more than one category. Keeping the main objective of that paper in mind, these papers were included in main category. Few papers were classified and included in a new category named "Future Research". Several sub-themes were identified within a theme and followed same distribution pattern of citation analysis. Group 1 contained largest number of papers 40 and group 5 with least number of papers 11. Sixth category which was named future research contained 6 papers only.

No specific pattern was observed using published articles. Although entrepreneurial intentions is not an emerging concept but still trend of increased publications in this area have been observed after 2010. There have been few emerging concepts which have been included in future research category. Now, research talk about sub-themes existing in every main theme or category.

Themes within Core Model (TPB and EEM)

Maximum number of publications in this theme focused on verifying the core model or general conditions of the entrepreneurial intention model keeping in mind start up intentions. Some of the papers focused on some other intentions like intention to internationalize, intention to exit, growth intention and etc. There was a set of papers that developed new theoretical framework other than Ajzen (1991), Theory of Planned Behavior.

Testing General Theory

Papers in this category generally tested or verified Theory of Planned behavior (TPB) or Entrepreneurial Event Model (EEM) by Sharpao using different samples like school students at higher level (Paço et al. 2011), university students with different academic background (Gelderen et al. 2008) and general population (Drnovsek and Erikson, 2005). Respondents were taken from diverse geographical locations of the world like developing Afghanistan, Tunisia, Malaysia, China, Peru, Ethiopia, Emerging Economies Ukraine, Romania, and Developed Nations like Portugal, Germany, Spain, and France. Most of the papers tested TPB followed by EEM and four of them integrated these two models (Solesvik et al. 2012; Drnovsek and Erikson 2005). A few of the papers considered perceived feasibility and desirability instead of behavioral control and attitude. One of the authors took social valuation of entrepreneurship instead of risk taking propensity (Lanero et al., 2011). Papers in this category largely confirmed the application of two renowned theories of entrepreneurial intentions.

Specific Intentions

Theory of planned behavior model can be applied to different fields of life not only to entrepreneurship like in marketing also. For example, this model can be used to predict intentions of consumers regarding purchasing of products. As entrepreneurship consists of many steps, therefore entrepreneurial process can also be divided into different parts. One of the authors focused on growth intentions like Kozan et al. (2006) and exit intentions (Brigham et al., 2007). Some of the papers focused on corporate EI Fini et al. (2012) and intentions to internationalize (Sommer and Haug, 2011). Few of the papers compared alternative models for comparing EI found the differences between the EI for growth purposes and in general or independently. Papers like Prabhu et al. (2012) and Carey et al. (2010) compared the EI of the different types of ventures i.e. general and growth ventures. As a whole intention models are considered to be satisfactory as per motivational antecedents are concerned.

Modified Theoretical Framework

Papers in this sub-category made use of other explanatory variables with basic TPB model were grouped together. Some of the models have resemblance with conventional EI model given in the (Hechavarria et al. 2012), Expectancy theory presented by (Renko et al. 2012). Gartner (2010) proposed a different model based on action/intentions/conditions/circumstances to study entrepreneurship. Quan (2012) created a difference between deliberate and impulsive EIs using different explanatory variables.

Extra Variables: EI model typically predicts 40 to 60% variation and some studies have proposed adding more variables in the traditional EI model. Hayton and Cholakovas (2012) advised to include more propositions to be tested using qualitative research. Hmieleski and Corbett (2006) included entrepreneurial inclination and found it to be significant.

Configuration of Motivational Antecedents: Conventional models in this specific area of entrepreneurship considers explanatory variables affect indirectly or directly EIs. However, some of the researchers adopted alternate configurations which were further divided into three categories.

Zhao et al. (2005) and Nasurdin et al. (2009) analyzed effect of mediation using self-efficacy. Fitzsimmons and Douglas (2011) studied the interaction between feasibility and desirability.

Main Categories and Sub-Categories with Entrepreneurship Education: Papers in this category were sub-divided into three sub-categories which are as following. Most of the research papers in this category were focused on the personality of the respondents or students differentiate among different entrepreneurship programmes and evaluating different entrepreneurship programmes and suggesting recommendations for academia, researchers, industry and policy makers.

Characteristics of Respondents: This sub-category not only focused on the EIs of the students after taking entrepreneurship education but also evaluating the contents of the programmes (Tounes, 2006; Bakotic and Kruzic, 2010). Leung et al. (2012) considered EIs of the students and tried to find out the reasons which students were willing to take entrepreneurship education and which did not.

Entrepreneurship Education Programmes: Research papers in this sub-category analyzed the EI of the students after taking Entrepreneurship Education Programmes (EEP) offered by the universities. It was found that most of the students had higher level of EIs after taking EEPs (Shahidi, 2012). One of the papers analyzed the relationship of participation of EEPs and perceived EIs using Global Entrepreneurship Monitor (GEM) Reports. Some of the studies compared the EIs of the students who have participated in the EEP and who have not. Findings showed that those who had attended EEP had higher EIs than who did not (Pihie and Bagheri, 2009). Selection of the students were based on researcher's own selection which can be biased. Therefore, (Degeorge and Fayolle, 2008) conducted a longitudinal study on the students regarding EIs who had attended EEP after 7 years. Pittaway and Cope (2007) wrote a review paper which showed a positive relationship between EEPs and EIs.

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Entrepreneurship Education Programmes Assessment: Research papers in this sub-category reviewed the different EEPs and evaluated their impact on the EIs of the students. Methodological variations exist among the various studies like focused on entrepreneurship as mandatory subject (Graevenitz et al. 2010), using of pre (Souitaris et al., 2007) and post measurement criteria for sample selection (Fayolle et al., 2006). Negative relationship was found having previous entrepreneurial experience (Fayolle and Gailly, 2009). Graevenitz et al., (2010) suggested that it's good to have low EI, when a person enhances his realistic information and gets insight into entrepreneurship.

Comparison among Respondents: Research papers in this sub-category focused on comparing different respondents belonging to different institutes. Comparison among the countries, different schools or universities (Wang and Verzat, 2011) and different geographical locations within a country (Packham et al., 2010). They tried to differentiate on the basis of external factors of EEP.

Main Themes and Sub-Themes within Personality and Psychological Factors: This theme contains large number of research papers and has diversified sub-themes with main theme. Almost half of the research papers in this category are related to psychological and personality factors and how they affect EIs of the students of the universities. Secondly, most of the papers dealt with demographic, gender differences and background variables that also affect EIs.

Psychological and Personality Aspects: Although personality traits have received some criticism but still a lot of researchers are paying attention to it. Large number of studies are relying on it using big five personality traits and their impact on EIs (Zhao et al. 2010). Few studies have also shown the positive relationship between personality traits and EIs using meta-analysis (Brandstatter, 2011). Personality traits have been studied by many researchers to analyze its impact on EIs including narcissism, risk perceptions, locus of control and innovativeness (Segal et al.

2005; Ahmed et al. 2010; Zellweger et al. 2011). Similarly, psychological factors such as career choice and cognitive-styles have also shown to affect EIs using empirical studies (Kickul et al. 2010). Some of the researches have proved that abilities relevant to EIs can be developed with passage of time and are found to impact positively like emotional intelligence and creativity (Zampetakis et al. 2009; Zampetakis et al. 2011).

Demographic and Background Variables: Most of the papers in this category are related to situational factors and their influence on the EIs of the university students like family business background, family business experience and family education. These all constructs have positive affect on the EIs as provided evidence by the following studies (Gird and Bagraim, 2008; Wu and Wu, 2008; Guerrero et al. 2008; Hadjimanolis and Poutziouris, 2011; Bhandari, 2012). Most prominent number of papers focused on the role model and their impact on building EIs (Carr and Sequeira, 2007). Social capital also had been found to empirically impact EIs (Linan and Santos, 2007).

Gender Problems: This sub-theme in all of the main themes has more consistency or less variation among all ones. Males constitute more positive perceived feasibility, attitude and higher EIs towards entrepreneurship as compared to females (Dabic et al., 2012; Strobl et al. 2012). On the opposite side of the males, females get more influenced by role models and Entrepreneurship Education (Wilson et al., 2007). Women perceive more barriers to entrepreneurship as compared to men, therefore are less likely to convert their ideas into reality (Shinnar et al., 2012).

Explicit Subsamples: This set of papers considered two specific samples from population exhibiting particular characteristics. These samples were students from higher secondary schools having limited scope and experience regarding entrepreneurship (Marques et al. 2012) and ones who had much experience regarding entrepreneurship (Tornikoski and Kautonen 2009).

Perceived Barriers: This specific sub-theme has been found to be underdeveloped. Only three research papers were found and indicating general nature problems like skills, financial, market and knowledge barriers negatively affects EIs of the sample respondents (Choo and Wong, 2006).

Main Themes in the Role of Institutions and Context Category: Majority of the research papers in this theme are concentrated on two main sub-themes. First one, role of context or environment, secondly role of institutions in developing EIs. EI models have been applied in differently diversified culture, ethnic backgrounds and others analyzing the influence of institutions. Lastly, only one paper can be sub-categorized under ecological approach.

Multicultural Studies: Main focus in this sub-theme is to investigate that how EIs differ across different countries. There has been a lot of variation in the EIs due to differences in the cultures. Two research papers have used secondary data from Global Entrepreneurship Monitor (GEM) and results indicated favorable support for acceptability of EIs varying across cultures as predicted by different antecedents. Initially, samples from two countries are taken for analyzing EIs (De Pillis and Reardon, 2007). More number of sample respondents from different countries were taken in order to generalize the findings of the results like six, seven and twelve and even thirteen (Moriano et al. 2012; Davey et al., 2011; Engle et al. 2010; Iakovleva et al., 2011).

Institutional Variables:

Formal institutions as well as informal are important to any nation because they play a vital role in development of EIs among individuals. Studies have proven that when institutions play positive role in any society then EIs are also found to be high (Linan et al., 2011). In this sub-theme, institutions like regional context, social networks and universities play dominant role in shaping EIs of the individuals (Zafar et al., 2012; Turker and Selcuk, 2009).

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Environmental Approach: This paper represents sub-theme of its own and unique of its own kind authored by Tang (2008). Findings of his study indicated that environmental philanthropy stimulates entrepreneurial alertness. Entrepreneurial alertness acts as mediating variable which enhances EIs.

Main Categories relevant to Entrepreneurial Thinking Process: Two diversified sub-categories arised after going through articles related to such category. These sub-categories were focused on how different constructs or variables affect entrepreneurial process and one sub-theme considered longitudinal studies to analyze transformation of entrepreneurial intentions into entrepreneurial behavior with passage of time. There is lack of such studies as they tend to consume a lot of time for data collection and facing the problem of tracking same respondents for their study and recording positive response from them.

Variables Influencing Entrepreneurial Process

Research papers in this sub-category are focused on impact of different constructs or variables specially EI on the entrepreneurial process. Most of the papers are quantitative in approach or empirical studies (Doern, 2009). A few of them are based on literature review and few of them are based on special issue of the journal (Nabi et al., 2006). Some of the papers also considered particular aspects and their impact on different stage of entrepreneurial process like impact of personality traits and growth barriers (Frank et al. 2007; Doern, 2009). Overall, this sub-theme provides interesting insight for future researchers.

Longitudinal Studies: These studies are considered to be most effective way to measure relationship between intention behavior link. Most known study in this sub-theme was by (Kolvereid and Isaksen, 2006) that took nascent entrepreneurs as sample respondents for investigating intention behavior link. At last, after 18 years EI predicted intention behavior link to

be true in a study conducted by years (Schoon and Duckworth, 2012). Few research gaps exist in this category to investigate alternative theories like exchange theory and career decision making (Manolova et al. 2012).

Discussion

According to the categories given in the articles, few conceptual and definitional issues remain. There is still opportunity for integrating more models using different theories into the field of entrepreneurship like expectancy and social cognitive career theory. These theories can contribute to the theory and practice through entrepreneurial process linked with EIs (Krueger, 2009). More complex models using alternative configurations can be used for determining motivational factors for startup decision, exit intentions, corporate entrepreneurship intentions. Few efforts have been made at the methodological level to develop questionnaire instrument. Researchers needs to consider nascent entrepreneurs as respondents for EIs. Considering the recommendations of Shook et al. (2003), researchers need to triangulate their results using different methods.

Review of the papers in this category suggests that contents and teaching techniques need to be improved in order to improve EIs in the students. Studies have empirically proved that differences between the attitudes and intentions exists among the students who have attended EEP and who have not. However, generalization of these results in different contexts remains doubtful (Zhao et al., 2005). Some of the variables have shown undecided results and their influence on EIs building of the students like teacher's teaching methodology, their expertise, previous entrepreneurial experience, available resources, course contents. Special attention needs to be given to the groups who have received EEP and who have not with different methodologies and treatments in order to avoid biasness in the studies. In the end, researchers need to focus on the pre and post measurements.

Following the recommendations given by (Krueger, 2009), research regarding EIs can progress by understanding deep phenomenon that lies down it. Researchers need to further understand in aggressive manner mental processes and entrepreneurial decision making that deepens our understanding about EIs (Hayton and Cholakova, 2012; Prabhu et al., 2012). Research on barriers have been ignored till now and deserves more attention by the researchers. Few neglected areas can be worked on perceived barriers for the males and females and how they discourage them from having EIs. Another area that can be carried is to measure EIs of the high secondary students through perceived barriers. Third area can be using different combinations of demographic, background and personality variables with perceived barriers to predict EIs.

As research have shown strong impact of formal and informal institutions on the development of EIs. However, much research is needed for the multi-dimensional nature of context and investigating relationship between public policy and EIs (Zahra and Wright, 2011). Research gap still exists regarding how context shapes EIs in an individual using qualitative research (Ethnography). Different countries are considered one of the dimensions of context, other dimensions can also be considered for further analysis like regional and national level. Other variables like impact of regulatory bodies, policy implementation, incentive systems on EIs specifically can also be explored (Engle et al., 2011; Linan et al. 2011).

Future direction for entrepreneurship researchers shown by longitudinal studies are appreciateable (Krueger, 2009). There are large research gaps and more empirical studies are needed to provide evidence for making strong link between intention behaviors. Previous studies have shown strong correlation between intention behaviors ranging from 0.90 to 0.96 (Ajzen et al.,

2009). A meta-analysis on TPB indicates that it explains only 27% change in the entrepreneurial behavior on average (Armitage and Conner, 2001). Which factors accurately explains variation in the intention behavior link still remains to be explored. More aggressive research is required in this particular domain as indicated by (Laspita et al., 2012). Another missing link between intention behaviors could be one's commitment to new venture creation as suggested by (Fayolle et al., 2011).

Conclusion

As mentioned before, EI is a prominent area in the field of entrepreneurship. But with the passage of time, new concepts, theories, questions, knowledge arises which needs to answered with new research approaches either using new methodology or theoretical contribution. Entrepreneurial intentions is an evolving area within the field of entrepreneurship and its importance is evident from increasing number of publications and citations even in the top tier journals. Large number of studies needs to be systematically analyzed to find trends, patterns and research gaps in the previous literature. Therefore, purpose of the study was to carry out a systematic literature review in order to do citation and thematic analysis. For this purpose, 110 research papers focused on entrepreneurial intentions published between 2005 and 2012 in the renowned electronic databases were considered for analysis. Major contribution of this paper lies in the citation and thematic analysis of the large number of publications. Relevant research gaps were also identified through extant literature review. Citation analysis is one of the influential instrument for the scholars to show impact of their research in the respective field. It was uphill task to classify such huge number of studies based on their themes and sub-themes. Thematic analysis can provide direction to the researchers working in the area of EI. Basically two research questions were answered in the respective articles relating to EIs. These research questions were:

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What do we know about EIs relevant research?

What further needs to be explored regarding EIs?

Based on the citation and thematic analysis of the study, five main themes or categories emerged from the previous literature which are as follows:

Theme 1: Maximum number of publications in this theme focused on verifying the core model or general conditions of the entrepreneurial intention model keeping in mind start up intentions. Most of the papers in this category tried to predict EIs through core theories used (TPB or EEM) or addressing methodological issues.

Theme 2: This theme contains large number of research papers and has diversified sub-themes with main theme. Almost half of the research papers in this category are related to psychological and personality factors and how they affect EIs of the students of the universities. Most of the papers dealt with demographic, gender differences and background variables that also affect EIs.

Theme 3: Papers in this category were sub-divided into three sub-categories which are as following. Finding differences of EIs among students of different fields. Evaluating differences in EIs of the students who took EEP and ones who did not take EEP. Evaluating different entrepreneurship programmes and suggesting recommendations for academia, researchers, industry and policy makers.

Theme 4: Majority of the research papers in this theme are concentrated on two main sub-themes. First one, role of context or environment, secondly role of institutions in developing EIs. EI models have been applied in differently diversified culture, ethnic backgrounds and others analyzing the influence of institutions. Lastly, only one paper can be sub-categorized under ecological approach.

Theme 5: Two diversified sub-categories arised after going through articles related to such category. These sub-categories were focused on how different constructs or variables affect

entrepreneurial process and one sub-theme considered longitudinal studies to analyze transformation of entrepreneurial intentions into entrepreneurial behavior with passage of time.

Theoretical and Practical Implications

This study has major implications for many stakeholders like entrepreneurs themselves, educationists, policy makers, practioners, industrialists, Government. This study can help existing as well as budding entrepreneurs to get inspired by the ideas and turn their EI into entrepreneurial behavior. This study can also help mentors; trainers find different ways to enhance EIs in the development of new ventures. Instructors, educationists and teachers can gain benefit from such study to share their understanding about relationship of entrepreneurship education and EIs. They can provide insights to it using their own understanding and suggestions provided through this research work. Industrialists or current entrepreneurs can make use of this study by finding ways to inspire employees to be nascent entrepreneurs in the near future or boost their EIs. They can cultivate entrepreneurial culture in their organizations to enhance entrepreneurial activities. Finally, Government and policy makers can develop such policies that can increase EIs of the youth or young generation and build conducive entrepreneurial ecosystem in Pakistan.

Limitations and Future Recommendations

No study is without limits. Firstly, all papers related to EI were not considered. Secondly, chapters from the books were excluded. Thirdly, selection of the research papers solely depended upon researcher's judgement which may vary from person to person. Fourthly, citation analyses showed the impact of most of the current papers. However, it may be possible that few of these papers gain more citations and gain impact in the near future in the area of EI.

Few of the papers were not categorized in any of the themes or sub-themes. These papers were focused on developing EIs through particular entrepreneurial activity. These research papers have been published in the years after 2012 which are categorized into further two themes: Sustainable entrepreneurial intentions and Social entrepreneurial intentions. Sustainable entrepreneurial intentions (SUEIs) focused on individual values for explaining a change in them (Avasilcai and Hutu, 2010). A few of the papers in this sub-theme considered sustainable orientation and its impact on EIs (Kuckertz and Wagner, 2010). Social entrepreneurial intention (SOEIs) have emerged the most recent researchable topic. Analyzed relationship between EE and SOEIs (Smith and Woodworth, 2012). One of the research papers made use of empathy as predictor of SOEIs and another used higher secondary school sample respondent for measuring SOEIs (Prieto, 2011). A few of the research papers investigated the impact of specific variables like entrepreneurial commitment and assessment of opportunities to explain EIs (Gregoire and Shepherd, 2012).

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.
- Ajzen, I. (2012). The theory of planned behavior. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), The handbook of theories of social psychology (pp. 438–459). London: SAGE Publications.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs: Prentice-Hall.

Ajzen, I., Csasch, C., & Flood, M. G. (2009). From intentions to behavior: Implementation

intention, commitment, and conscientiousness. Journal of Applied Social Psychology, 39(6), 1356–1372.

- Armitage, A., & Keeble-Allen, D. (2008). Undertaking a structured literature review or structuring a literature review: tales from the field. The Electronic Journal of Business Research Methods, 6(2), 103–114.
- Avasilcăi, S., & Hutu, C. A. (2010). Romania: entrepreneurial values and sustainability. Environmental Engineering and Management Journal, 9(7), 983–992.
- Barbosa, S. D., Kickul, J., & Smith, B. R. (2008). The road less intended: integrating entrepreneurial cognition and risk in entrepreneurship education. Journal of Enterprising Culture, 16(4), 411–439.
- BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender.
 Journal of Applied Social Psychology, 41(2), 270 297. doi:10.1111/j.1559-1816.2010.00713.x.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. Academy of Management Review, 13(3), 442–453.
- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. Journal of Economic Psychology, 33(2), 410-424.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. Entrepreneurship: Theory and Practice, 18, 63–77.
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: a look at five meta analyses. Personality and Individual Differences, 51(3), 222–230.
- Carsrud, A. L., & Brännback, M. (2011). Entrepreneurial motivations: what do we still need to know? Journal of Small Business Management, 49(1), 9–26.

Determinants of Entrepreneurial Intentions: A Systematic Review

- Choo, S., & Wong, M. (2006). Entrepreneurial intention: Triggers and barriers to new venture creations in Singapore. Singapore Management Review, 28(2), 47–64.
- Davey, T., Plewa, C., & Struwig, M. (2011). Entrepreneurship perceptions and career intentions of international students. Education and Training, 53(5), 335–352.
- De Pillis, E., & Reardon, K. K. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: a cross-cultural comparison. Career Development International, 12(4), 382–396. doi:10.1108/13620430710756762.
- 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. doi:10.1504/IJESB.2008.015951.
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., He, X., Buame, S., & Wolff, B. (2010). Entrepreneurial intent: a twelve-country evaluation of Ajzen's model of planned behavior. International Journal of Entrepreneurial Behaviour and Research, 16(1), 36–58.
- Engle, R. L., Schlaegel, C., & Dimitriadi, N. (2011). Institutions and entrepreneurial intent: a cross country study. Journal of Developmental Entrepreneurship, 16(02), 227–250. doi:10.1142/S1084946711001811.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. Journal of Business Research, 67(5), 663–666.
- 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), 701–720.

Fayolle, A., Basso, O., & Tornikoski, E. T. (2011). Entrepreneurial commitment and new venture

creation: a conceptual exploration. In K. Hindle & K. Klyver (Eds.), Handbook of research on new venture creation (pp. 160–182). Cheltenham: Edward Elgar Publishing.

- Fini, R., Grimaldi, R., Marzocchi, G. L., & Sobrero, M. (2012). The determinants of corporate entrepreneurial intention within small and newly established firms. Entrepreneurship: Theory and Practice, 36(2), 387–414. doi:10.1111/j.1540 6520.2010.00411.x.
- 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. doi: 10.1016/j.jbusvent.2010.01.001.
- Gartner, W. B. (2010). A new path to the waterfall: a narrative on a use of entrepreneurial narrative. International Small Business Journal, 28(1), 6–19.
- Gird, A., & Bagraim, J. J. (2008). The theory of planned behavior as predictor of entrepreneurial intent amongst final-year university students. South African Journal of Psychology, 38(4), 711–724.
- Gollwitzer, P. M. (1999). Implementation intentions strong effects of simple plans. American Psychologist, 54(7), 493–503.
- Guerrero, M., Rialp, J., & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: a structural equation model. International Entrepreneurship and Management Journal, 4(1), 35–50.
- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial Intentions. Journal of Applied Psychology, 93(5), 1053–1061.
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. Entrepreneurship: Theory and Practice, 33(2), 397–417.

Determinants of Entrepreneurial Intentions: A Systematic Review

- Hmieleski, K. M., & Corbett, A. C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. Journal of Small Business Management, 44(1), 45–63.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. Education and Training, 53(5), 353–370.
- Kessler, A., & Frank, H. (2009). Nascent entrepreneurship in a longitudinal perspective: the impact of person, environment, resources and the founding process on the decision to start business activities. International Small Business Journal, 27(6), 720–742. doi:10.1177/0266242609344363.
- Kolvereid, L. (1996a). Organizational employment versus self-employment: reasons for career intentions. Entrepreneurship: Theory and Practice, 20(3), 23–31.
- Kolvereid, L. (1996b). Prediction of employment status choice intentions. Entrepreneurship: Theory and Practice, 21(1), 47–57.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self employment. Journal of Business Venturing, 21(6), 866–885.
- Kraus, S., Rigtering, J. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands. Review of Managerial Science, 6(2), 161–182.
- Krueger, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. Entrepreneurship: Theory and Practice, 31(1), 123–138.
- Krueger, N. F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. InA. L. Carsrud & M. Brannback (Eds.), Understanding the entrepreneurial mind (pp. 51–72).New York: Springer.

Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs.

Entrepreneurship: Theory and Practice, 19(3), 91–104.

- 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., & Day, M. (2010). Looking forward, looking backward: From entrepreneurial cognition to entrepreneurship. In Z. J. Acs & D. B. Audretsch (Eds.), Handbook of entrepreneurship research. An interdisciplinary survey and introduction (2nd ed., pp. 321–358). New York: Springer.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. Journal of Business Venturing, 15(5–6), 411–432.
- Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions - investigating the role of business experience. Journal of Business Venturing, 25(5), 524–539.
- Lanero, A., Vázquez, J. L., Gutiérrez, P., & García, M. P. (2011). The impact of entrepreneurship education in European universities: an intention-based approach analyzed in the Spanish area. International Review on Public and Nonprofit Marketing, 8(2), 111–130.
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. Journal of Business Venturing, 27(4), 414–435. doi: 10.1016/j.jbusvent.2011.11.006.
- Leung, K.-Y., Lo, C.-T., Sun, H., &Wong, K.-F. (2012). Factors influencing engineering students' intention to participate in on-campus entrepreneurial activities. Journal of Entrepreneurship Education, 15, 1–20.
- Li, W. (2007). Ethnic entrepreneurship: studying Chinese and Indian Students in the United States. Journal of Developmental Entrepreneurship, 12(4), 449–466.

Determinants of Entrepreneurial Intentions: A Systematic Review

- 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., & Santos, F. J. (2007). Does social capital affect entrepreneurial intentions? International Advances in Economic Research, 13(4), 443–453.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011a). Factors affecting entrepreneurial intention levels: a role for education. International Entrepreneurship and Management Journal, 7(2), 195–218.
- Liñán, F., Urbano, D., & Guerrero, M. (2011b). Regional variations in entrepreneurial cognitions: start-up intentions of university students in Spain. Entrepreneurship and Regional Development, 23(3&4), 187–215.
- Nabi, G., & Holden, R. (2008). Graduate entrepreneurship: intentions, education and training. Education and Training, 50(7), 545–551.
- Nabi, G., Holden, R., & Walmsley, A. (2006). Graduate career-making and business start-up: a literature review. Education and Training, 48(5), 373–385.
- Nasurdin, A. M., Ahmad, N. H., & Lin, C. E. (2009). Examining a model of entrepreneurial intention among Malaysians using SEM procedure. European Journal of Scientific Research, 33(2), 365–373.
- 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.
- Oser, F., & Volery, T. (2012). «Sense of failure» and «sense of success» among entrepreneurs: the identification and promotion of neglected twin entrepreneurial competencies. Empirical Research in Vocational Education and Training, 4(1), 27–44.

Determinants of Entrepreneurial Intentions: A Systematic Review

- Packham, G., Jones, P., Miller, C., Pickernell, D., & Thomas, B. (2010). Attitudes towards entrepreneurship education: a comparative analysis. Education and Training, 52(8), 568–586.
- Pihie, Z. A. L. (2009). Entrepreneurship as a career choice: an analysis of entrepreneurial self efficacy and intentions of university students. European Journal of Social Sciences, 9(2), 338 349.
- Pihie, Z. A. L., & Bagheri, A. (2009). Developing future entrepreneurs: a need to improve science students' entrepreneurial participation. International Journal of Knowledge, Culture and Change Management, 9(2), 45–57.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education a systematic review of the evidence. International Small Business Journal, 25(5), 479–510.
- Prabhu, V. P., McGuire, S. J., Drost, E. A., & Kwong, K. K. (2012). Proactive personality and entrepreneurial intent: Is entrepreneurial self-efficacy a mediator or moderator? International Journal of Entrepreneurial Behavior and Research, 18(5), 559–586.
- Prieto, L. C. (2011). The influence of proactive personality on social entrepreneurial intentions among African-American and Hispanic undergraduate students: the moderating role of hope. Academy of Entrepreneurship Journal, 17(2), 77–96.
- Quan, X. (2012). Prior experience, social network, and levels of entrepreneurial intentions. Management Research Review, 35(10), 945–957.
- Sarasvathy, S. D. (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review, 26, 243–263.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. International Journal of Entrepreneurial Behaviour and Research, 11(1), 42–57.

Shapero, A. (1984). The entrepreneurial event. In C. A. Kent (Ed.), The environment for

Determinants of Entrepreneurial Intentions: A Systematic Review

entrepreneurship. Lexington: Lexington Books.

- Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), Encyclopedia of entrepreneurship (pp. 72 90). Englewood Cliffs: Prentice Hall.
- Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: the psychology of new venture creation. Entrepreneurship: Theory and Practice, 16(2), 23–45.
- Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: the role of gender and culture. Entrepreneurship: Theory and Practice, 36(3), 465–493. doi:10.1111/j.1540-6520. 2012.00509.x.
- Shook, C. L., Priem, R. L., & McGee, J. E. (2003). Venture creation and the enterprising individual: a review and synthesis. Journal of Management, 29(3), 379–399.
- Smith, I. H., & Woodworth, W. P. (2012). Developing social entrepreneurs and social innovators: a social identity and self-efficacy approach. Academy of Management Learning & Education, 11(3), 390–407.
- Solesvik, M. Z., Westhead, P., Kolvereid, L., & Matlay, H. (2012). Student intentions to become self-employed: Ukrainian context. Journal of Small Business and Enterprise Development, 19(3), 441–460.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. Journal of Business Venturing, 22(4), 566 591.
- Stenholm, P. (2011). Innovative behavior as a moderator of growth intentions. Journal of Small Business Management, 49(2), 233–251.

Strobl, A., Kronenberg, C., & Peters, M. (2012). Entrepreneurial attitudes and intentions: Assessing

gender specific differences. International Journal of Entrepreneurship and Small Business, 15(4), 452–468.

- Tang, J. (2008). Environmental munificence for entrepreneurs: entrepreneurial alertness and commitment. International Journal of Entrepreneurial Behavior and Research, 14(3), 128–151.
- Turker, D., & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? Journal of European Industrial Training, 33(2), 142–159.
- Urban, B. (2012). Applying a metacognitive perspective to entrepreneurship: empirical evidence on the influence of metacognitive dimensions on entrepreneurial intentions. Journal of Enterprising Culture, 20(2), 203–225.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behavior. Career Development International, 13(6), 538–559.
- Wang, Y., & Verzat, C. (2011). Generalist or specific studies for engineering entrepreneurs: comparison of French engineering students' trajectories in two different curricula. Journal of Small Business and Enterprise Development, 18(2), 366–383.
- Welter, F. (2011). Contextualizing entrepreneurship conceptual challenges and ways forward. Entrepreneurship: Theory and Practice, 35(1), 165–184.
- 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.
- Yemini, M., & Yeheskel, O. (2011). Not born here-evaluation of the country of origin effect on the entrepreneurial intentions of Israeli engineering students. International Journal of Learning, 17(10), 329–342.

Determinants of Entrepreneurial Intentions: A Systematic Review

- Zafar,M. J., Yasin, G., & Ijaz,M. (2012). Social networking a source for developing entrepreneurial intentions among entrepreneurs: a case of Multan. Asian Economic and Financial Review, 2(8), 1072–1084.
- Zahra, S. A., & Wright, M. (2011). Entrepreneurship's next act. Academy of Management Perspectives, 25(4), 67.83.
- Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V. S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions.
 International Journal of Entrepreneurial Behaviour and Research, 15(6), 595–618.
- Zampetakis, L. A., Gotsi, M., Andriopoulos, C., & Moustakis, V. (2011). Creativity and entrepreneurial intention in young people: empirical insights from business school students. International Journal of Entrepreneurship and Innovation, 12(3), 189-199.
- 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.
 doi: 10.1016/j.jbusvent. 2010.04.001.
- 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.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: a meta-analytic review. Journal of Management, 36(2), 381–404.

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