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Research Article

Testing the Competing Entrepreneurial Intention's Antecedents on Public University Students

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Abstract

This study focused on the entrepreneurial intention's antecedents in higher-education level. It examined the effect of need for achievement, self-efficacy, and risk-taking propensity on intention to be entrepreneurs. It used a sample of 204public university students and analyzed the proposed hypotheses by using multivariate analysis. The major findings are: [1] tendency to take risks is the dominant antecedent, compared to other variables, [2] students' self-efficacy correlates positively with intention to be entrepreneurs, and [3] student's positive perception on need for achievement and entrepreneurial intention mirrors a dramatic change of social perception on self-employed status in highly educated people. The successful government policy on entrepreneurship education at the university level can be a reference for similar programs. This study contributes on building the entrepreneurialeducation's body of knowledge through testing the inducing entrepreneurship subject as a compulsory subject.

Keywords: entrepreneurial intention, need for achievement,self-efficacy, risk-taking propensity, Indonesia

Introduction

To tackle unemployment in highly educated potential-workforce (i.e. college and university graduates), Indonesian government has implemented various programs encouraging higher-education students to be self-employed businessmen or entrepreneurs. Ministry of National Education and Ministry of Manpower and Transmigration are the main government

institutions responsible formulate. to implement, analyze, and control entrepreneurship programs for those students (AntaraSumbar, 2010). strategic programs are part of national longterm economic plan to generate two per cent of total population as competitive entrepreneurs in 2025 (Kompas, 2012).

Any government pays special intention to entrepreneurshipdevelopment sinceit plays

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an important role in economic development and job creation (Chen, 2013). Basically, "entrepreneurship is a process of innovation and new-venture creation through four (i.e. dimensions maior individual. organizational, environmental, and process) supported by collaborative network of government, education, and institutions (Kuratko and Hodgetts, 2007). It needs a comprehensive consideration on entrepreneurial macro and micro perspectives while recognizing and seizing opportunities that can be converted into marketable ideas. Kuratko and Hodgetts (2007) claim thatentrepreneurship is the required capability for competing effectivelyin the current global economy. To support this condition and acceleratethe growth of self-employment sectors. Indonesian government also implement various methods in large scales, such as providing special incentives for rural cooperatives and small-medium enterprises to establish new labor-intensive businesses. It is especially focused on local fisheries and agricultural ventures (Kompas, 2010).

higher-education students' trigger involvement and build their awareness on entrepreneurial activities during their government studies the has entrepreneurship subject as a compulsory course for any major undergraduate programs. It reflects the government's serious effort to encourage entrepreneurship culture and intention for highly educated potential labor. At the same time, this effort has propelled many studies to explore and find the most prospective antecedents of entrepreneurship intention. It is important due to it strongly relates to formulating appropriate programs and methods for entrepreneurship ones at the university level. It also becomes interesting after some empirical findings are inconclusive and debatable. It affirms that entrepreneurship has various perspectives and antecedents. For example, Zeffane (2013) found the impact of motivation (need for achievement) and personality traits (individualism or collectivism, introversion or extraversion) on entrepreneurial potential. Chen (2013) reported that students' IT entrepreneurial intention was directly determined by their expected outcomes, social influence and selfefficacy. Chen et al. (2012) added the need for achievement, education level, and entrepreneurial risk-taking behavior as the determinants in their research. Okhomina (2010) examined the effect of personality traits (need for achievement, locus of control, tolerance for ambiguity) entrepreneurial behavior. Wilson et al. (2009) extended the studies by examining the link between entrepreneurial selfefficacy and entrepreneurial intention of MBA's students. Prior similar study included gender either as an independent variable or as a moderating variable (Wilson et al., 2007). Finally, the research of Kristiansen and Indarti (2004) found that mixed demographic and individual background (gender, age, educational background, and work experience), personality and attitudes (need for achievement, locus of control, and self-efficacy) and contextual elements (capital access, information access, and social networks) affected entrepreneurial intention of Indonesian and Norwegian's students.

inconsistent results of entrepreneurial intention's determinants offer an opportunity to explore the gaps in different contexts, such as in the sample used, period of analysis, demographic background, and emotional maturity. For example. the empirical findings Kristiansen and Indarti (2004) reveal that the need for achievement has no significant effect on entrepreneurial intention. They argued that the countries' economic situation affected the sample used. Meanwhile, Zeffane (2013) found a positive and significant relationship between those variables. In the contexts of risk-taking propensity's effect on entrepreneurial intention, there are also contradicting results. Norton and Moore (2006) argued that there was no difference between

entrepreneur and non-entrepreneur in terms of risk-taking propensity, while Kihlstrom and Laffont (1979) stated that entrepreneurs were a risk-taker than non-entrepreneurs. The latter study counted their argument on the finding ofGurelet al. (2010). It said that individuals with superior risk-taking propensity, tolerance for ambiguity, and internal locus of control tend to have a high intention to start a new business.

To bridge those gaps, prove compatibility between empirical results and daily facts, promote the issues' relevancy and accuracy, competing the re-examine entrepreneurial antecedents, this study focused on public university students as the research object. This study provides different perspectives since the period of analysis is post implementation of new policy on establishing entrepreneurship as compulsory subject for higher university students. Having more knowledge entrepreneurship is deduced to accelerate having more intention to be an entrepreneur. The expected findings would expand the entrepreneurship's body of knowledge, especially in context of highly educated people.

The remainder of this study is organized as follows. Section 2 presents the discussion of the relevant theories, reviews the literatures, develops the proposed hypotheses, and shows the research model. Section 3 records the data and research methodologywhile Section 4 reveals the empirical findings and discussions. Finally, Section 5 provides the conclusion and recommendation.

Literature Review and Hypotheses Development

Need for Achievement

According to McClelland (1961, 1987), the need for achievement (N-Ach) refers to desire of individuals and their tendency to choose and persist at activities that may drive a chance of success or those providing maximum opportunity of personal achievement satisfaction (Zeffane, 2013).McClelland and his colleagues also defined the need for achievement as "desire to do well and to attain an inner feeling of individual accomplishment." In addition, N-Ach will motivate people to be courageous in taking risks to achieve their success (Rahman and Rahman, 2011). Khan (2000) added that people with a high need for achievement would be usually doing better than their competitors, carrying out all of their goals even complicated, dispersing complex problem, implementing challenging tasks successfully, and always establishing

an effective method that related to process of enhancing their business. Therefore, simply need for achievement describes an individual's passion to attain their success in a new business.

Self-Efficacy

Based on the research of Lent et al. (2000), self-efficacy is an individual's judgments on their own capabilities to arrange and manage courses of actions that are required to achieve expected outcomes/results. Chen (2013) added the definition by stating, "selfefficacy is an individual's perceptions or beliefs of his or her capabilities to execute actions in a certain context." Moreover, there also an opinion from Bandura (1997), which is similar with the previous definition, statingself-efficacy as thebeliefs in one's capabilities to organize and execute the courses of action required to produce given attainments.In other words, the concept from Bandura (1997) reinforced self-efficacy asindividuals "self-confidence" to perform his or her task. Self-efficacy affectsone's considerations in determining the goals, the way to solve the problem, and the decisionmaking; which previous experiences take place (Sequeiraet al., 2007).

Risk-Taking Propensity

(1996),risk-taking According to Koh propensity is "one's orientation towards taking chances in uncertain decision-making contexts."Itis onefactor distinguishing peoplefrom who have an entrepreneurial spirit and who do not have in building a new venture/business. The research of Kihlstrom and Laffont (1979), which differentiated this behavior between entrepreneurs and nonentrepreneurs, found that entrepreneurs tended to have a higher-risk propensity. Individuals with high level of this propensity usually have an "instinct" of decision they makerelated to new business, whether is right or not. Similarly, Zheng and Prislin (2012) also found the differences between entrepreneurs and non-entrepreneurs in terms of their reaction with relevant feedback. Not surprisingly, entrepreneurs take more risks when accepting feedback, for example, feedback on gains and losses, than

non-entrepreneurs. Specifically, Rai (2008) attempted to include age as one indicator of entrepreneur characteristics relating to their entrepreneurial-risk behavior. He found that young people in India (below 30 years old)were basically optimistic, enthusiastic, passionate, excited, and confidence with their risk-taking attitude when theyentered the entrepreneurial industry.

Entrepreneurial Intention

Churchill (1992) defined entrepreneurship as "the process of uncovering, developing, and seizing an opportunity disregarding to either resources or the location of the entrepreneur."Meanwhile, the term 'entrepreneur' can best be described as "a person who innovates on all fronts regularly, works under uncertainty, bears the noninsurable risk and combines and manages the factors of production effectively" (Rai, 2008). Related to it, many researchers have explorednot only about entrepreneurship as a general concept, but also discussed what influencing factors of someone's "intention" to be an entrepreneur (Kristiansen and Indarti, 2004; Wilson et al., 2007; Wilson et al., 2009; Chen, 2013; Zeffane, 2013). As mentioned by Ajzen (1991), intention refers to "the indication of how hard people are willing to try, of how much an effort they are planning to exert, in order to perform the behavior." It means the biggerthe intention of an entrepreneur is, the higher his or herpretension to performentrepreneurialwill be (Koeet al., 2012). Furthermore, Krueger (1993) simply stated this intention as "the target behavior of starting a business."

Hypotheses Development

Need for Achievement and Entrepreneurial Intention

There are supported findings on the relationship between the need for achievement and entrepreneurial intention. For example, the research of Zeffane (2013) found that the need for achievement was the most significant determinant of entrepreneurial potential of 503 students at a university in the United Arab Emirates, besidesthe extraverted-orientation variable. This concept refers to both "felt

ability" "desire" and become entrepreneurs while intention just focused "desire." The other study examined the need for achievement and enterprising (Okhomina. behavior 2010), found a positive and significant between relationship the need achievement and entrepreneurial behavior of auto dealers and used-car lotowners in South Standard Metropolitan Statistical Area (SMSA). The study definedthis behavior as entrepreneurial activities where entrepreneurs implementedenterprisingly their methods, practices, decision-making styles, disposition to autonomy, couragein doing experiments(innovativeness), risktaking, initiatives-taking (proactiveness), and aggressively competing-actions within its market. Individuals with a higher need for achievement typicallyare those having a strong desire to be successful, appreciate to personal responsibility, love to take risks, are likely to evaluate and measure what theyhave done. People with anelevatedneed for achievement generallyhave a high intention to entrepreneurship (Kristiansen and Indarti, 2004). Therefore, based on those arguments, the first hypothesis is: H1:The need for achievement has a positive influence on entrepreneurial intention.

Self-Efficacy and Entrepreneurial Intention

The study of Chen (2013) revealed a positive influence of entrepreneurial self-efficacy (ESE) on IT entrepreneurial intention among business administration students. Wilson et al. (2007) showed similar findings. They found a positive relationship between ESE and intentions to become an entrepreneur, mainly for the relationship between selfefficacy and career preferences of MBA students. They concluded that high degrees of ESEwould drive individuals to have a beliefof their possibility of having actionable ideas, launching new business, or running the current business.In another study, Wilson et al.(2009) also found the effect of gender on this enterprising intention of MBAstudents in which ESE performed as mediating variable. Similarly, Sequeiraet al. (2007) revealed that ESEhad a positive and statistically significant on entrepreneurial Furthermore, Kristiansen and Indarti (2004)

in their study also claimed that the high score on self-efficacy was positively connected with strong intention to be an entrepreneur of Norwegian and Indonesian students. This study concluded that the higher one's self-efficacy is, the biggerhis or her enterprising intention will be. It is because the strongerone's self-efficacy mirrorshis or herstrong belief to be able to start a new business successfully. Therefore, this study develops the second hypothesis as follows: H_2 : Self-efficacy has a positive influence on entrepreneurial intention.

Risk-Taking Propensity and Entrepreneurial Intention

Norton and Moore (2006) argued that entrepreneurs would assess venture opportunities more favorably than non-entrepreneurs. It means there is a significant influence of risk assessment or risk-taking propensity on the entrepreneur's intention to face business opportunities. Basically,

individuals with characteristics of risktaker, moretolerance for ambiguity, and superior internal locus of control, tend to have strong intention to start a new business (Gurelet al., 2010). In addition, in their research, Gurelet al. (2010) concluded that risk-taking was associated with intention to establish a business. Furthermore, there is a simple statement from Gürol and Atsan (2006): "entrepreneurship is historically associated with risk-taking", reflecting when someone decides to become entrepreneur, it means he or she is ready to sacrifice his or her time, effort (related with physic), fund (financial) and even his or her social environment to create something new with value. Therefore, based on those arguments, the third hypothesis is: H₃: Risktaking propensity has a positive influence on entrepreneurial intention.

There are three proposed hypotheses that can be summarized in the following research model (Figure 1).

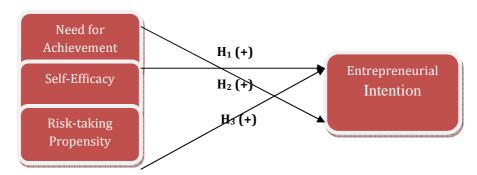


Fig. 1: The Research Framework

Research Methodology

This study employed 204 senior students of a public university who have finished their compulsory entrepreneurship course. The study asked respondents to fill in and answer the questionnaire in order to find out whether need for achievement, self-efficacy, and risk-taking propensity affected students' entrepreneurial intention or not. Then, the study analyzed the obtained data by through multivariate analysis. Items to measure these concepts were adapted from the literature on

entrepreneurial intention at the individual level (e.g., Saucier, 1994; Kolvereid, 1996; Kristiansen and Indarti, 2004). This research adopted the need for achievement scale of McClelland (1967), self-efficacy scaleof Chen et al. (2001), risk taking propensity scale ofKogan-Wallach instrument (Hisrich& Brush, 1985), and entrepreneurial intention scale of Franke andLuthje (2004). All the variables used five-point Likert-type scales (from 1: strongly disagree to 5: strongly agree).

Table 1: Inter-correlations

Constructs	Mean	Std.Dev.	(1)	(2)	(3)	(4)
(1) N-Ach	3.37	0.317	1	-	-	-
(2) SE	2.34	0.282	0.713**	1	-	-
(3) RTP	4.63	0.617	0.667**	0.733**	1	-
(4) EI	3.76	0.436	0.658**	0.716**	0.759**	1

Note: *** p < 0.001; ** p < 0.01; * p < 0.05

The correlation of independent variables, i.e. need for achievement and self-efficacy (0.713**); need for achievement and risk-taking propensity (0.667**); and self-efficacy and risk-taking propensity (0.733**), reveals that there is no severed multicollinearity, due to all values are still below the maximum value (0.80), which indicates the existence of multicollinearity (Gujarati, 1995). The significant and positive correlation between need for achievement and entrepreneurial intention (0.658**) indicates students' strong need for achievement will drive to a higher level of students' intention to become

entrepreneur. Meanwhile, positive and significant correlation between self-efficacy and intention be self-employed (0.716**) reflects students' high self-confidence on their required-skills to run the business will propel their intention to run their own business. Furthermore, the correlation risk-taking propensity between entrepreneurship intention (0.759**)mirrors positive and significant relationship between students' risk-taking behavior and their aspiration to start and run business as their future career (Table 1).

Table 2: Test of Construct's Validity and Reliability

Construct								
Need for		Self-		Risk-Taking		Entrepreneurial		
Achievement		Efficacy		Propensity		Intention		
Itarea	Factor	Item	Factor	Item	Factor	Item	Factor	
Item	Loading		Loading		Loading		Loading	
N-Ach1	0.507	SE1	0.615	RTP1	0.710	EI1	0.713	
N-Ach2	0.661	SE2	0.673	RTP2	0.729	EI2	0.722	
N-Ach3	0.670	SE3	0.694	RTP3	0.690	EI3	0.694	
N-Ach4	0.602	SE4	0.734	RTP4	0.725	EI4	0.764	
N-Ach5	0.757	SE5	0.719	RTP5	0.796	EI5	0.667	
N-Ach6	0.750	SE6	0.716	RTP6	0.789	EI6	0.705	

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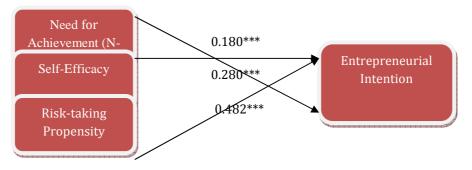
0.917		0.940		0.937		0.942	
Cronbach Alpha =							
				RTP16	0.765	EI16	0.791
				RTP15	0.790	EI15	0.788
N-Ach15	0.643	SE14	0.833	RTP14	0.731	EI14	0.817
N-Ach14	0.686	SE13	0.856	RTP13	0.665	EI13	0.800
N-Ach12	0.812	SE12	0.789	RTP12	0.742	EI12	0.722
N-Ach11	0.757	SE11	0.809	RTP11	0.703	EI11	0.725
N-Ach10	0.806	SE10	0.777	RTP10	0.715	EI10	0.681
N-Ach9	0.769	SE9	0.813	RTP9	0.793	EI9	0.726
N-Ach8	0.700	SE8	0.787	RTP8	0.664	EI8	0.752
N-Ach7	0.730	SE7	0.684	RTP7	0.715	EI7	0.721

Table 2 presents the results of constructs' validity and reliability test. This study applied factor analysis to test each construct's validity and proceeded with the estimation of reliability (alpha) of each variable. The factor analysis procedure followed the work of Tabachnick and Fidell (1996) in which the study repeated the procedure until there were no invalid statement-items according to the criteria set out in SPSS 20. An item would be retained if the factor loading was equal to or greater than 0.5. After the validity test, this study examined the variable reliability by using the Cronbach's Alpha. It was to test the consistency of the overall respondents in answering the statement-items of a particular variable. The Cronbach's Alpha value should be commonly bigger than 0.6. The greater value of Cronbach's Alpha is the better reliability of the variables. From validity test, there is only one invalid item:

need for achievement (N-Ach13), while other constructs are reliable.

Findings and Discussion

Figure 2 shows the hypotheses testing's results. This study finds that need for affectsentrepreneurial achievement intention positively ($\beta = 0.180$; p < 0.001). In other words, senior students with high desire to achieve their personal accomplishmentfavorably tend to have higher intention to become entrepreneur.It supports the prior findings of Kristiansen and Indarti (2004), Okhomina (2010), and Zeffane (2013). It implies that educational background lends to senior students a solid foundation to be more aware and encouraged becoming entrepreneurs. Entrepreneurial knowledge (as one of the compulsory subjects) has enriched and enlightened final-year students' perception on achievement and future career.



Note: *** p < 0.001; ** p < 0.01; * p < 0.05

Fig. 2: Hypotheses Testing

For the second hypothesis test, it shows that self-efficacy has a positive influence on students' entrepreneurial intention (β = 0.280; p < 0.001). It means students' selfefficacy or simply self-confidence, which is based on perceptions of students about their skills and abilities (Wilson et al., 2007), would significantly influence their intention to create a new business. The finding is in line with prior studies of Kristiansen and Indarti (2004), Sequeiraet al. (2007), and Chen (2013). Since senior students are the sample used, who have finished the entrepreneurship subject as their infers course, compulsory it that entrepreneurial knowledge, which is coupled by other business understanding and social experience during the university studies, plays an important role in building students' self-efficacy. It enriches and supports their intention to be self-employed. They become more courageous and self-confident to choose starting and running their own business as a promising way of life.

Finally, the last hypothesis test reveals that the influence of risk-taking propensity on entrepreneurial intention is positive and significant (β = 0.482; p < 0.001). This result demonstrates that the higher level of students' risk-taking tendency, the stronger their intention to be an entrepreneur and run their own business. It mirrors as well the students' awareness on regular risks that entrepreneurs should face (Sarasvathyet al., 1998). The empirical result is in line with the works of Gürol and Atsan (2006), Norton and Moore (2006), and Gurelet al. (2010). It reveals that senior students, having educated

for university level, perceive business risks as measureable and manageable matters. Risks do not impede them to aspire as entrepreneurs. It is noteworthy that young and highly educated people are more having risk-taking tendency, ready for uncertainty, and optimistic.

empirical findings These lend some important implications. Firstly, the successful government policy on entrepreneurship education at university level has given a solid evidence to sustain similar programs. The entrepreneurship subject can be a compulsory course at senior high school as well. The curriculum difference lies on the course contents and approaches. At lower level, the emphasis is on introduction and building entrepreneurial awareness, meanwhile at higher level, the focus is on practices, start-up projects, and apprenticeship. Secondly, an integrated coordination among related government institutions (i.e. Ministry of National Education and Ministry of Manpower and Transmigration) is a must. Senior students should have more opportunities and incentives to start their own business as early as possible. Special loans, new ventures workshops, management trainings, and subsidized-trade exhibition programs are the examples of supportive programs. Thirdly, massive, structured and systematic programs on youth entrepreneurship development should be the priority plans at national and local level. Star-up business competitions, young entrepreneurs' awards, and innovative business simulationscan be some of routinely entrepreneurial programs

for not only government institutions, but also private and social organizations. Those supporting platforms will become conducive to entrepreneurial capacity-building environment.

Conclusion

This study examines the effect of need for achievement, self-efficacy, and risk-taking propensity on entrepreneurial intention. By employing a sample of 204final-year university students and analyzing the proposed hypotheses, it found some important findings. Tendency to take risk is the dominant antecedent, compared to other variables. It reveals that senior students perceive that risks are manageable and measurable things. It does not hamper their intention to start and run their own business. Students' self-efficacy, which is simply their self-confidence, correlated positively with intention to be entrepreneurs. It reflects the students' entrepreneurial knowledge affects implicitly students' self-reliance to choose self-employed people as their future career. Meanwhile, the positive effect of need for achievement on entrepreneurial intention mirrors a dramatic change of social perception on self-employed status in highly educated people. Senior students see becoming entrepreneurs is an honor profession like others.

These empirical findings may not be generalized to other sectors/industries or countries with a distinct level of education. Country's economic growth, population profile, natural resource availability, and society cultures and norms play an important role to the entrepreneurship development, especially for youth people. Therefore, this study suggests the inclusion other sectors or industries' and demographic characteristics, such as non-service sectors (manufactures, military), professions (teachers, civil servants, salespeople) and education background (high school's students, non-business students). It is noteworthy for testing the effect of those variables in two separate periods, i.e. pre and taking the compulsory entrepreneurship subject. It is to see

whether entrepreneurial knowledge makes a different or not.

References

1.Ajzen, I. (1991). "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes*, 50, 179-211."

2.AntaraSumbar (2010). 'KemenakertransdanKemendiknasBentukPo kjaPendidikanKewirausahaan [Ministry of Manpower and Transmigration and Ministry of National Education Formed a Working Committee for Entrepreneurship Education],' [online], [Retrieved September 1, 2014], http://www.antarasumbar.com/berita/nasi onal/

d/0/102030/kemenakertransdankemendikn as-bentuk-pokja-pendidikankewirausahaan.html

3.Bandura, A. (1997). Self-Efficacy: The Exercise of Control, *Freeman*, New York.

4.Chen, G., Gully, S. M. & Eden, D. (2001). "Validation of a New General Self-Efficacy Scale," *Organizational Research Methods*, 4 (1), 62-83.

5.Chen, L. (2013). "IT Entrepreneurial Intention among College Students: An Empirical Study," *Journal of Information Systems Education*, 24 (3), 233-243.

6.Chen, S., Su, X. & Wu, S. (2012). "Need for Achievement, Education and Entrepreneurial Risk-Taking Behavior," *Social Behavior and Personality*, 40 (8), 1311-1318.

7.Churchill, N. C. (1992). 'Research Issues in Entrepreneurship,' In Sexton, DL.andKasarda, JD. (Eds.), The State of the Art of Entrepreneurship, *PWS-Kent Publishing*, Boston, Massachusetts, 579-596.

8.Franke, N. &Luthje, C. (2004). "Entrepreneurial Intentions of Business Students: A Benchmarking Study," International Journal of Innovation and Technology Management, 1 (3), 269-288.

9.Gujarati, D. N. (1995). Basic Econometrics, *McGraw Hill*, New York.

Milcha Handayani Tammubua, IkaFebrilia and Ari Warokka (2015), Journal of Entrepreneurship: Research & Practice, DOI: 10.5171/2015.251294

- 10.Gurel, E., Altinay, L. & Daniele, R. (2010). "Tourism Students' Entrepreneurial Intentions," *Annals of Tourism Research*, 37 (3), 646-669.
- 11.Gürol, Y. &Atsan, N. (2006). "Entrepreneurial Characteristics amongst University Students: Some Insights for Entrepreneurship Education and Training in Turkey," *Education and Training*, 48 (1), 25-38.
- 12.Hisrich, R. D. & Brush, C. G. (1985).'The Women Entrepreneur,' *Macmillan Publishing Company*, New York.
- 13.Khan, A. R. (2000). Entrepreneurship, Small Business and Lives of Successful Entrepreneurs, Rubi Publications, Dhaka. Google Scholar
- 14.Kihlstrom, R. E. &Laffront, J. J. (1979). "A General Equilibrium Entrepreneurial Theory of Firm Formation based on Risk Aversion," *Journal of Political Economy*, 87 (4), 719-748.
- 15.Koe, W. L., Sa'ari, J. R., Majid, I. A. & Ismail, K. (2012). "Determinants of Entrepreneurial Intention among Millennial Generation," *Procedia Social and Behavior Sciences*, 40, 197-208.
- 16.Koh, H. C. (1996). "Testing Hypotheses of Entrepreneurial Characteristics: A Study of Hong Kong MBA Students," *Journal of Managerial Psychology*, 11 (3), 12-26.
- 17.Kolvereid, L. (1996). "Prediction of Employment Status Choice Intention," *Entrepreneurship Theory and Practice*, 21 (1), 47-57.
- 18.Kompas (2012). Menakertrans: Untuk Maju, Indonesia Harus Tambah Wirausahawan [Minister of Manpower and Transmigration: To Be leading, Indonesia should Increase Its Entrepreneur]," [online], [Retrieved September 19, 2014], http://bisniskeuangan.
- kompas.com/read/2012/10/13/18560570/ Menakertrans.Untuk.Maju.Indonesia.Harus.T ambah.Wirausahawan
- 19.Kristiansen, S. &Indarti, N. (2004). "Entrepreneurial Intention among

- Indonesian and Norwegian Students," *Journal of Enterprising Culture*, 12 (1), 55-78.
- 20.Krueger, N. F. (1993). "The Impact of Prior Entrepreneurial Exposure on Perceptions," *Entrepreneurship Theory and Practice*, 18 (1), 5-22.
- 21.Kuratko, D. F. & Hodgetts, R. M. (2007). Entrepreneurship Theory, Process, Practice, *Thompson South-Western*, USA.
- 22.Lent, R. W., Brown, S. D. & Hackett, G. (2000). "Contextual Supports and Barriers to Career Choice: A Social Cognitive Analysis," *Journal of Counseling Psychology*, 47 (1), 36-49
- 23.McClelland, D. C. (1961). The Achieving Society, *Collier-Macmillan*, New York and London.
- 24.McClelland, D. C. (1967).The Achieving Society, *Free Press*, New York.
- 25.McClelland, D. C. (1987). "Characteristics of Successful Entrepreneurs," *Journal of Creative Behavior*, 21 (2), 219-33.
- 26.Norton, W. I, Jr. & Moore, W. T. (2006). "The Influence of Entrepreneurial Risk Assessment on Venture Launch or Growth Decisions," *Small Business Economics*, 26 (3), 215-226.
- 27.0khomina, D. A. (2010). 'The Relationship between Personality Traits and Entrepreneurial Behavior and the Moderating Role of Supportive Environment,' International Journal of Business and Economics Pespectives, 5 (1), 139-154.
- 28.Rahman, K. M. &Rahman, S. F. (2011). "Entrepreneurship Needs and Achievement Motivations of Descendant Latin-Japanese Entrepreneurs in Japan," *International Journal of Entrepreneurship*, 15, 99-119.
- 29.Rai, S. K. (2008). "Indian Entrepreneurs: An Empirical Investigation of Entrepreneur's Age and Firm Entry, Type of Ownership and Risk Behavior," *Journal of Services Research*, 8 (1), 213-228.
- 30. Sarasvathy, D. K., Simon, H. A. & Lave, L.

- (1998). "Perceiving and Managing Business Risks: Differences between Entrepreneurs and Bankers," *Journal of Economic Behavior and Organization*, 33 (2), 207-226.
- 31.Saucier, G. (1994). "Mini-Markers: A Brief Version of Golberg's Unipolar Big-Five Markers," *Journal of Personality Assessment*, 63 (3), 506-516.
- 32.Sequeira, J., Mueller, S. L. & McGee, J. E. (2007). "The Influence of Social Ties and Self-Efficacy in Forming Entrepreneurial Intentions and Motivating Nascent Behavior," *Journal of Developmental Entrepreneurship*, 12 (3), 275-293.
- 33.Tabachnick, B. G. &Fidell, L. S. (1996). 'Using Multivariate Statistics,' *Harper Collins College Publishers*.
- 34.Wilson, F., Kickul, J. &Marlino, D. (2007). "Gender, Entrepreneurial Self-Efficacy, and

- Entrepreneurial Career Intentions: Implications for Entrepreneurship Education," *Entrepreneurship Theory and Practices*, 31 (3), 387-406.
- 35.Wilson, F., Kickul, J., Marlino, D., Barbosa, S. D. & Griffiths, M. D. (2009). "An Analysis of The Role of Gender and Self-Efficacy in Developing Female Entrepreneurial Interest and Behavior," *Journal of Developmental Entrepreneurship*, 14 (2), 105-119.
- 36.Zeffane, R. (2013). "Need for Achievement, Personality and Entrepreneurial Potential: A Study of Young Adults in the United Arab Emirates," *Journal of Enterprising Culture*, 21 (1), 75-105.
- 37.Zheng, C. & Prislin, R. (2012). "Beyond Risk Propensity The Influence of Evaluation Period and Information Relevance on Risk-Taking Behavior," *Academy of Entrepreneurship Journal*, 18 (1), 1-20.