

# CHOICE OF SELF-EMPLOYMENT INTENTIONS AMONG SECONDARY SCHOOL STUDENTS

Lope Pihie ZAIDATOL AKMALIAH\*

Hassan HISYAMUDDIN\*

## Abstract

Entrepreneurial research among secondary school students has become more important for the past two decades. In line with the government emphasis on entrepreneurship as an important career option as a source of national prosperity in the future, this study is to investigate the status of secondary school students' self-employment intention based on the Theory of Planned Behavior. The study was tested on a sample of 1357 students in Klang Valley area which random sampling method was utilized. The instrument with 5 Likert Scales used has a reliability value with a Cronbach  $\alpha$  range between .65 and .96. The results showed significant and positive correlations between attitudes towards self-employment, subjective norms, support, entrepreneurial self-efficacy and interest with self-employment intentions. In fact, subjective norm showed the strongest relationship with self-employment intentions ( $r=.68$ ;  $p<.01$ ) and attitude depicted the lowest ( $r=.40$ ;  $p<.01$ ). The finding also revealed that community support had a strong relationship with intention ( $r=.64$ ;  $p<.01$ ). Based on the findings, even though all factors had a significant relationship with self-employment intentions, subjective norms showed the strongest relationship with entrepreneurship as a career for secondary school students.

**Key Words:** *Entrepreneurs Development, Self-Employment Intention, Entrepreneurial Self Efficacy, Community Support, Subjective Norms, Entrepreneurial Attitude and Entrepreneurial Interest*

**JEL Classification:** Z00 - General

## 1. Introduction

Sexton et al. (1991) said that entrepreneurship education develops students aspiration as well as readiness for self-employment and he said that the success of entrepreneurship training programs is driven by the learners belief in the relevance of the program for his or her survival. According to Holmgren et al. (2005) entrepreneurship education has become both of national priority and a global responsibility and it has become the impetus for vest expansion into all levels of education from primary and secondary and particularly into university levels (Hannon, 2006). Henry et al (2006) argued that entrepreneurship education should provide the entrepreneurial opportunities for all students and Wilson (2007) mentioned that while students still in secondary schools that the first aspirations of entrepreneurship intentions take shape and this way affect students' career option in the future.

Entrepreneurial aspiration is a term used to describe the readiness and willingness to become an entrepreneur. It can be measured by the possibility rate of starting ones own business after leaving school. Steward (1999) found that content knowledge is important for individuals to gain confidence and undertake an entrepreneurial career. This means that good education can increase business knowledge and improve the self-efficacy of potential entrepreneurs. Fiet *et al.* (2006) claimed that entrepreneurial interest can be trained and they highlighted in their study the success rate of systematic training of adult urban inner city poor to develop their entrepreneurial interest and capacity.

Frank *et al* (2005) reported that pupils' development orientations were affected by the entrepreneurship orientation of their school. Entrepreneurship education has the potential to develop knowledge and skills for enterprise but also, importantly, increase the willingness of individual to consider entrepreneurship as a career option (Lucas *et al* 2004). They claimed that important in the decision to start a venture is the confidence and self-belief that an individual has in his/her ability to undertake successfully many activities that are required. They further suggested that self-efficacy is central to the willingness to act in an entrepreneurial way, to identify and seize opportunities. According to Kolvereid (1996) employment status choice models that focus on entrepreneurial intention have been the subject of considerable interest in

---

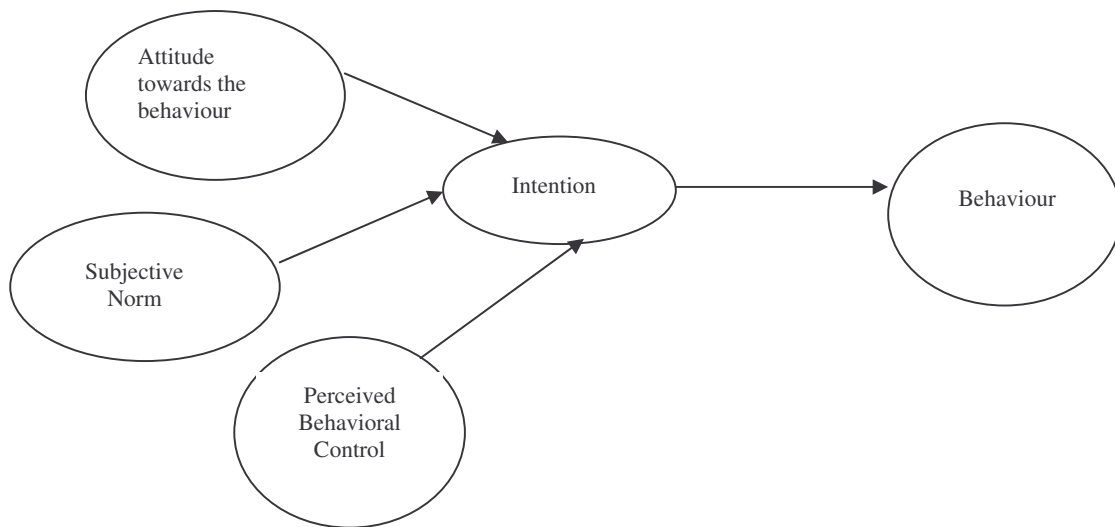
\* Faculty of Educational Studies, University Putra Malaysia

entrepreneurship research. According to the past literatures, intention is best predicted by attitudes and subjective norms which are subjected to the Theory of Planned Behaviour.

### Theory of Planned Behaviour and Self-employment intention

The Theory of Planned Behaviour suggests that behaviour is predicted by behavioural intentions (Ajzen & Fishbein, 1980). This theory “provides a useful conceptual framework for dealing with complexities of human social behaviour” (Ajzen, 1991, p. 206). There are three antecedents of intentions; attitude toward behaviour, subjective norm and perceived behavioral control. (Figure 1)

Figure 1: Theory of Planned Behaviour Model (Ajzen & Fishbein, 1980)



According to Ajzen & Fishbein (1980) attitude towards behaviour is a person’s judgments about the impact of the desired behaviour whether is good or bad. Whereas subjective norms refers of what social group who are important to that person think about performing the intended behaviour. Finally, perceived behavioral control is an individual’s judgments of his ability to do the intended behaviour. In this study, the intended behaviour is the entrepreneurial career. Ajzen and Driver (1992, p. 208) stressed that “the more favorable the attitude and subjective norm with respect to a behaviour, and the greater the perceived behavioural control, the stronger should be an individual’s intention to perform the behaviour under consideration”. For the past of almost two decades, this theory has been used by entrepreneurship scholars all over the world in exploring important elements which precede ones decision in choosing entrepreneurship as a career.

Intentions proved to be the best predictor of planned behaviour (Ajzen, 1987). The model further developed by Krueger and Carsrud (1993) recommended entrepreneurial self-efficacy to replicate perceived behavioral control also predict entrepreneurial intentions.

Entrepreneurial self-efficacy originated from Bandura’s Social Learning Theory on self-efficacy. This theory is regarding an individual judgments about his capabilities to complete a given tasks successfully whereby most people will avoid any tasks which he/she thinks is incompetent. Because of its reliability in predicting behavior (Gist, 1987; Stumpf, Brief & Hartman, 1987), Bandura’s theory has prepared a constructive conceptual framework in entrepreneurial studies whereby someone who want to become an entrepreneur will be aware of his capacity to accomplish any entrepreneurial related work (Krueger, Reily & Carsrud, 2000; Betz & Hackett, 1981). Brice (2002) argued that those who has high entrepreneurial self-efficacy will also has interest to be self-employed in future. Chen, Green and Crick (1998) found a significant finding which differentiate between an entrepreneur and non entrepreneur. In addition, various studies presented significant relationship between entrepreneurial self-efficacy and self-employment (Nurul Indarti & Kristiansen, 2003; Segal, Borgia & Schonfeld, 2002; Hassan, 2007). Furthermore, De Noble, Jung and

Ehrlich (1999) research conformed that individuals with high entrepreneurial self-efficacy also had high level of entrepreneurial intentions.

Ajzen and Fishbein (1990) argued that subjective norm is an important factor influence ones intentions to execute behavior. In entrepreneurship research, Baughin et al (2006) expanded the meaning of subjective norm to be national norms and social support. National norms portrays to which a country's culture, values and norms support entrepreneurial activity, meanwhile the social support reflecting the approval and support for entrepreneurial activity available from family and friends.

Previous studies resulted mix findings of the relationship of subjective norms towards self-employment (Krueger, Reilly and Carsrud, 2000; Meeks, 2004) which also has similar findings in other nonentrepreneurial studies (Ajzen, 1991). For instance, Kolvereid (1996) studies showed that subjective norms has a positive and significant relationship with self-employment ( $r=.60$ ;  $p<.05$ ). In Malaysia, Ramayah and Zainon (2005) research on Universiti Science Malaysia students found similar outcome ( $r=.57$ ;  $p<.01$ ). Conversely, these result incompatible with Krueger et al. (2000) which revealed that there was no relationship between subjective norm and entrepreneurial intentions. In this studies we broadly utilize community support in terms of social support (Baughn et al, 2006)

Even though little work has been done on the role of social support in entrepreneurship research (Buttner, 1992), literatures on social support have been associated with bringing down the stress (Cohen and Will, 1985; Arcuri and Lester, 1990). According to Baughn et al (2006) the two components of social support which are family and friends are important source in providing capital and workforce. They are important factors contribute towards desirability in engaging entrepreneurship as a career. In fact, Baughn et al (2006) studies reported that family support of business students in Philippines had a significant correlation with entrepreneurial interest ( $r = .42$ ,  $p < .05$ ). In addition, they also reported similar significant results which associate family support and entrepreneurial interest in other countries such as China, Hanoi and Ho Chi Minh City. These result should enlighten the importance of family support in entrepreneurship research. As entrepreneur can be regarded a risk taker, social support could mitigate the impact of the result of the risk and also can provide feedback which can enhance efficacy (Wood, 1989).

Kolvereid and Isaken (2006, p.870) suggested that the term of self-employment is that the individual is faced with two alternatives when selecting a career – either as self-employed and employed in an organization. Attitudes towards self-employment is an individual perceptions on working as an owner of a business. Jackson and Rodkey (1994) argued that attitudes towards entrepreneurship is an important aspect which predict potential entrepreneur in future. Previous studies showed that attitudes towards self-employment associated with self-employment intentions (Kolvereid & Isaken, 2006; Autio et al, 2001; Tkechev & Kolvereid, 1999; Kolvereid, 1996). For instance, Kolvereid & Isaken reported that attitude towards self-employment predicts self-employment intentions ( $\beta =.33$ ,  $p < .001$ ).

Entrepreneurial interest is defined as the attractiveness or desirability perceptions of starting a business perceived by the individuals (Shapero & Sokol, 1982; Krueger & Brazeal, 1994). Indeed, Krueger (2000, p. 14) recommended it as “an assessment of examining entire set of rewards (and punishment), intrinsic, formal and informal”. Past literatures reported significant association between entrepreneurial interest and self-employment intentions (Krueger, Reilly and Carsrud, 2000; Kennedy et al, 2003).

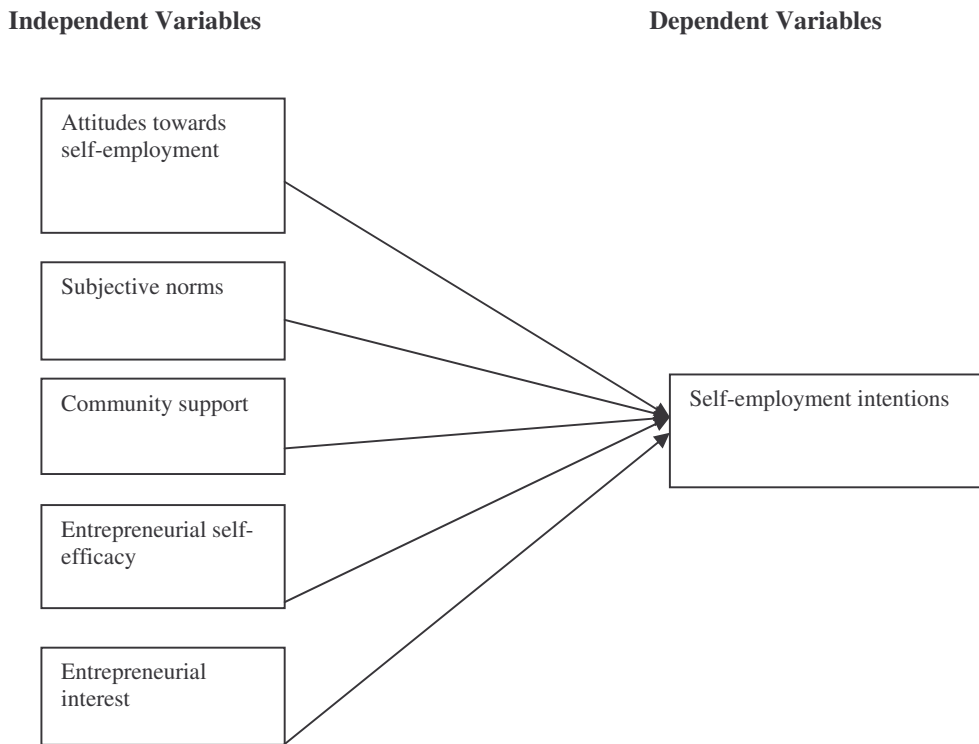
To understand the variables included in the study, an explanation is given as follow:

Attitudes towards self-employment are the difference between perceptions of personal desirability in becoming self-employed and organizationally employed. Therefore ‘high’ attitude towards self-employment actually indicates that the respondent is more in favoring of self-employment than organizational employment (Kolvereid, 1996). Subjective norm refers to perceptions of what important people in respondents’ life think about them becoming self-employed, weighted by the strength of the motivation to comply with them (Krueger *et al* 2000). To understand the meaning of intention, the definition given from Bird (1998) is utilized. It is defined as a state of mind directing a person’s attentions and action towards self-employment as opposed to organizational employment. Whereas the concept self-efficacy refers to ones personal assessment of his or her capability to accomplish a certain level of performance (Jung, 2001). According to Boughan et al (2006) community support is a perception of what the community thinks of an individual starting a business

venture and the motivation of the individual to comply with the wishes of the community, and entrepreneurial interest is the perception whether the student like or not to be an entrepreneur (Wang Wong and Lu, 2002).

The proposed model for this study is based on the compilation of constructs through reading and analyzing the relevant and related literature review regarding Theory of Planned Behaviour and self-employment intention. The model is illustrated in figure 2 below:

Figure 2: Model of Self-Employment Intentions



## 2. Objective

The objective of the study was to determine secondary school students' choice of self-employment intention. Specifically the study sought to answer the following research questions:

- What is the perception of students towards self-employment intention?
- What is the entrepreneurial aspiration of the secondary school students?
- What is the students' perception of their attitude towards self-employment?
- What is the students' perception on constructs such as subjective norm, community support, entrepreneurial efficacy and entrepreneurial interest?
- Is there a significant relationship between student self-employment intention with student's attitude towards self-employment, subjective norm, community support, entrepreneurial efficacy and entrepreneurial interest?

## 3. Methodology

The study utilized a descriptive research design. Sample of the study comprised of 1357 form four students from academic secondary schools in Selangor, Malaysia. Data were gathered in October-November

2007 using a set of questionnaire measuring students self-employment intention, entrepreneurial aspiration, community support, attitude toward self-employment, entrepreneurial efficacy, entrepreneurial interest and subjective norm. Permission was obtained from Educational Planning and Research Division, Ministry of Education and the Director of Education for the state of Selangor to conduct the survey. The school principals were contacted to fix the date of data collection and to make the necessary preparations with form four students in the science, commerce and MPV classes. Data were collected by the researchers and two research assistants.

The instrument was developed based on the modification of previous instruments developed by several authors such as by Ajzen and Fishbein (1980), Kolvereid (1996), Krueger (2000), Chen, Green and Crick (1998) and Hassan (2007). The reliability of each set of constructs has a Cronbach  $\alpha$  value ranged between .65 and .96. The measurement of items in the survey questionnaire was based on 5 point Likert scales with 1 demonstrating “strongly disagree” to 5 demonstrating “strongly agree”. Negatively worded items were rescored so that higher scores reflected its mean. Mean score above 3.80 is considered high, 3.40-3.79 is considered moderate and below 3.39 is considered as low perceptions. Data were analyzed using descriptive and inferential statistics. (Table 1)

Meanwhile, this study also attempts correlational research in order to describe association between factors such as attitudes towards self-employment, subjective norms, community support, entrepreneurial efficacy and entrepreneurial interest with self-employment intentions. The Davis (1971) convention was adopted in interpreting magnitudes of the correlation coefficients. (Table 2)

**Table 1: Mean score measurement.**

Mean Score	Description
< 3.39	Low
3.40-3.79	Moderate
> 3.80	High

**Table 2: Correlation coefficients interpretation based on Davis (1971)**

.70 or higher	Very strong association
0.50-0.69	Substantial association
0.30-0.49	Moderate association
0.10-0.29	Low association
0.01-0.09	Negligible association

#### 4. Findings

Table 3 illustrates students’ perception on the items measuring self-employment intention. The highest mean score is for the item “I put effort to make more money” followed by “I want to be my own boss”. The lowest mean score is for the item “I have thought seriously to start my own business after completing secondary school” (M = 2.82). Overall the self-employment intention score of the students was in the moderate to low category (mean = 3.41). The following table illustrates the perception of students regarding self-employment intention.

**Table-3 : Self employment intentions of secondary school students**

Items	M	S.D
I will choose a career as an entrepreneur.	3.23	1.01
I prefer to be an entrepreneur rather than be an employee in a company.	3.54	1.11
I am prepared to do anything to be an entrepreneur	3.18	1.06
I’ll make every effort to start and run my own business	3.26	1.05
I have thought seriously to start my own business after completing secondary school	2.82	1.04
I have a strong intention to start a business someday	3.51	1.11
I’m determined to create a firm in the future	3.44	1.13
I put effort to make more money	4.25	.99
I want be my own boss	4.11	1.05

I will start my business in next 5 years	3.03	.94
I will start my business in next 10 years	3.20	1.08

Table 4 illustrates entrepreneurial aspiration of students. It was found that only 47.4% of the students have positive aspiration to be entrepreneur.

**Table-4 : Entrepreneurial aspiration of secondary school students**

Items	F	Percentage
Yes	643	47.4
No	714	52.6
Total	1357	100

Table 5 illustrates the perception of students' attitude towards self-employment career. It was found that overall mean score for the construct was 3.80 which indicate a moderately high perception.

**Table-5 : Students' perception regarding attitude toward self-employment**

Items	M	SD
Attitude towards self-employment	3.80	0.57

Table 6 illustrates the mean score for the constructs subjective norms, community support, entrepreneurial efficacy and interest. The result indicate moderate score on subjective norm and community support, but low perception on entrepreneurial interest and self-efficacy.

**Table-6 : Students' perceptions of subjective norms, support, interest and entrepreneurial self-efficacy.**

Items	M	S.D
Attitude toward self-employment	3.80	.57
Subjective norm	3.69	.76
Community support	3.52	.56
Entrepreneurial interest	3.06	.56
Entrepreneurial Self-Efficacy	3.28	.61

Table 7 illustrates the degree of relationship between self-employment intention and other related constructs such as subjective norm, attitudes toward self-employment, entrepreneurial efficacy, support and interest. It was found that there exist a significant and positive relationship between self-employment intention with subjective norm ( $r = .69, p < .01$ ), attitude toward self-employment ( $r = .41, p < .01$ ), community support ( $r = .64, p < .01$ ), self-efficacy ( $r = .55, p < .01$ ) and interest ( $r = .49, p < .01$ ). Self-employment intention has the strongest relationship with subjective norm and the lowest with attitude towards self-employment. Based on Davis correlation coefficient, the result indicated no weak relationship between these factors.

**Table-7: Correlation between self-employment intentions and selected constructs**

Items	Self-employment intentions
Subjective norm	.68
Attitude toward self-employment	.41
Community support	.64
Entrepreneurial Self-efficacy	.55
Entrepreneurial interest	.49



## 5. Discussion

The findings indicate that the students surveyed have low perceptions on entrepreneurial interest and self-efficacy. The concept of self-efficacy has been extensively employed in the career theory literature to explain perceived career options as well as career oriented behavior. Markman *et al* (2002) suggested that self-efficacy reliably predicts scope of career options considered, occupational interest, perseverance in difficult fields, and personal effectiveness. The findings suggest that, secondary school students in this study as a whole do not have the confidence or abilities to be an entrepreneur, since the score on their self-efficacy is still low. This study found a significant correlation between self-efficacy with self-employment intention and this is consistent with previous findings which indicated that individuals with higher entrepreneurial self-efficacy have higher entrepreneurial intention (Wang, Wong & Lu, 2002 and Segal, Borgia, & Schoenfeld, 2002). Since the student score on self-efficacy in this study is still low the possibility of choosing self-employment as a career alternative is questionable.

Markman *et al* (2002) suggested that given the difficulty of entrepreneurial ventures, high self-efficacy is important through out the full cycle of the endeavor. That is, entrepreneurs with high self-efficacy may be more successful in their entrepreneurial pursuits than those with low self-efficacy. School system in Malaysia need to change the approach in dealing with entrepreneurship preparation programs among school students to ensure the student will be able to choose self-employment as their career alternative.

The findings of Krueger *et al* (2000) and Luthje and Franke (2003) concur with the current study that there exists a relationship between attitudes towards self-employment, subjective norm and intention towards self-employment. However the current study did not support Krueger *et al* (2000) who failed to find a link between subjective norm and intention. This is because Krueger *et al* (2000) study used a single item measures for subjective norm construct which can be argued that this type of measures might increase measurement error. Due to their findings, Kreuger *et al* (2000) suggested in future studies, researcher should use multiple items measures. For this study specifically, a multiple item measures was used. In addition, Krueger *et al* (2000) also argued that the result was based on their respondents who were senior university business students who had “a tendency toward inner directedness” or high internal locus control which can reduce the impact of social norms. However in this study, the respondents were students who were still at secondary school and need someone to support them in choosing the right career. This statement conform the findings on subjective norm and community support which is reported as moderate, which both placed second and third highest in mean score and this also parallel with previous literature which indicated positive and significant relationship between subjective norms and self-employment intentions (Krueger, 1993; Tkachev and Kolvereid, 1999; Kolvereid, 1996a; Kennedy *et al*, 2003; Meeks, 2004; Hassan, 2007). This finding showed that subjective norms and community support are important factors which can influence individual decision in choosing entrepreneurship as a career. Hassan (2007) argued that a positive image on entrepreneurship career could reflect positive impact on subjective norms and community support especially among adolescent. At this stage, they tend to appreciate advice and encouragement from family, friends and community. Therefore, it is suggested that entrepreneurship educators and government should team up in promoting and producing a good image of entrepreneurship as a career by exploiting mass media as an important means of communication beside entrepreneurship road shows and carnival as Ministry of Entrepreneurial and Cooperative Development was doing for the past 10 years. In addition, this finding concurs with Scott and Twomey (1988) and Mathews and Moser (1995) who reported that there is an empirical evidence for the relationship between the parental role model and preference for a self-employment career.

The finding also illustrates that there is a positive and moderate correlation between students' perceptions regarding attitudes towards self-employment and intentions which is consistent with past literatures (Kolvereid, 1996a; Kolvereid, 1996b, Autio *et al*, 1997; Tkachev and Kolvereid, 1999; Hassan, 2007). In fact, attitudes showed highest mean according to students' perceptions ( $M= 3.80$ ;  $SD=.57$ ). However, interestingly in this study, attitudes towards self-employment represent the lowest association among all independent factors ( $r = .41$ ,  $p < .01$ ). This result has proved that even though the respondents have high and positive attitudes towards self-employment, they have moderate intentions to be an entrepreneur in future. According to Kivela (2002), majority of the students have positive attitudes towards self-employment

because they have a high regard for entrepreneur who play prominent roles in the society. Nevertheless, this proposition doesn't mean that they have motivation to be an entrepreneur in future (Douglas, 1999) due to other factors such as entrepreneurial self-efficacy (Krueger and Carsrud, 1993) and subjective norms (Baughn et al, 2006). This current research particular results indicate that Malaysian secondary school students were favorable towards becoming self-employed but they don't have enough confidants to be an entrepreneur which is reflected by low correlation value between attitudes and self-employment intentions.

Also, this study exposed that respondents perceptions on the association between self employment attitudes towards self-employment go along with similar result of entrepreneurial interest ( $r = .49$ ;  $p < .01$ ). In fact, student perceptions on their entrepreneurial interest has the lowest mean score ( $M = 3.06$ ;  $SD = .56$ ) together with 52% of the respondents do not have positive entrepreneurial aspiration. In general, our result corresponds with past literatures whereby entrepreneurial interest has positive and moderate relationship with self-employment intentions (Krueger, 1993; Krueger, Reilly and Carsrud, 2000; Kennedy et al, 2003; Audet, 2004). Entrepreneurial interest is described as the degree of attractiveness to be an entrepreneur, the result of this study portray that entrepreneurship career is not an interesting profession as perceived by the students. It can be concluded that students prefer more viable occupations rather than becoming an entrepreneur. According to Kolvereid (1997, p. 55), desirability and feasibility to become self-employed can decrease and turn to become organizationally employed if the individual prefer more "job security, shorter working hours or longer vacations". Therefore, it is suggested that students should be exposed to educational system which emphasized on developing entrepreneurial skills and knowledge. This suggestion is parallel with Wang, Wong and Lu (2002) and Krueger (1993) who suggested that entrepreneurial education should highlight on perceived feasibility in order to create interest in becoming entrepreneur.

Alsos *et al* (2006) claimed that experience from youth enterprises are associated with more positive attitudes towards entrepreneurship, stronger perceptions of behavior control and more positive subjective norms towards entrepreneurship. He further explained that through these antecedents, youth enterprise experience is found to be strongly related to entrepreneurial intentions. Alsos *et al* finding also concurs with the current study because the respondent previously had taken an entrepreneurship component in a subject called living skill while they were at the lower secondary school level and this may have improved their intention score to be in a moderate category and their attitude towards self-employment in the moderate to high category. Meanwhile, their entrepreneurial interest and entrepreneurial self-efficacy score is still low and this needs a proper intervention program.

Again, this research findings conform the model of entrepreneur antecedents which associate selected factors with self-employment intentions. Entrepreneurship educators and related agencies in developing entrepreneur should aware that certain important factors should be put into consideration in order to yield potential entrepreneurs. In fact, this study findings found that the education system offered in school is not enough to make entrepreneurship as a favorite profession among students at least in Klang Valley area which are more exposed to entrepreneurial activities. Therefore, this research calls for immediate improvement and effective use of the pedagogical approaches to entrepreneurship related curriculum. In sum, it is agreed that the Theory of Planned Behaviour is a viable theory as a benchmark to explore antecedents of entrepreneurial behavior among secondary school students.

## 6. Conclusion

The study concludes that Malaysian secondary school students were favorable towards becoming self-employed but they don't have enough confidence to be an entrepreneur which is reflected by low correlation value between attitudes and self-employment intentions. The students have a high perception regarding the attitudes towards self-employment but they still have low perception on entrepreneurial self-efficacy and interest. This may indicate that secondary school students prefer other career since they perceived entrepreneurship is not an interesting profession. This is because the implementation of entrepreneurship education in academic secondary school is not enough to make entrepreneurship as a favourite profession among students. This is proved by the data which indicate about 52% of the students surveyed do not have positive entrepreneurial aspirations. This study also conclude that subjective norm and



community support has a profound influence towards entrepreneurship as a career choice, which means that the more favorable the attitude and the subjective norm with respect to becoming self-employed the stronger the individual intention to become self-employed and the more positive community support received by the student the higher will be their entrepreneurial intention. Finally, students with positive self-efficacy and entrepreneurial interest will also have stronger intention to be self-employed.

## 7. Implication

- Students should be exposed to educational system which emphasized on developing entrepreneurial skills and knowledge. Entrepreneurial education should highlight on perceived feasibility in order to create interest in becoming entrepreneur.
- Policy makers should develop youth enterprise program as part of entrepreneurship education intervention program.
- Training should be given to entrepreneurship teachers to improve their teaching approaches.
- Specific intervention program need to be done to improve entrepreneurial self-efficacy and entrepreneurial interest.
- Entrepreneurship educators and government should team up in promoting and producing a good image of entrepreneurship as a career.

## BIBLIOGRAPHY

- Ajzen, I (1987) Attitudes, Traits & Actions: Dispositional Prediction of Behavior in Personality and Social Psychology. *Advances in Experimental Social Psychology*, 1(20). 1-63.
- Ajzen, I (1991) The Theory of Planned Behavior. *Organizational Behavior and Decision Processes*, Vol. 50, p. 179-211
- Ajzen, I & Driver, L (1992) Application of the Theory of Planned Behaviour to Leisure Choice, Vol. 24, No. 3, pp. 207-224
- Ajzen, I & Fishbein, M (1980) *Implementing Attitudes and Predicting Social Behavior*. Prentice Hall: Englewoods Cliffs.
- Alsos, G.A. and Kolvereid, L. (1998), "The Business Gestation Process of Novice, Serial and Parallel Business Founders", *Entrepreneurship Theory and Practice*, Vol. 22, No. 4, pp.101-114
- Arcuri, A. & Lester, D. (1990) Moonlighting and stress in police officers. *Psychology Reports* 66, 350.
- Audet, J. (2004) A longitudinal study of the entrepreneurial intentions of university students, *Academy of Entrepreneurship Journal*, 10 (1 et 2), 3-16.
- Autio E., Keeley R.H., Klofsten, M. and Ulfstedt, T. (1997) Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia and USA, *Frontiers of Entrepreneurship Research, Babson Conference* Waltham, MA: P&R Publication Inc.
- Bird, B. (1998), "Implementing Entrepreneurial Ideas: The Case for Intention", *Academy of Management Review*, Vol. 13, pp.442-453.
- Baughin, C.C., Cao, J. R., Linh T. M. L., Lim, V. and Newpert, K. T. (2006) Normative, Social and Cognitive Predictors of Entrepreneurial Interest in China, Vietnam and the Philippines. *Journal of Developing Entrepreneurship*. Vol. 11, No. 1, 57-77
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28, 399-410.
- Brice, J. Jr (2002) *The Role of Personality Dimensions and Occupational Preferences on The Formation of Entrepreneurial Intentions*. Disertasi PhD yang tidak diterbitkan. Mississippi State University
- Buttner, E. H. (1992) Entrepreneurial stress: It is hazardous to your health? *Journal of Managerial Issues*, 4(2) 223-240
- Cohin, S & Wills, T. A (1995) Stress, social support and buffering the hypotheses. *Psychology Buletin*, 98 (2) 310-357.
- Chen, C., R. Green, and A. Crick. (1998) The self-efficacy expectations and occupational preferences of females and males. *Journal of Business Venturing*, 13(4), 295-316
- Douglas, E.J. and Shepherd, D.A. (2002) Self-employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization. *Entrepreneurial Theory and Practice*, 26(3), pp.81-90
- Davis, J.A. (1971). *Elementary survey analysis*. Englewood Cliffs, NJ: Prentice Hall.

- De Noble, A. F., Jung, D. I., and Erlich, S. B. (1999) Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. In R. D. Reynolds, W. D. Bygrave, S. Manigart, S.M. Mason, G.D Meyer, H. J. Sapienza & K. G. Shaver (Eds.), *Frontiers of Entrepreneurship Research*,(73-87), Waltham, MA: P&R Publication Inc.
- Jackson, J.E. and Rodkey G. R. The Attitudinal Climate for Entrepreneurial Activity. *Public Opinion Quarterly*,58,358.
- Frank H., Korunka C., Lueger M. and Mugler J. (2005), "Entrepreneurial Orientation and Education in Austrian Secondary School: Status Quo and Recommendations", *Journal of Small Business and Enterprise Development*, Vol. 12, No. 2, pp.259-273
- Gist, M. E. (1987) Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183-211
- Hassan, H (2007a) *Hubungan faktor terpilih dengan tekad keusahawanan mengikut persepsi pelajar*. Unpublish Master Thesis, Universiti Putra Malaysia.
- Hannon, P.D. (2006) Teaching pigeon to dance: Sense and meaning in entrepreneurship education: *Education Training*, 48(5), 296-308
- Holmgren C., Fiom J., Olofsson A., Karlsson, H. Snyder, K. and Sundrom, U. (2005) Entrepreneurship education: Salvation or domination? *Journal of Entrepreneurship Education* 8:7-19
- Indarti, Nurul and Stein Kristiansen.(2003) Determinants of Entrepreneurial Intention: The Case of Norwegian Student, *Gadjah Mada International Journal of Business*, 5,(1), January 2003,79-95.
- Jung L. D., Ehrlich S.B., and Noble A.E.D. and Baih R.B. (2001), "Entrepreneurial Self-Efficacy and Its Relationship to Entrepreneurial Division: A Comparative Study between the U.S and Korean", *Management International*, Vol. 6, No. 1, pp.41-53
- Kivelä, P. (2002). Ammattikorkeakouluopiskelijoiden suhtautuminen yrittäjyyteen. Ammattikorkeakoulussa opiskelevien arvot, asenteet ja intentiot yrittäjyyttä kohtaan sekä perhetaustan vaikutus niihin. Pirkanmaan ammattikorkeakoulun julkaisusarja A. Tutkimukset ja selvitykset nro 3.
- Kennedy, J., Drennan, J., Renfrow, P. & Watson, B (2003). The influence of role models on students' entrepreneurial intentions and university degree course. *Queensland Review* , 10, 37-52.
- Kolvreid, L.(1996a) Prediction of Employment Status Choice Intentions, *Entrepreneurship Theory and Practice*, 21(1): 47-57.
- Kolvreid, L. (1996b) Organisational employment versus self-employment: Reasons for career choice intentions, *Entrepreneurship Theory and Practice*, 20 (3): 23-31.
- Krueger, N.F. & Brazeal, D.V. (1994) Entrepreneurial Potential Entrepreneurs, *Entrepreneurship Theory and Practice*, 20,91-104.
- Krueger, N. F. & Carsrud, A. L. (1993) Entrepreneurial Intentions: applying the theory of planned behaviour", *Entrepreneurship and Regional Development*, 5, 315-330.
- Krueger, N.F., Reilly, M.D, and Carsud, A.L. (2000), "Competing Models of Entrepreneurial Intention", *Journal of Business Venturing*, Vol. 15, pp.411-432
- Lucas W.A. and Cooper S.Y. (2004), "Enhancing Self-Efficacy to Enable Entrepreneurship: The Case of CMI's Connection", *A paper presented at High-Technology Small Firms Conference: Enschede, The Netherlands*.
- Luthje, C. and Franke, N. (2003), "The 'Making' of an Entrepreneur: Testing a Model of Entrepreneurial Intent among Engineering Students in MIT", *R & D Management*, Vol. 33, No. 2, pp.135-147
- Markman, G.D., Balkin D.B., & Baron R.A. (2002), "Inventors and New Venture Formation: The Effect of General Self-Efficacy and Regretful Thinking", *Entrepreneurship Theory and Practice*, Vol. 27, No. 2, pp.149-165.
- Mathews, C.H., Moser, S.B. (1995), "Family background and Gender: Implication for Interest in Small Firm Ownership", *Entrepreneurship & Regional Development*, Vol. 7, No. 4, pp.365-377
- Meeks, Micheal D. (2004) *Antecedents of Entrepreneur Decision: An Empirical Analysis of Three Predictive Models*. Unpublished PhD Dissertation, University of Michigan Ann Arbor. University of Colorado at Boulder
- Melin, K. (2001) *Yrittäjyysintentiot ja niiden taustatekijät Virossa ja Suomessa. ertailukohteina eräissä ammatillisissa oppilaitoksissa opiskelevat nuoret kummassakin maassa*. Acta Wasaensia. No 93. Liiketaloustiede 37. Johtaminen ja organisaatiot.
- Robinson, P. B. Huefner, J., Hunt, H. K., (1991). Entrepreneurship Research on Student Subjects Does Not Generalize to Real World Entrepreneurs, *Journal of Small Business Management*, April, 29 (2): 42 - 50.
- Scott, M.G. and Twomey, D.F (1988), "The Long-Term Supply of Entrepreneurs: Students' Career Aspiration in Relation to Entrepreneurship", *Journal of Small Business Management*, Vol. 26, No. 4, pp.5-13.
- Segal, G., Borgia, D., and Schoenfeld, J. (2002), "Using Social Cognitive Career Theory to Predict Self-Employment Goals", *New England Journal of Entrepreneurship*, Vol. 5, No. 2, pp.47-56
- Sexton, D. L. & Karsede, J. D. (1991) *The state of the art of entrepreneurship*. Boston, M.A: Kent Publishing
- Shapero, A. and Sokol, L. 1982. Social dimensions of entrepreneurship. Dalam *The Encyclopedia of Entrepreneurship*.(72-90) Prentice Hall, Englewood Cliffs.

- Souitaris V., Zerbinati S., and Al-Laham Andreas (2007), "Do Entrepreneurship Program Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources", *Journal of Business Venturing*, Vol. 22, pp.566-591
- Stumpf, S. A., Brief, A. P. and Hartman (1987) Self-efficacy expectations and coping with career-related events. *Journal of vocational Behaviour*, 31, 91-108
- T. Ramayah & Zainon Haron (2005) Entrepreneurial Intention Among Universiti Sains Malaysia (USM) Students. *International Journal of Management & Entrepreneurship*, 1,(1),21-29.
- Tkachev, A. & Kolvereid, L. (1999) Self Employment Intentions among Russian Students. *Entrepreneurship & Regional Development*, 11, 269-280.
- Wang, C., Wong, P., and Lu, Q. (2002), "Tertiary Education and Entrepreneurial Intentions", (in P.Phan-(Ed.), *Technological Entrepreneurship*, ( pp.55-82 Greenwich) CT: Information Age Publishing
- Wilson, F., Kickul, J. & Maulins, D (2007) Gender, entrepreneurial self-efficacy and entrepreneurial career intentions. Implications for entrepreneurship education. Implication for entrepreneurship education. *Entrepreneurship Theory and Practice* 31(3), 387-401
- Wood, J. V. (1989) Theory and research concerning social comparison of personal attributes. *Psychology Bulletin* 106, 231-248