

# “Motivation to start a small business: a study among generation Y in Taiwan”

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## Motivation to start a small business: a study among generation Y in Taiwan

### Abstract

The purpose of this research is to examine the influence of personality traits (need for achievement, risk taking, tolerance for ambiguity, locus of control, and self-efficacy) on the motivation to start a small business. The survey was conducted among 252 generation Y who stayed in eight urban cities in Taiwan context. In essence, the research built a framework based on the Theory of Planner Behavior to entrepreneurship. Collected data were analyzed using SPSS and SmartPLS statistical tool. The results showed four of the five personality trait dimensions were found significantly related to motivation to start a small business. Self-efficacy was not significantly associated with motivation to start a small business. This implies that locus of control, need for achievement, risk taking, and tolerance for ambiguity are the important traits to foster motivation to start a small business among generation Y in Taiwan.

**Keywords:** personality traits, generation Y, motivation, new business, theory of planned behavior, Taiwan.

**JEL Classification:** M13.

### Introduction

In Taiwan, the small businesses hold a significant role in affecting the society and economy. The small and middle enterprises have always been an upward trend for a decade in Taiwan. The small and middle enterprises contributed almost 78.30% of the GDP to the country in the year 2014 (Chiang, 2014). The existing small and medium enterprises are around 1,024,000, accounting for 97.81% of the total enterprises in Taiwan. Besides, they are also contributing a total of 719.7 million employments, which accounts for 78.43% of the total employed population in Taiwan.

Over the recent years, the unemployment issues among young graduates have raised because of the flawed policy makers and academicians. One of the options that can help resolve the unemployment issues among young generations is to encourage them to be self-employed. Although the fresh graduates possess the knowledge and skills to start-up a business, yet, only a small percentage of this generations choose to be self-employed, even a small business, immediately after graduating (Lee, 2012). One of the possible reasons could be lack of confidence and encouragement. Besides, many of this young generation are highly dependent on their families (Yang & Hsu, 2010), and their parents have recorded the highest saving rates in Taiwan's history. The financial security has allowed this young generation to pursue careers on their own preferences, as their parents are financially capable.

The Government of Taiwan pours in tremendous efforts to improve the domestic business environment

for the young generation. Up to now, the government has even researched into the Asia-Pacific Entrepreneurial Centre Plan and the Project for the Realization of Entrepreneurial Dreams to focus on providing services, trainings, and funding to assist young entrepreneurs in starting up their own businesses (Chen, Weng, & Hsu, 2010). Along with that, the Taiwan Premier Jiang Yi-Huah has long urged the government authorities to step up and support the young people in starting up businesses as they are the key force to revive the country's economy. Lately, the government of Taiwan has approved the plans made by the Ministry of Economic Affairs' (MOEA) in providing young entrepreneurs' assistance programs to help them overcome the different challenges in business.

In Taiwan, the young generation refers to the generation Y. This generation is also known as "the Net. Generation", "Millennial", "Echo Boomers", "iGeneration". Generation Y's multi-tasking ability brings about technical competence, high speed and energy into the workplace (Kim, 2008). Gen Y tends to favour an inclusive style of management, dislike slowness and desire immediate feedback about performance. There is no general consensus within the academic and popular press literature regarding the age span of the different generations (Ringer & Garma, 2007). This study defines generation Y based on definition proposed by Krahn and Galambos (2014), which is frequently cited in research. They classified generation Y as those who were born between 1980 and 2000s. It is worth noting that the population of this study are the age groups of 14 to 34.

Many researchers (Abu Elanain, 2008; Chlosta, Patzelt, Klein, & Dormann, 2012; Rauch & Frese, 2007; Ong & Ismail, 2008; Zhao & Seibert, 2006) have provided evidence on the influence of personality traits on the motivation to set up an organization. Some of them are self-efficacy, ambiguity, achieve-

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ment, self-consistency, locus of control and risk taking. Nonetheless, most of these studies were undertaken in Western countries. In the context of Taiwan, the existing research in this area is still scanty, especially among generation Y. Hence, there is a need to address the deficiency in the current research. The aim of the present study is to examine the particular personality traits on motivation to start a small business among generation Y.

## 1. Literature review

**1.1. Underlying theory.** Theory of Planned Behavior (TPB) was originated by Azjen (1988), who used this theory to predict the deliberate behavior that could be deliberative and planned. The TPB model then assumed that intentional should be translated to entrepreneurial behavior, given that intent might be a sound predictor of behavior, however, it is not the behavior itself (Nabi, Holden, & Walmsley, 2010). Krueger, Reilly and Carsrud (2000) adopted TPB to support the personal attitudes toward the act, such as entrepreneurship, and self-efficiency, specifically, demonstration as paramount indicators of entrepreneurial intention in their study. Likewise, this study proposes to adopt TPB as the supporting theory in examining the influence of personality traits on the generation Y's motivation to start a small business.

**1.2. Motivation to start a small business.** Motivation to start a small scale business is regarded as an entrepreneurs' willingness to exert effort in the venture creation process to make the venture work (Dimov, 2010). Reasons for starting a new business differ from person to person, from one country to another, depending on economic, political, societal, and cultural environment in which entrepreneurs operate. Generally, Asian young generation tend to think that making more money is the most important force to start-up a small business. Some studies indicated economic conditions and entrepreneurial orientations affect entrepreneurs' motivation to start-up a business (Benzing, Chu & Callanan, 2005). Likewise, a study conducted in the context of Vietnam revealed that entrepreneurs in Ho Chi Minh City were motivated by personal satisfaction and growth to start a business. In contrast, entrepreneurs in Hanoi city stated that creating job for themselves and family were the prime motive to start a business. A study carried out in Kenya and Ghana revealed that increasing income and providing themselves with jobs are the two important motivators to start a business (Chu, Benzing & McGee, 2007). On the other hand, in the context of China, the need for personal achievement, the desire to make a direct contribution to the success of an enterprise, and the desire for higher earnings are the primary motivations for entrepreneurs to start a small business (Pistrui,

Huang, Oksoy, Jing & Welsch, 2001). Among the predictors for entrepreneurs to start a business, personality traits are identified as the powerful motivational determinant (Fitzsimmons & Douglas, 2011; Liao & Lee, 2009).

**1.3. Personality traits.** Personality traits are the relatively enduring pattern of thoughts, beliefs and deportment that discrete people from one another by their own unique stereotype and beliefs. They are persisting, foreseeable aspects of private conduct that demonstrate contrasts in single movements (Llewellyn & Wilson, 2003). Personality traits might be influenced by the one of a kind, implicit, subjective particular information, values/emotions, discernment and encounters of the person that are not effortlessly repeated (Kueh & Voon, 2007). They of a singular may serve as an impetus which influences the danger observation of business people in decision making (Chauvin, Hermand & Mullet, 2007; Rauch & Frese, 2007). Proactive personality is a significant indicator, especially by entrepreneurial start-up intentions, however the influence reduces with time as the venture matures (Frank, Lueger & Korunka, 2007). Entrepreneurs were proven to possess higher scores of tolerance for ambiguity, internal locus of control, proactive personality, self-efficacy and the need for achievement compared to non-entrepreneurs in explaining business success (Cools & Broeck, 2008; D'Intino, Goldsby, Houghton & Neck, 2007; Ismail, Khalid, Hj. Jusoff, Abdul Rahman, Kassim & Zain, 2009; Rauch, Wiklund, Lumpkin & Frese, 2009).

Many studies involving the relationship between personality traits of entrepreneurship and motivation to set up an organization illustrated inconclusive findings (Abu Elanain, 2008; Ismail et al., 2009). People with attributes, for example, high affinity for risk taking, tolerance of ambiguity and internal locus of control are less averse to begin another business. According to Gurel, Altinay & Daniele (2010), the personality traits which are closely linked with entrepreneurial potential are creativity, locus of control, tolerance for ambiguity and risk affinity. These ones have significant influence on the intention of entrepreneurs to start-up a new business. Among many types of personality traits, this study attempts to select five types that are broadly researched in the literature, namely self-efficacy (Brandstätter, 2011; de Pillis & Reardon, 2007; Liao & Lee, 2009), tolerance for ambiguity (de Pillis & Reardon, 2007; Mohd Zain, Mohd Akram & Ghani, 2010), need for achievement (Frank et al., 2007; Littunen, 2000), locus of control (Brandstätter, 2011; de Pillis & Reardon, 2007; Frank et al., 2007; Mohd Zain et al., 2010), and risk taking (de Pillis & Reardon, 2007; Frank et al., 2007).

**1.4. The relationship between personality traits and motivation to start a small business. Need for achievement and motivation to start a small business.** Research in the field of personality traits has identified achievement motivation or the need for achievement as a standout amongst the most noticeable hypothetical contentions with relation to entrepreneurship (Gürol & Atsan, 2006). It is placed that the need for achievement is one of the key drivers behind people who act entrepreneurially. It can be defined as an unconscious (implicit) motive acquired via hedonic reinforcement of behavior-consequences associations. Specifically it refers to the influential gratification which is associated with mastering difficult tasks and improving one's performance relative to some criterion of excellence (Edgerton & Roberts, 2014). Lee and Tsang (2001) discovered a positive relationship between need for achievement of business people and the development rate of their organization. Accomplishment inspiration was altogether and absolutely related to the entrepreneurial inspiration just around the US members (de Pillis & Reardon, 2007). As shown in the recent meta-synthesis, need for achievement is positively linked to entrepreneurship (Brandstätter, 2011). Since entrepreneurs are a subset of the self-employed, the determination to become self-employed is related to motivation to start a business. Based on the above discussion, we conjecture our hypothesis as follows:

*H1: Need for achievement has a positive influence on motivation to start a small business among generation Y.*

**1.5. Risk taking and motivation to start a small business.** Risk taking implicates the personality dimension that distinguishes the degree to which people are ready to select an activity that requires a substantial level of risk (Chang & Wu, 2012). When it comes to looking into the antecedents of entrepreneurial intention, risk-taking propensity emerges as one of the most challenging variables. On the one hand, risk-taking propensity is viewed as one of the determinants of self-employed motivation (Chang & Wu, 2012; Gurel et al., 2010; Gürol & Atsan, 2006). On the other hand, risk-taking propensity is employed as an endogenous variable in entrepreneurial intention models. Previous studies have proven that there is a significant positive relationship between risk tolerance and the decision to become self-employed (Brandstätter, 2011; Hormiga & Bolívar-Cruz, 2014; Kirkwood & Walton, 2010). In other words, empirical evidence supports that those who possess the conventional wisdom with a higher inclination towards risk have a significantly higher probability of becoming

entrepreneurs. These findings lead to our second hypothesis:

*H2: Risk taking has a positive influence on motivation to start a small business among generation Y.*

**1.6. Tolerance of ambiguity and motivation to start a small business.** Tolerance of ambiguity in an individual determines the extent to which one could persist and live with these situations. Entrepreneurs usually make decisions with insufficient data and invest a huge amount of time and effort into a venture with uncertain outcome (Altınay, Madanoglu, Daniele & Lashley, 2012). Hence, entrepreneurs' decision making with insufficient information and effort into venture creation with uncertain outcomes is related to the tolerance of ambiguity of entrepreneurs. Similarly, Gurel et al. (2010) found the significant and positive influence of tolerance of ambiguity on the intention of entrepreneurs to start-up a new business. Based on the mentioned empirical evidences, we develop our hypothesis as the follows:

*H3: Tolerance of ambiguity has a positive influence on motivation to start a small business among generation Y.*

**1.7. Locus of control and motivation to start a small business.** Individuals with an internal locus of control accept that they can follow up on results in life, while people with an outer centre of control accept that occasions happen past their charge. Diaz (2003) mentioned that belief has been implicated in entrepreneurship exercises. Those individuals with a higher external focus of control are esteemed to be more entrepreneurial than those with an easier inner locus of control as they convey a stronger achievement orientation. Previous research has found the relationship between internal locus of control and venture growth is positive. Lee and Tsang (2001) expected that people who have confidence in their capability to control their life occasions might energetically look for new business open doors rather than sitting tight for the opportunities to come to them. Hence, the following hypothesis is advanced:

*H4: Locus of control has a positive influence on motivation to start a small business among generation Y.*

**1.8. Self-efficacy and motivation to start a small business.** Self-efficacy is not only an individual's self-judgment, to whether they sustain the power to perform a particular task, but also the principle and thought that they can convert those skills and experiences into a successful or fruitful outcome

(Wilson, Kickul & Marlino, 2007). Self-efficacy plays an instrumental role in the formation of motivation to make young generation self-employed. Chen and He (2011) have proposed that self-efficacy influences the development motivation of self-employment, and the probability of a new venture creation. They indicate that the intention to start a venture is organized partially by the perception of anticipated outcome-success or bankruptcy. Similarly, Luthans and Ibrayeva (2006) employed the factor self-efficacy in their model of motivation and self-employed and proposed that self-efficacy constitutes one of the key requirements of the young generation entrepreneurs' potentials. Personal efficacy was found to be significantly and positively related to five-year entrepreneurial intention in a study by de Pillis and Reardon (2007). Therefore, the following hypothesis is proposed:

*H5: Self-efficacy has a positive influence on motivation to start a small business among generation Y.*

## 2. Research method

**2.1. Population and sample size.** The respondents of this study were generation Y (aged between 14 and 34) from eight urban cities of Taiwan, namely Taipei City, Kaohsiung City, Taichung City, Tainan City, Greater Taoyuan City, Greater Chungli City, Greater Hsinchu City and Keelung City. According to National Statistics of ROC for Taiwan, source updated at 2010, these eight cities are among the most populous and large in Taiwan. The exact numbers of generation Y in these eight cities cannot be determined as there is no published number readily available. Therefore, the researcher followed suggestion by Sekaran (2003) who proposed the appropriate sample for most research must be more than 30 and less than 500. Thus, this study sampled 300 populations from generation Y in the mentioned eight cities.

**2.2. Research instrument, data collection and data analysis.** Although there are a lot of statistical methods to analyze the data, this study applied the Statistical Package for Social Science (SPSS Version 2.0) and Partial least squares (PLS). Therefore, descriptive analysis for all items such as frequency analysis, internal consistency and analysis of relationships between variables by using correlation analysis were conducted. Besides, the responses and information collected from the questionnaire were tested by using statistical techniques such as frequency distribution and Pearson Correlation, for the purpose of this study.

This study focused on individuals as the unit of analysis. The unit of analysis considered different

employment status for generation Y in eight urban cities in Taiwan. The participants were restricted to only Taiwanese who stayed in eight urban cities. The target respondents may be at different levels including employment, non-employment and temporary employment into all small business industries. The researchers contacted the generation Y in the eight urban cities of Taiwan via email, phone calls and face to face interaction. In this study, questionnaires were distributed with combination of two methods including personal and electronic distributions. Throughout a period of about three weeks, questionnaires were distributed through friends, National Taiwan University MBA students, course mates and classmates who fairly represented a wide variety of small business industries in Taiwan. The name and number of questionnaires distributed to each individual were recorded and monitored throughout the survey. Then, in order to improve the response rate of e-distributed questionnaires, there were two rounds of follow-ups through electronic mails.

## 3. Results

**3.1. Sample profile.** This survey shows that 51.6% of respondents were female while 48.4% were male. On other hand, the majority of respondents were aged between 23-25 years old (40.9%), followed by 36.1% aged between 20-22 years old, and 23.0% between 26-29 years old. For the living city, 22.2% (56) of respondents were from Taipei city, 12.3% (31) from Kaohsiung city, 8.7% (22) from Greater Taoyuan city, 9.5% (24) from Greater Hsinchu city and 12.7% (32) from Keelung city, each of 29 respondents (11.5%) were from Taichung city, Tainan city and Greater Chungli city. For the current employment status, the greater number of the respondents (52.4%) was currently employed, 25.0% unemployed and 22.6% temporary employed. Eventually, there were 125 respondents (49.6%) possessing 0-2 years of working experiences. Other than that, 85 respondents (33.7%) possessed 3-5 years of working experience and 42 respondents (16.7%) had more than 5 years of working experience.

**3.2. Descriptive analysis.** Table 1 provides a summary of the descriptive analyses of the variables in this study. It was observed that all variables have minimum values of 1.5 and maximum values of 5.00, covering the whole range of Likert scale available. This showed that some respondents rated strongly disagree and some rated strongly agree in terms of being self-employed among gen Y in Taiwan. Nevertheless, the modes for majority of variables were around 4.00, indicating that overall the respondents were still rating in support of becoming their own boss in Taiwan.

Meanwhile, among the entire variables, personality trait was rated the highest from all respondents with a mean value of 4.08. This indicates that generation Y in Taiwan has possessed very high desire to start up their own businesses even if it is a small one. This was followed by tolerance for ambiguity of generation Y in Taiwan (4.05). Besides, it was observed that locus of

control has the highest standard deviation with a value of 0.754. This shows that there is a gap on personality traits of Taiwanese generation Y among the respondents. This was likely due to the fact that attitude mediated the relationship between personality and motivation to start-up a small business, which would be discussed further in the subsequent section.

Table 1. Descriptive analysis of variables

Mean of variables	Mean	Mode	Std. deviation	Minimum	Maximum
Achievement	4.08	4.00	0.558	2.50	5.00
Locus of control	3.75	3.50	0.754	1.50	5.00
Risk taking	3.46	3.50	0.662	2.00	5.00
Self-efficacy	4.01	4.00	0.499	2.67	5.00
Tolerance for ambiguity	4.05	4.33	0.560	2.67	5.00
Motivation	3.76	3.25	0.715	2.00	5.00

**3.3. Measurement model results.** The assessment of measurement model would take into account the formation and reflective measurement model. Each of the constructs needs to be treated differently in the evaluation (Vinzi, Trinchera & Amato, 2010). However, this study only involved the measurement of reflective constructs, and assessed internal consistency reliability, indicator reliability, convergent validity and discriminant validity of the constructs (Hair, Ringle & Sarstedt, 2011). As shown in Table 2, the reliability of the scale was assessed through the investigation of the composite reliability (CR) and the average variance

extracted (AVE). CR is used to depict the degree to which the construct indicators indicate the latent constructs exceed the recommended value of 0.7 (Hair, Sarstedt, Ringle & Mena, 2012), while AVE reflects the overall amount of variance in the indicators accounted by the latent construct, which should exceed the recommended value of 0.5 (Hair et al., 2011). The AVE obtained in this study ranged from 0.544 to 0.744. In terms of CR, the values ranged from 0.773 to 0.921. Both AVE and CR in this study meet the cut off values suggested by Hair et al. (2012) and Hair et al. (2011), respectively.

Table 2. Items loadings, composite reliability, and the average variance extracted for the measurement model

Construct	Items	Loadings	AVE	CR
Achievement	Achievement 2	0.887	0.633	0.773
	Achievement 3	0.692		
Locus of control	Locus of control 3	0.577	0.551	0.783
	Locus of control 4	0.808		
	Locus of control 5	0.818		
Motivation	Motivation 1	0.802	0.745	0.921
	Motivation 3	0.822		
	Motivation 4	0.910		
	Motivation 5	0.912		
Risk taking	Risk Taking 2	0.611	0.655	0.847
	Risk Taking 3	0.906		
	Risk Taking 4	0.878		
Self-efficacy	Self-efficacy1	0.533	0.568	0.790
	Self-efficacy2	0.743		
	Self-efficacy4	0.931		
Tolerance for ambiguity	Tolerance for ambiguity 1	0.707	0.544	0.778
	Tolerance for ambiguity 2	0.617		
	Tolerance for ambiguity 3	0.866		

Next, the loadings and cross loadings were examined by running the PLS-algorithm analysis. Discriminant validity was ascertained when an indicator's loading pertaining to its associated latent construct is higher than all the remaining constructs.

From the data collected for this study (refer to Table 3), it was apparent that there was no problem on discriminant validity. All cross loadings of every constructs were below the indicator's outer loadings.

Table 3. Discriminant validity of constructs

	Achievement	Locus of control	Motivation	Risk taking	Self-efficacy	Tolerance
Achievement	<b>0.796</b>					
Locus of control	0.358	<b>0.742</b>				
Motivation	0.485	0.412	<b>0.863</b>			
Risk taking	0.012	0.225	0.457	<b>0.809</b>		
Self-efficacy	0.240	0.386	0.379	0.482	<b>0.753</b>	
Tolerance	0.021	0.088	0.329	0.441	0.381	<b>0.737</b>

Table 4. Loadings and cross loadings for the measurement model

	Achievement	Locus of control	Motivation	Risk taking	Self-efficacy	Tolerance
Achievement2	<b>0.887</b>	0.334	0.458	-0.018	0.188	0.043
Achievement3	<b>0.692</b>	0.221	0.293	0.052	0.205	-0.025
Locus of control3	0.182	<b>0.577</b>	0.196	0.364	0.442	0.347
Locus of control4	0.293	<b>0.808</b>	0.373	0.011	0.134	-0.105
Locus of control5	0.303	<b>0.818</b>	0.315	0.240	0.391	0.095
Motivation1	0.286	0.335	<b>0.802</b>	0.329	0.288	0.336
Motivation3	0.418	0.275	<b>0.822</b>	0.348	0.258	0.029
Motivation4	0.458	0.409	<b>0.910</b>	0.445	0.414	0.402
Motivation5	0.487	0.384	<b>0.912</b>	0.434	0.328	0.321
Risk taking2	-0.127	0.218	0.236	<b>0.611</b>	0.502	0.141
Risk taking3	-0.037	0.123	0.451	<b>0.906</b>	0.295	0.444
Risk taking4	0.149	0.242	0.384	<b>0.878</b>	0.462	0.415
Self-efficacy1	0.117	0.325	0.121	0.277	<b>0.533</b>	0.202
Self-efficacy2	0.241	0.314	0.219	0.256	<b>0.743</b>	0.198
Self-efficacy4	0.194	0.310	0.410	0.497	<b>0.931</b>	0.401
Tolerance for ambiguity 1	0.101	-0.059	0.222	0.318	0.327	<b>0.707</b>
Tolerance for ambiguity 2	-0.143	0.032	0.023	0.223	0.229	<b>0.617</b>
Tolerance for ambiguity 3	-0.033	0.166	0.306	0.382	0.289	<b>0.866</b>

**3.4. Structural model results.** Moreover, the five independent variables could explain 48.2% of the dependent variable which in case referred to motivation ( $R^2 = 0.482$ ), as indicated by the value in the motivation construct (Figure 1). With SmartPLS,

the testing of hypotheses was done in two stages. During the first stage, PLS-algorithm was conducted. Subsequently, in the next step bootstrapping was performed. The results obtained from both are shown and summarized in Table 4.

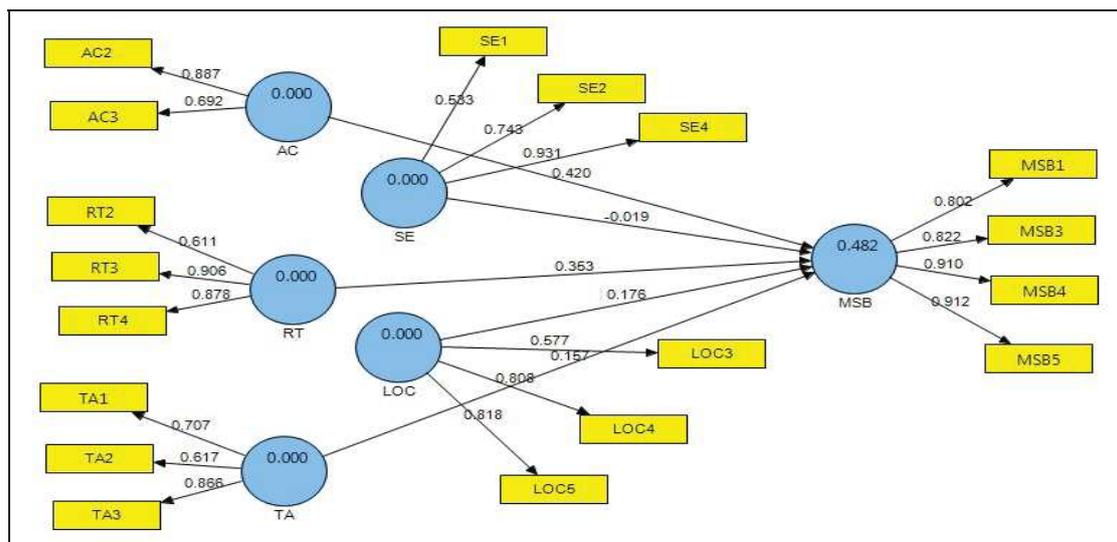


Fig. 1. Path model of the study

Looking at the significance level (which were translated from  $t$ -value), it was found that all direct relationships under testing were proven significant,

except for relationship between self-efficacy and motivation (H1.5:  $\beta = -0.0195$ ,  $p > 0.05$ ). The other constructs, namely, need for achievement (H1.1:

$\beta = 0.4198$ ,  $p < 0.01$ ), risk taking (H1.2:  $\beta = 0.3528$ ,  $p < 0.01$ ), tolerance for ambiguity (H1.3:  $\beta = 0.1567$ ,  $p < 0.01$ ) and locus of control (H1.4:  $\beta = 0.176$ ,  $p < 0.01$ ) were all positively related to motivation start-up a small business among Taiwanese generation Y.

Table 5. Hypotheses analysis

Hypothesis	Relationship	Path coefficient ( $\beta$ )	Std. error	t-value	Remarks
H1	AC → MSB	0.4198	0.0571	7.3465**	Accepted
H2	RT → MSB	0.3528	0.0518	6.8159**	Accepted
H3	TA → MSB	0.1567	0.0513	3.0569**	Accepted
H4	LOC → MSB	0.176	0.0528	3.3327**	Accepted
H5	SE → MSB	-0.0195	0.0578	0.3369	Rejected

Note: ‘\*\*\*’ denotes  $p < 0.01$ , ‘\*’ denotes  $p < 0.05$ . For one-tailed test with  $df = 203$ ,  $t$ -value  $> 1.65$ ;  $p < 0.05$ ,  $t$ -value  $> 2.3$ ;  $p < 0.01$ . AC = Need for achievement, LOC = Locus of control, MSB = Motivation start a small business, RT = Risk taking, SE = Self-efficacy, TA = Tolerance for ambiguity.

#### 4. Discussion, implications, and limitations

The aim of this study was to investigate the motivation to start a small business among generation Y in Taiwan. Specifically, the relationships between personality traits (self-efficacy, locus of control, need for achievement, risk taking, and tolerance for ambiguity) and motivation to start a small business were examined. The study found that need for achievement ( $t = 7.347$ ,  $p < 0.01$ ), risk taking ( $t = 6.816$ ,  $p < 0.01$ ), locus of control ( $t = 3.333$ ,  $p < 0.01$ ), and tolerance for ambiguity ( $t = 3.057$ ,  $p < 0.01$ ) had significant influence on motivation to start a small business. The results revealed that generation Y with high need for achievement look for alternative solutions to enhance their environments which leads to higher motivation to start a small business. According to de Pillis and Reardon (2007), some cultures produce more entrepreneurs because of the acculturation process that creates a high need for achievement. Accordingly, this study supports that Taiwan business environment is considered as a highly competitive environment, and this has created the achievement-oriented people to create entrepreneurial practicality towards oneself and to end up as business people. On top of that, the results also indicate high risk taking of generation Y turns into a reliable and developing element in decision making inside the constructive space. This means that high risk significantly and positively is related to motivation to start a small business among generation Y, whereas self-efficacy ( $t = 0.337$ ) has no such effect to make generation Y self-employed, and this result is concurred with the previous findings by Brandstätter (2011), Hormiga and Bolívar-Cruz (2012). On the other hand, this study confirmed that generation Y with internal locus of control can observe what happens in their lives, and cope with changes more effectively. This result concurred with the previous research findings by Lee and Tsang (2001). Besides, the results also show that generation Y with high tolerance of ambiguity perceives ambiguous stimuli as attractive, testing, and intriguing which could increase

their motivation to venture a small business. The findings are in line with the previous study by Gurel et al. (2010). Although previous study explicated that self-efficacy is positively related to motivation to start a business, self-efficacy in this study was insignificant with motivation to start a small business. One of the explanation might be due to having more female respondents (51.6%). Indirectly, this result seems to indicate that female lack confidence in their self-attraction and self-control, hence they are less inclined to start-up a new business than to continue family businesses in Taiwan.

This study is consistent with TPB by Ajzen (1988). Generation Y with the certain favorable personality traits (need for achievement, risk taking, tolerance for ambiguity, and locus of control) have motivation to start a small business. This research contributes additional knowledge and reference regarding the generation Y's motivation as researched thoroughly by associating with several favourable personality traits. From the practical perspective, this study is beneficial to international businesses since generation Y are a valuable and a lucrative target segment for Taiwan. The findings assist a better understanding of the desirable personality traits to motivate generation Y to start a small business.

This study also has some limitations. The first limitation is that the results may be more applicable to the specific context of Taiwan where the research was conducted. The number of people on the line of unemployment is increasing throughout the world. It is essential to discuss the topic of entrepreneurship because more and more people want to operate their own business and become entrepreneurs due to the current economic recession. A second one is that this study only targeted generation Y as its samples. Generation X with intention to be entrepreneurs may take in dissimilar opinions. The next limitation is that this study merely employed the descriptive statistics. Since the answer for this study is more

descriptive than conclusive, the motivational factors and generations Y's profiles identified above should suffice as a foundation for further theoretical development and multivariate empirical research that may produce more convincing or conclusive results. There is also limitation associated with the dependent variable – motivation to start a small business. For instance, this study did not consider the differences between individuals' decision to take up a young firm, take over an existing firm from someone else, or take over an existing family business. People may be less probable to protrude up their own business because newly started firms are more probable to give way than an existing firm.

Overall, the findings demonstrate the convenience of incorporating new explicative variables, which may include aspects regarding professional background or environmental characteristics. Likewise, the other measures such as satisfaction with the new venture, increase in sales, and the benefit increment when the society pulls through could be considered. Moreover, for future research, the control variables (Gender and

Age) can be examined to address the impact of the entrepreneurs' reasons leading to start-up and performance of the company. Future research can also expand this field by tracking successful and unsuccessful entrepreneurs over a point of time and examining the validity of this finding. In summary, this study targeted individuals who had the intention to be entrepreneurs.

## Conclusions

This study aimed to test the personality traits and the motivation to start a small business. Therefore, it enhances the understanding regarding the processes involved, in the course of becoming self-employed. The results demonstrated that certain personality traits affect a person's entrepreneurial intentions. Overall, this study not only extends the existing research based on personality traits in investigating the process of becoming self-employed, but also offers a new direction for future research to challenge and explore the contextual effects on entrepreneurial processes in Taiwan.

## References

1. Abu Elanain, H.M. (2008). An investigation of the relationship of openness to experience and organizational citizenship behaviour, *Journal of American Academy of Business*, 13 (1), pp. 72-78.
2. Altinay, L., Madanoglu, M., Daniele, R. and Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention, *International Journal of hospitality management*, 31 (2), pp. 489-499.
3. Ajzen, I. (1988). *Attitudes, Personality, and Behavior*. Chicago: Dorsey.
4. Benzing, C., Chu, H.M. and Callanan, G. (2005). A regional comparison of the motivation and problems of Vietnamese entrepreneurs, *Journal of Developmental Entrepreneurship*, 10 (1), pp. 3-27.
5. Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses, *Personality and Individual Differences*, 51 (3), pp. 222-230.
6. Chang, M.-L. and Wu, W.-Y. (2012). Revisiting Perceived Risk in the Context of Online Shopping: An Alternative Perspective of Decision-Making Styles, *Psychology & Marketing*, 29 (5), pp. 378-400.
7. Chauvin, B., Hermand, D. and Mullet, E. (2007). Risk perception and personality facets, *Risk Analysis*, 27 (1), pp. 171-185.
8. Chen, W.-Y., Weng, C.S. and Hsu, H.-Y. (2010). A study of the entrepreneurship of Taiwanese youth by the Chinese Entrepreneur Aptitude Scale, *Journal of Technology Management in China*, 5 (1), pp. 26-39.
9. Chen, Y. and He, Y. (2011). The impact of strong ties on entrepreneurial intention: an empirical study based on the mediating role of self-efficacy, *Journal of Chinese Entrepreneurship*, 3 (2), pp. 147-158.
10. Chiang, M.-H. (2014). Taiwan's Economy: Slower than Expected, *East Asian Policy*, 6 (1), pp. 81-93.
11. Chlosta, S., Patzelt, H., Klein, S.B. and Dormann, C. (2012). Parental role models and the decision to become self-employed: The moderating effect of personality, *Small Business Economics*, 38 (1), pp. 121-138.
12. Chu, H.M., Benzing, C. and McGee, C. (2007). Ghanaian and Kenyan entrepreneurs: A comparative analysis of their motivations, success characteristics and problems, *Journal of Developmental Entrepreneurship*, 12 (3), pp. 295-322.
13. Cools, E. and van den Broeck, H. (2008). Cognitive styles and managerial behaviour: a qualitative study, *Education and Training*, 50 (2), pp. 103-114.
14. D'Intino, R.S., Goldsby, M.G., Houghton, J.D. and Neck, C.P. (2007). Self-leadership: A process for entrepreneurial success, *Journal of Leadership & Organizational Studies*, 13 (4), pp. 105-120.
15. de Pillis, E. and Reardon, K.K. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: a cross-cultural comparison, *Career Development International*, 12 (4), pp. 382-396.
16. Diaz, F. (2003). Locus of control, nAch and values of community entrepreneurs, *Social Behavior and Personality: an international journal*, 31 (8), pp. 739-747.
17. Dimov, D. (2010). Nascent entrepreneurs and venture emergence: Opportunity confidence, human capital, and early planning, *Journal of Management Studies*, 47 (6), pp. 1123-1153.
18. Edgerton, J.D., and Roberts, L.W. (2014). Need for Achievement, *Encyclopedia of Quality of Life and Well-Being Research*, pp. 4284-4287.

19. Fitzsimmons, J.R. and Douglas, E.J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions, *Journal of Business Venturing*, 26 (4), pp. 431-440.
20. Frank, H., Lueger, M. and Korunka, C. (2007). The significance of personality in business start-up intentions, start-up realization and business success, *Entrepreneurship & Regional Development*, 19 (3), pp. 227-251.
21. Gurel, E., Altinay, L. and Daniele, R. (2010). Tourism students' entrepreneurial intentions, *Annals of Tourism Research*, 37 (3), pp. 646-669.
22. Gürol, Y. and Atsan, N. (2006). Entrepreneurial characteristics amongst university students: some insights for entrepreneurship education and training in Turkey, *Education and Training*, 48 (1), pp. 25-38.
23. Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet, *The Journal of Marketing Theory and Practice*, 19 (2), pp. 139-152.
24. Hair, J.F., Sarstedt, M., Ringle, C.M., and Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research, *Journal of the Academy of Marketing Science*, 40 (3), pp. 414-433.
25. Hormiga, E. and Bolívar-Cruz, A. (2014). The relationship between the migration experience and risk perception: A factor in the decision to become an entrepreneur, *International Entrepreneurship and Management Journal*, 10 (2), pp. 297-317.
26. Ismail, M., Khalid, S.A., Othman, M., Jusoff, Hj.K., Abdul Rahman, N., Kassim, K.M. and Zain, R.S. (2009). Entrepreneurial intention among Malaysian undergraduates, *International Journal of Business and Management*, 4 (10), p. 54.
27. Kim, D.J. (2008). *Generation gaps in engineering?* Citeseer.
28. Kirkwood, J. and Walton, S. (2010). What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behaviour & Research*, 16 (3), pp. 204-228.
29. Krahn, H.J. and Galambos, N.L. (2014). Work values and beliefs of 'Generation X' and 'Generation Y', *Journal of Youth Studies*, 17 (1), pp. 92-112.
30. Krueger, N.F., Reilly, M. and Carsrud, A. (2000). Competing models of entrepreneurial intentions, *Journal of Business Venturing*, 15 (5/6), pp. 411-432.
31. Kueh, K. and Voon, B.H. (2007). Culture and service quality expectations: evidence from Generation Y consumers in Malaysia, *Managing Service Quality*, 17 (6), pp. 656-680.
32. Lee, W.N. (2012). *Entrepreneurial Intention: A Study among Students of Higher Learning*. Univeristy Tunku Abdul Rahman.
33. Lee, D.Y. and Tsang, E.W.K. (2001). The effects of entrepreneurial personality, background and network activities on venture growth, *Journal of management studies*, 38 (4), pp. 583-602.
34. Liao, C. and Lee, C. (2009). An empirical study of employee job involvement and personality traits: The case of Taiwan, *International Journal of Economics and Management*, 3 (1), pp. 22-36.
35. Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality, *International Journal of Entrepreneurial Behaviour & Research*, 6 (6), pp. 295-310.
36. Llewellyn, D.J. and Wilson, K.M. (2003). The controversial role of personality traits in entrepreneurial psychology, *Education+ Training*, 45 (6), pp. 341-345.
37. Luthans, F. and Ibrayeva, E.S. (2006). Entrepreneurial self-efficacy in Central Asian transition economies: quantitative and qualitative analyses, *Journal of International Business Studies*, 37 (1), pp. 92-110.
38. Nabi, G., Holden, R. and Walmsley, A. (2010). From student to entrepreneur: Towards a model of graduate entrepreneurial career-making, *Journal of Education and Work*, 23 (5), pp. 389-415.
39. Pistrui, D., Huang, W., Oksoy, D., Jing, Z. and Welsch, H. (2001). Entrepreneurship in China: characteristics, attributes, and family forces shaping the emerging private sector, *Family Business Review*, 14 (2), pp. 141-152.
40. Rauch, A. and Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success, *European Journal of Work and Organizational Psychology*, 16 (4), pp. 353-385.
41. Rauch, A., Wiklund, J., Lumpkin, G.T. and Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future, *Entrepreneurship Theory and Practice*, 33 (3), pp. 761-787.
42. Ringer, A.C. and Garma, R. (2007). *Does the motivation to help differ between generation X and Y?* Paper presented at the Australian & New Zealand Marketing Academy Conference: University of Otago, School of Business, Dept. of Marketing, Dunedin.
43. Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. 2003. John Willey and Sons, New York.
44. Vinzi, V.E., Trinchera, L. and Amato, S. (2010). PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement *Handbook of partial least squares*, Springer, pp. 47-82.
45. Ong, W.J. and Ismail, H. (2008). Revisiting personality traits in entrepreneurship study from resource-based perspective, *Business Renaissance Quarterly*, 3 (1), pp. 97-114.
46. White, R.E., Thornhill, S. and Hampson, E. (2007). A biosocial model of entrepreneurship: The combined effects of nurture and nature, *Journal of Organizational Behavior*, 28 (4), pp. 451-466.
47. Wilson, F., Kickul, J. and Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education, *Entrepreneurship Theory and Practice*, 31 (3), pp. 387-406.

48. Yang, Y.-C. and Hsu, J.-M. (2010). Organizational process alignment, culture and innovation, *African Journal of Business Management*, 4 (11), pp. 2231-2240.
49. Mohd Zain, Z., Mohd Akram, A. and Ghani, E.K. (2010). Entrepreneurship intention among Malaysian business students, *Canadian Social Science*, 6 (3), pp. 34-44.
50. Zhao, H. and Seibert, S.E. (2006). The big five personality dimensions and entrepreneurial status: a meta-analytical review, *Journal of Applied Psychology*, 91 (2), p. 259.