



Tertiary Students' Entrepreneurship Learning Socialization: Factor Analysis and Structural Equation Modeling

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ABSTRACT

This study examines 728 tertiary students' entrepreneurship learning socialization and its influencing factors to serve as a school reference for the development of internship and entrepreneurship education. The results show that students' internship experience has a significant direct effect on entrepreneurship learning socialization, and entrepreneurship intention has a significant effect on entrepreneurship learning socialization through internship experience. The influence pattern and empirical data of entrepreneurship intention and internship experience on entrepreneurship learning socialization has a good fit. This paper gives an insight from Taiwan tertiary institutions about entrepreneurial learning socialization of students and contributions to them. We describe the development of the influencing factors, discuss its implications for entrepreneurship and internship education, and finally offer suggestions for further entrepreneurship education development.

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Tertiary students, entrepreneurship learning socialization, internship experience, entrepreneurship intention

1. Introduction

Internship education is important issues that enhance student employment and entrepreneurial. Students learning practical knowledge, inspire positive work attitude, and employment will through workplace internship (Alpert, Heaney & Kuhn, 2009). As the domestic unemployment climbs, employment-oriented tertiary education programs urgently need to find the teaching resources for internship and entrepreneurship education in Taiwan. The difficulty currently faced by tertiary students in their learning careers cannot be solved with a confinement to school internship (Chou, 2010; Wu, 2011). Tertiary institutions educate and instruct learners to acquire high levels of knowledge and skills and deliver learning enhanced students' employability (Hamilton & Tee, 2009; Sweitzer & King, 2013).

Student acquired internship outcomes also house tertiary-learned skills (internship behavior, career choice goals, outcome expectations), and these may be linked into business-deployed, tertiary student skills, and into the relevant business types where the graduate students often find their initial internship (Gokuladas, 2010; Liu, Xu & Weitz, 2011; Shafie & Nayan, 2010). Internship education plays the role of helping to reduce the unemployment rate in a country. Entrepreneurship learning socialization explores the students' internship experience and learning experience in the internship curriculum (Dupre & Williams, 2011; Fugate, Kinicki & Ashforth, 2004).

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Socialization is the process by which persons learn the ways of society or social groups so that they can function properly within it or with them, and the process by which persons acquire knowledge, skills and dispositions that make them more or less able members of their society (Ambrož, 2015). Therefore individuals in general and youth in particular can significantly improve their employability through continuous education and learning. Through this entrepreneurship learning, they can easily adapt to the dynamic and turbulent external environment and maintain their current jobs, get promoted, or move to new jobs within or without the organization or move out of paid employment altogether to start new business ventures. Employment can be a result of the education an individual has acquired in the following ways. First, the type of education received might address the manpower needs of the economy. Secondly, the type of entrepreneurship and internship education influences the beliefs, attitudes, expectations, and values of the individual being educated (Ambrož, 2015; Apolloni, Galliani, Zizzo, Epifania, Crosta & Cesareo, 2013). Thus, if the education excites and fosters correct beliefs, attitudes, realistic expectations and responsible behavior, it causes an individual to pass opportunities for self-employment and formal employment.

Some research found students' experiences of learning entrepreneurship intention and internship experience provided them with chances to learn new internship skills, which may be helpful for their future self-employment (Dupre & Williams, 2011; Liu, Xu & Weitz, 2011; Misra & Mishra, 2011). Entrepreneurship intention are defined as follows: Attitude towards self-employment is the difference between perceptions of personal desirability in becoming self-employed and organisationally employed (Telander & Tramayne, 2011; Tomlinson, 2010). It is best predicted by attitudes towards the behaviour, subjective norms and perceived behavioural control. Research suggests that internship experience is important to affect internship learning result. It is positively related to students' self-efficacy, choice goals, and outcome expectations in contexts that can be characterized as complex, dynamic, and inherently uncertain (Edvardsson & Alves, 2010; Gault, Leach & Duey, 2010; Hoekstra, 2011).

From a theory of social cognitive career development point of view, the readiness to perform a behavior to become internship experience has been depicted as actively ambition of internship (Brown, Lent, Telander & Tramayne, 2011; Gokuladas, 2010). The availability of a validated instrument to measure industry vision, labor market, work requirement and academic achievement towards internship experience could be of much help (Hoekstra, 2011). The entrepreneurship education support of such exposure to career guidance has channels their mind to prefer employment over being an employer. Students who are exposed to entrepreneurship education ought to have more favorable views of small businesses as projected in their course of study than their to guidance and counseling teachers. It is likely then to observe that turning the knowledge gain in their entrepreneurial course by student requires proper guidance and counseling should be exposed to career guidance to build entrepreneurship intentions. Greater efforts should be placed in enhancing the attractiveness of entrepreneurship within the educational system thorough entrepreneurial learning socialization.

2. Purposes of this study

The paper, Analysis of factors in tertiary students perceived entrepreneurship intention and entrepreneurship learning socialization, using internship experience as a mediator variable. The purposes of this study are to address the 2 following issues.

1. There is no significant correlation between tertiary students' entrepreneurship intention, internship experience and entrepreneurship learning socialization.
2. Influence models of tertiary students' entrepreneurship intention, internship experience, and entrepreneurship learning socialization fit the data collected by this study.

3. Methodology

3.1 Subjects

This study treats students from tertiary as the population, and adopts random sampling and cluster sampling for survey. A total of 728 valid samples were collected.

3.2 Measures

A 40-item survey questionnaire was developed to measure participants' entrepreneurship intention, internship experience, and entrepreneurship learning socialization. The research tool is a "Questionnaire of Factors Which Influence Tertiary Students' Entrepreneurship Learning Socialization". The questionnaire includes entrepreneurship intention scale, internship experience scale and entrepreneurship learning socialization scale (Edvardsson & Alves, 2010; Hoekstra, 2011). The scales' factors, number of questions reliability and validity are shown in Table 1.

The 'Questionnaire of Influence Tertiary Students' Entrepreneurship Learning Socialization' was reviewed by five experts for subject contents' suitability to ensure the scales' expert validation. Six students were invited to answer the questionnaire to enhance the validity of the scale's contents. In addition, six tertiary schools were selected for a pre-test, and 124 students were selected as the pre-test objects in total. The scales used in this study are in self-assessment form, and a Likert 5-point scale is used as the scoring method. There are five levels of choices from 'agree' to 'do not agree;' five equal portions of 5, 4, 3, 2 and 1 are distinguished according to the extent of agreement, and 5 points, 4 points, 3 points, 2 points and 1 point are given in this order. The higher the score an individual receives, the larger extent of agreement the individual has.

Table 1. An Overview of Factors, Number of Questions, Reliability and Validity for Tertiary Students' Entrepreneurship Intention, Internship Experience and Entrepreneurship Learning Socialization Scale

Entrepreneurship intention Scale				Internship experience Scale				Entrepreneurship learning socialization Scale			
Factor name	No.	Cronbach α	Factor loading	Factor name	No.	Cronbach α	Factor loading	Factor name	No.	Cronbach α	Factor loading
Goal orientation	4	.90	23.18%	Industry vision	4	.91	22.49%	Entrepreneurial Self-efficacy	4	.90	23.98%
Entrepreneurial skill	4	.88	22.561%	Labor market	4	.88	20.51%	Entrepreneurial alertness	4	.89	22.56%
Entrepreneurial ability	4	.86	19.22%	Work requirement	4	.89	19.23%	Outcome expectations	4	.88	19.78%
Total reliability Cronbach α		.90		Total reliability Cronbach α		.91		Total reliability Cronbach α		.90	
Accumulated explained variance			64.91%	Accumulated explained variance			62.23%	Accumulated explained variance			66.32%

3.3 Data analysis

In processing the survey data used in this study, the collected questionnaires were coded, and Statistical Package for Social Science (SPSS version 12.0) and linear structural analysis (LISREL version 8.5) were used to verify the correlation among the factors of 'entrepreneurship intention,' 'internship experience' and 'entrepreneurship learning socialization' variables and their effects in order to achieve the purpose of this study. In this study, the statistical test level $\alpha = 0.05$.

4. Results

The empirical results of tertiary students' entrepreneurship learning socialization are shown in Figure 1, and are analyzed as follows: The estimated value of the direct affecting parameter between entrepreneurship

intention and internship experience is 0.69 ($t = 5.12, p < .05$). This means that entrepreneurship intention has a significant effect on internship experience.

The estimated value of the direct affecting parameter between entrepreneurship intention and entrepreneurship learning socialization is 0.45 ($t = 4.78, p > .05$). This means that 'entrepreneurship intention' does not necessarily have a significant effect on entrepreneurship learning socialization. The estimated value of the direct affecting parameter between internship experience and entrepreneurship learning socialization is 0.88 ($t = 4.92, p < .05$). This means that internship experience has a significant effect on entrepreneurship learning socialization.

In summary, in this study of tertiary students' entrepreneurship learning socialization and its influence pattern, entrepreneurship intention has a significant effect on internship experience, but does not have a significant effect on entrepreneurship learning socialization. Internship experience has a significant effect on entrepreneurship learning socialization.

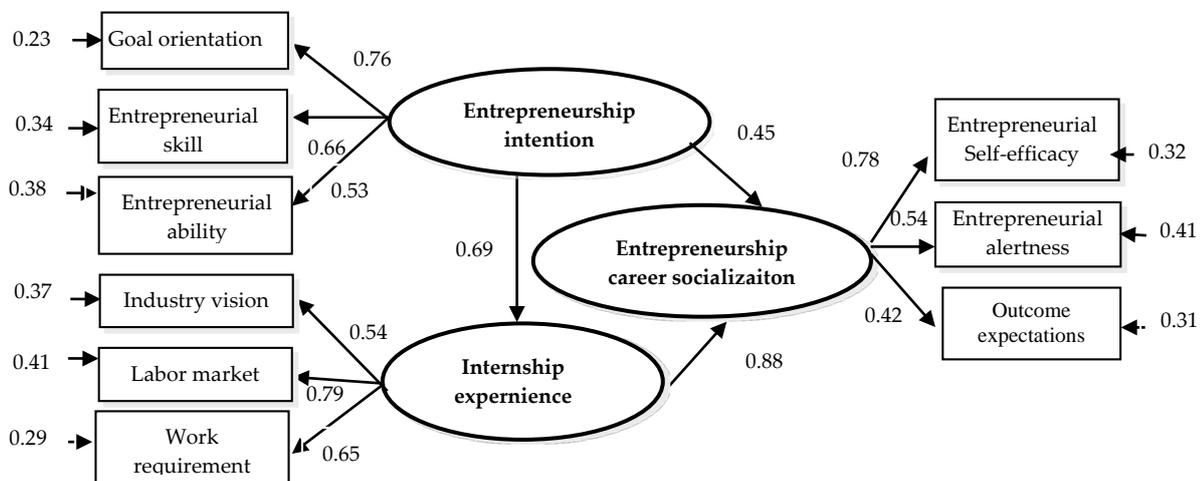


Figure 1. Path of Tertiary Students' Entrepreneurship Learning Socialization

5. Discussion

Students' internship experience has a significant direct effect on entrepreneurship learning socialization, and entrepreneurship intention has a significant effect on entrepreneurship learning socialization through internship experience. The influence pattern and empirical data of entrepreneurship intention and internship experience on entrepreneurship learning socialization has a good fit. The influence effects of entrepreneurship intention, internship experience, and entrepreneurship learning socialization shows that for tertiary students, the influence of entrepreneurship intention on entrepreneurship learning socialization comes mainly through their awareness of internship experience. In addition, internship experience has a direct and significant effect on entrepreneurship learning socialization. From the influence of entrepreneurship intention, internship experience and entrepreneurship learning socialization, we can clearly see that compared with entrepreneurship intention, internship experience has a greater influence on entrepreneurship learning socialization (Edvardsson & Alves, 2010; Hoekstra, 2011; Nam, Yang, Lee, Lee, & Seol, 2011).

Regarding the test results, according to the goodness of fit test standard by Hair et al, the model in this study has a good overall fit (Bentler, & Bonett, 1980; Wittenkind, Raeder & Grote, 2010). In the absolute

fitness and incremental fitness tests, all indices meet the standard, and have the best fit. Most of the parsimonious fitness indices meet the test standard, and have a good fit. Overall, in the entrepreneurship learning socialization and its influence model established in the study based on theories, both the model and the data have a good fit, and in the parameter estimation most of the estimated values are significant. This shows that all the indices of latent variables have their importance, and only the parameter value of entrepreneurship intention 'on 'entrepreneurship learning socialization' is low. Overall, the empirical data have a good explanatory power (Bentler & Bonett, 1980; Hair, Black, Babin & Anderson, 2010).

Students' entrepreneurship intention influences internship experience and labor market is an important factor which influences internship experience. Students' internship experience influences entrepreneurship learning socialization, entrepreneurial self-efficacy and entrepreneurial alertness are important factors which influence entrepreneurship learning socialization (Patel, Salahuddin & O'Brien, 2008; Wittenkind, Raeder & Grote, 2010) .

The results show that among all latent variables in the model, the direct influence of entrepreneurship intention on entrepreneurship learning socialization is not significant, indicating that the assumed influence of 'entrepreneurship intention on students' entrepreneurship learning socialization needs further testing; this is something worthy of a more in-depth study and validation in the future. Based on test results, although the overall result is acceptable, the model consistency level is not entirely satisfactory, and its entrepreneurship intention has a relatively low explanatory power for entrepreneurship learning socialization. The possible reasons are (Bentler & Bonett, 1980; Chang, 2010):

The measurement error variance of the three main variables in the model is too large. Although in the course of the investigation in this study each step was made following reasonable procedures, in a sample survey there are a survey bias and restrictions on the study objects in answering the questionnaire. These can result in a bias between the survey data and the actual situation (Wittenkind, Raeder & Grote, 2010).

The influence is test of indices and method. Currently in the verifying calculation of structural equations, the index value is subject to the sample size, and sometimes the index value may influence each other. When the index is far greater than or much lower than the standard value, the judgment is more accurate; when the index is close to the standard value, we then need to consider the possible influence from the error of the missing scope of variables. Although a complete research model was tried to be established in this study based on past researches and theories, there has been little domestic research on the topic of students' entrepreneurship learning socialization.

6. Implication

Good internship models, relevant entrepreneurship education and training, and government encourage the at tertiary education will yield high social returns. Instilling the urge for entrepreneurial learning will ensure that youths possess the relevant of internship skills and competencies that match the skill gaps and competencies in the entrepreneurial business and labor market. Governments need to create jobs and increase incentives for private enterprise and foster entrepreneurial culture.

7. Limited

There may be undetected factors which resulted in a low explanatory power, and there are other variables which have not been identified. Regarding this model's test results, perhaps in the future a further study can be conducted to find the variables either missing in the theories or can be further added or deleted, or more comprehensive empirical data can be collected for testing to improve the consistency between this model and empirical data.

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