



INFLUENCE OF INTERNSHIP LEARNING EFFECT IN BUSINESS SERVICE SECTOR: USING INTERNSHIP SELF-EFFICACY AS THE MEDIATOR VARIABLE

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ABSTRACT

This study examines 364 tertiary students' internship learning effect and its influencing factors to serve as a school reference for the development of internship education measures. The results show that students' internship self-efficacy (ISE) has a significant direct effect on 'internship learning effect (ILE)', and 'internship awareness (IA) 'has a significant effect on 'internship learning effect' through 'internship self-efficacy'. The influence pattern and empirical data of 'internship awareness 'and 'internship self-efficacy ' on 'internship learning effect' has a good fit.

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Keywords: Tertiary students, Internship learning effect, Internship self-efficacy.

Contribution/ Originality

This study contributes in the existing literature that students' internship self-efficacy of internship awareness and internship learning effect have provided them with chances to learn internship competence and attitude, which may be helpful for their future employment.

1. INTRODUCTION

As the domestic unemployment climbs, employment-oriented tertiary education programs urgently need to find the teaching resources for internship education in Taiwan (Wu, 2011). The difficulty currently faced by tertiary students in their learning careers cannot be solved with a confinement to school internship (Chou, 2010). Tertiary institutions educate and instruct learners to

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acquire high levels of knowledge and skills and deliver learning enhanced students' employability (Chou, 2010), (Sweitzer and King, 2013). Amid industrial structure adjustment in Taiwan, SMEs are mostly concentrated in the service sector, with the proportion being slightly over 80%. 56.72% of SMEs are Sole Proprietorships. In terms of the industries, 50.62% of SMEs are in wholesaling and retailing, followed by manufacturing (10.52%) and restaurant industry (9.68%) (Small and Medium Enterprise (SMEs) of Ministry of Economic Affairs, 2014). The service sector is the main driver of Taiwan's economy and responsible for the bulk of local job creation, with sector output reaching NT\$9.4 trillion (US\$32 billion) and accounting for 68.19% GDP in 2012. The industries employed nearly 6.28 million people or 58.6% of the entire workforce in 2012 (Liu *et al.*, 2011). The gross GDP ratio of education services industry accounted for between 4.65% -5.95% and annual rate of change was 1.16%. Business Service industrial development is very labor-absorbing effect industry of the knowledge economy and society through the foundation of services and promote industrial restructuring (Liu *et al.*, 2011). Student acquired internship outcomes also house tertiary-learned skills (internship behavior, internship intention, internship attitude), and these, in-turn, may be linked into business-deployed, tertiary student skills, and into the relevant business types where the graduate students often find their initial internship (Chou, 2010). Internship education plays the role of helping to reduce the unemployment rate in a country. Internship learning effect explores the students' internship learning result and internship learning attitude on the internship and business field and at the same time providing internship experiences in the process of learning internship and belief in the internship curriculum (Gokuladas, 2010), (Fugate *et al.*, 2004).

Some research found students' experiences of learning internship awareness and internship self-efficacy provided them with chances to learn new internship skills, which may be helpful for their future self-employment (Small and Medium Enterprise (SMEs) of Ministry of Economic Affairs, 2014), (Dupre and Williams, 2011; Misra and Mishra, 2011). Internship awareness was cognitive adaptability as the ability to effectively and appropriately change construct than for example career motivation, personal initiative or proactive personality, and in fact subsumed each of these variables, helped individuals cope with work transitions in a turbulent employment market (Tomlinson, 2010; Brown *et al.*, 2011). Research suggests that internship self-efficacy is important to affect internship learning result. It is positively related to student belief, ability, and attitude in contexts that can be characterized as complex, dynamic, and inherently uncertain (Edvardsson Stiwne and Alves, 2010), (Gault *et al.*, 2010), (Rothwell *et al.*, 2008).

From a theory of planned behavior point of view, the readiness to perform a behavior to become internship self-efficacy has been depicted as actively ambition of internship (Nam *et al.*, 2011), (Wittenkind *et al.*, 2010). The availability of a validated instrument to measure self-evaluation of personality, labor market, school reputation and academic achievement towards ISE could be of much help (Gokuladas, 2010), (Brown *et al.*, 2011), (Edvardsson Stiwne and Alves, 2010).

2. PURPOSES OF THIS STUDY

The paper, Analysis of factors in tertiary students perceived internship awareness and internship learning effect, using internship self-efficacy as a mediator variable, discussed the variables which may influence tertiary students’ internship learning effect and found the relationships among the variables. The purposes of this study are to address the 2 following issues.

1. There is no significant correlation between tertiary students’ internship awareness, internship self-efficacy and internship learning effect.
2. Influence models of tertiary students’ internship awareness, internship self-efficacy, and internship learning effect fit the data collected by this study.

3. METHODOLOGY

3.1. Subjects

This study treats students from tertiary engineering as the population, and adopts random sampling and cluster sampling for survey. A total of 364 valid samples were collected.

3.2. Measures

A 41-item survey questionnaire was developed to measure participants’ internship awareness, internship self-efficacy, internship learning effect, and demographic information. The research tool is a ‘Questionnaire of Factors Which Influence Tertiary Students’ Internship learning effect.’ The questionnaire includes internship awareness scale, internship self-efficacy scale and internship learning effect scale (Small and Medium Enterprise (SMEs) of Ministry of Economic Affairs, 2014), (Gokuladas, 2010), (Fugate *et al.*, 2004), (Misra and Mishra, 2011), (Edvardsson Stiwné and Alves, 2010), (Gault *et al.*, 2010). The scales’ factors, number of questions reliability and validity are shown in Table 1.

Table-1. An overview of factors, number of questions, reliability and validity for tertiary students’ internship awareness, internship self-efficacy and internship learning effect scale.

Internship awareness Scale				Internship self-efficacy Scale				Internship learning effect 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	.87	23.32%	Self-evaluation of personality	3	.88	21.09%	Internship behavior	4	.89	23.92%
Career development	4	.88	22.41%	Labor market	3	.87	17.24%	Internship intention	4	.88	21.31%
Job requirement	3	.86	19.42%	School reputation	3	.86	13.92%	Internship attitude	4	.84	18.44%
				Academic achievement	3	.86	12.82%				
Total reliability Cronbach α		.89		Total reliability Cronbach α		.89		Total reliability Cronbach α		.90	
Accumulated explained variance			64.15%	Accumulated explained variance			60.07%	Accumulated explained variance			63.67%

The ‘Questionnaire of Influence Tertiary Students’ Internship Learning Effect’ was reviewed by five experts for subject contents’ suitability to ensure the scale’s expert validation. Six students were invited to answer the questionnaire to enhance the validity of the scale’s contents. In addition, nine tertiary schools were selected for a pre-test, and 128 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.

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 ‘internship awareness,’ ‘internship self-efficacy’ and ‘internship learning effect’ 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 engineering students’ internship learning effect are shown in Figure 1, and are analyzed as follows: The estimated value of the direct affecting parameter between ‘internship awareness’ and ‘internship self-efficacy’ is 0.73 ($t = 3.25, p < .05$). This means that ‘internship awareness’ has a significant effect on ‘internship self-efficacy’.

The estimated value of the direct affecting parameter between ‘internship awareness’ and ‘internship learning effect’ is 0.34 ($t = 5.183, p > .05$). This means that ‘internship awareness’ does not necessarily have a significant effect on ‘internship learning effect’. The estimated value of the direct affecting parameter between ‘internship self-efficacy’ and ‘internship learning effect’ is 0.82 ($t = 3.28, p < .05$). This means that ‘internship self-efficacy’ has a significant effect on ‘internship learning effect’. In summary, in this study of tertiary students’ internship learning effect and its influence pattern, ‘internship awareness’ has a significant effect on ‘internship self-efficacy’, but does not have a significant effect on ‘internship learning effect.’ ‘Internship self-efficacy’ has a significant effect on ‘internship learning effect.’

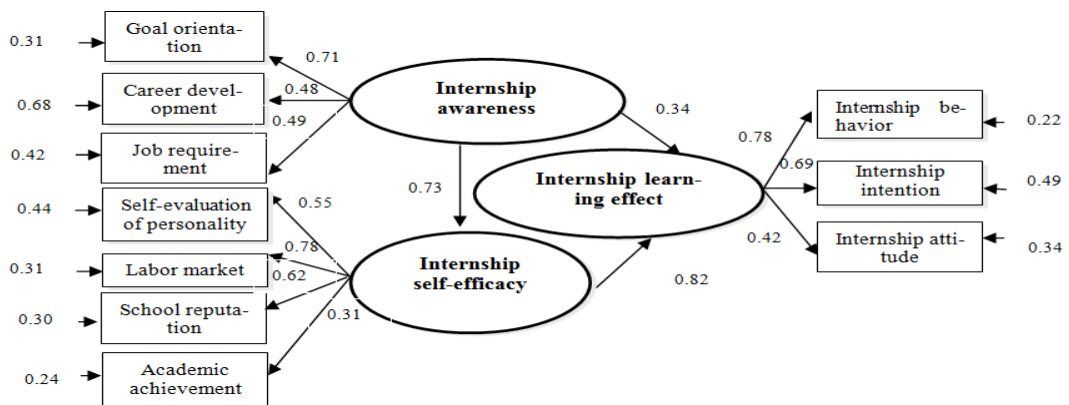


Figure-1. Path of tertiary students’ internship learning effect

5. DISCUSSION

Students' 'internship self-efficacy' has a significant direct effect on 'internship learning effect,' and 'internship awareness' has a significant effect on 'internship learning effect' through 'internship self-efficacy.' The influence pattern and empirical data of 'internship awareness' and 'internship self-efficacy' on 'internship learning effect' has a good fit. The influence effects of 'internship awareness' 'internship self-efficacy' and 'internship learning effect' shows that for tertiary engineering students, the influence of 'internship awareness' on 'internship learning effect' comes mainly through their awareness of 'internship self-efficacy.' In addition, 'internship self-efficacy' has a direct and significant effect on 'internship learning effect.' From the influence of internship awareness, internship self-efficacy and internship learning effect, we can clearly see that compared with internship awareness, internship self-efficacy has a greater influence on internship learning effect (Edvardsson Stiwne and Alves, 2010), (Gault *et al.*, 2010), (Wittenkind *et al.*, 2010).

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 and Bonett, 1980), (Hair *et al.*, 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 internship learning effect 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 'internship awareness' on 'internship learning effect' is low. Overall, the empirical data have a good explanatory power.

Students' 'internship awareness' influences 'internship self-efficacy' and 'benefits of entrepreneurship' is an important factor which influences 'internship self-efficacy'. Students' 'internship self-efficacy' influences 'internship learning effect', 'belief' and 'ability' are important factors which influence 'internship learning effect' (Bentler and Bonett, 1980), (Hair *et al.*, 2010), (Patel *et al.*, 2008), (Chang, 2010).

The results show that among all latent variables in the model, the direct influence of 'internship awareness' on 'internship learning effect' is not significant, indicating that the assumed influence of 'internship awareness' on students' 'internship learning effect' 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 internship awareness has a relatively low explanatory power for internship learning effect. The possible reasons are:

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 (Bentler and Bonett, 1980), (Hair *et al.*, 2010), (Chang, 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' internship learning effect.

6. IMPLICATION

There may be undetected factors which resulted in a low explanatory power, and there are other variables which have not been identified (Wu, 2011), (Brown *et al.*, 2011). 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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REFERENCES

- Bentler, P.M. and D.G. Bonett, 1980. Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3): 588-606.
- Brown, S.D., R.D. Lent, K. Telander and S. Tramayne, 2011. Social cognitive career theory, conscientiousness, and work performance: A meta-analytic path analysis. *Journal of Vocational Behavior*, 79(1): 81-90.
- Chang, Y.Y., 2010. English-medium instruction for subject courses in tertiary education: Reactions from Taiwanese undergraduate students Taiwan. *International ESP Journal*, 2(1): 55-84.
- Chou, C.M., 2010. Analysis of college students' satisfaction with educational functions and teaching patterns of technological and vocational education in Taiwan. *World Transactions on Engineering and Technology Education*, 8(3): 262-267.
- Dupre, C. and K. Williams, 2011. Undergraduates' perceptions of employer expectations. *Journal of Career and Technical Education*, 26(1): 8-19.
- Edvardsson Stiwnne, E. and M.G. Alves, 2010. Higher education and employability of graduates: Will bolgna make a difference. *European Educational Research Journal*, 9(1): 32-44.
- Fugate, M., A.J. Kinicki and B.E. Ashforth, 2004. Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1): 14-38.
- Gault, J., E. Leach and M. Duey, 2010. Effects of business internships on job marketability: The employers' perspective. *Education + Training*, 52(1): 76 - 88.

- Gokuladas, V.K., 2010. Technical and non-technical education and the employability of engineering graduates: An Indian case study. *International Journal of Training and Development*, 14(2): 130-143.
- Hair, J.F., W.C. Black, B.J. Babin and R.E. Anderson, 2010. *Multivariate data analysis*. 7th Edn., New Jersey: Pearson Prentice Hall.
- Liu, Y., J. Xu. and B.A. Weitz, 2011. The role of emotional expression and mentoring in internship learning. *Academic Management Education*, 10(1): 94-110.
- Misra, R.K. and P. Mishra, 2011. Employability skills: The conceptual framework and scale development. *Indian Journal of Industrial Relations*, 46(4): 650-660.
- Nam, S.K., E. Yang, S.M. Lee, S.H. Lee and H. Seol, 2011. A psychometric evaluation of the career decision self-efficacy scale with Korean students: A reach model approach. *Journal of Career Development*, 38(2): 147-166.
- Patel, S.G., N.M. Salahuddin and K.M. O'Brien, 2008. Career decision-making self-efficacy of vietnamese adolescents: The role of acculturation, social support, socioeconomic status, and racism. *Journal of Career Development*, 34(3): 218-240.
- Rothwell, A., I. Herbert and F. Rothwell, 2008. University commitment: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(2): 1–12.
- Small and Medium Enterprise (SMEs) of Ministry of Economic Affairs, 2014. Statistical abstract of national income in Taiwan area. Available from http://book.moeasmea.gov.tw/book/doc_detail.jsp?pub_SerialNo=2013A01165&click=2013A01165#.
- Sweitzer, H.F. and M.A. King, 2013. *The successful internship: Personal, professional and civic development in experiential learning*. 4th Edn., C.A: Belmont.
- Tomlinson, M., 2010. Investing in the self: Structure, agency and identity in graduates' employability education. *Knowledge & Economy*, 4(2): 73–88.
- Wittenkind, A., S. Raeder and G. Grote, 2010. A longitudinal study of determinants of perceived employability. *Journal of Organizational Behavior*, 31(4): 566–586.
- Wu, C.C., 2011. High graduate unemployment rate and Taiwanese undergraduate education. *International Journal of Educational Development*, 31(3): 303–310.

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