# An Empirical Study of Professional License Acquisition: Theory of Planned Behaviour View

I-Jyh Wen, Chien Wei Liang

<sup>1</sup> Engineering Science and Technology Department, National Yunlin University of Science and Technology, Douliu City, Taiwan(R.O.C)

Keywords: Professional license, Theory of Planned Behaviour View, Trust, Career planning

Abstract:

This research was conducted, taking the Theory of Planned Behavior, to identify professional workers' perspectives on their professional license. According to this research purpose, the research issued survey questionnaires to 600 manufacturing workers in Yunlin County, located in central Taiwan, as a research sample. After follow-up, only 510 questionnaires were returned (81.66% of returned rate) including 490 questionnaires with complete and valid information, which were used as the major research data in this study, and 20 invalid ones. Subsequently, this research employed the SPSS 22 statistical software to analyze data according to the research purpose and significant questions. The statistical analyses included descriptive statistics, reliability analysis, validity analysis, exploratory data analysis, correlation analysis, regression analysis, and structural equation modelling to examine the proposed hypotheses. The research results revealed that people's trust significantly affected their attitudes toward professional certification. Their career plan could also significantly influenced behaviour control while pursuing professional license; their attitudes, motivation, and behaviour control significantly inspired their behaviour intention to acquire professional licenses. This study finally suggested that individuals who work in the workplace should devote themselves to practical learning skills and meet professional requirements through professional training and regular practices. It was also suggested to keep maintaining and improving their professional competence, work quality, and consumer services. Based on personal career planning and skill requirements of the future employment environment, professional workers need to receive further knowledge and skills to ensure the values of professional licenses.

# 1 INTRODUCTION

With the transformation of the economic system, the competition of the overall industrial environment has also increased. Professional licenses have a tremendous usage rate in the Japanese labour market, which is closely related to a labour participation rate and high salary income (Morikawa, 2018). Education and licenses should be the basic requirements for the employment of enterprises. However, under the decline of education quality, the awareness of obtaining professional licenses naturally rises. Generally speaking, academic qualifications only represent the necessary training process, while professional licenses can represent professional competence. In the security industry, the professional certification has successfully played its own importance, and obtaining professional certification is an improvement in personal achievement (Black et al., 2017). Human resources certification authority can help employees who do not have a university degree to benefit and obtain credibility in this field through certification and licensing (Lengnick-Hall, 2012). Professional licenses establish a threshold in related industries, which brings high income to the licensed employee (Kleiner, 2014). Compare technicians who have been certified by the state and have not been certified and technicians who have been certified by the government institution to the organization and the workplace, and willing to try different areas of work (Wheeler et al., 2019). Through the above, we can understand the increasingly complex and specialized specialization of modern social division. The professional license represents the guarantee of quality and the provision of trustworthy service. The more, the higher the professional license, the more representative of the society towards trust and stability, and the

professional license. The system is based on the control of obtaining a license to practice, affecting people's career choices, and inciting the market is vast, so the definition of professional standards for professional licenses is important (Albert, 2017).

However, for the reasons why manufacturing personnel obtain professional licenses, this study proposes the following hypothetical questions as the research motivation:

- 1. Is there a direct relationship between whether the personnel have a professional license and the personnel's willingness to try hard and pay attention to the evaluation of the behaviour and the impressions and impressions of talented friends around the personnel and the professional licenses? Is that one of the motivations for the formation of this study?
- 2. In recent years, the domestic economic downturn has caused companies to reduce their willingness to recruit talents. In the case of limited job titles, job seekers have college diplomas. Therefore, they have their own strengths by having professional licenses. The benefits are directly related to whether the Chinese people are willing to try hard to obtain professional licenses. It is the second motivation for this study.
- 3. At present, the needs of many professional professionals in the domestic workplace, with professional skills licenses in line with the needs of business owners, can not only stand out among many job seekers but also have more contact and learning opportunities than other colleagues in carrying out tasks. However, it is directly related to the motivation of the Chinese people because they have professional licenses and fully exert their substantive benefits and the satisfaction they receive when they are expressed.
- 4. In today's society, professional licenses have created a trend. Many colleges and universities and non-government organizations have actively set up classes to recruit students and even announced that collective registration has discounts to attract many people to participate in the curriculum. Some of them are invited and recommended by relatives and friends. However, it is impossible to know precisely the substance of the course content, and after obtaining the license, it is found that there is no benefit in the field of the workplace. Therefore, whether the Chinese have a professional license awareness should feel the influence of essential friends and organizations in the vicinity and the factors to achieve the behaviour. Direct relationship? It is the fourth motivation to form this research.
- 5. Many domestic license courses have many restrictions, such as qualification status, training time, training cost, course difficulty, and convenience of

transportation. Due to the above factors, some Chinese people are frustrated during the acquisition period, resulting in half away due to the situation. So, when the Chinese people have sufficient ability to achieve the goal of obtaining a professional license, it is directly related to the resources and opportunities needed in the process of acquisition. It is the fifth motivation for the study.

6. In the course of the personnel's careers, most people regard promotion and salary as the top priority and can push these two factors to the highest peak. The best medium is a professional license blessing, and some business owners also have professional licenses for their staff. Give more resources to help. Therefore, when the Chinese people obtain the best career goals through planning professional licenses in their careers and whether this goal is directly related to the resources and opportunities required in the process of acquisition, it is the sixth motivation for the study.

# 2 LITERATURE REVIEW

### 2.1 Trust

From the market of organic milk, trust, and self-identification help explain the reasons for the purchase behaviour (Carfora et al., 2019). Consumer trust in food choices, the Intention to pay for food in the supply chain is influenced by consumer trust (Giampietri et al., 2018). In the process of accepting residents' acceptance of Green Label Residential Buildings (GLRB), it is crucial to understand the subjective knowledge, social trust and environmental attitudes as significant predictors (Liu et al., 2018). The key to establishing market goods is the trust of consumers and the behavioural intentions of consumers to purchase new green products (Nuttavuthisit & Thøgersen, 2017).

### 2.2 Career Planning

Nursing education workers must support students' thoughts about nursing and the reasons for choosing a career because it will motivate them and influence them about knowledge learning, job performance, and career planning (Yilmaz et al., 2016). The vocational curriculum of the discipline effectively reduces the perception of technical barriers and improves the behaviour of nursing students in career preparation (Park, 2015). For employees with strong professional adaptability, the indirect impact of career

satisfaction and perceived career management on turnover intention is more substantial (Guan et al., 2015).

# 2.3 Theory of Planned Behaviour

Theory of Planned Behaviour (TPB) is an extension of Rational Behaviour Theory (T.R.A.). It is believed that individual behavioural decisions are not made under the control of the will, but also in conjunction with opportunities to express individual behaviour. Therefore, from the perspective of attitude and subjective norms in the rational behaviour theory framework, the perceptual behaviour control variables of "personal external environmental control ability "are added to measure the importance of the formation of analytical behaviour in three stages. Through the three factors of Attitude, subjective norm, and perceived behaviour control, the Intention to perform different types of behaviour can be accurately predicted (Ajzen, 1991). Users' trust tendencies affect their trust in in-app advertising, which in turn affects their attitude toward in-app advertising and their intent to view in-app advertising (Cheung & To, 2017). In order to encourage consumers to be interested in potential strategies for sustainability certification, attitudes, subjective norms, and perceived behavioural control are all significant predictors of Intention (Judge et al., 2019). Gain insight into the drivers of N.M.P. intent and understand how to encourage behavioural change, so attitudes, perceptional controls, and subjective norms positively influence intent (Daxini et al., 2019). In the process of determining the determinants of consumer safety behaviour in the automotive repair and service industries, social norms perceived behavioural control, and safety priorities are the primary sources of determinants (Abu Bakar et al., 2017).

### 3 RESEARCH METHODOLOGY

The research mainly adopts the questionnaire survey method. The content is divided into primary data and research methods, research framework construction, research hypothesis establishment, questionnaire design and variable operation definition, research objects, and data analysis methods. This research is based on the theory of Planning Behaviour developed by Ajzen (1985). The proposed "attitude, subjective norms, behavioural control, behavioural intentions" as a variable to explore the behaviour of professional licenses, together with the degree of influence of

"trust" variables on behavioural attitudes, and whether "career planning" controls behaviour Has an impact line. According to the research motivation and purpose, the theoretical model structure is formed to examine the content of the causal relationship in the theoretical model of this paper. Can the individual prove the research hypothesis of this research? The structure of this research is shown in the following figure:

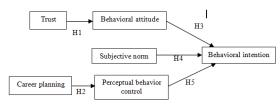


Figure 1: Structure of Research.

- H1: Trust is positively associated with behavioural attitude;
- H2: Career planning is positively associated with Perceived behavioural control;
- H3: Behavioural Attitude is positively associated with obtaining Intention;
- H4: Subject norms are positively associated with obtaining Intention;
- H5: Perceived behavioural control is positively associated with obtaining Intention.

Table 1: Construct and definition.

	Construct Operational definition		Number of measurement
	Trust	The attitude of professional licenses has a positive impact on future outcomes.	items 5
*	Career planning	Act of obtaining a professional license will be influenced by the development of the individual plan and the degree of the steps.	5
	Attitude	How to feel positive about professional certification	5
	Subjective norm	For professional licenses, it will be affected by society and positively given to colleagues, family, and friends.  Degree of support or negative opposition °	5
	Behavioural control	The master who judges how much he can control the professional license Review.	5
	Behavioural Intention	Subjective judgments of individuals' will obtain a professional license in the future.	5

### 4 RESULTS

# 4.1 Sample Characteristics Analysis

According to the demographic variable analysis of the sample of this study (Table 2), the respondents were in the gender section, with 81.8% males and 18.2% females. Based on age group, 31.0% were mainly at 41 to 50 years old, followed by 27.1% at 31 to 40 years old, and followed by 23.3% of the under 30 years old group and 18.6% over the age of 51. In the education level, the number is below the specialities (including), accounting for 44.9%, followed by universities and research institutes, which are 31.6% and 23.5% respectively. Based on the seniority, the number of years has been five to less than ten years, accounting for 38.6%, followed by ten years or more, accounting for 33.7%, followed by 2 to less than five years, accounting for 21.8% and less than 2 The year accounts for 2.9%. In the marriage part, the married majority accounted for 62.0%, followed by unmarried 38.0%.

Table 2: Demography of the respondents.

Variables	Variables Items		Percent (%)	
G 1	Male	401	81.8	
Gender	Female	89	18.2	
	< 30	114	23.3	
	31-40	133	27.1	
Age	41-50	152	31.0	
	>51	91	18.6	
	College	220	44.9	
Education	Bachelor	155	31.6	
	Master	115	23.5	
	< 2	29	2.9	
Job tenure	2-5	107	21.8	
Job tenure	5-10	189	38.6	
	>10	165	33.7	
Marital	Single	186	38.0	
status	Married	304	62.0	
Note: valid samples = $490$ .				

# 4.2 Exploratory Factor Analysis

Based on the comprehensive analysis of the data, the combined reliability (C.R. value) of each facet in this study is between 0.865 and 0.906, both of which are greater than 0.7 in accordance with the test requirements of the combination reliability. On the other hand, Cronbach's  $\alpha$  represents the reliability of the measured structure: Trust is 0.804, Career planning is 0.855, attitude is 0.838, Subjective norm is 0.868, Perceived behavioural control is 0.837,

Behavioral Intention is 0.869, all in accordance with the relevant scholars Recommended standard. The compositional reliability of each facet of the research model, AVE, and Cronbach's alpha are detailed (Table 3).

# 4.3 Pearson Correlation Analysis

In order to understand the relationship between variables, Pearson correlation analysis can be used to know the degree of correlation between variables, and trust has a significant positive correlation with the attitude of obtaining professional licenses (r=0.851, p<0.01); career planning for perceived behavior control (r=0.858, p<0.01) had a significant positive correlation; attitude (r=0.796, p<0.01), subjective norm (r=0.705, p<0.01), behavioral control for behavioral intent (r=0.818, p<0.01) There is a significant positive correlation (Table 4).

# 4.4 Structural Pattern Analysis

The ratio of Chi-Square to Degree of Freedom (df) is 2.919, and the value is close to the standard recommended by the scholars. (G.F.I.) is 0.892, (CFI) is 0.813, (RFI) is 0.848, (IFI) is 0.814, (RMR) is 0.037, (NFI) is 0.801; PNFI and PGFI are both >0.5, and (RMR) is 0.037, (RMSEA) is 0.077 and meets the criteria of less than .08. The values of this study have met and met the standards. This study shows the overall fittest index for the S.E.M. model (Table 5). The results of the path analysis between the various facets reached a significant level, which confirmed that the research hypotheses proposed in this study are all valid. The path between the various facets in this study: Trust has a positive and significant impact on attitude, the effect value is 0.851; career planning has a positive and significant impact on perceived behaviour control, the effect value is 0.858; Attitude has positive confidence for behavioural Intention, The influence value is 0.732; the subjective norm has a positive and significant influence on the behaviour intention, and its value is 0.659; the perceptual behaviour control has a positive and significant influence on the behaviour intention, and its value is 0.736. As shown in (Figure 2.). This study verified the results of the empirical study that all five research hypotheses were established, and the results of the hypothesis verification results are summarized in Table 6.

Table 3: Model of research construct.

Construct and observable variable	Mean (S.D.)	S.F.L.	CR	AVE	α
TR1	4.40 (0.73)	0.813			
TR2	4.44 (0.70)	0.793			
TR3	4.31 (0.74)	0.736	0.865	0.563	0.804
TR4	4.29 (0.76)	0.716			
TR5	4.34 (0.76)	0.688			
CP1	4.33 (0.82)	0.860			
CP2	4.41 (0.69)	0.830			
CP3	4.25 (0.80)	0.788	0.896	0.636	0.855
CP4	4.45 (0.76)	0.752			
CP5	4.27 (0.72)	0.751			
AT1	4.36(0.7 9)	0.840			
AT2	4.39 (0.80)	0.822			
AT3	4.40 (0.67)	0.810	0.878	0.612	0.838
AT4	4.29 (0.76)	0.735	_		
AT5	4.38 (0.77)	0.696		Ш	
SN1	4.34 (0.70)	0.882			/
SN2	4.35 (0.72)	0.818			EHI
SN3	4.26 (0.74)	0.817	0.905	0.658	0.868
SN4	4.38 (0.85)	0.795			
SN5	4.21 (0.88)	0.740			
PBC1	4.36 (0.72)	0.766			
PBC2	4.21 (0.81)	0.775			
PBC3	4.33 (0.71)	0.788	0.886	0.614	0.837
PBC4	4.37 (0.69)	0.790			
PBC5	4.29 (0.79)	0.786			
BI1	4.29 (0.83)	0.830			
BI2	4.19 (0.73)	0.782			
BI3	4.33 (0.76)	0.777	0.906	0.660	0.869
BI4	4.27 (0.77)	0.794			
BI5	4.41 (0.78)	0.875			

Table 4: Correlation of research variables.

Construct	TRU	CP	AT	SN	PBC	BI
TRU	1					
CP	.823**	1				
AT	.851**	.841**	1			
SN	.803**	.806**	.773**	1		
PBC	.796**	.858**	.808**	.740**	1	
BI	.723**	.813**	.796**	.705**	.818**	1

Table 5: Measurement mode matching index checklist.

Verification	Verification	Verification	Verification
indicator	standard	value	result
CMIN/DF	<3	2.919	Close
GFI	>0.9	0.892	Close
RMR	< 0.05	0.037	Good
RMSEA	< 0.08	0.077	Good
NFI	>0.9	0.801	Close
CFI	>0.9	0.813	Close
RFI	>0.9	0.848	Close
IFI	>0.9	0.814	Close
PNFI	>0.5	0.634	Good
PGFI	>0.5	0.571	Good

Table 6: Research hypothesis of verification result summary table.

Hypothesis	Path	Path value	Result
H1	trust → attitude	0.851	Established
H2	Career planning → Behavioural control	0.858	Established
НЗ	attitude → Behavioral Intention	0.732	Established
H4	Subjective norm → Behavioural intention	0.659	Established
Н5	Behavioural control → Behavioural Intention	0.736	Established

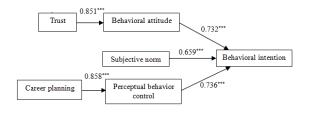


Figure 2: Path analysis diagram.

### 5 CONCLUSIONS

### 5.1 Research Restrictions

This research strives to be comprehensive in the research process, and it is as objective and rigorous as possible within the controllable range. However, there are still some restrictions that make this study not perfect. If there are factors such as limited resources, time, workforce, cost, and fit which create imperfections and when designing the questionnaire, although the purpose and integrity of the questions and the meaning of the questions are sought, each respondent may have different cognitions and standards for the same items, which may result in errors in the research results.

### **5.2** Future Research Directions

According to the study was the conclusion of this study, provide the following four-point proposal, as academic researchers or those who continue to explore the practical operation of future reference:

- Since the scope of this study is only for a single county, the results of the questionnaire may differ from other regions and values. It is suggested that questionnaires can be adjusted for other counties and cities to compare differences in different environmental backgrounds and concepts.
- It is suggested that researchers in the future can add environmental culture, values, and other factors to analyze and discuss, and then understand other factors that have obtained professional licenses.

If manufacturing workers want to increase their willingness to obtain professional licenses, this research proposal must be strengthened for the following points:

- 1. Individuals should invest in effective learning ability and self-requirement in the workplace, and maintain and enhance the quality of their professional competence, quality, and service through the acquisition of professional licenses and regular training.
- 2. Individuals should have a clear understanding of their own career views and needs and plan to obtain professional licenses. During the process of communication, analysis, and support with their loved ones or important others, they must overcome unnecessary obstacles in order to accomplish the purpose.

Aiming at the individual's career planning, matching the conditions or skills required for the future employment environment, measuring their own knowledge of the professional license, and assessing the knowledge and skills they are currently learning to achieve their desired goals.

#### REFERENCES

- Abu Bakar, E., Syamimi Isa, N., & Osman, S. (2017).

  Application of Theory of Planned Behavior in the motor vehicle repair and service industry. *Safety Science*, 98, 70–76. https://doi.org/10.1016/j.ssci.2017.06.001
- Ajzen, I. (1991). The theory of planned behavior.

  Organizational Behavior and Human Decision
  Processes, 50(2), 179–211.

  https://doi.org/10.1016/0749-5978(91)90020-T
- Albert, K. (2017). The certification earnings premium: An examination of young workers. *Social Science Research*, *63*, 138–149.

https://doi.org/10.1016/j.ssresearch.2016.09.022

- Black, I. S., Hertig, C. A., & Trinca, A. Y. (2017). Chapter 8 - The Power of Certification. In S. J. Davies (Ed.), Women in the Security Profession (pp. 79–88). Butterworth-Heinemann. https://doi.org/https://doi.org/10.1016/B978-0-12-803817-8.00013-4
- Carfora, V., Cavallo, C., Caso, D., Del Giudice, T., De Devitiis, B., Viscecchia, R., Nardone, G., & Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food Quality and Preference*, 76, 1–9. https://doi.org/10.1016/j.foodqual.2019.03.006
- Cheung, M. F. Y., & To, W. M. (2017). The influence of the propensity to trust on mobile users' attitudes toward in-app advertisements: An extension of the theory of planned behavior. *Computers in Human Behavior*, 76, 102–111. https://doi.org/10.1016/j.chb.2017.07.011
- Daxini, A., Ryan, M., O'Donoghue, C., & Barnes, A. P. (2019). Understanding farmers' intentions to follow a nutrient management plan using the theory of planned behaviour. *Land Use Policy*, 85, 428–437. https://doi.org/10.1016/j.landusepol.2019.04.002
- Giampietri, E., Verneau, F., Del Giudice, T., Carfora, V., & Finco, A. (2018). A Theory of Planned behaviour perspective for investigating the role of trust in consumer purchasing decision related to short food supply chains. *Food Quality and Preference*, 64, 160–166. https://doi.org/10.1016/j.foodqual.2017.09.012
- Guan, Y., Zhou, W., Ye, L., Jiang, P., & Zhou, Y. (2015).

  Perceived organizational career management and career adaptability as predictors of success and turnover Intention among Chinese employees. *Journal of Vocational Behavior*, 88, 230–237. https://doi.org/10.1016/j.jvb.2015.04.002
- Judge, M., Warren-Myers, G., & Paladino, A. (2019).
  Using the theory of planned behaviour to predict intentions to purchase sustainable housing. *Journal of Cleaner Production*, 215, 259–267. https://doi.org/10.1016/j.jclepro.2019.01.029

- Kleiner, M. M. (2014). Occupational Licensing in Health Care. In *Encyclopedia of Health Economics* (pp. 409–413). Elsevier. https://doi.org/10.1016/B978-0-12-375678-7.01101-9
- Lengnick-Hall, M. (2012). What is the value of human resource certification? A multi-level framework for research. *Human Resource Management Review HUMAN RESOURCE MANAGEMENT REV*, 22. https://doi.org/10.1016/j.hrmr.2011.03.001
- Liu, Y., Hong, Z., Zhu, J., Yan, J., Qi, J., & Liu, P. (2018). Promoting green residential buildings: Residents' environmental Attitude, subjective knowledge, and social trust matter. *Energy Policy*, 112, 152–161. https://doi.org/10.1016/j.enpol.2017.10.020
- Morikawa, M. (2018). Occupational licenses and labor market outcomes in Japan. *Japan and the World Economy*, 48, 45–56. https://doi.org/https://doi.org/10.1016/j.japwor.2018.0 7.002
- Nuttavuthisit, K., & Thøgersen, J. (2017). The Importance of Consumer Trust for the Emergence of a Market for Green Products: The Case of Organic Food. *Journal of Business Ethics*, 140(2), 323–337. https://doi.org/10.1007/s10551-015-2690-5
- Park, S. (2015). Effects of discipline-based career course on nursing students' career search self-efficacy, career preparation behavior, and perceptions of career barriers. Asian Nursing Research, 9(3), 259–264. https://doi.org/10.1016/j.anr.2015.06.003
- Wheeler, J. S., Renfro, C. P., Wang, J., Qiao, Y., & Hohmeier, K. C. (2019). Assessing pharmacy technician certification: A national survey comparing certified and noncertified pharmacy technicians.

  Journal of the American Pharmacists Association, 59(3), 369-374.e2. https://doi.org/10.1016/j.japh.2018.12.021
- Yilmaz, A. A., Ilce, A., Can Cicek, S., Yuzden, G. E., & Yigit, U. (2016). The effect of a career activity on the students' perception of the nursing profession and their career plan: A single-group experimental study. *Nurse Education Today*, 39, 176–180. https://doi.org/10.1016/j.nedt.2016.02.001