

A Study on the Adaptability of Vietnamese Migrant Workers in Taiwan

Tzu-Chun Sheng¹, Cheng-Chun Chao^{2*} and Hung-Fen Juan³

Abstract

The effects of an aging population and fewer children have made it increasingly difficult for Taiwan's industries to recruit elementary laborers. Bringing in foreign workforces has become the most direct choice to solve the shortage of manpower. Over the years, Vietnam has become a very important source of foreign workers for Taiwan, accounting for 32.58% of the total number of foreign laborers in Taiwan, second only to Indonesia. These foreign workers have worked hard for the continuous advancement of Taiwan's economic development and infrastructure. After leaving their native places and coming to work in Taiwan, Vietnamese workers are faced with problems in the working environment, adaptation to life, and interpersonal relationships. The purpose of this study is to explore the adaptability of Vietnamese laborers after coming to Taiwan. The research results can provide the foundation for the government to formulate regulations and policies. It can also be said that human resources companies and manufacturers provide definite suggestions on the management of Vietnamese workers in Taiwan.

JEL Classification Numbers: C60, F16, J28, J62.

Keywords: Foreign Migrant Workers, Human Resource Management, Rights and Interests of Foreigners

¹ Department of Finance, Ling Tung University, Taiwan, ROC.

² Ph.D. Program of Business, Feng Chia University, Taiwan, ROC.

* Corresponding author: cpa1188@gmail.com.

³ Hong Ya Manpower Agency .,LTD

1. Introduction

Obviously, the population growth rate in Taiwan has slowed down in recent years. Under the influence of the aging population and lower birth rates, the phenomenon of insufficient elementary laborers in our country has gradually emerged. Traditional industrial towns are facing the dilemma of lack of labor; therefore, bringing in foreign laborers has become the most direct choice to solve the shortage of manpower (Marhani, et al., 2012). Taiwan government first time opening the gate to introduce foreign workers was in October 1989, from four countries including Thailand, Philippines, Malaysia, and Indonesia. Also, in November 1999 opened the introduction of foreign workers from Vietnam. According to statistics from Taiwan's Ministry of Labor, most of foreign laborers' market in Taiwan consists of workers from Vietnam, Indonesia, Thailand, and the Philippines, occupying approximately 98% of Taiwan's foreign workers.

Table 1. Number of foreign workers in Taiwan's industries in 2020-Statistics

Nationality	Total		Male		Female	
	Number of people	%	Number of people	%	Number of people	%
Vietnam	228,433	32.58	148,831	65.15	79,602	34.85
Indonesia	264,984	37.79	64,874	24.48	200,110	75.52
Philippine	151,071	21.55	59,212	39.19	91,859	60.81
Thailand	56,743	8.09	47,289	83.34	9,454	16.66
Malaysia	8	0.00	8	100	-	-
Total	701,139	100.00	320,214	45.67	381,025	54.33

Data Source: October 2020 Ministry of Labor Website, compilation of statistics on the number of migrant workers

From Table 1, Vietnamese workers are the second largest foreign population introduced in Taiwan. As of October 2020, there are 228,433 people accounting for 32.58% of the total number of foreign workers in Taiwan. This shows that Vietnamese workers are a very important source of introduction for Taiwan. In order to make a living, foreign workers have to leave their hometowns and travel to Taiwan to work. In addition to burden the pressure of high-priced loans, they also have to face the issues of adaptation of living environment. Since the outbreak of COVID-19 pandemic in 2019, Taiwan and many countries have implemented border controls, and the adaptability problems faced by foreign workers in Taiwan have only become more and more serious. Therefore, the Taiwanese government, employers that employ foreign workers, manpower agencies that bring in foreign workers, and the general public, should normally pay more attention to this group of foreign workers from other countries. After all, these foreign workers have indeed done their best for Taiwan's economic development and infrastructure construction over the years.

However, bringing in foreign laborers can help overcome the labor shortage in the market, but excessive dependence on foreign labor and its negative effects have become a serious social problem (Abdul-Rahman, Wang, Wood and Low, 2012; Seol, 2012; Strauss and McGrath, 2017). Foreign workers come from different countries and have

various backgrounds. These dissimilar life backgrounds will inevitably affect and cause laborers to face work and life adjustment problems, interpersonal relationship problems..., and so on. These issues can easily cause adverse effects such as productivity, job involvement, and lower efficiency of operation. Some domestic business owners have long ignored the problems of various live adaptation faced by foreign workers living in Taiwan.

These workers live in a society with differentiate cultures and customs; furthermore, the language communication barrier has caused foreign workers to have various problems such as sabotage, absence from work, alcohol drinking, fighting and trouble making or even running away. Therefore, the issue of foreign workers adapting to live in Taiwan, besides foreign workers themselves need to adjust and adapt, but the agents, employers, and the relevant policies made by government are also important connection to directly affect the adaptability of foreign migrant workers in Taiwan. Therefore, the adaptation of Vietnamese migrant workers to live in Taiwan deserves further study and discussion.

In recent years, many studies have tried to explore the adaptability of foreign workers to live and work in other countries. Many related researches circle around the issues of culture shock, cultural gap, or corporate cross-cultural management (Oberg, 1960; Black and Gregersen, 1991; Chen, Lin and Sawangpattanakul, 2011; Chang, Yuan and Chuang, 2013; Douglass and Roberts, 2015 ; Hsu and Liao, 2016; Wang, Lin, Hsiung and Chen; 2020). Foreign workers will also face various problems and difficulties related to exploitation, low wages, high working hours, labor safety, lack of social relationship support, physical and mental health, language communication, religious beliefs, and family attachments. (French and Lam, 1988; Black, Mendenhall and Oddou, 1991; Parker and McEvoy, 1993; Chen, et al., 2000; Tjosvold and Fang, 2005; Michael, Zetsche and Margraf, 2007; Pheng, Ying and Shan, 2008; Lindert, et al., 2009; Seol, 2012; Guldenmund, Cleal and Mearns, 2013; Wu et al., 2021). These internal and external factors also actually affect the adaptability of foreign workers. However, there are few studies that comprehensively discuss and check the situations faced by foreign workers and make analyses of actual problems.

This research hopes to help the government, industry, and even Vietnamese workers themselves to gain more knowledge and understanding of the topics discussed. Based on the research background and motivation content, this research takes Vietnamese laborers in Taiwan as the research objects, and proposes research on various adaptation situations of Vietnamese laborers. The main purpose of the research is to explore the adaptability of Vietnamese laborers who are introduced to Taiwan. Using Fuzzy theory and Analytic Hierarchical Process, AHP method from four aspects to explore various key factors that affect the adaptation of Vietnamese workers who live in Taiwan, including personal background, occupational status, physical and mental health, society and culture, and interpersonal relationships. Finally, the study provides concrete suggestions from human resources companies and manufacturers about the work management of Vietnamese workers in Taiwan.

2. Literature Review

2.1 Predicament and Opportunities of Foreign Workers

Many countries have designated foreign workers as "guest workers", that is, transitional labor force that cannot stay for a long time and can be replaced and supplemented at

any time. The literal meaning of foreign workers is quite wide. For example, foreign teachers, foreign managers or senior engineers of foreign companies, foreign workers, and foreign caregivers at homes are all included in this scope. Therefore, the broad definition of "foreign laborer" refers to all persons who are employed in Taiwan and do not have the nationality of the Republic of China. However, according to the regulation of Employment Service Act of Taiwan, based on the work they are engaged in, foreign workers working in Taiwan are classified into white-collar and blue-collar foreign workers. The so-called white-collar foreign workers refer to professionals engaged in specialized and technical work. On the other hand, blue-collar foreign workers refer to workers who are engaged in more manual labor, domestic help, and nursing service.

Generally speaking, the industries in which blue-collar foreign workers work in Taiwan are divided into two categories, foreign workers in productive industries and foreign workers in social welfare. Article 42 of Chapter V Employment and Administration of Foreign Workers of Taiwan's Employment Service Act is also regulated, "For the purpose of protecting nationals' right to work, no employment of foreign worker may jeopardize nationals' opportunity in employment, their employment terms, economic development or social stability."

Cholewinski and Cholewinski (1997) pointed out that the transnational transfer of labor is a global phenomenon, which may occur in any country or region in the world. The causes are quite complicated, but they cannot be separated from the power of economic push and pull. For a long time, the introduction of a large number of foreign workers not only has contributed a lot to Taiwan's economic progress, but also has been a certain degree of impact on social development. Carraro and Soubeyran (2005) indicated that the introduction of foreign labor has two main advantages for the importing country. Manufacturers by hiring low-paid foreign workers can reduce their production costs and increase their competitiveness in the commodity market. While employers can easily dismiss migrant workers, foreign workers also can act as a buffer against economic depression in the importing country.

A large amount of evidence pointed by Hanson (2010) expressed that allowing labor to move from low-income countries to high-income countries will bring substantial earnings in global income. Most high-income countries strictly restrict labor inflows into their countries. These countries unilaterally formulate foreign labor-related policies to limit the negative impact of the influx of foreign labor. Abdul-Rahman, et al., (2012) believed that although foreign labor can help overcome labor shortages in the market, over-reliance on foreign labor and its negative effects have become a serious social problem. The main negative effects brought about by foreign workers are excessive dependence on foreign workers, criminal activities or social problems increasing, and the existence of illegal workers. Governments, private enterprises and international organizations must face these issues squarely.

Most of Taiwan's "foreign workers" come from Southeast Asian countries with poorer economic conditions. After coming to Taiwan, they will have to burden heavy workload or domestic helpers and caregivers. The time of residence is limited and the blue-collar foreign workers are not allowed to change employers. Among the blue-collar foreign workers, foreign domestic helpers and foreign caregivers hired by families, and caregivers employed by nursing agencies are classified as social service or personal service workers. The introduction of foreign labor can supplement the vacancy of

human resources in labor-importing countries, and has a positive effect on promoting the country's economy and production (Marhani, et al., 2012). Piore (1986) considered that such a distinction is very suitable for foreign workers, because most foreign workers come from developing countries and work in secondary labor markets that domestic workers are unwilling to enter, which can complement the needs of the country's economy.

In 1990, the United Nations announced the International Convention on the Protection of the Rights of All Migrant Workers and Their Families, which mainly regulates the definition of foreign workers, embarkation and disembarkation restrictions, and items of right enjoyment. In the definition of working conditions of foreign workers, the wages of foreign workers, working hours, industrial safety, and health and other working conditions, the wages and treatment of foreign workers shall not be lower than these of employees in employment countries. At the same time, it is necessary to provide further vocational counseling, placement services, vocational training, and retraining for foreign workers and their family members (Liao, et al., 2014; Wang, et al., 2020).

The International Convention responds the earliest advocate reason and target of West and McKee (1980) who think legalizing the minimum wage to eliminate the exploitation of laborers and protect disadvantaged laborers. Imperfect competition in the labor market will lead to an increasingly serious problem of labor exploitation (Tierney, 2011). Therefore, under the premise of equality of human rights and economic efficiency, the guarantee of minimum wage should cover all workers (Lai, 2010). Nafziger and Bartel (1991) thought that four goals can be achieved in this way, including uniformly applying various laws and regulations to foreign workers, making up for the deficiencies in the old laws and regulations, improving the separation of foreign workers from their family members, and reducing the existence of illegal foreign workers... etc.; therefore, the legislation provides more substantial protection for foreign workers.

Most people in many countries choose to move across the other countries to look for opportunities due to economic or political issues. Most of these workers lack advanced skills or high-tech capabilities. The unskilled-working visa program facilitates the entry of transnational migrant workers into specific occupations and labor markets. These foreign workers are widely recruited for low-paying service and hospitality jobs, agriculture and gardening labor, construction, manufacturing, forestry, mining, and fishery in resource-related jobs (Buckley, 2013; Torres et al., 2013). The niche of the immigrant labor market is related to various temporary, unsecure and unstable working conditions in unstable employment (Cheng and Wu, 2013). Human trafficking policies and human trafficking laws are often intertwined with immigration systems that produce unstable employment and unstable legal status.

Arnold and Pickles (2011) and Sangha et al. (2012) pointed out that under the background of consideration of capital and country how to “assemble” the labor force, the unstable employment, inconvenient freedom of labor relations, and immigration systems are usually interrelated. Worker racialization and immigrants are at high risk of unstable employment. Racialization to the expansion of unstable employment and the pattern of labor segmentation continually evolving is the key point. Shipper (2002) showed that the hierarchy system of racialization generates differentiated wages and

other privileges among different groups of foreign workers. Some national policies not only establish the legal superiority of certain races relative to other races, but also restrict the operation of each level of foreign workers.

Therefore, Strauss and McGrath (2017) pointed out that the exploitation of international migrant workers is increasingly being involved in the framework of human trafficking, political and legal fields, and the media. Unstable employment and comfortless labor power are presented in complex ways through the immigration system. These immigration systems actively create conditions of subordination and dependence for migrant workers. This also reflects the phenomenon of comfortless freedom which is experienced by immigrants, concealing the form of labor-management relations of comfortless freedom which is institutionalized and exploited. McGrath and Strauss (2015) indicate that in political economy, comfortless labor and related relationships of coercive work are usually interpreted to be as remainder, exceptional or non-capitalism. The concept of free contract is often the core regarding the hypothesis about how capitalism operating in labor market works.

Nevertheless, the competitive economy in the current global environment, foreign workers are not necessary to face a completely unfriendly situation (Lenard and Straehle, 2012; Larner, 2015). Not all economic immigrants are situated in disadvantaged status. Highly skilled workers and entrepreneurs are likely to experience significant advantages in the labor market of the host country. Immigration systems in many countries tend to attract these immigrants (Ghosh, Mayda and Ortega, 2014). Taking Canada's temporary labor immigration policy as the topic of discussion, Nakache and Kinoshita (2010) point out that main point of short-term policy will not help the country to achieve its long-term labor market requirements. The government should consider re-adjusting the work permit policy to allow these immigrants and workers to have greater mobility. The government can also use law enforcement mechanisms to protect them from abuse behavior; improve communication between different government participants; adopt policies to support the integration of temporary foreign workers; and encourage public debate about recent changes in labor immigration policies.

2.2 The adaptability of foreign workers

From many news events or social phenomena, it can be found that the differences in social culture, language and living habits of foreign workers leaving their hometown to work abroad can easily cause difficulties in interpersonal communication and adaptation. If this kind of life and work stress and unsuitability conditions cannot be properly relieved, it may cause inferior work performance in the long run, and severe cases may even trigger other physical and mental conditions. Foreign workers come from various nationalities and cultural regions, so their participation has created a multinational cultural phenomenon within the company (Chen, Lin and Sawangpattanakul, 2011; Douglass and Roberts, 2015; Hsu and Liao, 2016; Wang et al., 2020).

Therefore, how to effectively manage foreign workers and overcome cultural differences has become an important issue that needs to be resolved in the business world. When countries face the problem of introducing foreign workers, it is necessary to have the concept of cross-cultural management (Chen, Lin and Sawangpattanakul, 2011; Wang, et al., 2020). Diversification of management can be divided into two topics:

cross-country and internal multi-nationality. Internal multi-nationality mainly emphasizes how to effectively integrate internal personnel and people from diversified backgrounds or countries (Tung, 1988; Chang, Yuan and Chuang, 2013).

In Taiwan, many female foreign workers enter many families, and the effects on Taiwanese society is more direct and in-depth than male foreign workers. Many actual situations point out that employers require home caregivers to perform work exceeding the scope of their original work. In inspecting and observing the labor dilemma, foreign care workers not only have to endure low wages and high working hours (Wu et al., 2021), but also need to face the difficulties of life and work adaptation, lack of support from social relationships, and human rights issues (Seol, 2012). Many foreign workers engaged in nursing and house chores in Taiwan also face the pressure and discomfort caused by the emotional connection with their employers and their families. These pressures and maladjustments can easily make people feel anxious. Anxiety disorders are widespread in Western countries, and three-quarters of people experience anxiety disorders at least once in their lives. Research results show that the risks of cultural adaptation problems include the gradual deterioration of the mental health of this group and the need to provide culturally appropriate mental health services (Alderete, et al., 2000; Michael, Zetsche and Margraf, 2007).

Many foreign workers leave their hometowns to work abroad, facing the unfamiliar living environment and foreign culture, and cause inadaptability issues. Oberg (1960) expresses that in various countries or regions, there are different customs, behavior restrictions, and legal regulations. When an individual is situated in a different environment, he or she will be concerned about whether to violate local norms or customs; then, he or she will be in a state of tension, uneasiness and insecurity. The situation is called culture shock. Black and Gregersen (1991) indicate that if workers living abroad face a considerable degree of cultural distance between the host culture and the home culture, it will exacerbate three adaptable difficulties such as work adaptability, interpersonal interaction, and general life adaptability. Facing an unfamiliar environment, foreign workers may also have symptoms such as anxiety or psychological discomfort due to fear of infringing taboos, fear of saying the wrong words or improper behavior. Black and Gregersen (1991) defined cross-cultural adaptation as "the degree of mental comfort in all aspects of foreign culture."

As early as the 1980s and 2000s, many documents indicated that many foreign workers faced cultural shock problems. Castles (1986) stated that the international migration of labor will become a worldwide wave. The shift in capital and production migration has resulted in the movement of labor. The rapid development of information and control technology has transformed the distribution of global labor around the world, and created a new international labor migration. To survive in this rapid change of international labor environment, foreign laborers must have good adaptability. Black and Stephens (1989) believed that daily life in overseas, foreign customs, interaction with local people, and the nature of overseas work will all affect the adaptability of foreign workers in overseas. Black and Gregersen (1991) proposed that overseas adaptation is an adaptation process for individuals to live or work in other country cultures outside their original countries. This shows the individual's psychological adaptability in the process and the cultural adaptability of the landlord country.

Parker and McEvoy (1993) found that the factors that affect job adaptation are salary

and job promotion opportunities. At the same time, women's adaptation to work are better than men. Regarding the adjustment of general life, adaptability is related to the individual's international work experience and stay duration in the host country. In addition, if foreign workers are too dependent on their home country's culture and living, their attachment will affect their ability to accept foreign cultures, and thus affect their life adaptation. Chen, Tjosvold and Fang (2005) stated that if employers and employees have different cultural backgrounds, once they encounter conflicts, it is often difficult for them to achieve effective communication. Lindert et al., (2009) indicated that in addition to the original physical and mental conditions of foreign workers, some of the illnesses of foreign workers may be caused by differentiation in labor, work patterns, language and culture of employers. Cultural differences cause adaptation pressure, low self-esteem, lack of effective social support, inability to choose and control the place of residence, low religious beliefs and high education levels are positively correlated with high anxiety (Hovey and Magaña, 2002).

In addition to cultural shock, foreign workers will also face family bondage from their home country, loneliness, lack of material and spiritual help, language communication skills, wages, and legal issues. Pheng, Ying and Shan (2008) pointed out that few people really understand the pressure, loneliness and homesickness that foreign workers face when working in a foreign country. When they work in a foreign country, their families in their home country are also ignored. Making money to support the family is the number one reason why workers go abroad to work. However, many of them are not happy working abroad because of homesickness, loneliness, long working hours, overtime, and lack of understanding, sympathy and appreciation from local people. Feldman and Brett (1983) and Pinder and Schroeder (1987) both applied the concept of stress management and indicated that social support can effectively reduce the uncertainty of expatriates in the new environment and reduce their difficulties in adapting overseas.

While foreign workers are working in Taiwan, supports from the society, including support from colleagues, support from direct officials, support from relatives and friends, support from family members..., etc. are very important. These resources help foreign workers while working in Taiwan, provide material and spiritual assistance, and abundant social support, which can help foreign workers improve their adaptation overseas (Black, Mendenhall and Oddou, 1991). French and Lam (1988) thought that five factors, including salary, length of stay, the number of relatives who live in the host country, private space, and the employer's nationality, are the most important factors affecting the job satisfaction of foreign workers. Salaries in host country higher than these of home country allow foreign workers to tolerate temporary jobs with low social status.

A study by Guldenmund, Cleal and Mearns (2013) found that language communication barriers are a hidden concern for the safety of foreign workers, and they can also cause poor adaptability of foreign workers. Manzoni et al. (2008) and Pheng, Ying and Shan (2008) suggested that labor decision-making units and labor agency companies should pay more attention to providing mental preparation and pre-employment education courses for foreign laborers. Assisting in psychological adjustment, providing pressure relief channels and complaint-appealing service mechanisms are all helpful to mediate the adaptability of foreign workers.

3. Research Process and Research Methods

3.1 Research process

First of all, the process of this research is to define the research direction and problems. Furthermore, according to the actual development situation of the current industries, the study collects relevant documents and arranges the overall research structure and possible-hierarchical dimensions. The result of the article analysis is used as the initial hierarchical analysis structure of the first stage of the Modified Delphi Method, MAM. After the establishment of the hierarchical analysis structure, the questionnaire of the hierarchical analysis method and communication with industry professionals will be established, and conduct questionnaire surveys. After collating the questionnaire data of experts, the data is processed by the fuzzy analytic hierarchy process, FAHP. The calculation process must pass the consistency test, and then obtain the weight value of the analysis facet criterion at each level.

The explanation of main study procedure is as follow:

Step 1. Defining study subject, question description and study purpose.

Step 2. Collecting and arranging related articles.

Step 3. Using Modified Delphi Approach separates hierarchy process structure to become assessment criteria and sub-criteria.

Step 4. Using analytic hierarchy process structure to develop professional questionnaire.

Step 5. Using FAHP to proceed analysis and gains the weight and arrangement of criterion and sub-criterion.

Step 6. Having empirical analysis and conclusion.

3.2 Modified Delphi Method

The Delphi method has been widely used by academic researchers in the fields of education, business, politics and international environment, art and social sciences. The Delphi method uses descriptive statistics to construct the consensus of experts. After many times of counter-consulting the opinions and thoughts of experts, researchers are able to gradually obtain expert consensus and can predict the results for decision-making.

Couper (1984) thought that there are three important factors to complete the Delphi method: sufficient time, capable participants, willingness to attend, and the compilation of inductive questionnaires. The research process of the Delphi method is to determine the main themes, select the experts to participate, handle the first, second and third rounds of questionnaires, and analyze the final results. Murry and Hammons (1995) considered that collective discussions executed by experts in the condition of face-to-face discussions are more likely to be interfered by many factors, such as group polarization, group think, bandwagon effect...etc., which causes collective decision-making unable to achieve the original effect. Therefore, the Delphi method should be a research method in which anonymous experts make collective decisions.

Murry and Hammons (1995) improved the traditional Delphi method and proposed a operation method of modified Delphi method. Its concrete implementation method is almost the same as the traditional method, but the difference is that Murry and Hammons (1995) omitted the complicated process of the questionnaire survey in the first round. Through the research results of relevant references, the items collected by the researchers or the conclusions of the previous expert interviews are directly

developed into a structured questionnaire. The modified Delphi method can enable the participated experts in the research to focus on the research topic, thereby eliminate the unnecessary speculation stage generated in the first round of the investigation process, and effectively increase the recovery percentage of the questionnaire. In addition, the experts involved in the research process should have independent and objective judgment, without being affected by others, to ensure that the research results are accurate.

This research topic belongs to a new and complex research field and it itself provides the information that is highly uncertain, and requires many experts to provide useful opinions. However, the collective meeting method requires a lot of cost and time. In order to enable the expert group to achieve effective interaction; therefore, this study adopts the modified Delphi method to establish a hierarchical analysis structure.

3.3 Fuzzy Analytic Hierarchy Process

The study uses Modified Delphi Method and Fuzzy Analytic Hierarchy Process, FAHP as the main research methods. First, establish a hierarchical analysis structure, and then obtain data through expert questionnaires. Then use the data to calculate the weight scores of each evaluation dimension criterion and sub-criterion. However, this research first describes the Analytic Hierarchy Process, AHP and hierarchical elements. In short, it uses hierarchies to analyze problems or systems as stands at the highest level to look at the mutual influence of different levels, rather than directly analyze elements from each level. And, AHP uses the eigenvector method to obtain the weight between the elements. Therefore, when establishing the hierarchical structure of the system, there are two issues that need to be solved: how to construct the relationship between the levels, and how to evaluate the degree of influence of the elements at each level.

Zadeh (1965) introduced fuzzy set theory to solve problems involving the absence of sharply defined criteria. Van Laarhoven and Pedrycz (1983) proposed Fuzzy Analytic Hierarchy Process, FAHP. They use the concept of fuzzy to solve the subjective, imprecision, and vagueness and other issues of the values in the pairwise comparison matrix of the traditional Analytic Hierarchy Process, AHP. And use the Triangular Fuzzy Number, TFN to measure the fuzziness. Fuzzy number is a fuzzy subset in real number space, which has normality and convexity.

Buckley (1985) indicated that using geometric mean to integrate expert opinions can increase the consistency and accuracy of factor judgments. Therefore, in this study, the geometric mean of all respondents' evaluations is used as the middle value of the Triangular Fuzzy Number, TFN; using the largest value and the smallest value of all respondents' assessments, respectively, is to be as the upper bound and lower bound of the Triangular Fuzzy Number, TFN. This study uses the Lambda-Max method proposed by Csutora and Buckley (2001) to calculate fuzzy weights.

4. Empirical analysis results

4.1 Using Modified Delphi Method to establish Hierarchical Analysis Structure

The study is based on the method proposed by Murry and Hammons (1995), and uses Modified Delphi Method to establish a hierarchical analysis structure. The questionnaire survey objects are mainly composed of experts from industry and academia. In order to ensure the completeness, relevance, and practicality of the questionnaire, the number of questionnaires issued toward the professional field of the

survey objects should be as even as possible. The experts totally 23 persons in this study are divided into 8 supervisors of Vietnamese labor agency companies, 8 enterprise owners who hire Vietnamese foreign workers, and 7 academic researchers. The hierarchical analysis structure obtained is shown in Table 2. The study explores the adaptability of Vietnamese migrant workers in Taiwan as the research theme, and sorts out five main influenced criteria: A. Personal background, B. Occupational status, C. Physical and mental health, D. Society and culture, and E. Interpersonal relationship. Each aspect contains 4-5 evaluation criteria (Sub-criteria).

Table 2. Hierarchical Analysis Structure

Level I Subject	Level II Criteria	Level III Sub-criteria
The adaptability of Vietnamese migrant workers in Taiwan	A. Personal credential	A1. Family status
		A2. Language
		A3. Religion and belief
		A4. Education Degree
		A5. Employment channels
	B. Occupational status	B1. Work ability and skills
		B2. Vocational training
		B3. Work experience in Taiwan
		B4. Salary and wage
		B5. Industry
	C. Physical and mental health	C1. Physical health status
		C2. Unaccustomed to environment
		C3. Mental status and stress
		C4. Fatigue situation
		C5. Lifestyle
D. Society and Culture	D1. Leisure and cultural adaptability	
	D2. Sexual life adjustment	
	D3. Government regulations and policies	
	D4. Living Environment	
E. Interpersonal relationship	E1. Status of family of orientation	
	E2. Make friends in Taiwan	
	E3. Interaction with direct supervisor	
	E4. Relationship with colleagues	
	E5. Marriage and relationship status	

Source: Modified Delphi Method of this research

4.2 Empirical Analysis of FAHP

The acquired objects of the questionnaires for this study are directors of Vietnamese manpower agencies, enterprise owners who employ Vietnamese laborers and academic researchers. A total of 25 expert questionnaires were issued and 23 valid questionnaires were retrieved. The effective questionnaire recovery rate is 92%. Each interviewed expert used the pairwise comparison method to fill out the questionnaire. Then, the expert questionnaires were compiled through advance integration, and then analyzed with the FAHP program written by the Matlab 2016 software.

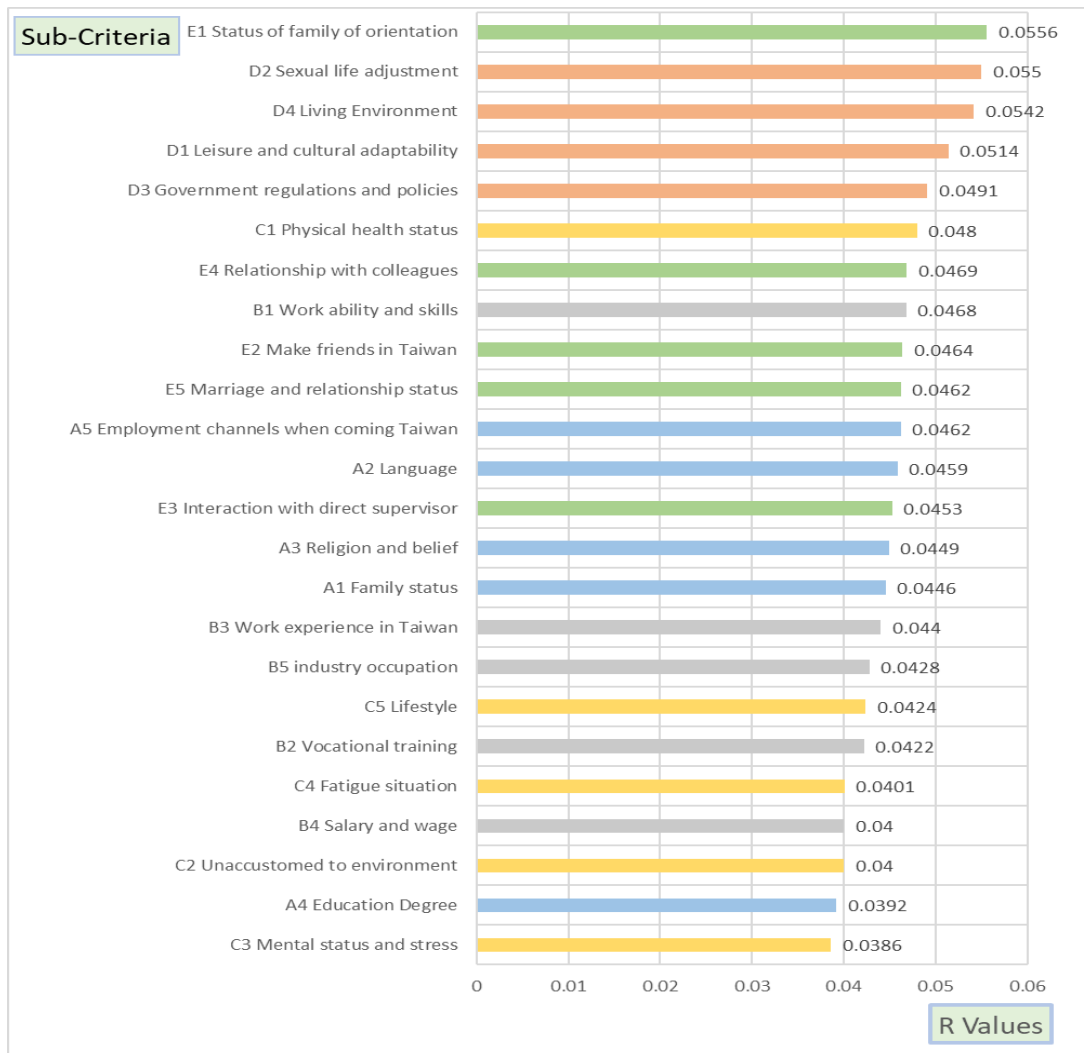
Through the FAHP analysis of the expert questionnaire completed by the interviewees on the "Research on the Adaptability of Vietnamese Migrant Workers in Taiwan", the weights and rankings of the criteria for each factor are shown in Table 3. From the

defuzzified numerical ranking in Figure 1. which can be seen, the top five variables that each condition needs to be considered and the adaptability of Vietnamese migrant workers in Taiwan's life are "E1 Status of family of orientation " (R=0.0556), "D2 Sexual life adjustment" (R=0.0550), "D4 Living environment" (R=0.0542), "D1 Leisure and cultural adaptability" (R=0.0514) and "D3 government regulations and policies" (R=0.0491). Relatively speaking, the less important evaluation indicators are "C4 Fatigue situation" (R=0.0401), "B4 Salary and Wage" (R=0.0400), "C2 Unaccustomed to environment " (R=0.0400), "A4 Education degree" (R=0.0392) and "C3 Mental Status and Stress" (R=0.0386).

Table 3. Final Fuzzy Weights and Defuzzier Values

Rank	Sub-Criteria	Final Fuzzy Weights	Defuzzier(R) Values
1	E1 Status of family of orientation	(0.0256,0.0596,0.0717)	0.0556
2	D2 Sexual life adjustment	(0.0405,0.0561,0.0656)	0.0550
3	D4 Living Environment	(0.0413,0.0563,0.0627)	0.0542
4	D1 Leisure and cultural adaptability	(0.0385,0.0533,0.0601)	0.0514
5	D3 Government regulations and policies	(0.0368,0.0477,0.0601)	0.0491
6	C1 Physical health status	(0.0329,0.0444,0.0622)	0.0480
7	E4 Relationship with colleagues	(0.0245,0.0304,0.0717)	0.0469
8	B1 Work ability and skills	(0.0318,0.0449,0.0597)	0.0468
9	E2 Make friends in Taiwan	(0.0238,0.0372,0.0676)	0.0464
10	E5 Marriage and relationship status	(0.0230,0.0369,0.0676)	0.0462
11	A5 Employment channels	(0.0270,0.0523,0.0544)	0.0462
12	A2 Language	(0.0272,0.0529,0.0529)	0.0459
13	E3 Interaction with direct supervisor	(0.0245,0.0400,0.0632)	0.0453
14	A3 Religion and belief	(0.0277,0.0483,0.0544)	0.0449
15	A1 Family status	(0.0253,0.0488,0.0544)	0.0446
16	B3 Work experience in Taiwan	(0.0287,0.0380,0.0597)	0.0440
17	B5 industry occupation	(0.0296,0.0357,0.0580)	0.0428
18	C5 Lifestyle	(0.0269,0.0327,0.0603)	0.0424
19	B2 Vocational training	(0.0296,0.0336,0.0580)	0.0422
20	C4 Fatigue situation	(0.0269,0.0269,0.0584)	0.0401
21	B4 Salary and wage	(0.0287,0.0322,0.0545)	0.0400
22	C2 Unaccustomed to environment	(0.0261,0.0272,0.0584)	0.0400
23	A4 Education Degree	(0.0261,0.0364,0.0512)	0.0392
24	C3 Mental status and stress	(0.0261,0.0282,0.0549)	0.0386

Data Source: This Research



Data Source: This Research

Figure 1. Defuzzification values of the various criterion dimensions

Considering the life adaptability of Vietnamese migrant workers in Taiwan, empirical data analysis shows that the E1 Status of family of orientation in E. Interpersonal relationship in the second-level factor dimension, has the highest weighting score. Considering the actual situation of Vietnamese migrant workers, their status of family of orientation has a great influence on workers in Taiwan. Many Vietnamese migrant workers work in Taiwan alone, and most of their relatives and family members stay in Vietnam. Even if there are a few relatives in Taiwan, most of them are still busy and have no time to take care each other. If their family members have special situations happened such as relative illness and hospitalization or a wife or children accident in their hometown, Vietnam, they cannot handle the cases personally. Also, Vietnamese migrant workers have encountered financial problems in their native families.

In many families, economic factors such as living expenses, hospital fees, children's tuitions, or loans have caused their families to raise economic needs or financial problems from oversea. More, there were also cases while Vietnamese migrant workers were working in Taiwan, their spouses or boyfriends or girlfriends who stayed in Vietnam had affection change, or the relationship couldn't be sustained due to

separation, or they had an affair and perchance faithless. These conditions will seriously affect their mood and stability when working in Taiwan. Many Vietnamese migrant workers feel frustrated, annoyed, and angry because of difficulties at hometown, which will further affect their work performance, and even some migrant workers violate the residency regulations because of accidents.

Part of the reason for the above phenomenon is also similar to that of the second-level factor, D2. Sexual life adjustment in D. Social and Cultural, which has the second highest weighted score in the facet criterion. Most Vietnamese migrant workers working in Taiwan are not accompanied by a spouse or close friend. "the desire for food an sex " is part of human nature. Facing heavy workloads but lack of consolation, Vietnamese migrant workers only in food and diet can enjoy various kinds of Vietnamese food in Taiwan Vietnamese restaurants to relieve yearning sensation or lovesickness.

However, the adjustment of sexual life is unable to satisfy the most basic needs of mankind. The issue of eroticism is a taboo topic with prejudice in Eastern countries and cultures, which often makes it impossible for migrant workers and their employers to deal with it positively. Many Vietnamese migrant workers are married or have intimate friends in Vietnam. The way they solve their sexual adjustments in Taiwan may also make them feel the much guilty in their hearts. The way they solve physical needs may not only involve illegal activities in Taiwan, but it also creates ethical and moral crises. This is actually a very difficult issue to deal with. If the government and employers fail to face this problem squarely, other social problems in Taiwan will inevitably arise. For example, how Vietnamese migrant workers should take care of their non-married children during their stay in Taiwan or how they deal with nationality issues.

In terms of the D4 living environment, the main task of Vietnamese migrant workers who come to work in Taiwan is originally to fill the vacancy caused by the lack of labor in Taiwan's industry. They are also favored by the industry because of their lower personnel costs than Taiwanese workers'. What's more, many Taiwanese owners and intermediaries who hire Vietnamese migrant workers, in order to reduce costs, arrange Vietnamese migrant workers in residential places which seriously do not comply with labor laws and fire protection laws. Many migrant workers are arranged to live in factory container houses or tin huts, unventilated basements, storage rooms filled with goods, illegal attic compartments of factories, or next to disgusting facilities.

In addition, some dormitories for migrant workers are overcrowded, with many people crowded in the same room, severely inadequate sanitary facilities, and insufficient clean drinking water for usage. Disputes for electricity usage and electricity bill calculations are also heard from time to time. Some owners limit the number of kilowatt-hours per person per month. If electricity excess usage, the power cut will be handled. Another situation is that the dormitory is far away from the workplace and transportation is very inconvenient, which only increases fatigue and commuting risks caused by a long journey. These poor living conditions have really affected the adaptability of Vietnamese migrant workers in Taiwan.

The fourth place in the ranking analysis is D1. Leisure and cultural adaptability. The impact on the work performance of Vietnamese migrant workers is also very obvious. Vietnamese migrant workers work 8-10 hours a day in Taiwan on average. In the rest

of the time, in addition to sleep and daily preparation activities, leisure activities are also very important during normal or holidays. If workers can't get enough rest or have good leisure activities, how they can face the heavy workload and pressure daily. Vietnamese migrant workers need to have normal and healthy leisure activities in Taiwan, such as playing football, playing badminton or organizing singing competitions and other social activities, as well as learning Chinese, cooking Vietnamese cuisine, and traveling in Taiwan.

In addition, Vietnamese migrant workers will also encounter cultural adaptability issues while working in Taiwan. As far as religious belief is concerned, migrant workers ask for help from religious beliefs such as Buddhism, Taoism, Christianity and Catholicism. Many people choose to engage in religious activities on holidays in order to seek spiritual comfort. In addition to the issues discussed above, Vietnamese migrant workers often encounter the problem of cultural incompatibility, that is, some Taiwanese like to have physical contact with their friends, such as patting their heads, shoulders, or hooking their shoulders and arms. These actions can easily make Vietnamese migrant workers feel violated. When Vietnamese people folded their arms on their chests, they show respect for the officials and elders. Many Vietnamese migrant workers are accustomed to sitting on the ground in their hometowns, while Taiwanese think these behaviors are impolite. Furthermore, many Vietnamese migrant workers feel that eating out and then packing food home is shameless. These are also fundamentally different from Taiwanese culture. All these show the issues of international cross-cultural management that Taiwanese employers or human resource companies have to pay attention to when hiring Vietnamese workers.

In terms of "D3. Government Regulations and Policies", for Vietnamese migrant workers, although Taiwan's basic salary still has room for growth annually. However, there was requirement for migrant workers to depart one day for reapplying for another three-year contract. This situation to be a burden for Vietnamese migrant workers has caused intermediary costs, and it has also increased the opportunities for wrong doers to exploit them. The current law regulates that the contract is renewed once every three years, and the contract can be renewed for 12 consecutive years and laborers are not required to leave the country. Some migrant workers with special skills have become rare talents for Taiwanese manufacturers for a long time and they will also have the opportunity to obtain permanent residency in Taiwan by obtaining licenses. Some young people who are motivated and willing to study have the opportunity to study in Taiwan and obtain a university degree. However, there are also disadvantages in current government regulations and policies. Vietnamese migrant workers in Taiwan are the same as other foreign workers. They must stay in Taiwan for 183 days each year, and their income tax will be refunded. This method is mainly to encourage long-term work, which is not conducive to short-term work.

In addition, Vietnamese migrant workers in Taiwan are different from other Southeast Asian workers. Laws and regulations in Taiwan restrict the amount of agency fees paid by workers in other Southeast Asian countries, but there are no regulations on Vietnamese migrant workers. Some Vietnamese migrant workers feel that they are not protected enough, which increases the chance of being exploited by intermediaries. There are even people under the control of illegal human trafficking groups. Also, perhaps focusing on the island's traffic control and environmental protection policies, regulations in Taiwan allow Vietnamese migrant workers to obtain driver licenses, but

do not allow them to legally purchase cars and motorcycles. However, many working locations in which migrant workers are working are relatively more inconvenient areas for transportation. The condition causes the dilemma that migrant workers on duty can drive vehicles, but cannot drive cars or motorcycles on when commuting to and from work. They can only rely on walking, using simple transportation or taking public transportation.

In addition, the results of the questionnaire also showed other data performance worthy of discussion and analysis: C4. Fatigue situation ($R=0.0401$), B4. Salary ($R=0.0400$), C2. Unaccustomed to environment ($R=0.0400$), A4. Education Degree ($R=0.0392$) and C3. Mental status and stress ($R=0.0386$) are the five dimensions with the lowest weight among the total of 24 items. Among them, 3 items are all items in C. Factors of physical and mental health. Analyzing these five low-weight dimension criteria, it is not difficult for us to find that the current Vietnamese migrant workers in Taiwan may be more and more protected by laws and policies, and their work fatigue situation is not obvious. Moreover, most of the workers who come to Taiwan are young and strong, and their work fatigue situation is not serious among migrant workers, and they are less likely to be unaccustomed to environment.

Although the salary situation is not high, it is protected by law after all. If the migrant workers are engaged in labor-intensive work, the salary level will not change much and will not be far from the expected income. Furthermore, Vietnamese migrant workers who come to Taiwan are generally not well educated. This variable will not affect their adaptability to life in Taiwan, but some migrant workers who require professional skills or academic experience needs to be further clarified. Finally, it is worth mentioning that Vietnamese migrant workers are generally optimistic and possess the national character of contentment, hardworking and thrifty, patience and affection. As long as they have not suffered too much setback, or the family and themselves have suffered unbearable changes. Generally speaking, situations like C3. Mental and stressful conditions are less likely to occur for Vietnamese migrant workers.

5. Conclusions and Recommendations

This research takes the adaptability of Vietnamese migrant workers to live in Taiwan as the research theme, and analyzes the factors that need to be considered in the individual conditions of Vietnamese migrant workers and the external environment. Use Modified Delphi Method to establish various indicators of hierarchical analysis structure. And use Fuzzy Analytic Hierarchy Process, FAHP to understand the relationship between factor facet and facet criterion toward weight. Hierarchical analysis structure is divided into five factor aspects, and totally has 24 aspects criteria. The questionnaires for this study are obtained from executives of multinational labor agency companies, enterprise owners and academic researchers who hire Vietnamese foreign workers.

Empirical data analysis results show that the numerical ranking after defuzzification shows that the top five variables that need to be considered and the adaptability of Vietnamese migrant workers in Taiwan's life are "E1 Status of family of orientation" and "D2 sex life adjustment". ", "D4 Living Environment", "D1 Leisure and Cultural Adaptability" and "D3 Government Regulations and Policies". Relatively speaking, the less important evaluation indicators are "C4 Fatigue Situation", "B4 Salary and Wage", "C2 Unaccustomed to environment ", "A4 Education Degree" and "C3 Mental Status and Stress". In sum, the factor dimensions "D. Society and Culture" and "E.

Interpersonal Relations" under the dimension criteria, the weighted scores are significantly higher.

The empirical analysis results are consistent with the general perception of the industry, and can be used as an important reference basis for the government to formulate laws and policies, and private enterprises and institutions in the future. Enterprises or human resources companies that employ Vietnamese migrant workers should strengthen the selection and pre-employment training of migrant workers before entering Taiwan. Filter their background and personality traits to reduce interference from their original family. Enterprises or human resources companies should properly plan the living environment, try to give guidance and arrange their leisure and cultural activities in Taiwan. Taiwan's central and local governments should revise the new laws and adjust policy orientations in a timely manner to protect the common rights and interests of employers, human resources companies and Vietnamese migrant workers, in order to avoid human rights disputes and work exploitation.

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