

Manpower or Relationships : An Empirical Study on Early Childhood Teachers' Job Seeking

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Abstract: Chinese society values relationships; thus, this study attempts to discover if relationships are effective during job seeking. Due to a lower birth rate, many kindergartens in Taiwan have encountered difficulties in operation. This study investigates the following question: When recruiting teachers, will kindergartens focus on selecting candidates with higher education and professional certificates, in order to increase competitiveness, or will kindergartens focus on selecting candidates who have a relationship with the school? This study collected 1058 valid samples of teachers in 23 counties and cities in Taiwan, using stratified cluster random sampling. Results of statistical analysis showed that teachers with higher education, teaching experience, and professional certificates tend to acquire teaching positions with higher salaries. Moreover, educational factors significantly influence opportunities to acquire jobs in public early childhood education institutions, indicating that human capital is a priority. However, teaching positions secured using relationships tend to be in private institutions with lower salaries. Nowadays, in Taiwan, people need to invest in human capital in order to acquire ideal teaching positions in early childhood education, and not rely on relationships. The findings can serve as a reference for other countries influenced by Chinese culture.

Key-Words: early childhood teachers, occupation acquisition, human capital, favor relationship

1 Introduction

Traditional Chinese society is a “relationship-based” society [1]. Most people treat others according to favor rules [2]. If someone neglects a relationship, he will be criticized for his lack of “favor”. Therefore, relationships can make things proceed more smoothly. Past studies on Chinese culture have indicated that when people make decisions, “favor” is the main factor [3]. When distributing resources, people tend to provide more resources to those who are related to them. For those without relationships, resources will be distributed fairly. Such behavior is common in traditional Chinese society, and still exists today even though society has been westernized [4].

Chinese societies include China, Singapore, Hong Kong, Macao and Taiwan, among others. This study investigates if relationships in

Chinese society influence the outcome of job seeking. Regarding China and Singapore, Bian and Ang found that since Chinese society values relationships, when job seekers and helpers (e.g., introducers) have a close connection, the job seekers are more likely to be successful [5]. However, due to lower birth rate in Taiwan, many kindergartens have encountered severe competition and operational crises. In order to guarantee educational quality and enhance competitiveness, “high-quality teachers” are in demand at modern kindergartens. When recruiting teachers, kindergartens tend to hire job seekers with a higher educational level, more teaching experience, and more professional certificates (high-quality manpower). However, when considering relationships in Chinese society, job seekers' human capital may be neglected. Job seekers with relationships are more likely to

be hired than those without. The main purpose of this study is to determine if manpower or relationships are the priority in early childhood education institutions in Taiwan. The findings are also compared with past studies to serve as a reference for other countries influenced by Chinese culture.

Currently, the early childhood education job market in Taiwan is divided into two opposing extremes: one is kindergartens with good benefits and salaries, which are the first choices of most job seekers, and the competitions for jobs in public kindergartens that offer the best salary and welfare, as well as most guaranteed jobs, are very fierce; on the other end, private kindergartens with incomplete systems and low salaries have a high turnover rate, thus, these kindergartens need to frequently recruit teachers, yet their positions seldom attract job seekers [6]. Therefore job seekers in the early childhood education field are concerned more about acquiring an ideal teaching position, instead of just having any position. This study focuses on the acquisition of ideal teaching positions. Since the ratio of public/private early childhood teachers in Taiwan is 3:7, and there are few positions in public kindergartens, most job seekers turn to private kindergartens. Moreover, as benefits and salaries in private kindergartens vary significantly, private kindergartens providing a high salary become another ideal teaching position. Based on the above, this study probes into two dimensions of the ideal teaching position: 1) guarantee of jobs: public kindergartens providing ideal teaching positions; 2) salary level: high-salary teaching positions being the ideal ones. High-salary teaching positions in private kindergartens are particularly worthy of further discussion (when compared with public kindergartens, private kindergartens provide more job opportunities). Thus, this study aimed to apply empirical data analysis to find out whether the acquisition of ideal teaching positions is influenced by human capital or relationships.

2. Literature Review

The two focuses of this study, human capital and relationships, are based upon human

capital and social capital theories. The theory of human capital reflects function and general principles of a merit society. In other words, a realistic society provides returns according to individual abilities. Employees' quality represents human capital. Employees with higher quality have more abilities and production efficiency. Employers will hire job seekers with higher quality and pay salary according to employees' abilities and productivity. Therefore, job seekers with higher human capital will acquire a higher salary, and will often be successful in obtaining jobs [7][8] [9]. Many studies have suggested that educational achievement, job experience and professional certificates can be used to reflect an individual's level of human capital [10][11]. In other words, people with a higher educational level, more job experience, and more professional certificates have higher human capital and more significant professional abilities. Therefore, they can stand out in the midst of severe job-seeking competition. After interviewing HR supervisors in 34 companies in Taiwan, Liu and Lee found that education and job experience are the key considerations of employers [12]. When employers stress job seekers' abilities and productivity, they consider past job experience and performance. When employers are uncertain about job seekers' abilities, they rely on educational level as a criterion. The findings of some empirical studies demonstrate that an increase of education and job experience will enhance an individual's income level, and result in successful job seeking [13]. There is little research on professional certificates. This study aims to analyze the influence of professional certificates on job acquisition.

In some social circles, cultural factors can have more significance than general principles. For instance, when relationships are involved, employers may consider more aspects than just human capital. Lin's social capital theory suggests that network of interpersonal relationships involves resources which could help individuals accomplish their goals. Through the use of interpersonal networks, job seekers can enhance their success in job seeking

or increase occupational achievements [14] [15]. Chinese society is a “relationship” based society. In a study on the city of Tianjin in China, Bian found that 45% of employees acquired their first jobs with the assistance of others [16]. Hwang’s study on Taiwan showed a significant influence of relationships on occupation acquisition [17]. Moreover, relationships with higher positions can make introductions more effective. Granovetter divided interpersonal networks into strong and weak ties. Strong ties mean more interaction, affection and intimacy. Friends have strong ties and general acquaintances have weak ties [18] [19]. According to Granovetter, subjects with strong ties usually have similar backgrounds and other dimensions. On the other hand, subjects with weak ties can obtain broader job-seeking information and succeed in their job seeking using helpful introductions. However, the research of Bian and Ang [20] on China and Singapore found that in Chinese society, strong ties are more effective. Since job seekers have close relationships with the people helping them, those people will be more willing to help. Thus, job seekers with relationships tend to be successful. However, with weak ties, intermediaries would not necessarily help the job seekers.

In sum, employers value job seekers’ human capital; however, introductions through relationships is also critical. This study aims to probe into the combined effect of both human capital and favor by data analysis.

3 Research Method

3-1. Research hypotheses

According to the above literature review, the hypotheses of human capital are proposed as follows:

H-1: Job seekers with higher human capital such as educational level, experience and certificates, are more likely to acquire ideal teaching positions.

Job seekers with relationships are more likely to be successful. Moreover, introductions from higher positions can make the introduction more effective. A stronger tie between

intermediaries and job seekers indicates more help.

H-2: With help from relationships, job seekers are more likely to acquire teaching positions.

H-3: When the intermediaries are in higher positions and have stronger ties, the job seekers are more likely to acquire ideal teaching positions.

Finally, this study aims to find out whether human capital or relationships are more influential. According to Chinese culture, relationships are significantly influential. Therefore, the hypothesis is as follows:

H-4: The effect of relationships on acquiring ideal teaching positions will be better than that of human capital.

3-2. Subjects and sampling

The subjects of this study were public and private kindergarten teachers in Taiwan. According to official statistics, there are a total of 3,297 kindergartens and 18,900 early childhood teachers in Taiwan, including 1,321 public kindergartens with 6,324 teachers and 1,976 private kindergartens with 12,713 teachers [21]. Sampling was conducted on 8% of the total population, with 1,500 subjects extracted. In order to enhance the representativeness of the samples, this study adopted stratified cluster random sampling. The geographic area was divided into four regions (northern, central, southern, and eastern regions), and the number of public/private early childhood teachers was sampled from each region pro rata. There were a total of eight categories: public kindergartens in northern Taiwan, private kindergartens in northern Taiwan, public kindergartens in central Taiwan, private kindergartens in central Taiwan, public kindergartens in southern Taiwan, private kindergartens in southern Taiwan, public kindergartens in eastern Taiwan and private kindergartens in eastern Taiwan. The ratios were 15%, 25%, 6%, 17%, 10%, 24%, 2% and 1%, respectively. Thus, the number of subjects sampled were 225, 375, 90, 255, 150, 360, 30 and 15, respectively. A total of 1500 questionnaires were distributed, and 1083 were returned, with a return rate of 72.2%. After eliminating invalid samples, there were 1041 valid samples.

3-3. Research tools and variable measurement

The research tool was the "Questionnaire of kindergarten teachers' job acquisition" designed by the researcher. The human capital items included aspects of education, job experience and professional certificates [22] [23]. Regarding relationship factors, this study referred to Lin's [24] concept of social capital. Nine experts were invited to review the survey, including three professors of early childhood, three professors of statistics, and three current kindergartens teachers. After the pretest, the questionnaire was revised. A statistical test showed that the reliability and validity were acceptable. Reliability α was .91 and construct validity was .69~. 90. The measurement of different variables is shown below:

(1) Predictor variable

a. Education: The measurement was based on teachers' educational level when seeking jobs. Most research uses educational years as the criterion; however, some scholars have suggested that due to the recent rapid expansion of universities in Taiwan, the quality of graduates can vary widely [25] [26]. Thus, it is insufficient to show human capital simply by educational years. Public schools are seen by the job market as better than private schools, and a major in early childhood education is preferable to other majors. Therefore, this study measured education using two approaches: 1) **personal educational years** 2) **graduated schools and departments** (early childhood departments of public schools, non-early childhood departments of public schools, early childhood departments of private schools and non-early childhood departments of private schools). These were used as dummy variables in regression analysis, with the early childhood departments of public schools as the control group.

b. Teaching experience: The measurement was based on years of subjects' teaching experience in kindergartens when seeking jobs.

c. Professional certificates: The measurement was based on the number of teachers' professional certificates when seeking jobs.

d. Social capital(effect of introducers): This study divided introducers into five categories: 1) **without introducers:** acquisition of teaching positions without assistance; 2) **introducers with a high position and strong ties:** intermediaries with a high position [27], who have a close relationship with the teachers; 3) **introducers with a lower position and strong ties:** intermediaries with a lower position who have a close relationship with teachers; 4) **introducers with a high position and weak ties:** intermediaries with a high position who do not have a close relationship with the teachers; 5) **introducers with a lower position and weak ties:** intermediaries with a lower position who do not have a close relationship with the teachers. For regression analysis, the first category was the reference group.

(2) Criterion variable

a. Public/private kindergartens: Public kindergartens are marked as 1 and private kindergartens are marked as 0.

b. Salary: Measurement is based on monthly salary, when teachers have just begun working in the kindergartens. There are 12 levels. A higher level indicates a higher salary.

(3) Control variables

a. Years of father education: Since the father's education will influence children's occupational positions [28], it is treated as a control variable.

b. Cultural capital: Cultural capital theory suggests that those who acquire high positions do not have strong professional abilities, but those with high-class cultural tastes, namely those with high cultural capital, tend to leave a good impression on employers [29] [30]. Therefore, this study includes job seekers' cultural capital in the control variable. According to the factor analysis result (see Table 1), there are two variables: **cultural resources** and **formal cultural capital**. Measurement of the variables is based on total scores of the items.

3-4. Data Analysis

Data analysis was conducted using SPSS, and the statistical methods included F test of mean, chi-square test of percentage cross analysis,

logistic regression analysis and OLS regression analysis.

Items of questionnaire	Factor 1 Formal cultural capital	Factor 2 Cultural resources	Communalities
I often visit or participate in artistic performances and cultural activities.	.91		.80
I often go to symphonic or musical performances.	.88		.78
I often go to exhibitions of books and paintings, or museums.	.87		.79
My friends think that I dress elegantly.		.85	.76
My friends think that I have cultured manners.		.84	.71
People tell me that I look like a kindergarten teacher.		.76	.55
Eigen value λ	3.17	1.21	
Percentage of variance	52.87	20.21	
Cumulative percentage	52.87	73.08	

Table 1 Matrix of the cultural capital factor analysis model

Note: Factors of with eigenvalue λ over 1 are extracted by principal components, and oblique rotation is conducted using oblimin. Two factors are obtained, and can explain 73.08% of the total variance.

4 Research Results

4-1. Acquisition of public teaching positions, early salary of current job and correlation analysis of pair variables

The percentage cross-analytical result of public/private kindergartens shown in Table 2 demonstrated that educational level, schools and departments attended, experience, certificates and the chi-square test gap of intermediary effects all reached a significant level. The figures showed that more teachers with higher educational levels teach in public kindergartens, with the number of teachers graduating from early childhood departments of public schools being significantly more than those graduating from other schools or departments. There are significantly more teachers with experience teaching in public kindergartens, as well as teachers who have professional certificates. More teachers enter public kindergartens without intermediary

Dependent variables Independent variables		Public/private kindergartens			Teachers' salary in current position		
		Public Kindergartens (%)	Private Kindergartens (%)	χ^2 (Cramer's V)	Mean (Standard deviation)	Number of samples (people)	F value (Eta)
Educational level	1.Senior high school and vocational school	4.5	95.5	95.285* (.30)	2.91(1.19)	221	125.34* (.45)
	2.College	33.1	66.9		4.09(2.07)	260	
	3.Above university	40.3	59.7		5.25(2.02)	549	
Graduated schools and departments	1.Early childhood department of public schools	62.5	37.5	290.27* (.53)	5.42(2.45)	373	46.48* (.35)
	2.Non-early childhood department of public schools	31.3	68.7		4.14(2.50)	99	
	3.private early childhood department of private schools	7.3	92.7		3.76(1.34)	354	
	4.Non-early childhood department of private schools	14.3	85.7		4.08(1.63)	196	
Teaching experience	1.Without job experience in early childhood institutions	25.1	74.9	5.21* (.07)	3.82(2.01)	303	37.03* (.19)
	2.With job experience in early childhood institutions	32.2	67.8		4.68(2.06)	732	
Professional certificates	1.Without professional certificates	10.0	90.0	115.32* (.34)	3.35(1.42)	360	178.39* (.39)
	2.With professional certificates	42.6	57.4		5.06(2.17)	655	
Effect of introducers	1.Without introducers	44.3	55.7	81.82* (.29)	5.11(2.09)	474	24.84* (.31)
	2.Introducers with high position and strong ties	12.5	87.5		3.70(2.04)	136	
	3.Introducers with low position and strong ties	9.8	90.2		3.86(1.84)	61	
	4.Introducers with high position and weak ties	24.2	75.8		4.02(1.99)	178	
	5.Introducers with low position and weak ties	22.1	77.9		3.65(1.86)	122	

assistance than those who use relationships. However, more teachers in private kindergartens are assisted by intermediaries. The least number of teachers enter public kindergartens using the assistance of intermediaries with a low position but strong ties.

A mean analysis of the early salaries of current jobs shown in Table 2 showed that educational level, schools and departments attended, experience, certificates and the mean gap of the effects of intermediaries all reached a significant level. As seen, the higher the teachers' educational level is, the higher their salary can be. Teachers who graduated from early childhood departments of public schools have the highest salary and those who graduated from early childhood departments in private schools have the lowest salary. Teachers with previous experience have a significantly higher salary, as do teachers with professional certificates. Teachers earning the highest salaries do not require assistance from intermediaries. Teachers assisted by intermediaries have a lower salary. Teachers

assisted by intermediaries with weak positions and weak ties have the lowest salary.

Table2: Cross analysis of variables on public and private kindergartens, percentage of early salary of current job and mean analysis

4-2. Regression analysis of variables on entering public kindergartens and acquisition of teaching positions with high salary and logistic regression analysis

As shown In Table 3, the opportunity to acquire positions in public kindergartens was predicted by 13 variables in equation 1. The result demonstrated that the explained power (Pseudo R²) of the overall model was .30. The influences of educational years, schools and departments attended all reached a significant level. However, the influences of experience and certificates were insignificant. According to the positive and negative directions of the B values, the higher the teachers' educational level is, the more possibility that teachers will acquire positions in public kindergartens. Teachers who graduated from early childhood departments of public schools are also more likely to acquire positions in public kindergartens. According to the B values, the gap between teachers who graduated from early childhood departments in public schools and those who graduated from the same departments in private schools was the most significant. After graduation, teachers who attended public schools mostly teach in public kindergartens, whereas those who attended private schools mostly teach in private kindergartens. Teachers graduating from public schools but in different departments had an insignificant gap. This demonstrated that teachers who graduated from public schools, even from departments other than early childhood, are more likely to enter public kindergartens than those who graduated from early childhood departments in private schools. The intermediaries of the four groups had significantly negatively influences on teachers' acquisition of positions in public kindergartens. This demonstrated that regardless of

intermediaries' positions and intimacy with job seekers, teachers assisted by intermediaries mostly enter private kindergartens. Teachers who enter public kindergartens mostly do not have intermediary assistance. This shows that the educational factor is the key to acquiring a position in public kindergartens. Teachers with higher education who graduated from early childhood departments in public schools have the most advantage. Relationships are ineffective in public kindergartens.

Table3:Regression analysis of entering public kindergartens and acquiring teaching positions with high salaries and logistic regression analysis

Dependent variables	Equation 1 (logistic regression)	Equation 2 (OLS regression)	Equation 3 (OLS regression)
	Acquisition of position in public kindergartens (Total samples)	Acquisition of teaching position with higher salary (Total samples)	Acquisition of position in private kindergartens with higher salary (samples of private teachers)
	B (β)	B (β)	B (β)
Years of father education	.06(.13)*	.03(.05)*	.05(.12)*
1.Personal educational years	.40(.36)*	.37(.29)*	.26(.32)*
2.Teaching experience of early children education	-.03(-.07)	.10(.22)*	.09(.29)*
3.professional certificates	.10(.06)	.20(.10)*	.19(.14)*
Graduated schools and departments (in comparison to early childhood department of public schools)			
1.Non-early childhood department of public schools	-.68(-.11)*	-.11(-.02)	-.31(-.07)
2.Early childhood department of private schools	-2.90(-.75)*	-.20(-.04)	-.19(-.07)
3.Non-early childhood department of private schools	-1.96(-.44)*	.21(.04)	.22(.07)
1.Formal cultural capital	-.00(-.00)	-.01(-.02)	-.01(-.01)
2.Cultural resources	.15(.17)*	.01(.01)	.03(.04)
Social capital (in comparison to no introducers)			
1.Introducers with high position and strong ties	-1.67(-.31)*	-.63(-.10)*	-.23(-.06)
2.Introducers with low position but strong ties	-1.57(-.20)*	-.33(-.04)	.00(.00)
3.Introducers with high position but weak ties	-.76(-.16)*	-.56(-.11)*	-.13(-.04)
4.Introducers with low position and weak ties	-.81(-.14)*	-.83(-.12)*	-.35(-.08)*
Public kindergartens (in comparison to private kindergartens)	-----	1.63(.36)*	-----
Constant	-7.32	-2.03	-1.04
Number of samples	817	807	546
F value	-----	53.49*	18.62*
R ²	-----	.49	.31
Model χ ²	354.89*	-----	-----
Pseudo R ²	.30	-----	-----

Equation 2 shows teachers' salary levels when acquiring current jobs. Since salary criteria in public and private kindergartens are different, the public/private kindergartens were treated as control variables to explore salary level factors. The statistical result demonstrated that influences of three variables of human capital were significant. According to the positive and negative directions of β, teachers with longer educational years, more teaching experience and more professional certificates

are more likely to acquire teaching positions with higher salaries. Three situations with intermediaries significantly and negatively influence the acquisition of teaching positions with higher salaries. Teachers assisted by intermediaries with low positions and low ties have the lowest salary. It demonstrated that teaching positions secured using the assistance of intermediaries with low positions and low ties have lower salaries. Teaching positions secured without intermediary assistance or with assistance from intermediaries with low positions but strong ties have higher salaries. The explained power R^2 of the model was .49. This shows that the model can explain nearly 50% of the difference of dependent variables. The result of equation 2 also showed that public kindergarten teachers' salaries are significantly higher than that of private kindergarten teachers. However, positions in public kindergartens are few and difficult to acquire. Therefore, the research investigated the key factors of how teachers could acquire positions in private kindergartens with higher salaries. As shown in equation 3, private kindergarten teachers were screened. The result suggested that teachers with longer educational years, more teaching experience and more professional certificates tend to acquire positions in private kindergartens with high salaries. Assistance from intermediaries with low positions and low ties significantly and negatively influence the acquisition of positions in private kindergartens with high salary. This demonstrated that positions in private kindergartens secured using the assistance of intermediaries of with low positions and low ties have lower salaries. According to β , education is the most significant factor, followed by experience and professional certificates. Therefore, human capital is also significantly valued by private kindergartens.

5. Conclusions

This study explored if human capital or relationships are the priority in early childhood institutions in Taiwan, and analyzed 1058 teachers in 23 counties and cities. The findings demonstrate that human capital is the priority in early childhood institutions in Taiwan.

Educational factors are important in order to acquire teaching positions in public kindergartens with guaranteed jobs and more benefits. Job seekers with higher educational levels who graduated from early children departments of public schools are more likely to acquire positions in public kindergartens. For positions in private kindergartens with high salaries, education, experience and certificates are the key factors, and job seekers with a higher educational level, more teaching experience and more professional certificates have more advantages. This shows that human capital is the key factor of early childhood teachers' acquisition of ideal teaching positions. As to the effect of relationships, research findings suggest that teaching positions acquired using help from intermediaries are mostly in private institutions with lower salaries. Intermediaries are ineffective for teachers who intend to seek teaching positions with higher salaries in private kindergartens. Some teaching positions acquired using intermediaries' assistance have the lowest salary. For instance, if intermediaries have a low occupational position and are not familiar with the job seekers, the positions acquired will usually be in private kindergartens with low salaries. The result demonstrates that although relationships are inevitable in Chinese culture, their effects on acquiring teaching positions is insignificant in modern Taiwan society. The early childhood education industry in Taiwan is severely competitive. In order to survive, kindergartens must hire high-quality teachers in order to maintain competitive advantages. Through using relationships, job seekers can only acquire unsatisfying teaching positions with low salaries.

In comparison to the findings of Bian and Ang [31] on China and Singapore, Hwang's [32] study on Taiwan found that intermediaries can help job seekers to acquire a position, and the higher the intermediary's position is, the better the effect will be. Bian and Ang demonstrated that strong relationships allow job seekers to accomplish their goals. If job seekers have a close relationship with intermediaries, they will receive more assistance and are more likely to be successful in obtaining a position. The above

indicates the effect of relationships in the job market of Chinese societies. However, this study analyzed the latest samples in Taiwan and demonstrated that the key factor to acquire ideal teaching positions is not intermediary assistance. Rather, it is the investment in human capital, including years of education, experience and certificates that is the most important. This suggests that the effect of relationships on job acquisition in Chinese societies can change with time. In addition, although relationships are still influential, the teaching positions acquired are not necessarily ideal ones, and are often positions in private kindergartens with low salaries.

Currently, kindergartens are encountering severe competition in Taiwan. In order to survive, kindergartens must hire teachers with advantageous human capital. The effect of relationships is gradually becoming insignificant. The findings of this study suggest a new interpretation on the role of relationships in Chinese societies, and can function as a reference for societies influenced by Chinese culture.

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