

台灣高等教育師資的聘任 問題研究

張家宜*

《中文摘要》

本文以實證分析研究台灣高等教育中師資聘任的過程，旨在探討各決策者遴選求職者進行面談及聘審時的標準；本研究於民國 82 年至 83 年實施，接受問卷調查的對象包括：33 所大學，11 個領域之現任與前任的系、所主任，以及參與聘審的教授。根據實證結果顯示，應聘者的論著發表與教育水準是最重要，其次的順序是工作經驗與年齡，而熟識程度與校友身份則又居次，至於婚姻狀況與性別差異並非重要的考量因素。

關鍵詞：教師聘任、審核履歷、聘任不公平、高等教育、決策

*張家宜為淡江大學教育發展中心教育學程組專任副教授。

Introduction

The Taiwanese higher education institutions have been in a situation where there is a “buyer’s market” in that the number of acceptable candidates far exceeded the number of job openings from the end of the 1980s to the mid-1990s. However, most faculty members and administrators are untrained in the art of selecting and hiring, a process which requires a substantial commitment of time and expense to the institution. How to locate the best candidates, screen their resumes, conduct effective interviews, identify strengths and weaknesses and assess positive and negative qualities, have become increasingly important, challenging and controversial task in higher education institutions. The purpose of this study is to examine empirically the criteria which higher education decision-makers in Taiwan use in selecting applicants for interview and hiring as faculty members.

Recruitment and hiring are the first and most effective opportunities for organizations to discriminate among equally qualified job candidates. Hiring and recruitment procedures, unlike standards for internal promotion or wages, are among the most loosely constrained instruments available to management. Hiring decisions are, in part, based on objective criteria, such as educational background and work experience; but for some part, they are based on the subjective judgments of gatekeepers whose perceptions may be distorted by prejudice. It is for this reason that the screening criteria need to be clearly defined and validated in order to decrease inequality in the hiring process (Doeringer and Piore, 1971).

According to the U. S. Equal Employment Opportunity Commission (1974), most discrimination in the area of employment practices occur in the selection process, whether consciously or unconsciously. Inequality in the selection process is more easily maintained than inequality in the rewarding process within an organization. Candidates are generally dependent on the organization for information about the hiring process and often do not communicate with other candidates about the job they are applying for. Thus, recruitment inequality is often less obvious and difficult to measure than inequality in other personnel areas (Szafran, 1984).

Higher Education System in Taiwan

The higher education system in Taiwan includes universities, four-year colleges, and two-year and five-year junior colleges. Since the Chinese Nationalist government relocated to Taiwan in 1949, the Taiwanese higher education system has grown tremendously: from 7 institutions in 1950 to 92 in 1970, and to 124 institutions, including 21 universities, 29 four-year colleges and 74 junior colleges in 1992 (Ministry of Education 1993). The higher education enrollment rates for the college-age population group rose from 3.1% in 1960 to 11.1% in 1980, and to approximately 23.5% in 1992 (Directorate-General of Budget, Accounting, and Statistics, 1993).

In 1992, there were 13 public universities, 8 private universities, and 15 public and 14 private colleges. There were a total of more than 900 departments at the undergraduate level, 600 of these were in universities and about 300, in four-year

colleges. There were more than 500 graduate schools (Ministry of Education 1993). Since the overall qualifications of faculty members is very different in junior colleges as compared to universities and colleges, this study focused only on universities and four-year colleges.

The prestige ranking of the universities in Taiwan has been quite stable. Public or "national" colleges and universities in Taiwan enjoy higher prestige and attract both better students and better faculty members, helped by the fact that they receive more funding from the government and have better facilities and equipment. Furthermore, they have lower student-faculty ratios. For instance, in 1993 the average student-faculty ratio was 11:1 in public higher education institutions compared to 20:1 in private institutions. Thus, the competition to get into public universities is strong among students as well as faculty.

The University Act was revised in January, 1994. The premise of this revised Act is that more autonomy should be granted to higher educational institutions and faculty members should have more active involvement in academic affairs. The Taiwanese six-year national economic plan for 1991-1997 includes building six more universities and twelve new or upgraded post-secondary institutions. Taiwan's higher education system is still expanding to meet the demands of an advanced industrial labor market.

Faculty Hiring Process in Taiwan

The recruiting of personnel in a department is usually handled by the chairperson of the department, who screens the applications and nominations, then submits his or her selection to an ad hoc committee for further screening. In recent years, with increasing push for democratization in academe, the ad hoc committee has started playing an important role in the first step of faculty hiring process and the committee reviews all the candidates' applications. However, the department chairperson remains very influential in the decision process. The ad hoc committee, in turn, submits its recommendation to the dean of the college for final decision. Finally, the dean's decision is submitted to the university senate for approval. Once the senate approves the hiring decision, it is up to the Ministry of Education to grant the newly hired faculty member a teaching certificate according to his/her qualification. According to the regulation by Ministry of Education, the department chairperson does not have discretionary power over the rank and salary of the new faculty member.

There are two major aspects of the faculty hiring practice in Taiwan which may lead the system to inequality of hiring before the enforcement of University Act. First, since the universities do not use open solicitations or advertisements in faculty hiring (Hsieh, 1986), incumbent faculty members referred friends and relatives to fill faculty and administrative vacancies in their own institutions. Recruitment through this kind of channels may give the applicants a better picture of the employers, and reduces the costs of trial-and-error job search (Doeringer and Piore, 1971). Thus, the employment-opportunity information network generally gives unequal access to the academic marketplace. The discriminatory hiring practices will not be affected as long as the recruiting channels and the information network structures remain entrenched.

Second, since it is usually the department chairperson alone who decides the names to be recommended to the ad hoc committee for faculty hiring, the screening criteria (such as qualifications) are based upon the subjective judgment of the chairperson, whose perceptions may be distorted. The chairperson may turn out to be authoritarian and monopolistic, and may exercise personal favoritism and nepotism in hiring. Thus, departments may end up recruiting not simply on the basis of qualifications but also on the other bases, including personal preference or goal.

In recent years, the supply of the returning scholars and graduates are increasing in a tremendous amount. Most universities has started using advertisements in hiring new faculty members. At the same time, although the chairperson remains very influential in the hiring process in the department, the ad hoc committee has started playing an important role in the first step of the faculty hiring process by reviewing all the candidates' applications in many departments in Taiwanese universities. Looking at this aspect of the faculty hiring process, with a focus on attitudes of both the department chair and the ad hoc committee members in Taiwan, was the major purpose of this study.

Method

Sample

Data for the study were collected using a survey questionnaire. In order to examine the variation in selection preferences across different departments and universities, a stratified random sample of the tri-category of departments (humanities, social sciences, and sciences and technology) and by universities was used. Three most popular departments in the humanities, four most popular departments in the social sciences, and four most popular departments in the sciences and technology in Taiwan were selected. The 11 departments thus selected were Chinese, English and History in the humanities area; Accounting, Business Administration, Economics and International Trade in the social sciences; and Chemistry, Electrical Engineering, Mathematics, and Mechanical Engineering in the sciences and technology area. A total of 33 institutions were in the final sample, which included 13 public universities, 8 private universities, and 12 private and public four-year colleges. Telephone calls were made to each selected department for the names of the department chairs, former department chairs, and one member of the ad hoc committee for hiring.

A survey questionnaire was mailed to selected current department chairs, former department chairs, and professors who were on hiring ad hoc committees in the 11 fields of study in 33 universities and four-year colleges in Taiwan. A total of 102 participants were in the humanities, 130 in the social sciences and 172 in sciences and technology. Of the total respondents, 175 were in public universities, 169 in private universities and 60 in private and public four-year colleges. No compensation of any kind was provided to the participants in the study.

The cover letter accompanying the questionnaire stated that the purpose of the research was to examine the criteria used by chairpersons in selecting applicants for interview. The questionnaire asked subjects to provide background information, such as their current rank, educational background (highest degree received, from a Taiwanese institution or abroad), numbers of years taught, administrative experience, age and gender.

In the second part of the questionnaire, the respondents were asked to indicate the importance they placed on each criterion, including age, gender, educational background, work experience, publications, marital status, familiarity with the hiring chairperson, and alumni on a scale of 1 (totally unimportant) to 7 (very important) in choosing a full-time faculty member. Within each criterion, respondents were asked to indicate the suitable range. Finally, subjects were asked to indicate their personal judgment as to the importance of resumes as compared to personal knowledge of the candidate and information from reference reports on a scale of 1 (totally unimportant) to 7 (very important).

Procedures

In the first round, 404 questionnaires were sent out in mid-December, 1993. By the end of February 1994, 180 responses were received. In the second round, 235 questionnaires were sent out around mid-March, 1994, to the non-respondents from the first round. Follow-up phone calls were made to encourage the participants to complete and return the questionnaires. Thus, an additional 127 responses were received by the end of April, 1994. With a total of 307 questionnaires returned, the response rate was 76 percent. A total of 24 questionnaires came back unanswered or incomplete, so the remaining 283 questionnaires resulted in a valid response rate of 70 percent.

There were several possible reasons for the incomplete questionnaires. Some respondents refused to fill out the questionnaire and, instead, described the criteria used by their departments to select new faculty members. Some respondents used their departments' actual vacancies as examples, so the answers were probably not objective and general. A few respondents mentioned the importance of the committee's role in negotiating or deciding on hiring and how the chairperson alone cannot make the decision. To them, it did not seem clear if the questionnaire was targeted at the chairperson's personal decisions or a hiring committee's choices, and that personal choices and committee choices did not always coincide. Furthermore, some respondents did not have the time nor the interest to complete the questionnaire.

Data Analysis and Findings

Respondent Characteristics

The demographic characteristics of the 283 respondents who completed the questionnaire are summarized. Forty-three percent of the respondents were 36-45 years old, and 39 percent were between ages 46-55. More than four-fifths of them were in the age range between 36-55. With respect to gender, as was expected, a whopping 92 percent of the respondents were male. Female chairpersons or female selection committee members were still minorities in Taiwan. With respect to current rank, 62 percent were professors and 38 percent were associate professors; which was consistent with the requirement in Taiwan that the minimum rank of the chairperson be associate professor. However, the majority of the chairpersons were of the professor rank.

In terms of the highest degree completed, about four-fifths (79 percent) of the respondents had a doctoral degree. The overall percentage of faculty members with doctorate degrees has been increasing over time in Taiwanese universities and colleges; about 44 percent had a doctoral degree in 1993. The percentage of chairpersons with the doctoral degree was expected to be relatively high because faculty members with a doctorate have a better chance of being selected as department chairs. With respect to the country where the degree was obtained, slightly over half (52 percent) of them had their highest degree from foreign countries. In fact, studying abroad for graduate studies has been a trend, particularly because of the prestige of graduate schools in more advanced countries and the common belief that the quality of training in those universities is superior. Only about 30 percent of the respondents had obtained their degrees in Taiwan. No obvious reasons could be found to explain the high non-response rate of 18 percent of this item.

In terms of teaching experience, 41 percent of the respondents had taught for an average of 6-15 years, and 34 percent had taught between 16-25 years. With respect to administrative experience, 52 percent of them were current department chair, 35 percent were former chair.

The 11 departments were grouped into three categories. Approximately 44 percent of them were in the field of sciences and engineering, 32 percent in social sciences and 24 percent in humanities. About equal percentages of the participants (42 percent and 43 percent, respectively) were working in public and private universities.

Results

This part analyze how academic job seekers' characteristics, such as age, gender, marital status, and academic qualifications are related to their perceived desirability for hiring for a faculty position. Mean score for each of the hiring criteria was calculated to indicate its importance. Independent t-test or Bonferroni multiple comparison was employed to see whether there were significant differences between the mean scores on the scale of importance by respondents' characteristics. The likelihood ratio chi-square test was also employed to determine if there were statistically significant differences by respondents' characteristics on respondents' views of the importance, on a scale 1-7, of

the job seekers' characteristics, such as age, gender, marital status, and academic qualifications. Finally, a logic model was used to estimate the probability of each of the criterion obtaining a positive evaluation (5, 6 or 7 on the scale).

Table 1 displays the percentage of respondents indicating the importance they attached to various characteristics on the 1-7 hiring-criteria scale. The table also presents the mean of the respondents' importance ratings.

Table 1
Percentage of Respondents Indicating Relative Importance of Various Candidate Characteristics for Making Hiring Decisions on a 1-7 Scale

Variable	Scale*							Total	Mean
	1	2	3	4	5	6	7		
Age	4	11	12	26	27	14	6	100	4.3
Gender	49	19	6	16	5	3	2	100	2.2
Education	3	1	2	12	20	31	31	100	5.7
Work Experience	2	6	5	18	29	28	12	100	5.0
Publication	0	0	3	6	18	39	34	100	5.9
Marital Status	47	19	9	14	8	1	2	100	2.3
Familiarity	2711	15	20	19	4	4	100	3.2	
Alumni	3014	12	24	13	5	2	100	3.0	

Note. * 1 = totally unimportant; 7 = very important.

All numbers in scale columns are percentages.

Age. As shown in Table 1, the mean score for the importance of age item was 4.3, with 26 percent of the respondents choosing a rank of 4, and 27 percent choosing a rank of 5. Younger respondents (below 45) considered age more important with the average score 4.4, while the respondents aged 55 and older considered age to be less important, with the average score 3.8. The average score for different departments also showed different results: 3.9 for humanities, 4.2 for social sciences and 4.5 for sciences and technology. Therefore, respondents in sciences and technology reported age more important.

As to the suitable age range, 42 percent of the respondents chose the range between 36 and 45, and 31 percent considered the upper end of the hiring age range to be 35. About 23 percent considered age unimportant. In comparing the respondents from different departments in terms of the response to desirable age range for a faculty applicant, a significant difference was observed (with $\chi^2 = 15.53$, $p < 0.05$). About 50 percent of the respondents in humanities reported the suitable age range to be 36-45, with 46 percent in the social sciences also choosing this range. However, a high percentage (41 percent) of the respondents in the sciences and technology considered the suitable upper end of the range to be 35.

Gender. The mean score for the importance of gender question was 2.2 (Table 1), with 68 percent of the respondents ranking the item as unimportant. As to the preferred

gender for faculty members, only about 9 percent of the respondents considered men to be more suitable for college/university teaching, while the rest (91 percent) reported gender to be not important. None of the respondents found women to be more suitable for faculty positions than men.

Education. The mean score for the importance of educational attainment of the candidate was 5.7, as shown in Table 1, with more than four-fifths of the respondents ranking educational background as important. In terms of the criteria for evaluating educational background, approximately 53 percent considered both the prestige of the degree-granting university and study abroad to be important, while 44 percent considered only the prestige of the degree-granting university to be important. A clear distinction was found between those respondents who had earned their degrees at home in Taiwan and those who had degrees from overseas, on the question as to the importance of the degree-granting university's prestige and overseas degrees, with $\chi^2 = 11.05, p < 0.05$. This was reflected in the fact that among the respondents who completed degrees at universities overseas, 58 percent ranked both the prestige of the degree-granting university and the study-abroad criteria as important. Among respondents who completed their degrees in Taiwan, about 58 percent ranked only the prestige of the degree-granting university as important. In other words, respondents with degrees from abroad considered study abroad to be more important.

Work Experience. The mean score for the importance of work experience was 5.0 (Table 1), with about 70 percent of the respondents ranking this criterion as important. Responses seemed to differ by the type of institution. Respondents in public universities considered work experience less important, with a mean score of 4.9, and their counterparts in private universities thought similarly (mean score = 5.0). However, respondents in four-year colleges considered work experiences much more important, with a mean score of 5.5.

In terms of the criteria for evaluating work experience, 60 percent considered teaching experience important. Respondents with different number of years taught showed different responses. A positive relationship can be found between the years of teaching and the percentage of respondents reporting the importance of teaching experiences. In other words, respondents with more years of teaching experience considered teaching experience to be a more important criterion.

The respondents differed significantly along gender lines in terms of the criteria for evaluating work experience (with $\chi^2 = 20.69, p < 0.05$). About 96 percent of the female respondents considered teaching experience as important, while only 57 percent of the male respondents reported teaching experience as important. Responses regarding criteria in evaluating work experience were found to be significantly different by department (with $\chi^2 = 49.22, p < 0.05$). About 91 percent of the respondents in humanities and 62 percent of the social sciences respondents considered teaching experience as important, while only 41 percent of the respondents in sciences and technology considered teaching experience as important.

Publication. The mean score for the importance of publication was 5.9, as shown in Table 1, with more than 90 percent of the respondents considering publication as important. As to the importance attached to publication, the mean score was 6.2 among the respondents in public universities. In contrast, the mean scores among

respondents in private universities and four-year colleges were 5.8 and 5.7, respectively. Thus, respondents in public universities considered having publication much more important than did their counterparts in private institutions and four-year colleges.

With respect to criteria for evaluating publications, about 81 percent thought both the number of articles and the quality of the journal where the articles were published to be important criteria. About 18 percent reported that only the quality of the journal was important.

Marital Status. The mean score for the importance of the applicant's marital status was 2.3 (Table 1), as about three-fourths of the respondents reported marital status as not important. Interestingly, respondents in humanities and social sciences considered marital status more important, with mean scores of 2.6 and 2.5, respectively, while those in sciences and technology, with the average score of 2.0, considered it less important.

With respect to the preferred marital status for a higher education position, 88 percent of respondents considered marital status of the applicant to be unimportant. About 11 percent thought a married individual would be more desirable as faculty, and only less than 1 percent considered an unmarried person to be more desirable.

Familiarity. The mean score for personal familiarity between the department chair and the candidate was 3.2, as shown in Table 1. About one-half of the respondents indicated familiarity to be not so important; only about 20 percent considered it important. Respondents' views as regards familiarity tended to differ according to their educational background or departmental affiliation. Respondents with a bachelor's or master's degree considered familiarity an important criterion. Respondents in social sciences considered familiarity more important, with a mean score of 3.6, while those in sciences and technology considered it less important (mean score=3.0). The humanities respondents, with a mean score of 3.1, like their sciences and technology counterparts, did not consider familiarity with the candidate important.

Alumni. The mean score for preference for alumni over non-alumni applicants was 3.0, as shown in Table 1. More than half (57 percent) of the respondents considered alumni status as not important, although about a quarter (24 percent) considered it fairly important. Respondents without a doctoral degree considered alumni status more important, with a mean score 3.6, compared to the mean score of 2.8 for respondents with a doctorate.

Table 2 shows the mean score for each of the hiring criteria. According to the ranking by Bonferroni multiple comparison, the most important criteria for faculty hiring in Taiwan were the candidate's publications and educational background, the second most important was work experience, followed by age, familiarity and alumni status. Marital status and gender of the applicant were shown to be least important.

Table 2
Means and Standard Deviations for the Relative Importance of Faculty Hiring Criteria

Variable Ranking **	X	SD	C. I. *	Importance
Publication	5.9	1.0	(5.74, 6.06)	1

Education	5.7	1.3	(5.49, 5.91)	1
Work Experience	5.0	1.4	(4.77, 5.23)	2
Age	4.3	1.5	(4.06, 4.54)	3
Familiarity	3.2	1.8	(2.91, 3.49)	4
Alumni Status	3.0	1.7	(2.72, 3.28)	4
Marital Status	2.3	1.6	(2.04, 2.56)	5
Gender	2.2	1.5	(1.96, 2.44)	5

Note. * 95% Bonferroni simultaneous confidence intervals

** Ranking by Bonferroni multiple comparison

As regards the "Other" item, 51 respondents (18 percent) mentioned "personal and moral character," (e. g., a sense of responsibility, easy to get along with, and hardship enduring) as important criteria in selecting faculty members. Forty-five (16 percent) respondents indicated that "fit with the department's development and programmatic needs" was an important criterion. Fifteen (5 percent) respondents reported that "quality of teaching" was important, and 11 (4 percent) mentioned that "quality of research" conducted in the past was important.

The final question, the respondents were asked to indicate their personal judgment as to the importance of resume as compared to personal knowledge of the candidate and information from references, on a scale 1 (very unimportant) to 7 (very important). The candidate's resume was reported to be crucial in faculty hiring by the respondents. Approximately 80 percent of the respondents reporting resume as important. A consistent result was found among institutions and departments. Respondents in public universities, private universities and four-year colleges reported the importance of resume closely, with mean score 5.6, 5.5 and 5.4 respectively. The reported result of the respondents in humanities, social sciences, and sciences and technology was the same, with a mean score of 5.5. In the case of candidates whom they did not personally know or who had not been strongly recommended, the respondents claimed that they would base their evaluation heavily on the resume.

The respondent's personal judgment of the importance of resume had a mean score of 5.5, as compared to mean score of personal knowledge of the candidate, 3.7, or information from references, 4.9. It reflected that academic decision-makers in Taiwan obtained information from a resume was more important, as compared to other sources, such as personal knowledge of the candidate and information from references.

Finally, from the above result, we may observe that 4 respondent characteristics--educational background, age, institution and department--showed significantly difference in evaluating the hiring criteria. Thus, using these 4 variables, a logic model was constructed. The 4 explanatory variables in the model are summarized in Table 3.

Table 3
Explanatory Variables for the Logic Model

Variable	Description
a. Educational background:	0 = doctorate degree; 1 = bachelor's or master's degree
b. Age:	0 = below 45; 1 = over 45
c. Institution:	0 = public university; 1 = private university; 2 = four-year college
d. Department:	0 = humanities; 1 = social sciences; 2 = sciences and technology

As shown in Table 3, each of the four explanatory variables had either two or three possible values, namely, 0, 1 or 2, thereby forming a total of 36 ($2 \times 2 \times 3 \times 3$) combinations of the respondents' characteristics. On the 1-7 scale that was used, 5, 6 and 7 reflected positive evaluation of each criterion, and 1 to 4 indicated negative evaluation. A logic model was fitted using the 36 combinations for each criterion to estimate the probability of receiving positive evaluation and negative evaluation.

The five criteria--age, educational background, work experience, publication and familiarity--with high probability of receiving positive ratings are presented in Tables 4 through 8. These tabulations include the different combinations of the 4 explanatory variables of respondent's characteristics and the estimated probabilities of the criterion receiving both negative rating and positive rating. The sum of the probability of negative rating and positive rating equals 1. The logic results were consistent with the chi-square and the t-test results indicated above.

The overall probability of age receiving positive rating (i.e. 5, 6 or 7 on the scale) was 0.47 (Table 4). The estimated probability of age receiving a positive rating was consistently higher than 0.6 among younger (under 45) respondents who were in the sciences and technology department. This indicated that the respondents who were younger and teaching in sciences and technology were more likely to consider age an important criterion. For educational background, as shown in Table 5, the overall probability of receiving positive rating was 0.83. The respondents in social sciences and in four-year colleges considered education most important, given that the variable's probability of receiving a positive rating was at least 0.97. The respondents in social sciences department reported education as important, as reflected in the positive rating probability of at least 0.85.

Table 4
Estimated Probabilities of Age Evaluated by Respondent Characteristics

Respondent characteristics	Estimated probabilities		
	Sum of	Scale	Scale

Class	a	b	c	d	probability	1 ~ 4	5 ~ 7
16	0	0	1	2	1.000	0.350	0.650
3	1	0	1	2	1.000	0.370	0.630
13	0	0	0	2	1.000	0.397	0.603
24	0	1	1	2	1.000	0.452	0.548
18	0	0	2	2	1.000	0.462	0.538
9	1	1	1	2	1.000	0.474	0.526
15	0	0	1	1	1.000	0.476	0.524
2	1	0	1	1	1.000	0.499	0.501
Overall :					1.000	0.530	0.470

Table 5
Estimated Probabilities of Education Evaluated by Respondent Characteristics

Class	Respondent characteristics				Estimated probabilities		
	a	b	c	d	Sum of probability	Scale 1 ~ 4	Scale 5 ~ 7
17	0	0	2	1	1.000	0.023	0.977
10	1	1	2	1	1.000	0.028	0.972
4	1	0	2	1	1.000	0.035	0.965
25	0	1	2	2	1.000	0.050	0.950
18	0	0	2	2	1.000	0.062	0.938
23	0	1	1	1	1.000	0.064	0.936
15	0	0	1	1	1.000	0.079	0.921
8	1	1	1	1	1.000	0.097	0.903
20	0	1	0	1	1.000	0.104	0.896

2	1	0	1	1	1.000	0.118	0.882
12	0	0	0	1	1.000	0.127	0.873
6	1	1	0	1	1.000	0.152	0.848
Overall :					1.000	0.173	0.827

For work experience, as shown in Table 6, the overall probability of receiving positive rating was 0.70. The respondents with a bachelor's or master's degree reporting the probability of receiving positive rating was at least 0.73. For publication variable, the overall probability of receiving positive rating was 0.91, as indicated in Table 7. The respondents who were over 45, teaching in social sciences in public universities were more likely to consider publication an important criterion, with the estimated probability of 0.96. For familiarity, the overall probability of receiving positive ratings was 0.27. The respondents with a bachelor's or master's degree and in social sciences were more likely to rate familiarity a positive evaluation, with the probability of 0.54, as shown in Table 8. For the rest three criteria--gender, marital status and alumni, the overall probability of receiving a positive rating was only 0.09, 0.11 and 0.19, respectively. This indicated that these three criteria were reported not as important as the above five criteria.

Table 6
Estimated Probabilities of Work Experience Evaluated by Respondent Characteristics

Class	Respondent characteristics				Estimated probabilities		
	a	b	c	d	Sum of probability	Scale 1 ~ 4	Scale 5 ~ 7
10	1	1	2	1	1.000	0.073	0.927
4	1	0	2	1	1.000	0.111	0.889
25	0	1	2	2	1.000	0.130	0.870
8	1	1	1	1	1.000	0.167	0.833
17	0	0	2	1	1.000	0.167	0.833
9	1	1	1	2	1.000	0.192	0.808
18	0	0	2	2	1.000	0.192	0.808
7	1	1	1	0	1.000	0.193	0.807
6	1	1	0	1	1.000	0.223	0.777
2	1	0	1	1	1.000	0.242	0.758
23	0	1	1	1	1.000	0.244	0.756

5	1	1	0	0	1.000	0.254	0.746
3	1	0	1	2	1.000	0.274	0.726
1	1	0	1	0	1.000	0.275	0.725
Overall :					1.000	0.304	0.696

Table 7
Estimated Probabilities of Publication Evaluated by Respondent Characteristics

Respondent characteristics					Estimated probabilities		
Class	a	b	c	d	Sum of probability	Scale 1 ~ 4	Scale 5 ~ 7
20	0	1	0	1	1.000	0.034	0.966
6	1	1	0	1	1.000	0.041	0.959
21	0	1	0	2	1.000	0.045	0.955
23	0	1	1	1	1.000	0.045	0.955
8	1	1	1	1	1.000	0.054	0.946
12	0	0	0	1	1.000	0.061	0.939
24	0	1	1	2	1.000	0.061	0.939
9	1	1	1	2	1.000	0.073	0.927
15	0	0	1	1	1.000	0.081	0.919
13	0	0	0	2	1.000	0.082	0.918
10	1	1	2	1	1.000	0.086	0.914
Overall :					1.000	0.092	0.908

Table 8
Estimated Probabilities of Familiarity Evaluated by Respondent Characteristics

Respondent characteristics					Estimated probabilities		
Class	a	b	c	d	Sum of probability	Scale 1 ~ 4	Scale 5 ~ 7
10	1	1	2	1	1.000	0.418	0.582
4	1	0	2	1	1.000	0.462	0.538
Overall :					1.000	0.728	0.272

Discussion

This research utilized a survey of department chairpersons and hiring committee members to examine empirically the criteria which department chairpersons claimed they use in selecting applicants for interview and hiring as faculty members. To sum up these findings, according to the ranking by Bonferroni's multiple comparison, the most important stated criteria in faculty hiring in Taiwan were the candidate's

publications and education. The second and third important criteria were work experience and age, respectively, followed by familiarity and alumni status. Marital status and gender of the applicant did not emerge as very important.

The questionnaire was designed to accurately assess the criteria used in faculty hiring, and the respondents were asked to indicate explicitly the importance they placed on each criterion in choosing a faculty member. The result that decision-makers tended to give more favorable rankings to applicants who had strong academic backgrounds did not necessarily reflect the rule of meritocratic norms. It can be posited that, since faculty members are generally highly educated and represent the elite levels of the society, and since many of them have lived abroad and received western social and cultural influences, the majority of them may have chosen to indicate academic qualification as the most important criterion. In the sample, about four-fifths (79 percent) of the respondents had a doctoral degree, and more than half (52 percent) of them obtained the highest degree from universities overseas. Furthermore, the fact that the cover letter accompanying the questionnaire stated that this was a study of the hiring criteria used in higher education probably heightened the salience of institutional norms for meritocratic decisions. Since the respondents were given to understand that the study was examining how they judged applicants, they probably wanted to appear especially merit-oriented and closer to some perceived ideal.

The findings of this research provide some insight into the faculty hiring process in Taiwan, and may contribute towards making educational decision makers and administrators more aware of the actual situation in higher education in Taiwan. In the past few years, partly due to the worldwide economic recession and changing opportunity structure in Taiwan, the number of graduates and scholars returning from abroad increased tremendously. The pool of qualified applicants who are seeking faculty jobs is expanding accordingly. The ratio of Ph.D. candidates to job openings is increasing steadily. Competition for faculty positions has become more serious. As a result, the issue of equal access in the academic job market has become increasingly important.

The findings of this research also point up the complexity of the phenomenon of faculty hiring process and that of studying it. We need to keep in mind that resume-screening is the pre-interview stage of the faculty recruitment process, it performs only a screening function before the interview. The criteria necessary to pass a screening may be different from those necessary to be ultimately hired to fill a real vacancy. These findings need to be viewed in conjunction with findings from studies of these other stages, in order to better understand the complex phenomenon of the hiring process.

It is also important to not view these findings in isolation from the institutional perspective. There may be times when the faculty view of maintaining standards differs from the institutional interests. For example, older professors, sometimes without terminal degrees, may feel threatened by the "hot" new Ph.D.s and so steer the search process toward candidates more like themselves. This could result in the lowering of faculty standards. It would thus be incumbent upon the dean to make sure the hiring meets the institutional goals and objectives (Jugenheimer, 1993). The findings, moreover, point up the dean's responsibility to insure that fair evaluation is

performed, not just of the successful candidate, but all applicants. The dean may need to review the resumes of all applicants, and attend the ad hoc committee meetings throughout the faculty hiring process, thereby performing the important function of monitoring to uphold and upgrade institutional standards.

In the final stage of the hiring process, the college/university president is responsible for balancing interests with priorities, perceptions of quality; for preventing dysfunctional conflicts, while safeguarding the established outcome goals of the institution. Since the president must view the institution as a whole, he/she must insist on high expectations, consonant with the mission of a particular university (Kauffman, 1993).

Finally, research using a more realistic stimulus is necessary to improve our understanding of the problem. Research strategies which more fully approximate real interview situations should be encouraged (Parsons & Liden, 1984; Raza & Carpenter, 1987). More research needs to be conducted in actual interview settings for better understanding the actual overall candidate-evaluation process.

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The Criteria of Faculty Hiring in Higher Education in Taiwan

Flora Chia I Chang*

《Abstract》

This study examines empirically the criteria which decision-makers in higher education use in selecting applicants as faculty members in Taiwan. A survey questionnaire was mailed to selected current department chairs, former department chairs, and professors who were on hiring committees in 11 fields of study in 33 colleges and universities in Taiwan. The results showed that the candidate's publications and education were considered as the most important criteria. The second and third important criteria were work experience and age, respectively, followed by familiarity with the decision-makers and alumni status. Marital status and gender of the applicant did not emerge as important.

Keywords: faculty hiring, resume-screening, recruitment inequality, higher education, decision-making

* Flora Chia I Chang, Associate Professor, Division of Education Programs, Educational Development Center, Tamkang University.