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Soldiers' Employment Attitude and Employability: An Exploratory Study

Peng Gao, Lunqu Yuan

School of Economics and Management, Beijing Jiaotong University (China)

10113112@bjtu.edu.cn, lqyuan@bjtu.edu.cn

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Abstract:

Purpose: Nowadays it is very difficult for Chinese retired soldiers to find proper jobs, and the primary reason is the significant gap between job requirements and soldiers owned job skills. Therefore, it is very important to improve the soldiers' job skills and enhance their understanding of employment.

Design/methodology/approach: This paper expands the study scope from the soldiers' job skills to the employability, initiatively introduces the employment attitude which has obvious impact on the employment of soldiers, and analyses the influence that employment attitude can play on employability. At last, this paper develops statistical method to find the relationship between soldiers' employment attitude and employability.

Findings: The empirical analysis shows that soldiers' employment attitude has the positive linkage with employability, which makes the employment attitude a measurable variable for the employability rather than an absolute standard.

Research limitations/implications: According to the research purpose, more variables should be considered in the model, consequently, there are only three indicators to describe solders' employment attitude and four indicators to describe solders' employability.

Originality/value: This paper takes research on soldiers' employability in a new perspective. The soldiers' employment attitude is served as the entry point, showing the influence that soldiers' employment attitude has on employability.

Keywords: retired soldiers, independent choosing profession, job skills training, employment attitude, employability

1. Introduction

The 11th National People's Congress (2011) standing committee's 23nd meeting announced the decision of revising the Law of the PRC on Military Service System (taking effect on August 29, 2012) on October 29, 2011. Meanwhile, the State Council and the Central Military Commission (2011) jointly issued the Retired Soldiers' Resettlement Regulation. The promulgation and implementation of the two laws and regulation mark that China has done significant adjustment on the resettlement of the retired soldiers, and reform of the retired soldiers' emplacement has entered a new stage.

However, the independent choosing profession of retired soldiers is facing severe challenge, it is usually hard for the retired soldiers to find suitable jobs, and some even cannot find a job. The problem is resulting from many reasons, such as, the poor enforceability of law and regulation, and the unsound of the matched system of financial compensation. Nonetheless, the most essential reason is the gap between job requirements and soldiers owned job skills. Therefore, it is very important to improve the soldiers' job skills and enhance their understanding of employment.

So far, many scholars had suggested to give soldiers employment skills training. This paper expands the study scope from soldiers' job skill level to soldiers' employability. It treats the soldiers' employability as the object of study and the soldiers' employment attitude as the entry point, hopes to analyze how the retired soldiers' employment attitude can affect or determine the employability and observes whether it is possible to use soldiers' employment attitude to evaluate their employability based on empirical research.

2. Literature Review

The study of the employability by the academic world has got articulated results, and the concept of employability has also developed into a new stage.

The concept of employability was first put forward in the 20th century by the British economist Beveridge (1909). They thought employment is the capability of one individual obtaining and

keeping jobs. Since the 21th century, the technological advance and reform had improved the speed of destruction and creation of vocations, the boundary less career also required employees to switch between different vocations, different functions, different majors, different roles and different organizations. The employability (containing all kinds of professional specifies and common skills, such as communication skills and learning skills) of labors and their adaptability to the changing occupational environment are also very important for the firms to gain and keep their competitive advantages. Therefore, connotation of the employability is further enriched and the denotation of it is keeping extension.

Jos and De Grip (2004) gave the views that the core of modern concept of employability comes from the willingness and ability of those who were hired, the limit of organizational and institutional conditions, and the attractiveness to the labor resources market. Further, they found employability is the willingness and ability to remain attractive in the labor resources market, is the ability to forecast and respond to changes in working conditions and tasks, and is the facilitation in human resources development process. Fugate, Kinicki and Ashforth (2004) told that employability is the ability to identify opportunities to achieve success. Van Der Heijde and Van Der Heijden (2006) pointed out that employability is reflected in continually implementing, acieration and creation of tasks. McQuaid and Lindsay (2005) introduced a numerous of factors affecting individual employability, including individual factors and external factors.

Employment attitude, on the other hand, is not an important content in economics research. As solders can get limited opportunity to participant in job skills training, their employment attitude may have a significant influence on employability. Employment attitude in this paper is defined as job seeker's overall view on career choice, career assessment and career orientation, reflecting job seeker's basic beliefs and attitudes. De Vos and Soens (2008) found that employment attitude played a mediating role between quality development and career success. Kalyal, Berntson, Baraldi, Näswall and Sverke (2010) found that employees with higher employability are more likely to leave when a high degree of job insecurity appears. Silla, De Cuyper, Gracia, Peiro and De Witte (2009) researched that job insecurity has an interaction with employability.

Based on the existing research, this paper expands the study scope from the soldiers' job skills to the employability, initiatively introduces the employment attitude which has obvious impact on the employment of soldiers, and analyses the influence that employment attitude can play on employability.

The arrangement of this paper is as follows. The 3rd part gives hypothesis based on the analysis of employment attitude and employability. The 4th part shows the questionnaire design, data acquisition and initial treatment of data. The 5th part gets the empirical results. The 6th part gives conclusions and policy recommendations.

3. Hypothesis

Referring to the research purpose, this article needs to build up a transmission mechanism from the soldiers' employment attitude to the employability. Before that, this paper observes how the existed law and regulation are ruling the soldiers job skills training.

On the aspect of law and regulation, Law of the PRC on Military Service System (2011) and Retired Soldiers' Resettlement Regulation (2011) specified that conscripts and retired officers should be organized to take professional education and skills training for free by the local people's government, and be given the corresponding academic certificate, professional certificate with employment opportunities recommended after passing the examination. Interim Measures of Placement of military cadres told that the protection of skill training for military cadres should be kept in aspects of policy and funding.

In aspect of policies and regulations, two levels exist, one is the central government, and another is local governments. Central government policies mainly includes Opinion of the State Council (2010) on strengthening the occupational training to promote the employment, Administrative Measures of the Ministry of Finance and the Ministry of Civil Affairs (2011) on the use of retired soldiers' vocational education and skill training funds, Notice of the Ministry of Finance, the Ministry of Civil Affairs and the Headquarters of the General Staff on the Strengthening and Improvement of the Retired Soldiers' Educational Training (2014). Local governments, military region, department of education, department of finance, department of human resources and social security should publish notices on improving the skill training for retired solders and help to promote their job seeking, except Hong Kong, Macao and Taiwan.

Thus, based on the existing research results, the legal policy and the implementation condition, this paper attempts to analyze the mechanism of influence soldiers' employment attitude has on employability based on the hypothesis. The hypothesis can be divided into three dimensions:

First, the concern level of soldiers on employment. This dimension has on employability lies in that if the soldiers cares about the employment, they will try to get to know what kind of skills they need, so as to achieve the improvement of individual employability. Second, the confidence level of soldiers towards their employment. This dimension has on employability lies in that the more confident the soldiers have on their employment, the more active they will be to achieve their own wishes. Third, the recognition level of soldiers on skills training. This dimension has on employability lays in that the more recognition the soldiers have on the skills training, the more active they are on the participation of the skills training, which will bring more training revenue.

So we get the following hypothesis:

H1: The concern level of soldiers on their employment impacts their employability positively;

H2: The confidence level of soldiers towards their employment influences their employability positively;

H3: The recognition level of soldiers for skills training impacts their employability positively.

Then, the empirical analysis will be done to prove the hypothesis put forward in this article, and some conclusions can be got.

4. Questionnaire design and data acquisition

Data of solders' employment attitude and employability for empirical analysis is collected by questionnaire. Questions which aimed at gaining quantifiable data contain multiple choices that measure solders' employment attitude, and self-scoring questions that measure solders' employability. Detail of questionnaire is shown in appendix.

The survey is conducted in different military regions. 419 pieces of questionnaires are delivered and 372 pieces of questionnaires are taken back, accounting for 88.78%. Totally 308 questionnaires are available after excluding invalid questionnaires, accounting for 82.80% of the recovered questionnaires.

As 8 multiple choices and 23 self-scoring questions are listed, it requires to reduce dimensions. Questions in the same dimension are given different weights so that they can be described by only 1 variable. We choose Entropy Method to calculate the weights. According to Information Theory, information entropy measures the uncertainty and reverses changes with information. Entropy Method, with the advantage of good objectivity, gives the weights depending on the information of the data, which is a proper way to exclude the influence of subjective factors.

All the multiple choices can be divided into 3 dimensions, denoted by X_1, X_2, and X_3. Questions 1~3 discuss solders' concern level towards employment; Questions 4~6 discuss solders' confidence level towards employment; Questions 7~8 discuss solders' recognition for skill training.

All the self-scoring questions can be divided into 4 dimensions, denoted by Y_1, Y_2, Y_3, and Y_4. Questions 1~5 discuss solders' psychological qualities; Questions 6~17 discuss solders' basic skills; Questions 18~21 discuss solders' social skills; Questions 22~23 discuss solders' job skills.

After calculating the information entropy, we find that, in every dimension, weights of each variable is basically equal, which indicates that each variable has substantially equivalent information. We name X_1~X_3 and Y_1~Y_4 as the employment attitude indicators and the employability indicators. Descriptive statistics results are shown in Table 1.

Indicator	Mean	Median	Std. Dev.	Skewness	Kurtosis	Jarque-Bera test	
						Statistic	Prob.
X_1	0.4817	0.4455	0.2058	0.4643	3.1663	11.4223	0.0033
X_2	0.6259	0.6391	0.1679	-0.1521	2.5184	4.1642	0.1247
X_3	0.6882	0.6667	0.2445	-0.7333	2.6978	27.6197	0.0000
Y_1	0.7513	0.7500	0.1880	-1.1738	4.9961	121.8560	0.0000
Y_2	0.7037	0.7083	0.1760	-0.6518	3.8896	31.9630	0.0000
Y_3	0.6810	0.6875	0.1992	-0.5963	3.4725	21.1194	0.0000
Y_4	0.5524	0.5001	0.2649	-0.0783	2.1587	9.3989	0.0091

Table 1. Descriptive statistics of X_1~X_3 and Y_1~Y_4

As shown in Table 1, we can find that:

- All the indicators, except for X_1 and Y_4, are far bigger than 0.5. Solders have a high expectation on career prospects; and have praise on skill training. Also, they are confident in psychological qualities, basic skills and social skills. On the other hand, they are of relatively poor performance in concern level towards employment and job skills.
- Y_1 appears to be left-skewed and fat-tailed. Solders tend to have a unanimous praise on their psychological qualities, which is highly reasonable.
- All the indicators, except for X_2, do not obey normal distribution. As the sample size is large enough, indicators should be normal distributed if they meet special conditions. If an indicator is affected by many factors and none of them play a leading role, the indicator usually obeys normal distribution. Thus, we can infer that all the indicators except for X_2 are affected by a few indicators or they are affected by a leading factor.

5. Empirical Analysis

5.1. Solders' Employment Attitude

First, we observe difference between high score group and low score group to ensure our date is valid and find data's differentiation characteristics. We choose the top 25% of each indicator as high score group; choose the bottom 25% of each indicator as low score group. ANOVA result of each indicator is shown in Table 2.

Indicator	Mean of high score group	Mean of low score group	F-Statistic	Prob.
X_1	0.7790	0.2774	745.1856	0.0000
X_2	0.8334	0.4031	1326.1387	0.0000
X_3	0.9480	0.3463	953.2327	0.0000

Table 2. ANOVA results of X_1, X_2 and X_3

As shown in Table 2, significant difference between high score group and low score group exists in each employment attitude indicators, indicating that all the employment attitude indicators have polarization characteristics. Respondents do not just select the average option.

Second, we analysis the correlation between each employment attitude indicator. Since it's not easy to recognize the regression equation form through plot, we use regression analysis directly. OLS results are shown in Table 3.

Dependent variable	Independent variable	Coefficient	Constant	Prob.	R-squared
X_1	X_2	0.0458	0.4532	0.0433	0.3397
X_1	X_3	0.0756	0.4296	0.0116	0.4036
X_2	X_3	0.0464	0.5940	0.0237	0.3279

Table 3. OLS results of correlation between each employment attitude indicator

As shown in Table 3, all the three regression functions are proved, but the R-squared are not satisfactory. We can conclude that correlation does exist between each employment attitude indicator, but the linear relationships are relatively weak. These results show that, though not strong, solders' concern level, confidence level and recognition for skill training are interrelated.

5.2. Solders' Employability

First, we observe difference between high score group and low score group. Similarly, we choose the top 25% and the bottom 25% of each indicator as high score group and low score group. The results are the same as employment attitudes that significant difference exists in each employability indicator, which are shown in Table 4. Second, we do the regression analysis, results shown in Table 5.

Indicator	Mean of high score group	Mean of low score group	F-Statistic	Prob.
Y_1	0.9571	0.5013	563.3780	0.0000
Y_2	0.9145	0.4748	902.4622	0.0000
Y_3	0.9196	0.4188	878.2594	0.0000
Y_4	0.8799	0.2062	1660.3044	0.0000

Table 4. ANOVA results of Y_1, Y_2, Y_3 and Y_4

Dependent variable	Independent variable	Coefficient	Constant	Prob.	R-squared
Y_1	Y_2	0.8054	0.1845	0.0000	0.6683
Y_1	Y_3	0.5831	0.3542	0.0000	0.5815
Y_1	Y_4	0.2123	0.6340	0.0000	0.3694
Y_2	Y_3	0.7455	0.1960	0.0000	0.8120
Y_2	Y_4	0.3387	0.5166	0.0000	0.4599
Y_3	Y_4	0.3628	0.4806	0.0000	0.3928

Table 5. OLS results of correlation between each employability indicator

As shown in Table 5, all the 6 regression functions are proved and R-squared of regressions of Y_1-Y_2, Y_1-Y_3 and Y_2-Y_3 are quite large. The regression of Y_1-Y_4, Y_2-Y_4 and Y_3-Y_4 are satisfactory.

We can find that solders' job skills are of weaker correlation with psychological qualities, basic skills and social skills. Referring to the descriptive statistics above and the development method of soldiers' job skills, we can infer the reasons of such phenomenon:

- Solders' job skills have objectivity and absoluteness that are not misled by the respondents' estimated biases.
- Solders' job skills differentiate high and low level significantly before they join the army.
- Solders have little opportunities to develop their job skills in active service.

5.3. Employment Attitude and Employability

Before the analysis of the relationship between employment attitude and employability, we have the correlation coefficient matrix between employment attitude and employability indicators, which is shown in Table 6.

	X_1	X_2	X_3
Y_1	0.2989	0.3645	0.3405
Y_2	0.3677	0.3796	0.3676
Y_3	0.3444	0.3980	0.3770
Y_4	0.2019	0.4027	0.2747

Table 6. Correlation coefficient between employment attitude and employability indicators

As shown in Table 6, we find that the employment attitude indicators have linear influences on the employability indicators, which can support the 3 hypothesis above.

We then need 2 indicators to describe employment attitude and employability respectively. Here we use the first principal component of employment attitude and employability indicators to integrate those indicators; we denoted them as X and Y, and we have:

$$X = 0.5800X_1+0.4948X_2+0.6472X_3 \quad (1)$$

$$Y = 0.4879Y_1+0.5676Y_2+0.5385Y_3+0.3870Y_4 \quad (2)$$

According to the PCA results, X contains 73.74% information of X_1, X_2 and X_3; Y contains 88.90% information of Y_1, Y_2, Y_3 and Y_4. In the employment attitude aspect, concern level towards employment has a larger weight while confidence level and recognition for skill training have small weights. In the employability aspect, weight of job skills is the smallest and the other variables share basically same weight.

When observing the plot, we can't find an exact regression equation form; also we can't improve the goodness of fit by increasing the power of X. Thus, we set the correlation as linear equation, OLS results shown in Table 7.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.9232	0.0849	10.8731	0.0000
X	0.4092	0.0802	5.1051	0.0000
R-squared	0.3185	Mean dependent variable		1.3465
Adjusted R-squared	0.3145	S.D. dependent variable		0.3334
S.E. of regression	0.3206	Akaike information criterion		0.5690
Sum squared residual	31.4445	Schwarz criterion		0.5932
Log likelihood	-85.6242	Hannan-Quinn criterion		0.5787
F-statistic	26.0624	Durbin-Watson statistic		1.6154
Prob. (F-statistic)	0.0000			

Table 7. OLS results of Y-X regression

As shown in Table 7, a strong linear relationship exists between X and Y, which meets our expectation. The R-squared is 0.3185 and this is basically satisfactory. We can get the conclusion that X and Y have a mutual relation with each other and 31.85% of dependent variable's variation can be linearly explained by independent variable, which means exogenous factors are needed to explain the remaining 68.15% of dependent variable's variation. That the coefficient of X is positive, indicating X and Y vary in the same direction, verifies the hypothesis we set, which is that the solders' concern level and confidence level towards employment and their recognition for skill training provide initiative and help to improve employability. Also, we can infer that solders with higher employability can have a better employment attitude.

6. Conclusions

This paper researches on solders' employment attitude, employability and the relationship between them. Through the analysis, we get to the following conclusions:

- In the employment attitude aspect: Solders' concern level towards employment is of middle-level; they have much confidence in searching jobs and a high expectation in job prospects; both solders with high and ordinary recognition for skill training occupy most. Mismatch and unbalance of solders' employment attitude also exist. Solders' concern level, confidence level and recognition for skill training are positively interrelated with each other.
- In the employability aspect: Solders have more confidence in psychological qualities, basic skills and social skills, while they realize that they have relatively poor quality in job skills. Employability indicators have positive linear correlation with each other. Solders' psychological qualities, basic skills, social skills and job skills have polarization characteristics. Though having legal support, solders' job skills still need to be improved. Because job skills are of high importance and can hardly be influenced by other qualities or skills, powerful methods of promoting are needed.
- In the aspect of relationship between employment attitude and employability: None of the indicators, except confidence level, obeys normal distribution. These non-normal indicators are affected by a few indicators or they are affected by a leading factor. Solders' employment attitude has a significant positive influence on their employability, but the influence is not that strong. Exogenous factors are needed to improve the explanatory ability of the regression function.

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Appendix

Question	Choice and scoring				
	A	**B**	**C**	**D**	**E**
1. Do you know the job placement situation before service?	No.	A little.	Basically know.	Have good understanding.	
	1	2	3	4	
2. Do you concerned about the employment situation and employment policies?	Yes.	No.			
	1	0			
3. Do you understand about the employment situation and employment policies?	Yes.	No.			
	1	0			
4. How is your expectation about employment prospects after retired?	Very good.	Good.	Bad.	Very bad.	Have no idea.
	5	4	2	1	3
5. What kind of job do you want most after retired?	Senior manager.	Middle manager.	Junior manager.	Common staff.	
	4	3	2	1	
6. What is your expected salary level per month after retired?	Less than 1000 CNY.	1000~3000 CNY.	3000~5000 CNY.	More than 5000 CNY.	
	1	2	3	4	
7. Do you think that skill training has benefits on job seeking?	Training can benefit a lot.	Training has some benefits.	Training can benefit only a little.	Totally not.	
	4	3	2	1	
8. What is your attitude towards attending training in spare time?	It helps a lot in job seeking.	It helps but also cost efforts.	Have no idea.	It is useless.	
	4	3	2	1	

Annex Table 1. Questions and quantitative methods of employment attitude

Item	Choice and scoring				
	Have not.	**Almost have not.**	**Have a little.**	**Basically have.**	**Have.**
1. Responsibility	1	2	3	4	5
2. Dedication	1	2	3	4	5
3. Initiative	1	2	3	4	5
4. Cooperative will	1	2	3	4	5
5. Obedience	1	2	3	4	5
6. Verbal ability	1	2	3	4	5
7. Writing skills	1	2	3	4	5
8. Learning ability	1	2	3	4	5
9. Executive ability	1	2	3	4	5
10. Problem-solving skills	1	2	3	4	5
11. Coordination skills	1	2	3	4	5
12. Reaction capacity	1	2	3	4	5
13. Innovation capacity	1	2	3	4	5
14. Reading ability	1	2	3	4	5
15. Analytical ability	1	2	3	4	5
16. Operational capability	1	2	3	4	5
17. Independence	1	2	3	4	5
18. Leadership skills	1	2	3	4	5
19. Comprehension	1	2	3	4	5
20. Self-recommendation skills	1	2	3	4	5
21. Interpersonal skills	1	2	3	4	5
22. English proficiency	1	2	3	4	5
23. Computer proficiency	1	2	3	4	5

Annex Table 2. Questions and quantitative methods of employability