



How to Evaluate the Performance of Continuous Education On the Improvement of Women's Integrated Competence

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Abstract

Considering Chinese women's lower education and integrated competence, governments at all levels call for improving women's integrated quality by continuous education. However, although continuous education is an important form in China's education system, there is no scientific measurement system to evaluate the performance of continuous education on the improvement of lower-education-degree women's integrated competence at present. By means of comparing women's situations before and after participating continuous education, and quantitative and qualitative analyses, this paper tries to find out the way to evaluate the performance of continuous education on the improvement of women's integrated competence.

Keywords: Evaluation, Continuous education, Women, Competence

Women's integrated competence is a general concept, combining all abilities concerning women's thoughts and politics quality, individual spiritual state, scientific and cultural level, career development, social association, and healthy. It chiefly includes women's responsibility, enterprise, consciousness, will, sentiment, intelligence, skill, specialty, education, sociality, constitution, and many other elements (Huiping Chen, 2006, p12). Presently, the women's "improving quality" project is on-going, advocating women's equal education. However, in order to achieve this goal really, we should not stop at women's enrollment ratio of fundamental education or eliminating illiteracy but focus on improving the level of women education and enriching the contents of education. As a matter of fact, in real social life, because of the restrictions of traditional customs, social ideas, economic status, geological location, family condition, and many other elements, women usually have less opportunities than men to obtain benefits from continuous education, and even fail to obtain necessary knowledge due to gender, which greatly restricts the further improvement of women's integrated competence (Jihong Ning, 2004, p28).

Continuous education is to supplement, renew, broaden, and improve people's knowledge and skills. In other words, after working a period of time or during the work period, people choose to study in educational or training institutions. It includes diploma education and non-diploma education, and emphasizes the systematic education. Continuous education exerts it significant effects on optimizing intelligent structure, improving intelligent quality, developing creativity, mining people's potential, inspiring talents, exploring people's spiritual motivation, and driving their overall development.

The Federation of Women in Zhongshan city, Guangdong, has already realized the importance of continuous education in improving women's scientific and cultural knowledge, and skills. In 2003, it started the project of improving women's quality. At present, the Federation of Women in Zhongshan city has already helped more than 5000 women to take continuous education. Besides, more than ten thousand women have accepted short-term trains.

Then, how to evaluate the effects of continuous education on the improvement of women's integrated competence? Firstly, we should establish the structure of women's integrated competence.

1. Establish the structure of women's integrated competence

According to the components of women's integrated competence, we take five aspects, namely women's thoughts and political quality, individual spiritual state, scientific and cultural level, career development, and social association, as the level-1 indexes in evaluating women's integrated competence. And each level-1 index consists of many level-2 indexes respectively. The detail is as follow (Table 1).

2. Construct the system of evaluating the performance of continuous education on the improvement of women's integrated competence

At present, there is no special analysis tools to evaluate whether women's integrated competence can be improved by continuous education or not. Based on the structure of women's integrated competence, this paper completes a

questionnaire survey on whether continuous education can improve informants' integrated competence or not. Here, the paper classifies informants' answers into five classes, including "extremely agree", "agree", "general", "disagree", and "extremely disagree".

For the sake of rightly measuring different indexes, the project team establishes the rules of marking informants' choices as follow.

If an informant chooses "extremely agree", it means he or she completely agrees that his or her ability reflected by this index is improved significantly. And the degree of agreement is 100%.

If an informant chooses "agree", it means that he or she agrees to a 75% degree that his or her ability reflected by this index is improved obviously. And the degree of agreement is 75%.

If an informant chooses "general", it means that he or she agrees to a 50% degree that his or her ability reflected by this index is improved unnoticeably. And the degree of agreement is 50%.

If an informant chooses "disagree", it means that he or she does not agree that his or her ability reflected by this index is improved obviously. And the degree of agreement is 25%.

If an informant chooses "extremely disagree", it means that he or she completely disagrees that his or her ability reflected by this index is improved obviously. And the degree of agreement is 0%.

Then, we can get every level-2 index's degree of agreement by the following formula.

$$D = (n_1 \times 100\% + n_2 \times 75\% + n_3 \times 50\% + n_4 \times 25\% + n_5 \times 0\%) / N \quad (\text{Formula 1})$$

Here, D refers to level-2 index's degree of agreement. n_1 , n_2 , n_3 , n_4 , and n_5 respectively refers to the numbers of people who choose "extremely agree", "agree", "general", "disagree", and "extremely disagree". N refers to the total number of people who make choices concerning certain index.

The degree of agreement can directly reflect the correlation between women's participation in continuous education and their integrated competence's level-2 indexes. Therefore, in order to make further studies more convenient, we turn the average of every level-2 index into continuous education's relevant level-1 index's degree of improvement on women's integrated competence (degree of improvement for short).

$$T = \sum_{i=1}^S D_i / S \quad (\text{Formula 2})$$

Here, T refers to the average degree of improvement of continuous education on this level-1 index. D_i refers to the degree of agreement of every level-2 index under certain level-1 index. S refers to the quantity of level-2 indexes under certain level-1 index.

After getting the values of D and T respectively, we can make evaluations based on standards as follow.

If D (or T) $< 60\%$, it means that the informant thinks that continuous education does not exert evident effects on this index of women's integrated competence. The degree of improvement is low.

If $60\% \leq D$ (or T) $< 80\%$, it means that continuous education can exert obvious effects on this index of women's integrated competence. The degree of improvement is high.

If D (or T) $\geq 80\%$, it means that continuous education can exert significant effects on this index of women's integrated competence. The degree of improvement is very high.

Therefore, we can construct the following model for evaluating the performance of continuous education on the improvement of women's integrated competence (Table 2).

3. Analyze the improving effects of continuous education on women's integrated competence in Zhongshan city

After establishing the evaluation system, the project team has designed the "Effects of continuous education on women's integrated competence in Zhongshan city and relevant evaluation" questionnaire carefully according to different indexes in this system. Team members have visited hundreds of women who had taken continuous education, and have collected 713 effective questionnaires. Nearly 60% informants have taken the continuous education provided by the Federation of Women in Zhongshan city and higher colleges. Based on these useful data, this paper analyzes the improvement effect of continuous education on women's integrated competence from five aspects.

3.1 Analyze the improving effect of continuous education on women's concerns for current affairs, national and social common issues

According to the data (Figure 1) in the questionnaire on "the effect of continuous education on women's concerns for current affairs, national and social common issues", 113 informants choose "extremely agree", 390 "agree", 187 "general", 15 "disagree", and 1 "extremely disagree".

According to the Formula 1:

$$D=(n_1\times 100\%+n_2\times 75\%+n_3\times 50\%+n_4\times 25\%+n_5\times 0)/N$$

We can get informants' degree of agreement on certain level-2 index.

$$D_1=[113\times 100\%+390\times 75\%+187\times 50\%+15\times 25\%+0\times 1]/(113+390+187+15+1)=71.2\%$$

And according to the evaluation model, "If $60\% \leq D$ (or T) $< 80\%$, it means that continuous education can exert obvious effects on this index of women's integrated competence. The degree of improvement is high." We can conclude that:

Continuous education can make women more concerning from international politics, national and social affairs. The degree of improvement is high.

3.2 Analyze the improving effect of continuous education on women's social and collective responsibility and sense of honor

According to the data (Figure 2) in the questionnaire, 91 informants choose "extremely agree", 431 "agree", 166 "general", 13 "disagree", and 0 "extremely disagree". According to the Formula 1, we can get:

$$D_2=(91\times 100\%+431\times 75\%+166\times 50\%+13\times 25\%+0\times 0)/(91+431+166+13+0)=71.4\%$$

And according to the evaluation model, "If $60\% \leq D$ (or T) $< 80\%$, it means that continuous education can exert obvious effects on this index of women's integrated competence. The degree of improvement is high." We can conclude that:

Continuous education can improve women's social and collective responsibility and sense of honor significantly. The degree of improvement is high.

3.3 Analyze the improving effect of continuous education on women's world view and philosophy

According to the data (Figure 3) in the questionnaire, 181 informants choose "extremely agree", 408 "agree", 87 "general", 9 "disagree", and 0 "extremely disagree". According to the Formula 1, we can get:

$$D_3=(181\times 100\%+408\times 75\%+87\times 50\%+9\times 25\%+0\times 0)/(181+408+87+9+0)=77.8\%$$

And according to the evaluation model, "If $60\% \leq D$ (or T) $< 80\%$, it means that continuous education can exert obvious effects on this index of women's integrated competence. The degree of improvement is high." We can conclude that:

Continuous education can exert positive effect on women's world view and philosophy significantly. The degree of improvement is high.

In the structure of women's integrated competence, the level-1 index of women's politics and thoughts quality consists of three level-2 indexes, namely women's concerns for international affairs, and national and social common issues, women's social and collective responsibility and sense of honor, and women's world view and philosophy. According to the Formula 2, we can get:

$$T_1=(71.2\%+71.4\%+77.8\%)/3=73.4\%$$

Because the degree of improvement T_1 is between 60% and 80%, the project team concludes that the continuous education can exert significant effect on women's political and thoughts quality, the level-1 index in the system of women's integrated competence. Its improving effect is evident and the degree of improvement is high.

Similarly, we can get relevant data about other nine level-2 indexes and four level-1 indexes as follow (Table 3).

Based on analyses above, we can conclude that continuous education contributes to the improvement of women's integrated competence from five aspects, including political and thoughts quality, individual spiritual state, scientific and cultural level, career development, and social ability. Especially in women's scientific and cultural aspect, the degree of improvement is higher (the average degree reaches 80.5%). The degrees of improvement for another four level-1 indexes are higher than 70%. These data prove that continuous education can significantly improve women's integrated competence, which is an important way to develop the female human resources

References

- Chen, Huiping. (2006). On the problem of development of youthful women in the rural areas. *Women's Academy at Shandong*. No.2, p12.
- Ning, Jihong. (2004). On the problems of rural women's development at the new era. *Journal of Shandong Agricultural Administrators' College*. No.2, p28.

Table 1. The structure of women's integrated competence.

	Level-1 index	Level-2 index
Structure of women's integrated competence	Political and thoughts quality	Degree of thinking of current affairs and common issues
		Responsibility and sense of honor
		World view and philosophy
	Individual spiritual state	Demand for study and consciousness of competition
		Spiritual and working state
	Scientific and cultural level	Ability of learning and innovation
		Theoretical level and expression ability
		Ability of differentiation and analysis
	Career development	Work skill and specialty level
		Career programming
	Social association	Ability of coordination and communication
		Social and relationship net
		Degree of participating social activities

Table 2.

	Level-1 index	Evaluation of continuous education on this index	Level-2 index	Degree of agreement
Model for evaluating the performance of continuous education on the improvement of women's integrated competence	Political and thoughts quality (T ₁)	If D (or T) < 60%, it means that the informant thinks that continuous education does not exert evident effects on this index of women's integrated competence. The degree of improvement is low.	Degree of thinking of current affairs and common issues	D ₁
			Responsibility and sense of honor	D ₂
			World view and philosophy	D ₃
	Individual spiritual state (T ₂)		Demand for study and consciousness of competition	D ₄
			Spiritual and working state	D ₅
	Scientific and cultural level (T ₃)	If 60% <= D (or T) <80%, it means that continuous education can exert obvious effects on this index of women's integrated competence. The degree of improvement is high.	Ability of learning and innovation	D ₆
			Theoretical level and expression ability	D ₇
			Ability of differentiation and analysis	D ₈
	Career development (T ₄)		Work skill and specialty level	D ₉
			Career programming	D ₁₀
	Social association (T ₅)		Ability of coordination and communication	D ₁₁
			Social and relationship net	D ₁₂
			Degree of participating social activities	D ₁₃

Table 3.

	Level-1 index	Evaluation of continuous education on this index	Level-2 index	Degree of agreement
Model for evaluating the performance of continuous education on the improvement of women's integrated competence	Political and thoughts quality (T ₁)	T ₁ =73.4% It means that continuous education has obvious improving effect on this index and the degree of improvement is high.	Degree of thinking of current affairs and common issues	D ₁ =71.2%
			Responsibility and sense of honor	D ₂ =77.4%
			World view and philosophy	D ₃ =77.8%
	Individual spiritual state (T ₂)	T ₂ =76.5% It means that continuous education has obvious improving effect on this index and the degree of improvement is high.	Demand for study and consciousness of competition	D ₄ =76.2%
			Spiritual and working state	D ₅ =76.7%
	Scientific and cultural level (T ₃)	T ₃ =80.5% It means that continuous education has obvious improving effect on this index and the degree of improvement is high.	Ability of learning and innovation	D ₆ =82.0%
			Theoretical level and expression ability	D ₇ =79.1%
			Ability of differentiation and analysis	D ₈ =80.5%
	Career development (T ₄)	T ₄ =74.8% It means that continuous education has obvious improving effect on this index and the degree of improvement is high.	Work skill and specialty level	D ₉ =81.4%
			Career programming	D ₁₀ =68.3%
	Social association (T ₅)	T ₅ =71.7% It means that continuous education has obvious improving effect on this index and the degree of improvement is high.	Ability of coordination and communication	D ₁₁ =72.2%
			Social and relationship net	D ₁₂ =74.9%
			Degree of participating social activities	D ₁₃ =67.9%

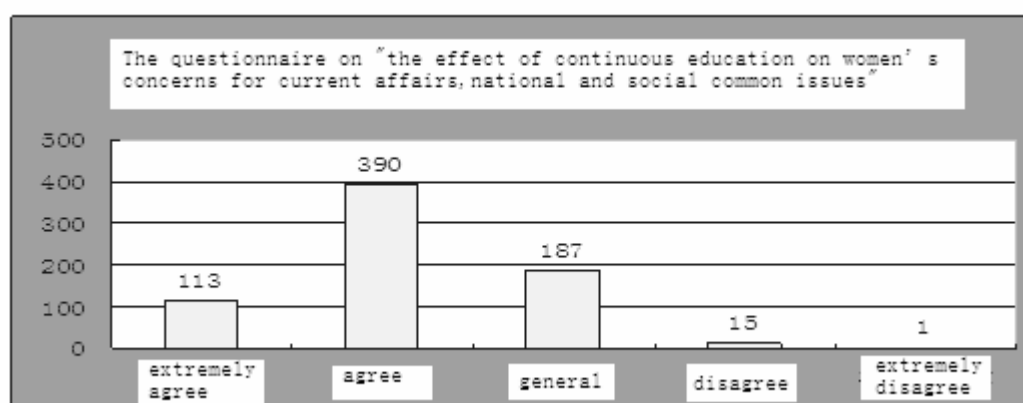


Figure 1.

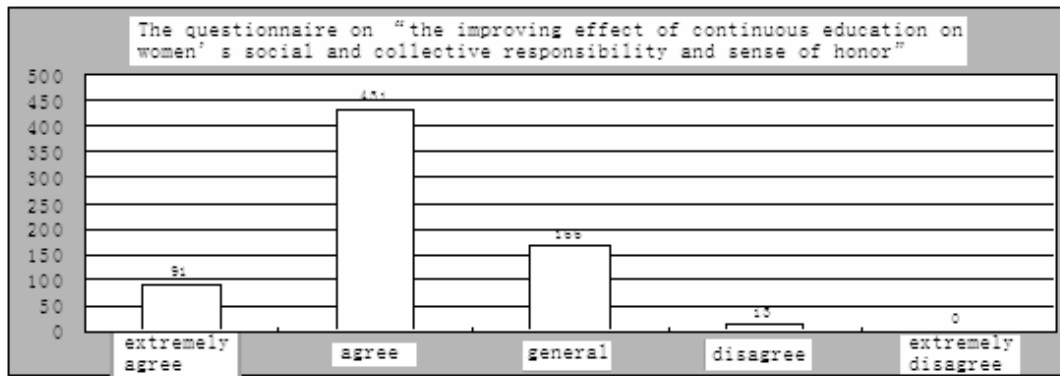


Figure 2.

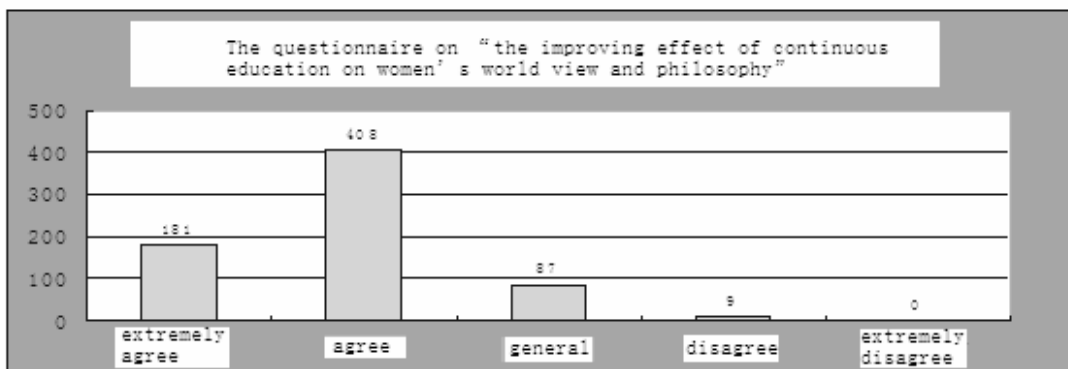


Figure 3.