

The Regression Analysis of the Kindergarten Teachers' Education Concept

MAO Le^[a]; ZENG Bin^{[b],*}; LI Yang^[c]

^[a]School of Education, Ankang University, Ankang, China.

^[b]Preschool and Primary Education School, China West Normal University, Nanchong, China.

^[c]Neijiang Vocational & Technical College, Neijiang, China.

*Corresponding author.

Supported by Education development research center of Sichuan province project “study on the efficiency of private kindergartens classification management” [project number: CJF17048]; 2017 person of outstanding ability, China West Normal University scientific research fund project “private kindergartens classification management and its support system research” [project number: 17 yc533].

Received 16 August 2018; accepted 1 November 2018
Published online 26 November 2018

Abstract

Scientific and rational concept of education is of great significance to the development of kindergarten teachers. In order to investigate kindergarten teachers' concept of education task, education content, young children's one-day life, and young children's active learning. The Kindergarten Teachers' Education Concept Questionnaire was adopted in the research, and 138 kindergarten teachers who come from Sichuan province were sampled as the research objects. The results showed that educational attainment had an overall effect on kindergarten teachers' education concept. Professional rank had an effect on kindergarten teachers' concept of education task. Kindergarten teachers' concept of education content had significant differences in different regions. Household income had an effect on kindergarten teachers' concept of young children's one-day life. Personal relations had an effect on kindergarten teachers' concept of children's active learning. That is to say, kindergarten teachers' education concept was influenced by factors like educational attainment, professional rank, location of kindergarten, personal relations, household income etc.

Key words: Kindergarten teachers; Education concept

Mao, L., Zeng, B., & Li, Y. (2018). The Regression Analysis of the Kindergarten Teachers' Education Concept.

Canadian Social Science, 14(11), 30-34. Available from: <http://www.cscanada.net/index.php/css/article/view/10649>
DOI: <http://dx.doi.org/10.3968/10649>

INTRODUCTION

Education concept is of great significance to the development of teachers. First, teachers' education concept has an effect on their education behavior. Second, teachers' education concept has an effect on their teaching behavior. Third, education reform need improvement of education concept of teachers. The research on education concept by Chinese scholars mainly focuses on the present situation, characteristics, formation and transformation. At present, the current domestic research on teachers' education concept has the following shortcomings: First, there is little research on kindergarten teachers' education concept. Second, neglect the research on the influencing factors of teachers' education concept. Third, the quantitative research of teachers' education concept is less. Aimed at the deficiency of existing researches, this study intends to make a breakthrough in the following aspects: First, kindergarten teachers are selected as the research objects in this study, which is beneficial to understand the influencing factors of the kindergarten teachers' education concept. Second, the research on influencing factors of kindergarten teachers' education concept is more comprehensive. The existing researches on teachers' education concept mainly consider the internal factors, but in this study, both internal factors and external factors are all took into account.

1. METHODS

1.1 Study Object

The study samples were from 3 demonstration kindergartens and 3 non-demonstration kindergartens which located in Shunqing district, Langzhong city,

Yingshan county, Erlong town, and Longling town, in Nanchong, Sichuan province, China. The number of issuing questionnaire was 160. The number of actual recycling questionnaire was 149. The valid questionnaires was 138. The basic data was as follows. 69 kindergarten teachers were from the urban areas. 55 kindergarten teachers were from county. 14 kindergarten teachers were from the villages and towns. 7 kindergarten teachers didn't get college degree. 78 kindergarten teachers had college degree. 53 kindergarten teachers had bachelor degree. None of the kindergarten teachers had graduate degree or above. 80 kindergarten teachers had primary professional rank. 33 kindergarten teachers had middle professional rank. 11 kindergarten teachers had senior professional rank. 14 kindergarten teachers had not professional rank. 106 kindergarten teachers belonged to the institution staff, and 32 didn't. There were 69 kindergarten teachers whose monthly income were less than 5,000 yuan. There were 51 kindergarten teachers whose monthly income were between 5,000 yuan and 10,000 yuan. There were 18 kindergarten teachers whose monthly income were more than 10,000 yuan.

1.2 Tools

The research tool was kindergarten teachers' education concept questionnaire which was revised according to Kindergarten Education Quality Evaluation Handbook. This questionnaire included the concept of education task, education content, young children's one-day life,

and young children's active learning. This questionnaire adopted 4 grade Richter scale. The reliability and validity of the questionnaire were respectively 0.78 and 0.75. SPSS24.0 was used for data statistics and analysis.

2. RESULTS

2.1 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Overall Education Concept as Dependent Variable

In this study, it adopted stepwise multiple regression analysis which selected kindergarten teachers' personal circumstance as independent variable and overall education concept as dependent variable. It was educational attainment that entered into the independent variable of regression equation. The F statistics of the whole regression model test reaches a significant level. $F=5.089$. Table 1 shows that the regression of educational attainment to concept of kindergarten teachers' education is remarkable. $p=0.026$. In the regression model, predictive variable' standardized regression coefficient is 0.19. $\beta=0.19$. At the same time, it is a positive number which means that educational attainment has a positive effect on kindergarten teachers' overall education concept.

Table 1
Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Overall Education Concept as the Dependent Variable

Predictive variable	R	R ²	ΔR^2	F	B	Beta(β)	t	p
Intercept					19.546			
Educational attainment	0.190	0.036	0.029	5.089*	1.903	0.190	2.256*	0.026

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

2.2 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Education Concept Dimensions as the Dependent Variables

2.2.1 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Education Task concept as the Dependent Variable

In this study, it adopted stepwise multiple regression analysis which selected kindergarten teachers' personal circumstance as independent variable and education task

concept as dependent variable. It was professional rank that entered into the independent variable of regression equation. The F statistics of the whole regression model test reaches a significant level. $F=7.014$. Table 2 shows that the regression of professional rank to kindergarten teachers' education task concept is remarkable. $p=0.009$. This suggests that professional rank could significantly predict the kindergarten teachers' education task concept. In the regression model, predictive variable' standardized regression coefficient is 0.221. $\beta=0.221$. At the same time, it is a positive number which means that professional rank has a positive effect on kindergarten teachers' education task concept.

Table 2
Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Education Task Dimension as the Dependent Variable

Predictive variable	R	R ²	ΔR^2	F	B	Beta(β)	t	p
Intercept					19.546			
Professional rank	0.221	0.049	0.049	7.014**	0.936	0.221	2.648**	0.009

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

2.2.2 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Education Content Concept as the Dependent Variable

In this study, it adopted stepwise multiple regression analysis which selected kindergarten teachers' personal circumstance as independent variable and education content concept as dependent variable. It was location of kindergarten that entered into the independent variable of regression equation. The F statistics of the whole regression model test reaches a significant level. $F=6.785$.

Table 3 shows that the regression of kindergarten location to kindergarten teachers' education content concept is remarkable. $p=0.01$. This suggests that kindergarten location could significantly predict the kindergarten teachers' education content concept. In the regression model, predictive variable' standardized regression coefficient is 0.218. $\beta=0.218$. At the same time, it is a positive number which means that kindergarten location has a positive effect on kindergarten teachers' education content concept.

Table 3
Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Education Content Concept as the Dependent Variable

Predictive variable	R	R ²	ΔR^2	F	B	Beta(β)	t	p
Intercept					9.786			
Location of kindergarten	0.218	0.048	0.048	6.785*	0.564	0.218	2.605*	0.01

* $p<0.05$,** $p<0.01$,*** $p<0.001$

2.2.3 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Young Children's One-Day Life Concept as the Dependent Variable

In this study, it adopted stepwise multiple regression analysis which selected kindergarten teachers' personal circumstance as independent variable and young children's one-day life concept as dependent variable. It was family income that entered into the independent variable of regression equation. The F statistics of the whole regression model test reaches a significant level.

$F=5.176$. Table 4 shows that the regression of family income to kindergarten teachers' concept of young children's one-day life is remarkable. $p=0.024$. This suggests that family income could significantly predict the kindergarten teachers' concept of young children's one-day life. In the regression model, predictive variable' standardized regression coefficient is 0.191. $\beta=0.191$. At the same time, it is a negative number which means that family income has an negative effect on kindergarten teacher s' concept of young children's one-day life.

Table 4
Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Young Children's One-Day Life Concept as the Dependent Variable

Predictive variable	R	R ²	ΔR^2	F	B	Beta(β)	t	p
Intercept					9.366			
Family income	0.191	0.037	0.030	5.176*	-0.257	-0.191	-2.275*	0.024

* $p<0.05$,** $p<0.01$,*** $p<0.001$

2.2.4 Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Young Children's Active Learning Concept as the Dependent Variable

In this study, it adopted stepwise multiple regression analysis which selected kindergarten teachers' personal circumstance as independent variable and young children's active learning concept as dependent variable. It was personnel relation that entered into the independent variable of regression equation. The F statistics of the whole regression model test reaches a significant level.

$F=4.126$. Table 5 shows that the regression of personnel relation to kindergarten teachers' concept of young children's active learning is remarkable. $p=0.044$. This suggests that personnel relation could significantly predict the kindergarten teachers' concept of young children's active learning. In the regression model, predictive variable' standardized regression coefficient is 0.172. $\beta=0.172$. At the same time, it is a positive number which means that personnel relation has a positive effect on kindergarten teacher s' concept of young children's active learning.

Table 5
Stepwise Multiple Regression Analysis of Taking Kindergarten Teachers' Personal Circumstance as Independent Variable and Young Children's Active Learning Concept as the Dependent Variable

Predictive variable	R	R ²	ΔR^2	F	B	Beta(β)	t	p
Intercept					8.412			
Personnel relation	0.172	0.029	0.029	4.126*	0.756	0.172	2.031*	0.044

* $p<0.05$,** $p<0.01$,*** $p<0.001$

3. DISCUSSION

3.1 Kindergarten Teachers' Education Concept was Mainly Affected by Educational Attainment

Educational attainment could predict the kindergarten teachers' education concept to the greatest extent. This result suggests that educational attainment has an effect on kindergarten teachers' education concept. Wang Yanzhi (2007) had taken a research which showed that educational attainment could affect kindergarten teachers' education concept. This study further confirms and enriches her research result. First, from the angle of research tools, Wang Yanzhi (2007) took use of teacher concept, children concept and education concept. However, the result had no difference by using different research tools to study the kindergarten teachers' education concept. Second, from the research region, Wang Yanzhi(2007) selected Hebei province which belonged to Chinese central region, while it belonged to Chinese western region in this study. This result suggests that no matter in western China or central China, educational attainment both has an effect on kindergarten teachers' education concept. Third, from the point of different stages of education, the result had no difference with other studies of teachers' education concept. They both prove that educational attainment has an effect on teachers' education concept. Such as Wang Changqing's (2009) study of high school teachers.

3.2 Kindergarten Teachers' Education Task Concept was Mainly Affected by Professional Rank

This result suggests that professional rank has an effect on kindergarten teachers' education task concept. Other studies of education stages had the same result. For example, Wang Changqing (2007) had taken a research that if middle school teachers got different professional rank, their mental health education would be different. The reason might have the following points. First, according to the scheme of kindergarten teachers professional rank evaluation in our country, professional rank, to a certain extent, on behalf of the kindergarten teachers' ability level. Second, it might be related to kindergarten teachers' professional level of consciousness. According to the research of Chen Shuiping (2015), the professional consciousness level of kindergarten teachers who had professional rank were better than kindergarten teachers who had not professional rank.

3.3 Kindergarten Teachers' Concept of Education Content was Mainly Affected by Location of Kindergarten

This result suggests that location of kindergarten has an effect on kindergarten teachers' concept of education content. This was consistent with the research results of Wang Yanzhi (2007), Li Ning (2013), Li Lixin (2014), Tan Xiangfu (2016) et al. For example, the survey result of Li Ning (2013) showed that city kindergarten teachers'

education concept level is better than that of rural kindergarten teachers. The results of Pan Yuejuan (2012) and Liu Yan (2012) et al all showed that in terms of school preparation, urban children and rural children were different significantly. The results of this study further suggests that the education concept of kindergarten teachers might be one of the reasons for the differences between urban and rural children.

3.4 Kindergarten Teachers' Concept of Young Children's One-Day Life was Mainly Affected by Family Income

The result indicates that family income has an effect on kindergarten teachers' concept of young children's one-day life. The results of Jia Jinjin (2014) and Kang Jing (2004) et al had showed that kindergarten teachers did not make full use of the one-day life. For example, the result of Kang Jing (2004) showed that kindergarten teachers attached great importance to the teaching activity but ignored life activities. The result further indicates that family income has an effect on kindergarten teachers' concept of young children's one-day life.

3.5 Kindergarten Teachers' Concept of Children's Active Learning was Mainly Affected by Personnel Relation

Personnel relation could predict kindergarten teachers' concept of children's active learning to the greatest extent. It means that personnel relation has an effect on kindergarten teachers' concept of children's active learning. The reason could be analysed from the following angles. There were four possible reasons from analyzing kindergarten teachers' personal perspective. First, it might be related to kindergarten teachers' subjective well-being. The result of Wei Yonggang (2014) showed that the subjective well-being of kindergarten teachers who belonged to institution staff was better than that of kindergarten teachers who were out of institution staff. For kindergarten teachers with establishment, they had a stable job, and there was no risk of being laid off at any time, so they were willing to spend time on encouraging children to study actively. Second, it might be associated with the kindergarten teachers' job satisfaction. The result of Lu Chang'e (2012) suggested that kindergarten teachers with establishment had higher job satisfaction, so they would pay more attention to the development of young children. Third, it might be associated with the psychological contract characteristics of kindergarten teachers without establishment. Without establishment, kindergarten teachers had strong psychological oppression and imbalance. Undeniably, they were high-risk groups of psychological contract violation. The result of Tian Yuan (2015) could confirm this point. As a result, kindergarten teachers without establishment tended to ignore the guidance to children's active learning. Fourth, it might be associated with the ability to work of kindergarten teachers. Existing research showed that

state-paid kindergarten teachers' work ability was better than non-state-paid kindergarten teachers. The result of Luo Zhengwei (2014) could confirm this point. As a consequence, compare to kindergarten teachers without establishment, kindergarten teachers with establishment were better at guiding children's active learning. From analyzing external causes, it might be related to kindergarten teachers' living conditions. The result of Li Chenzhi (2014) showed that kindergarten teachers without establishment were at a disadvantage. In addition, compare to kindergarten teachers with establishment, kindergarten teachers without establishment faced a number of problems. Such as low income, lack of social security, big work load and fewer opportunities for advancement. There were two possible reasons. First, it might be related to their professional development. In terms of professional development, kindergarten teachers without establishment were at a disadvantage and were not conducive to get good professional development way. The results of Li Huafeng (2015) and Zhang Yanlei (2009) both confirm it. For example, the result of Zhang Yanlei (2009) showed that kindergarten teachers without establishment were lack of opportunities to take part in on-the-job training and study tours. And in terms of professional development level, kindergarten teachers without establishment obviously lagged behind kindergarten teachers with establishment. Second, it might be associated with the treatment of kindergarten teachers. Even in economically developed regions such as Beijing and Shanghai, the kindergarten teachers without establishment still had low income. For example, Gao Congcong (2015) selected Shenzhen as research area, and the result also confirmed this.

REFERENCES

- Chen, S. P., & He, Z. F. (2015). Preschool teachers' professional consciousness: Structure, characteristics and Influence factors. *Education Research Monthly*, (10), 58-64.
- Gao, C. C., Li, C. Z., & Wu, Q. L. (2015). Non-state-paid kindergarten teachers' living condition investigation and study. *Journal of Teacher Education*, 2(05), 80-87.
- Gao, X. Y., & Pang, L. J. (2003). The role of theory of teachers' education ideas. *Educational Science*, 02, 23-26.
- Kang, J. (2004). *Lanzhou city kindergarten day life management problems in the analysis and strategy research* (Master's thesis). Northwest Normal University, Lanzhou.
- L, C. Z., & Gao, C. (2014). 20 years' study on non-state-paid teachers' living condition. *Contemporary Teacher Education*, 7(02), 27-31.
- Li, C. Z., & Gao, C. C. (2015). Factors and Specific ways of non-state-paid teachers' professional development. *Journal of Teacher Education*, 2(05), 95-102.
- Li, H. F. (2015). *Ordos city non-state-paid kindergarten teachers' living condition investigation and study* (Master's thesis). Hebei university, Hebei.
- Li, N., Deng, H. H., Zhang, X. F., & Deng, Z. J. (2013). The investigation of the urban and rural preschool teachers' education concept differences. *Truth Seeking*, S2, 289-290.
- Liu, Y., Qin, J. L., Pan, Y. J., & Shi, X. B. (2012). A comparative study of preschool children's language readiness for primary school enrollment in urban and rural areas. *Journal of Educational Studies*, 8(05), 90-97.
- Lu, C. E., & Zhang, A. Q. (2012). Preschool teachers' job satisfaction, organizational commitment and turnover intention. *Journal of West Anhui University*, 02, 58-62.
- Luo, Z. W. (2014). *Haikou city preschool teachers mental toughness empirical research* (Master's thesis). Hainan Normal University, Haikou.
- Pajares, M. F. (1992). Teachers' beliefs and educational re-search: Cleaning up a messy construct. *Review of Educational Research*, (3), 307-332.
- Pan, Y. J., Qiu, Z. H., Liu, Y., & Zhou, X. (2012). A Comparative study of math learning outcomes of preschool children in urban and rural areas. *Journal of Educational Studies*, 8(04), 122-128.
- Pang, L. J., & Ye, Z. (2000). Theory of teacher education idea and education behavior relationship. *Journal of Education Research*, (07), 47-50+70.
- The central institute of education science pre-school education research. (2009, July). *The kindergarten education quality assessment handbook* (p.259). Beijing: Education Science Press.
- Tian, Y., & Zhang, Z. P. (2015). A research on management strategies of temporarily-employed kindergarten teachers from the perspective of psychological contract theory. *Journal of Shijiazhuang University*, 17(06), 111-114.
- Wang, C. Q. (2009). Analysis of the alight of question-and-answer dialogue teaching in classroom and countermeasures. *Journal of Schooling Studies*, 6(04), 63-64+43.
- Wang, Y. Z., Sun, Y. J., & Meng, H. Y. (2007). Relationship between kindergarten teachers' educational perspective and quality of children 's activity. *China Journal of Health Psychology*, 04, 322-324.
- Wei, Y. G. (2014). Authorized strength have an effect on kindergarten teachers' subjective well-being. *Education Comments*, (03), 51-53.
- Zhang, Y. L. (2009). *Shanghai City Non-state-paid Kindergarten Teachers' Living Condition Study* (Master's thesis). East China Normal University,.