The Restraining Factors for the Academic Development of Female Academics and the Countermeasures in China

Ping Huang1, Guangrong Yu2, Chuandong Ma3*

1Faculty of Education, Sichuan Normal University, Chengdu, China
2Department of Science Research Administration, Sichuan Normal University, Chengdu, China
3College of Fundamental Education, Sichuan Normal University, Chengdu, China
Email: huangpingpingp@aliyun.com, 798876995@qq.com, *machuandong2006@163.com

Received 28 April 2014; revised 3 June 2014; accepted 10 June 2014

Copyright © 2014 by authors and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY).
http://creativecommons.org/licenses/by/4.0/

Abstract
Female academics are an integral part in colleges and universities, playing a more and more important role in the development of higher education in China. Female academics are the part of main working force that cannot be neglected in higher education, especially in knowledge-based economy. This paper will commence to present the facts and situation of female academics’ achievement by some statistical data. Then, the significance of the female academics professional development will be discussed. The causes that restrain the female academics’ professional development will be analyzed in China. Some suggestions and countermeasures for their academic research development will be discussed.

Keywords
Female Academics, Academic Research and Restrain, Analyze and Countermeasures

1. Introduction

With the rapid development of the higher education in China, more and more female teachers work in universities and colleges, and the number and proportion is on fast increase year by year. In 1950, there were only 2139 female teachers in colleges and universities. In 1981, there were 62,500, and in 1997, the number reached 142,400, females taking up 35.2% in college and university teachers in China [1]. When we came to 2011, there were 1,392,700 college and university teachers, among which 652,950 were females, taking up 46.88% [2].

*Corresponding author.

http://dx.doi.org/10.4236/jss.2014.26055
Thus, female teachers have become a very important new force, playing a more and more important role in China higher education. Some of them have already become the academic leaders in their colleges or universities and some have even become well-known experts both at home and abroad. However, female teachers are far from equal to male teachers in academic research activities. Judging from the professional title structure, female professors only take up 27.5% in the whole country, female associate professors take up 43% and female lectures take up 51.2% [3]. The reality is: more and more females rank first in the entrance examination for colleges and universities, but fewer and fewer female scientists come out. On the 11th high-level forum of Chinese Women Scientists Annual Meeting of China Association for Science and Technology, Liu Shu, the honor committee member and former vice chairman of China Association for Science and Technology, said that although the female scientific and technological workers surpass one-third among the whole, data displays, among the academicians of the Chinese Academy of sciences and Academy of Engineering, females only takes up 5%; among the 175 chief scientists in the 973 national key basic research development plan, there are only eight female scientists, taking up 4.6%; female scientists take up 3.9% among the Cheung Kong Scholars; among the winners for Science & Technology Award for Chinese Youth, females take up 8.4%. All the data show that in 2009, the rate of the female scientists at high rank is 5% more or less. Statistics in the past few years show that there are no females in the experts of 863 National Plan [4]. On the world scale, up till 2009, there are 466 scientists from 28 countries having won the Nobel Prize in Sciences, but there are only 10 women, taking up 2.1% among the whole [5].

In Chinese colleges and universities, female teachers take up a much smaller proportion in those who have higher professional titles, very much like a pyramid, indicating that female teachers have hardly been equal to male teachers in academic field. They have much fewer academic achievements than male teachers in numbers and their achievements are also poorer in quality. There are a few women academic backbones. Male teachers are the leading force in such academic activities as hosting high level science research projects and cultivating post graduates. On the whole, there are great differences between male and female college teachers in their academic achievements, academic status and reputation. Wei Yu, the former deputy minister of Chinese Ministry of Education, academician of CAE (the Chinese Academy of Engineering), said, “I think if a country has no voices of women in the scientific field, it is, of course, not the presentation of a country’s progress.” [5]. Thus, the authors here analyze the importance of female teachers’ academic research and the various factors that restrain their academic development, put forward the corresponding countermeasures and suggestions, which would be of great importance in constructing high level teaching staff in Chinese colleges and universities.

2. The Importance of College Female Teachers’ Professional Development Based on the Academic Prospective

Academic nature is one of the basic properties making college teachers different from other professions. The presentation of it is the development, communication, integration and application of knowledge. The fundamental duties of college teachers are teaching and science research. They are carriers of profound knowledge, and they need to constantly update their knowledge and skills so as to transfer the latest knowledge to their students, and at the same time they themselves have to be engaged in science research. The academic achievement and reputation decide one’s academic status. In fact, college teachers’ individual academic development promotes the development of academic and it also meet college teachers’ spiritual need in “their passion for justice behind the rational, their thirst for truth behind science, and their longing for better things behind criticism.” [6] and their strong intrinsic motivation to be engaged in academic activities. Academic research is one of the most important part in colleges and universities. Academic research is the way through which teachers expand their professional knowledge, deepen their science research, improve their teaching quality, update and reform their knowledge structure. Academic research is the inevitable requirement of time and society to college teachers [7]. Their work can mostly reflect the strength and academic level of a college or university.

Traditionally, academic research has been considered as a field in which only men are superior in culture, value and construction, while women are in a relatively weak position. Confronting the challenge of the time, college female teachers must consciously realize and carry out their own historical mission, social responsibilities and duties. College female teachers should realize their own characteristics, taking part in the reform to nature and society in their unique way, and being actively engaged in science research. They should confirm and realize their need and value, keeping up with the time, setting up the idea of lifelong study and fostering their
strong research awareness. They should constantly update their knowledge structure, renew their ideas, improve their academic ability and bring their potential into full play.

As college educators, only through specific academic research practice can women teachers know better the development trend of their subjects, the latest research achievements and development direction so as to make precise analysis and judgment on their taught subjects. Only after they have achieved mastery by comprehensive study on experience knowledge of their own subject and the academic knowledge in their academic field can they transfer the latest science knowledge to their students, to inspire the students to think independently in learning, to cultivate the students’ scientific spirit and innovative thinking habit, to promote students’ nurturance in their good ideology and morality, thinking method and thinking quality, to promote the formation of the students’ creative spirit and creative personality.

In the time of knowledge economy, teachers are not only learners but also researchers, which is of very importance for teachers’ professional development. Female teachers need to study, grow and develop gradually in the process of working to adopt themselves to the reform of education development, to meet the new requirement. They need to make up their deficiency, pursue new knowledge and improve their own research ability. Female teachers’ professional development is influenced to a great degree by the environment they are in, but what is more important is their own mentality and deed. Their recognition to their own value and their pursuit for rationality are the main subject consciousness. Many requirements from society, students and parents to teachers are neutral, so female teachers must construct their knowledge and ability system, improve their research ability and spend as much time and energy on academic research as possible so as to set up a better channel for their professional development and earn a place in the academic field.

3. Analysis on the Causes That Restraine Female Academics’ Professional Development

With the expansion of China’s higher education in recent years, most of the females working in teaching and research are struggling to forge ahead and playing more and more important role. But due to the fact that the female teachers share the same standards with the male teachers in the improvement of academic level, profession promotion, further study for Master or Doctor degree, female teachers have to pay more effort than men, and sometimes they have to be more excellent than men if they want to get attention they deserve, because their academic status are much lower than men, and it would be more difficult for their academic development [8]. In reality, female teachers are restrained to varying degree by various factors, and their value cannot be realized equally, which directly affect enthusiasm for scientific research. There are many reasons for it.

3.1. The Inertia Influence of Traditional Culture

The Chinese traditional marriage and family system clearly divide the responsibilities of men and wives: Men outside the home, women inside. In the process of civilization, such division of labor pattern has been deeply marked by the traditional gender culture with strong inertial force. The cultural features of Chinese patriarchy society show that the masculine culture is dominant in the society, reflected specifically in social norms, ideology and value orientation. “Men’s absolute rule to women is the fundamental principle of the society.” [9]. Even in colleges and universities, the fair social environment fit for female’s development has not fully formed, and the rocentric culture and traditional views of female restrained under such culture have not changed completely.

College female teachers are influenced not only by traditional culture, but also by modern culture, that is, men and women are equal. They are a new generation of women intellectual struggling in the cracks of the alternation of old and new culture at the crossing point of history and reality. For many years, academic research has been regarded as men’s career and men have been dominant in the academic field in colleges and universities. Females as the producers in the creative work of knowledge and other professions in society, their low participation in academic research is not primarily from their independent choice or their ability, but reflects the tendency and choice of scientific research, and its interaction with other systems. Because the main academic norm and culture are masculine, policy and regulation mostly embodies the male perspective and requirements. Men always have more chances, resources and power. Females are particularly disadvantaged in the competition of academic field. In addition, women suffer from gender discrimination in work, and at the same time they are engaged in unpaid housework, which forms a contact with reality and ideology. The external pressure from such inequality has brought many problems and restriction to women, becoming a more powerful and profound
gender mental stress [10].

3.2. Family Factors

The conflicts between tradition and modern, career and family, as well as the different requirements and standards to women from men have brought great perplex to women teachers, a focus of their role conflict and perplex. From the perspective of equality between men and women, both men and women have the responsibility of raising children, supporting parents and sharing housework. Whether from time or space, women teachers have a lot of freedom in work, so it is difficult to distinguish the boundary between work and family life from physical or secular sense [11]. Influenced by traditional view, women are required by the mindset of the society to fulfill the family duty first, and then to pursue their social goal, otherwise they will be confronted with great pressure both from family and society. According to survey, the most difficult time for women is during the period from 25 to 35 years old when they have to sacrifice their youth for family and children. Females have to lag behind males at the golden age for their academic development. The different physiological features between men and women decide the different expectation and behavior norms in the society. Female teachers play the double roles of socialized person and woman in life, shouldering the double loads of career and family. They are measured and evaluated by different standards from those for men in the society. Under such circumstances, female teachers suffer from all sorts of pressure. They are either under overload of career and family, or under pressure from family conflicts. When career conflicts with family responsibility, most women don’t want to attend to one thing while neglecting the other. Under such big mental stress, female teachers always find themselves in the contradiction between family and career choices in a state of embarrassment, so, some of them tend to shoulder the family role first, while for their own career, they have to put it aside. The negative ego makes them become mediocrity and lack of initiative, killing the potential of their wisdom and creativity, which greatly affects their academic development and achievement.

3.3. The Restriction from Their Own Physiological and Psychological Characteristics

On one hand, the role conflict female teachers are confronting makes them undertake more load than males, suffering more from the stimulus from both inside and out environment, therefore they are more likely than men to experience a series of adverse reactions in psychology, such as fretful, depressed and anxious. On the other hand, due to their physiological characteristics, they are more easily to feel self-abased, dejected and melancholy and moody. The traditional superstition and old emotions makes them have poorer mental capacity. In addition, physiologically, women bear the task of begetting and conceiving offspring, which would cost them a lot of time and energy, they have to stop their career for a period of time, while for men they would not. Third, the traditional labor division as “men outside the home, women inside (In Chinese tradition, it is supposed that men should work outside the home, while women should take care of the children and do all the housework at home.)” and the idea of “men are stronger than women” have been deeply rooted in women’s mind as their behavior standard. Psychologically, the man-dominated society of thousands of years has made women the weaker side. Most women now depend too much on men and families because of their weak state of mind and psychological dependence on men. Fourth, there are fewer women achieving a lot in the field of scientific research, but it doesn’t mean that they cannot pay the same contribution to sciences just because they are considered not fit for scientific research and they are inferior to men in their ability. All these greatly affect their choice for academic research and largely weaken their scientific ambition and confidence. Some women have high education background, but the traditional labor division and the competition in academic research make some female teachers feel it very difficult to do science research, so they choose to hold back in front of challenges, giving up or lower their own career goal. They think it reasonable to lag behind men in career, and are willing to stand behind to support their husbands or children to achieve success so as to realize their own value—in the social psychology it is called a sense of substitute achievement. Therefore, there is a distance between female and male teachers in their main body consciousness, competition consciousness, innovative consciousness and success consciousness.

3.4. The Differences in Their Cognitive Structure from Male

As a creative thinking activity, scientific research requires the researcher has high theoretical attainment, a reasonable knowledge structure and perfect cognitive structure. First, modern psychology research proves, that men
and women have little different in their intelligence quotient, there is indeed difference in their cognitive ability: females are inferior to males in creativity, thinking and imagination, but they are superior to men in observation, memory and verbal skills. Their cognitive structure make them unfit for science research. Second, women focus their attention and interest on themselves or things related with them due to the influence of traditional gender role. Such self-consciousness of inward-looking constrains women field of vision. Their sensitivity and acceptance to the outside world information is not high, which greatly affects the improvement of their abstract logical thinking. They are used to seal way of thinking, lack of innovation spirit, so they cannot check on themselves, they can not reflect, adjust and change themselves in a broader social background, as a result, they are not confident in themselves, lack of sense of competition, reconciled to the situation they make no attempt to make progress. They are limited in cultural and academic exchanges and their academic field of vision. All these seriously affect their academic position and the possibility of create new academic achievements and individual potential. Third, at present, the discourse of the current scientific research and professional structure still take the traditional gender boundaries for the guidelines. Science is the field of masculine values and of male authority. Cognitive science is still “man thinking”. In the process of socialization, men and women have different growing experience, women’s cognitive perspective, thinking mode and value orientation are quite different from men. The traditional higher education mode established on the basis of the emphasis on “rational” is unfavorable to the development of female teachers. In the male-centered culture, a successful woman is considered as a family-unfriendly, not understand life, feelings blunt “superwoman”. Actually this is comparison for men, consciously or unconsciously, centralized preset implied men, in another way, in a deeper sense, identity and strengthen the male scale.

### 3.5. Influence of Social Environment

W. F. Ferudo thinks, “Society does not emphasize on women’s desire to have higher achievements in the field of intelligent and leadership, but encourage them to achieve in social skills.” [12]. Traditionally, men are strong and women are weak, this is not determined by their physical, but caused by society. In the socialization of gender roles, these concepts gradually give the role of different gender to individuals, and through the way such as family, society, schools, a variety of evaluation methods and public opinion, women are forced to follow the behavior mode that meet the needs of its gender, strengthening the role of identity and accepting some gender bias unconsciously, which affect their value orientation. Some female teachers are even afraid of getting success because they are afraid of the blame and criticism from their colleagues, families and society. The double pressures of teaching and science research affect their organizational behavior and job security. They feel very tired and unsatisfied. During the period of producing and raising children, women teachers have already lag behind men and the rule that women teachers have to retired at 55 years old, five years earlier than men, make them lose five years to compete with men, when they are rich in teaching experience and having more time doing science research. Objectively it causes the inequality in the opportunities for development in colleges and universities in the aspect of teaching and research.

### 4. Suggestions for Women Academics’ Professional Development

As the outstanding parts in women, female teachers in colleges and universities should make full use of their advantages, pursuing career success and the realization of self-value. The academic development directly affects the quality of higher education, and they should strengthen their scientific research consciousness, give full play to their potential to promote the healthy and harmonious development of higher education.

#### 4.1. Improve the Social and Cultural Environment, and Promote Conceptual Change

The old traditional idea blocks women’ pursue for career and if we want to get it removed, we should not only depend on the society, but most important is women themselves. Social idea determines the environment for women’s success, so it is of vital importance for the development and renewal of social idea. There should also be social mechanism and policy to relieve women role conflict, to develop home service industry, promote the socialization of housework, which needs the coordination of whole society.

As the training base for high-level female talents, colleges and universities are responsible for establishing good environment to develop and popularize the potential of women who really enjoy equality and freedom. To
set up the new social idea, colleges and universities must try to set up more images of women making great contributions to the society through cultivating high-level female talents, through successful women’s precept, making the whole society understand the current women historical mission and responsibility. Constantly enrich the real connotation of equality between men and women, to form a progressive society concept, to create an equality between men and women for their common development environment, fundamentally shaken the traditional culture of gender bias against women and setting up an active role for the reconstruction of traditional culture.

As female academics, they should consciously renew their traditional gender idea, setting up new social gender role. First, they should actively take part in policy advocacy and seek for social support. They should realize the positive aspects of the progress of time and their life and work. They should learn to break through the constrain of the traditional social gender culture, establishing equal social gender consciousness. Second, they should make great effort to reform and create outside environment, calmly facing the defeat and frustration in reality. They should be always positive, optimistic, aggressive with advanced consciousness and diversified ways of thinking. They should have good psychological quality and moral quality, ability quality, cultural quality, aesthetic quality together to form the perfect personality of women. Their own qualities ultimately decide their social position, the basis for self-liberation and self-fulfillment. Third, they should learn to adjust their attitude, bravely confronting the inequality in society, learn to give blithely ignore the unfairness in a simple way, learn to resolve contradictions with a positive attitude. Female college teachers should adjust their position in marriage, family and career, objectively analyze their own ability and value and take up the different responsibility in the role conflicts in order to realize the harmony of social roles and professional ability, pursue their own life ideal, properly using rational and wisdom to deal with the relationship of the family and career. Fourth, they should strive for their own development, learn to study and try to absorb new views of value, overcome inferiority and dependent psychology, and ultimately set up self-confidence, transcend themselves and realize their own value.

4.2. Strengthen Their Academic Consciousness and Lifelong Learning

Female teachers should first know clearly that the knowledge-driven time has come and women must master new research theories and methods. Secondly, they should have lifelong self-education idea, constantly improving themselves so that their knowledge structure is developing and changing with the time, keeping up with the new trend and development of their own subject, as well as the new inventions, new ideas and new insights in the bigger culture category. They should be armed with the latest knowledge to enhance the level of theory. Thirdly, female teachers should enhance their academic consciousness, giving full play to their potential, so as to gain social recognition. They should consciously take the academic innovation as historical mission given by the era, through knowledge update for breakthrough innovation, build confidence, strengthen the consciousness of competition continuously. Also, they should have the awareness of quality, take scientific research as the forerunner, and strive for excellence. They should consider the characteristic of their own ability and the environment, rationally design self-development blueprint, and establish appropriate professional development goals. Female teachers with innovative ability should hold lifelong education idea, learn how to realize the reproduction of knowledge to create development with mastered information. Innovation does not depend on how your original foundation is, but on whether you are willing to learn lifelong, and keep striving [13].

4.3. Strengthen the Management System, Arouse the Enthusiasm of Academic Research

Scientific research management in colleges and universities should pay attention to the institutional construction teachers’ academic management and the renewal of ideas, provide equal competition opportunities, learning and development opportunities for female teacher’s academic research, inspiring their consciousness to participate in the competition. Adhere to the principle of preferential support, create conditions for the growth of the female experts, build academic atmosphere for female teachers and maximize their enthusiasm. China’s national natural science foundation committee (NSFC) have formulated related policies: in order to promote women science researchers development, give full play to the role of the female scientific research talents, NSFC in recent years emphasizes to foster and support women scientific research personnel, especially in the “2010 Annual Evaluation Work Opinion” it clear requires that the application age for Youth projects should be: men, under 35 years old, women, under 40 years old. It has also made policy to finance female researchers under the same conditions
Management department should establish the human-centered idea, implements the flexible management, pays attention to personality development under the unified requirements. Create an environment in which everyone is fully respected and trusted. Establish effective incentive mechanism: efficiency combined with the task, the incentive combined with punishment, the personal interest combined with actual contribution. Make clear academic guidance, build reasonable academic evaluation system, and formulate relevant measures and system. In such work as the title promotion and post appointment, it should be fair and reasonable, accurately evaluate female teachers’ academic level, supplemented by the corresponding incentive policy for women teachers in research.

4.4. Strengthen Team Construction, Improving Capacity of Collaboration

Organize female teachers’ salon, and encourage them to participate in it, providing them with an opportunity to learn from each other. Invite female scholars who are good at adjusting career and family issues to help them improve the ability of dealing with family and career conflict and scientific research. Encourage female teachers to establish the concept of collaborative research, to join in the team actively, depending on the team for durable and breakthrough of academic development. On one hand, female teachers should strive to undertake scientific projects, in a good academic environment, to form a relatively stable research team, in which their own academic research ability can get rapid increase. On the other hand, in the process of teamwork, the telepathic communication between people and wisdom spark collision will further enhance the exchange of information, as well as to achieve resource sharing, broaden one’s vision. Keep up with the development of the academic frontier, guide them to carry on the research work, arouse their research interest. The sincere cooperation and joint research is helpful for female teachers to give full play to their subjective initiative, to recreate the self in academic research.

4.5. Carry out the Scientific Research Training and Improve Their Scientific Research Ability

Female academics should not only have the enthusiasm but also ability of scientific research. Colleges and universities should carry out the training program for female teachers according to the different levels of trainees, paying attention to cultivating and improving their research ability, pay attention to the specific content, the flexibility of the method and the diversity of means. From the perspective of social capital, female teachers’ social circle is narrow, which inhibits their access to academic information, not conducive to their academic research work. Management departments in colleges and universities can take seminars, conferences, seminars, and a variety of forms such as further research to open up a variety of channels, provides inspiration and guidance for the female teacher, broaden their horizons, increase the amount of information, improve their quality and ability, give full play to the subjective initiative, to improve the scientific research ability. They should encourage and support women teachers to make further study in key universities both at home and abroad, encourage them to participate in important domestic and international academic conferences. To create conditions for every female teacher to participate in a scientific research program, help them to master research method from practice, to collect and process information in the study, to understand extensively the scientific research literature and research achievements in her field, to position accurately the new academic dynamic and gaps in the field as well as their own direction, improve their scientific research ability.

5. Conclusion

As it has been presented and discussed above, it can be seen that although female academics are playing more and more important roles, their achievement and status are very low. The main causes that restrain female Academics’ professional development could be the influence of social environment, traditional culture, family factors and their own physiological and psychological characteristics. Therefore, it will be very helpful for improving female academics’ abilities and achievement if the government could improve the social and cultural environment for females’ professional development. The universities could strengthen the management system to arouse their enthusiasm of academic research and offer the scientific research training to improve their scientific research ability.
References