Analyzing the Stability of Young Teachers in Colleges and Universities from the Perspective of Psychological Needs

Xiaotang Liu\textsuperscript{a}, Ang Sheng\textsuperscript{b}

Nanjing University of Science and Technology, Jiangsu, Nanjing, 210094 China

\textsuperscript{a} liuxiaotang617@163.com, \textsuperscript{b} 1219791332@qq.com

Abstract. The teaching staff is the foundation of the development of universities, and the stability of the teaching staff is the guarantee for the development of universities. If universities want to have long-term development, they must attract and retain talents to the greatest extent possible. The article not only considers the objective material environment and conditions, but also focuses on the subjective psychological needs of teachers. Through questionnaire surveys and individual interviews, data analysis and policy discussions are conducted on the stability of the young teacher group at a certain science and technology university in Jiangsu. The survey results show that young teachers have different psychological needs due to their different working time; The establishment of a stable relationship between universities and young teachers is to some extent achieved by continuously meeting the psychological needs of teachers.

Keywords: psychological needs, job satisfaction, stability

1 Introduction

For colleges and universities, teachers are the foundation of development, and young teachers are the foundation of the foundation, as well as the energy driving force and important guarantee for the sustainable and healthy development of colleges and universities. Psychologically, college teachers often show a higher ambition for career success, and their demand for spiritual and psychological self-satisfaction is higher than their demand for material life. They hope to obtain the recognition of the unit and society through their mental work\textsuperscript{[1]}. Once the expected self-value has not been realized, it is very easy to appear negative emotions of negativity, burnout and boredom, and even feel that the work platform provided by the school is not in line with their career planning and resign, and then there will be problems related to the stability of the construction of college teachers. Therefore, colleges and universities need to fully understand and grasp the material and psychological needs of teachers, analyze the development needs of young teachers, and on this basis, attract, train and retain young talents to the maximum extent, fully explore their potential value, and encourage them to actively participate in work and devote themselves to teaching and scientific research\textsuperscript{[2]}. 

© The Author(s) 2024
At present, the analysis and discussion on the stability of college teachers in China are mostly based on the objective material environment conditions, and less on the subjective psychological characteristics of teachers. This paper mainly explores the stability of teachers based on the psychological needs of young teachers.

2 Research Process and Data Analysis

2.1 Research Process

The object of the research is the "young teachers group" in a Jiangsu University of Science and Technology, which is defined as the full-time teachers under 45 years old (including 45 years old) in the school. By referring to relevant literature and materials, the "Questionnaire on the current situation and needs of young teachers" is designed. The questionnaire mainly includes two aspects: (1) The basic information of young teachers: gender, professional title, age, political status, marriage and childbearing status of teachers; (2) Measurement of psychological needs and stressors of young teachers. At the same time, the author distinguishes the young teachers who have been in school for 1-3 years, 4-9 years, 10-15 years and more than 15 years.

The stability of the teaching team is largely reflected in the turnover intention of teachers, and the job satisfaction and work-life pressure of teachers in colleges and universities affect the turnover intention of teachers. Therefore, the stability of the teaching team is mainly studied by examining the job satisfaction and pressure sources in multiple dimensions. Before the survey, communicate with the surveyed teachers in advance to make it clear that "the questionnaire answers are not good or bad", "complete it independently", and "express your truest feelings", so as to ensure that the collected data is true and effective and can reflect the real thoughts of teachers. The number of young teachers in the surveyed universities who met the survey conditions was 1146, and a total of 306 valid questionnaires were collected, accounting for 26.7%. The distribution of young teachers in various colleges of science, technology, arts, economics and management was relatively balanced, and the proportion of young teachers in the four stages of 1-3 years, 4-9 years, 10-15 years and 15 years or more in the school was basically consistent with the proportion of total teachers. The statistical results are representative. Through pre-sorting the questionnaire survey results, using SPSS and other analysis tools to test the reliability and validity of the survey data, and then conducting descriptive analysis according to the actual statistical results, relevant conclusions are drawn.

At the same time, the study also selected all full-time teachers who quit the school in the past five years as reference samples, and carried out data collection and analysis through data sorting, interview and investigation.

2.2 Date Analysis

(1) Basic Information of the Interviewed Teachers

Among the young teachers who participated in this survey, 75.8% were male and 24.2% were female. The number of young teachers with 4-9 years of experience is the
largest, accounting for 50.98%; The proportion of married teachers with children is the highest, 49.02%, 28.43% of teachers are currently single; The proportion of teachers who graduated from other teaching and research institutions in China was 60.5%; The teachers with intermediate titles or below accounted for the largest proportion, 54.90%; The proportion of teachers who received awards at or above provincial level accounted for 20.26%.

(2) Statistics of Job Satisfaction

In the questionnaire, job satisfaction is mainly set in the following four aspects: A: material level, including salary level, platform and research environment, policy support of schools and colleges, and settlement policy; B: Personal development and promotion, including promotion system, professional training, multiple opportunities for further study, etc. C: School culture recognition, including the school's historical and cultural environment, interpersonal relations, etc.; D: Personal value realization, including the expectation of work future, attitude towards career development, etc. The questionnaire arranges the order of concerns to avoid teachers' stereotype and select a certain aspect together.

Table 1. Descriptive statistics of job satisfaction

<table>
<thead>
<tr>
<th>Survey dimension</th>
<th>Items</th>
<th>Five-level scale (1 is completely dissatisfied, 5 is completely satisfied)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>Salary and benefits</td>
<td>6.86%</td>
</tr>
<tr>
<td></td>
<td>Scientific research platform</td>
<td>4.58%</td>
</tr>
<tr>
<td></td>
<td>Supporting policy for young teachers</td>
<td>4.9%</td>
</tr>
<tr>
<td></td>
<td>Settlement policy</td>
<td>12.75%</td>
</tr>
<tr>
<td>B</td>
<td>The promotion system and policies</td>
<td>7.52%</td>
</tr>
<tr>
<td></td>
<td>Academic frontier guidance</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Team leader giving professional guidance</td>
<td>4.25%</td>
</tr>
<tr>
<td></td>
<td>Training and further education policy</td>
<td>2.29%</td>
</tr>
<tr>
<td>C</td>
<td>School reputation, cultural environment</td>
<td>0.65%</td>
</tr>
<tr>
<td></td>
<td>Respect teachers for important decisions</td>
<td>10.46%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>3.59%</th>
<th>8.17%</th>
<th>18.95%</th>
<th>40.52%</th>
<th>28.76%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership concern, Life support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships with leaders</td>
<td>0.65%</td>
<td>1.63%</td>
<td>8.5%</td>
<td>45.1%</td>
<td>44.12%</td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td>0%</td>
<td>0.33%</td>
<td>3.27%</td>
<td>40.2%</td>
<td>56.21%</td>
</tr>
<tr>
<td>Be qualified for job requirements</td>
<td>0.33%</td>
<td>1.63%</td>
<td>2.94%</td>
<td>42.81%</td>
<td>52.29%</td>
</tr>
<tr>
<td>Able to achieve work objectives</td>
<td>0.98%</td>
<td>3.27%</td>
<td>11.11%</td>
<td>51.63%</td>
<td>33.01%</td>
</tr>
<tr>
<td>Having a clear career plan</td>
<td>0.33%</td>
<td>3.59%</td>
<td>6.86%</td>
<td>47.06%</td>
<td>42.16%</td>
</tr>
<tr>
<td>Optimistic about the future development</td>
<td>3.27%</td>
<td>8.17%</td>
<td>22.22%</td>
<td>42.48%</td>
<td>23.86%</td>
</tr>
<tr>
<td>Passionate about college teaching profession</td>
<td>0%</td>
<td>0.65%</td>
<td>2.61%</td>
<td>35.95%</td>
<td>60.78%</td>
</tr>
</tbody>
</table>

Table 1 shows that the four items with the lowest satisfaction are Settlement policy, Salary and benefits, Respect teachers for important decisions, The promotion system and policies, mainly focused on the level of material level and personal development and promotion. The three items with high satisfaction are passionate about college teaching profession, relationships with colleagues, and be qualified for job requirements, mainly focusing on the realization of personal value.

(3) Statistics of Pressure Sources

The survey results showed that the overall pressure of young teachers was concentrated in the assessment system and scientific research tasks of the school, which reached 70.92% and 50.65% of the respondents. According to the analysis of the school entry time, young teachers who have been in the school for 1-3 years are under the greatest pressure in terms of the school's assessment system, scientific research tasks, research platform construction, and insufficient funding for teaching and research, which is closely related to the school's talent policy of "either promotion or leave" and "either promotion or transfer" in recent years. The pressure caused by the difference in education and teaching concepts and the difficulty in realizing self-worth increases with the increase of age. For young teachers, especially in the first employment period, schools do not have strict requirements on teacher teaching, so young teachers do not feel the work pressure caused by the difference in education and teaching concepts in the first three years. However, with the increase of teaching tasks in the later period and the deepening of their own teaching practice, this part of pressure will also increase. At this stage after 15 years of entry, they will gradually lose the qualifications and opportunities to apply various talent projects and talent titles. If there are no other outstanding achievements in scientific research or teaching, some teachers will lose their motivation to work hard and improve.
Data of Former Full-Time Teachers in the Past Five Years

The total number of full-time teachers who voluntarily quit the school in the past five years is 152. The distribution of school attendance time when the above teachers quit was analyzed, as shown in Table 2.

Table 2. Distribution of the teachers who voluntarily quit

<table>
<thead>
<tr>
<th>In school</th>
<th>3 years or less</th>
<th>4-9 years</th>
<th>10 years or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>57</td>
<td>64</td>
<td>31</td>
</tr>
<tr>
<td>Proportion</td>
<td>37.50%</td>
<td>42.10%</td>
<td>20.40%</td>
</tr>
</tbody>
</table>

In the past five years, the proportion of teachers who have been working for more than 10 years in the surveyed universities is relatively low. There is no significant difference in the proportion of teachers who have been working for 3 years or less and those who have been working for 4-9 years, which is higher than the proportion of teachers who have been working for more than 10 years. Most of the teachers who quit voluntarily are between 31-40 years old, while the proportion of 26-30 years old and over 51 years old is very low. Looking at the reasons for resignation, "personal reasons" and "family reasons" accounted for the largest proportion, that is, the existing policy or environment of the school could not meet the needs of personal development and family needs.

3 Analysis of Research Results

3.1 Analyze The Needs of Teachers in Different Entry Periods from Four Dimensions: Material Level, Personal Development and Promotion, School Culture Recognition and Personal Value Realization

In the overall descriptive analysis of young school teachers' satisfaction with their job demands, teachers' satisfaction with the two dimensions of school culture recognition and personal value realization is higher than that of material material and personal development and promotion.

In terms of material level, the satisfaction of the surveyed young teachers working 1-3 years is the highest, such as salary level, support degree of scientific research platform, settlement policy, etc. With the increase of working time, satisfaction generally declines. For the interpretation of various school policies, teachers who have been working 1-3 years are also the most concerned, and the demand is as high as 62%. At the same time, the life pressure (marriage and childbirth, house purchase, supporting parents, etc.) of teachers who have been working for 4-9 years is the highest, reaching 51.96%, which is corroborated by the survey results that teachers are at the lowest level of satisfaction with salary and settlement policy during this period of employment.

In terms of personal development and promotion, the satisfaction of the two items, "The promotion system and policies ", "Team leader giving professional guidance " and "Training and further education policy ", is the highest in 1-3 years. With the increase of working time, the satisfaction decreases continuously, indicating that people's
consideration and attention to promotion policies increase over time; The survey on the
demand for personal goal realization, such as "scientific research team guidance", "diversified assessment system", "talent selection policy" all reached the highest point in
the 4-9 years or 10-15 years, indicating that teachers at this stage pay more attention to
school policies and their own development than to the level of material level.

In the dimension of school culture recognition, there is no significant difference in
the satisfaction of "school reputation, cultural environment" at different working peri-
ods. In the two projects of "Leadership concern, Life support" and "Respect teachers
for important decisions", the satisfaction rate is the highest in the first three years of
working. Over the time, the satisfaction rate decreases continuously, indicating that
teachers are more willing to think about and pay attention to the development of the
school and are more willing to participate in the development and construction of the
school. At the demand level, in the aspects of "discussion and communication between
school leaders", "care and guidance from college or team leaders" and "listening to the
opinions of teachers' representatives in major decisions of the school or college", the
degree of demand increases significantly with the increase of school working time,
which also shows that teachers gradually establish connections with schools in daily
education and teaching work. The acceptance and recognition of the cultural soft envi-
ronment of the school are constantly increasing.

In terms of personal value realization, the achievement of "Having a clear career
plan" and "Optimistic about the future development" is the highest at the stage of 10-
15 years; In the aspect of "Be qualified for job requirements", the teachers who work-
ing more than 15 years is the highest; In terms of "Able to achieve work objectives",
the lowest is the teachers who working less than three years, the achievement degree
increases over time. It shows that the establishment of a more stable and close connec-
tion between teachers and schools is generally based on the realization of personal
value, which is specifically manifested in the aspects of being competent for the current
job requirements, maintaining an optimistic and positive attitude towards the current
life and work status, and planning for their future work and life.

3.2 Analyze the Needs of Teachers from Different Entry Times

For teachers who have been working for 1-3 years, the highest degree of satisfaction is
the school's reputation, educational level and cultural environment, as well as the pro-
fessional guidance given by the team leader. Teachers' recognition of the school's his-
tory and cultural environment can promote the establishment of employment relations
with the school. High demand for several items are timely propaganda and interpreta-
tion of school policies, scientific research team guidance, observation and exchange,
diversified assessment system, and the support of school platforms and scientific re-
search funds. The top two sources of stress are examinations and research assignments.

For teachers who have been working for 4-9 years and 10-15 years, the highest sat-
isfaction is still the school's reputation, educational level and human environment, and
the timely professional guidance provided by the team leader, but the satisfaction with
the settlement policy and welfare benefits has decreased significantly. There is no sig-
nificant change in the demand for policies, and the higher items are timely publicity
and interpretation of school policies, scientific research team guidance, observation and communication, and diversified assessment systems. In addition to the assessment and scientific research tasks, the sources of pressure are relatively large, which increases the insufficient funding for teaching and research. At the same time, the pressure brought by the difference in teaching concepts is also significantly increased.

For teachers who have been working for more than 15 years, the highest degree of satisfaction is still the reputation, educational level and cultural environment of the school, but the satisfaction of the support for scientific research platform and the respect for teachers in major decisions of the school has decreased significantly, indicating that teachers at this stage pay attention to the development of the school and the relationship between themselves and the development of the school. In terms of policy demand, the greater demand is for observation and communication, scientific research team guidance and diversified assessment system, and there is a significant improvement in listening to the opinions of teachers' representatives in major decisions of schools or colleges. The top two sources of stress are assessment and scientific research tasks, while the self-worth is difficult to realize the pressure increased significantly.

4 Research Conclusions and Related Policy Considerations

Maslow's hierarchy of needs theory tells us that people's needs are hierarchical, and only after low-level needs are satisfied can high-level needs appear and need to be satisfied [3]. To establish a stable relationship between universities and teachers, to a certain extent, it is achieved by constantly meeting the needs and psychological expectations of teachers [4]. According to the school's teacher employment policy, we call it initial employment period that teachers generally working in the school for 1-3 years, and the school will provide relatively fixed introduction conditions, including salary, research start-up funding, team resources, etc. When the conditions provided are basically equal to the psychological expectations of teachers, the employment relationship can be established. We call it evolution period that teachers working in the school for 4-15 years, teachers will enter a period of rapid growth and development. The output of most scientific research achievements and the establishment of scientific research status depend on the accumulation of achievements in this stage. In evolution period, teachers will establish a deeper and more stable relationship with the school, as well as a long-term emotional interaction. We call it mature period that teachers working in the school for more than 15 years, in this period, teachers hope to play their own effectiveness in colleges and universities, realize their own scientific research ideals and personal values, and obtain a psychological sense of achievement.
4.1 **During the Initial Employment Period, Teachers Should Meet Their Basic Living Needs and Establish a Stable Employment Relationship**

When school signs the admission agreement with the new teachers, the school meets the material needs of the new teachers, provides platform and resource support, which indicates the successful establishment of the employment relationship. The relationship is relatively stable during the first employment period (initial employment period). Whether it is possible to enter the next stage of a more stable relationship through efforts, in addition to teachers’ own efforts to improve their ability level and complete the tasks of the school's employment period, the school should also establish a more stable and continuous relationship between teachers and the school through certain channels, such as promotion of positions, improvement of benefits, integration of scientific research teams, and establishment of resource platforms.

According to the survey data, what schools need to focus on at this stage is the promotion system and promotion policies. Schools need to design scientific and reasonable promotion mechanism. Previous studies have found that the promotion of academic qualifications and professional titles can stimulate and meet the needs of individuals for higher levels of achievement, so as to maintain lasting work motivation. We can further establish and improve the employment mechanism that conforms to the law of running a school in higher education and the growth characteristics of young teachers, and improve the evaluation and promotion mechanism focusing on teacher ethics, education and contribution, so as to promote outstanding young teachers. We can create favorable conditions, build a development platform, and formulate reasonable, standardized, feasible incentive mechanisms for outstanding young teachers, such as breaking the rules for promotion and title, giving priority to recommendation and evaluation, and recommending as school reserve cadres.

4.2 **During the Evolution Period, Teachers Need to Satisfy Their Sense of Belonging and Value, and Establish a Stable Psychological Relationship**

After the establishment of employment relationship between teachers and schools, a series of training activities should be carried out to enable young teachers to further understand the history and cultural environment of the school, they will have a sense of responsibility and mission for the school [5][6]. By allowing young teachers to be familiar with the scientific research and teaching environment, integrate into the team, have a harmonious interpersonal relationship, get respect and care, they will have a sense of belonging and identity to the school. Let young teachers have the opportunity to make suggestions for the development of the school, so that they will have a sense of honor and achievement for the development of the school. By solving the difficulties of young teachers in life, work confusion and psychological troubles, they will have a sense of closeness to the school. When teachers establish a relationship with the school and their psychological expectations are matched, their job satisfaction will be improved as well as their job stability [7].
According to the survey data, what schools need to pay attention to at this stage is that young teachers in schools are not satisfied with the settlement policy and salary and welfare. Teachers at this stage will generally face high pressure of buying a house, raising children and supporting the elderly, and the cost of living is relatively high. Therefore, schools can reasonably and effectively help young teachers to carry out services such as housing improvement and purchase according to national policies and actual conditions. School should strengthen communication and exchanges with local governments and do everything possible to help young teachers solve practical difficulties such as enlisting their children in nursery schools. Constantly improve the school teaching facilities, information network, transportation, catering and other service guarantee system, effectively create a "home" culture, improve the happiness index of young teachers. Respect the achievements of young teachers, develop flexible and diverse salary management models, pay attention to young teachers in the distribution, increase the funding of independent school research funds for young teachers, and improve their labor value and stability by improving salary income and welfare benefits [8].

4.3 During the Mature Period, Teachers Need to Meet the Needs of Self-Realization and Establish Stable Emotional Connection

Due to the organizational nature of colleges and universities, the two important factors in the psychological expectations of teachers who choose to work in colleges and universities are stability and development, that is, life is relatively stable and comfortable, and personal development is controllable. These people often do not have a high pursuit of material life, but pay more attention to the realization of personal self-value and the improvement of social status. Therefore, when the salary package provided by the school meets their life needs, the housing conditions provided by the school and the conditions for children's enrollment meet their stable needs; Or when the resources, platforms and team conditions provided by the school meet their development needs and can support them to realize their self-value, these teachers will establish emotional connection with the school and achieve a relatively high level of stability [9].

According to the survey data, what schools need to pay attention to at this stage is teachers' democratic participation in decision-making on major school issues. The survey results show that teachers' satisfaction at this stage is low, which reflects the high demand for school teachers to participate in school management, and also reflects that the coverage of teachers' participation in school democratic management is not enough, and the effectiveness needs to be further improved. Schools should form a cultural atmosphere of concerning and caring for young teachers, respecting the development needs of young teachers, strengthening democratic management, improving governance structure, supporting teachers' participation in school management, enriching the opportunities and channels for teachers to participate in school affairs decision-making, striving to create a "warm" working atmosphere, which has a very important impact on the establishment of a stable relationship with teachers.

The topic takes young teachers in colleges and universities as the research object, focuses on individual teachers, explores the relationship between their psychological
needs and the stability of college team construction, and provides new ideas for the construction and development of college teachers. There is a positive correlation between the establishment of psychological relationship between teachers and schools and the improvement of the stability of teachers. In the later stage, a set of effective, feasible and extendable ways to establish psychological connection between teachers and schools can be studied and formulated, so as to improve the stability of teachers in colleges and universities[10].

References

5. https://kns.cnki.net/kcms2/article/abstract?v=HboJJBuTKtiQFNHw-LaKUiwYmTK1hFFEINgRZzsUYyi9RAL7OiCWBzW15fY2c1aRoyaXbHUEAoqft-M532qRF1Z8t6kteBPuxPR1askkmG8NjYAHwEeUubkGHPDz-Koj61ZJX6VFPxNEwJwR4YpndeQ==&uniplatform=NZKPT&language=CHS