

The Relationship between Stress and Teaching Initiative of University Teachers

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Abstract: Taking 328 college teachers as the research object, the current stressors of college teachers and the relationship between different stressors and the teaching initiative of college teachers were studied by questionnaire survey, in order to provide reference for stimulating the teaching initiative of college teachers and improving teaching quality.

Keywords: university teachers; stressors; pedagogical initiative; Quality of teaching

Talent is the first productive force of society, and the cultivation of talents needs to be completed through teachers' teaching. Therefore, the cultivation of talents is influenced by teaching initiative and other factors. At present, there are a series of problems common among teachers in colleges and universities, such as low enthusiasm for work and insufficient investment in work, which lead to some problems in the teaching process and affect the effect of talent cultivation. However, current research on the influencing factors of teaching initiative and teaching commitment mainly focuses on the organizational climate, reward and punishment regulations, teachers' sense of teaching efficacy and work motivation^[1]. A large number of survey results show that moderate work pressure is positively correlated with employees' performance, especially their work initiative^[2]. This study discusses the current university teachers' pressure sources, pressure situation and the relationship between different pressure and teachers' work initiative, with a view to providing some reference to improving university teachers' work initiative and enhancing the quality of university teaching.

1. The Proposal of The Problem

Stress is a kind of subjective reaction, a nervous internal mental state caused by some things in the external environment acting on the organism, and a subjective feeling and evaluation of the organism^[3]. The same event causes different levels of stress in different individuals. College teachers are both educators and researchers, and play multiple roles in their work. The conflicts and demands of multiple roles form the main source of pressure for college teachers.

The formation of pressure is influenced by organizational environment and system. Due to the implementation of the examination system, the competition among teachers in colleges and universities is becoming more and fiercer, and the pressure is becoming more and more intense. Excessive competition will consume teachers' energy, bring mental pressure, and eventually lead to the deformation of behavioral response.^[4] The current evaluation system of university teachers includes teaching evaluation system, appointment system, professional title promotion system and so on.^[5] The effect of these systems on college teachers is bound to cause corresponding pressure response.

In recent years, with the reform and innovation of higher education, people have paid close attention to the work pressure of young teachers in colleges and universities, which will become the focus of attention in the future development. The increasing work pressure of young teachers is bound to have an adverse impact on their work. Therefore, we should take effective measures to reasonably solve the problem, otherwise it will not only affect their overall quality, but also have a huge impact on the quality of university running and its long-term development. Under the above background, this paper mainly studies the following questions: What is the current stress situation of college teachers? Does teaching evaluation result become the main work pressure of college teachers and does it influence the work initiative of college teachers? Do other teacher evaluation systems besides teaching evaluation system bring work pressure to teachers and influence their teaching initiative? Compared with the work pressure brought by teaching evaluation system, what is the effect of other evaluation system?

2. Questionnaire Design and Data Collection

(1) Questionnaire design

According to the meaning of the initiative of teachers teaching, this study adopts the five-point Likert scale, respectively from the degree of active participation in teaching activities and measure work zeal, etc. The independent variables included three components. The first is a measurement of demographic variables, including age, level of education, gender, income, subject, and family situation. The second is the measurement of teachers' stress perception degree, which adopts mature stress test scale, including teaching evaluation results, work income, scientific research achievements, professional title promotion, interpersonal communication, time allocation and other 11 items. The third is the result option. The Likert scale is used in measurement with 1 being no stress at all, 2 being no stress, 3 being mild stress, 4 being moderate stress and 5 being severe stress.

(2) Data acquisition

By means of stratified random sampling, the research group distributed network questionnaires to teachers at different levels of schools to obtain survey data. A total of 325 questionnaires were collected, and after eliminating invalid samples, 264 questionnaires were valid, with an effective rate of 81%.

3. Results of Data Analysis

(1) Descriptive analysis

This study relied on a well-established stress measurement scale and finally used 11 indicators as a stress measurement tool for university teachers. For university teachers, the first stressors were title promotion, job income, research capacity enhancement and scientific research tasks, the second stressors were year-end assessment and conflict between work and family, and the third stressors were teaching evaluation and administrative matters. The relationship between teachers and students and colleagues did not become a source of stress for teachers. The over-emphasis on research results in higher education institutions has led to more research stress than teaching stress among teachers. The mean value of perceived stress on teaching evaluation results for the sample of teachers surveyed in this study was 3.08, which is a medium level of stress. Compared with research pressure, teaching pressure is small. Appropriate pressure can stimulate teachers' potential and increase teaching initiative; excessive stress, on the other hand, can do the opposite. In order to further understand the differences in the influence of different stressors, this study further analyzed the variance and correlation of pressure score of professional title promotion, teaching evaluation results and other dimensions in school type, professional title and other factors. The larger the F-value, the greater the variance; the smaller the p-value ($p < 0.05$), the more significant the correlation, and the detailed results are shown in Table 1.

Table 1: Differentiated analysis of stress among teachers in higher education

Stressors	Professional Title		Type of School		Length of Teaching Experience	
	F-value	P-value	F-value	P-value	F-value	P-value
Teaching Evaluation	0.854	0.376	2.857	0.021	0.132	0.578
Professional Title Promotion	29.184	0.000	1.213	0.118	12.573	0.000
Job Income	7.532	0.000	4.975	0.001	4.872	0.006
Research Capacity Enhancement	2.983	0.164	3.126	0.006	2.521	0.038
Scientific Research Task	0.937	0.352	3.274	0.004	0.358	0.578

There are significant differences in stress perception of teachers in different types of schools in terms of student evaluation results, scientific research tasks, research capacity enhancement, job income and other aspects. The pressure of teachers on teaching evaluation in junior college and secondary college ($M = 3.26$ and $M = 3.17$) was significantly greater than that in ordinary universities ($M = 3.13$). However, there is no significant difference in the perceived stress of teaching evaluation between teachers with different titles and years of teaching experience. Scientific research tasks were more stressful for teachers at second-year institutions ($M = 4.12$) and less stressful for teachers at prestigious universities ($M = 3.01$), but also a moderate to high level. The well-known universities are generally research-oriented universities with superior research requirements and relatively low teaching requirements. Therefore, teachers' perception of pressure from teaching evaluation results is weak. At the same time, most of the teachers in renowned universities have high level research capabilities and research resources, making it less complicated to complete research tasks. Therefore, their perception of pressure is relatively weak.

Teachers with different teaching years and different professional titles have consistent differences in stress perception, and there are significant differences in job income, research capacity enhancement, professional title promotion and other aspects. In terms of job income, lecturers had the highest income pressure ($M = 4.29$) and professors had the lowest ($M = 3.31$). In terms of research capacity promotion, pressure was considered to be higher for lecturers and associate professors ($M = 4.02$ and $M = 4.09$) and moderate for assistant professors and professors ($M = 3.32$ and $M = 3.57$). In terms of title promotion, the perceived pressure to promote was weakest for professors ($M = 2.37$) and stronger for assistant professors ($M = 4.18$), lecturers ($M = 4.23$) and associate professors ($M = 4.18$).

(2) Causal analysis

Regression equations were used to analyse the effects of various stress variables on teachers' teaching initiative (Table 2).

Table 2: Regression analysis results of teacher stress on teaching initiative in colleges and universities

Variable	B	S.E
Teaching Evaluation	-0.163*	0.062
Professional Title Promotion	0.158*	0.073
Job Income	-0.172**	0.075
Research Capacity Enhancement	0.093*	0.083
Scientific Research Task	-0.231***	0.058
Conflict Between Family and Work Time	0.047	0.017
Conflict Between Teaching and Research Time	-0.213***	0.74
Faculty-Student Relationship Stress	-0.048	0.045
Administrative Matters	-0.173**	0.047
Year-End Assessment	-0.179*	0.069
Colleague Relationship Pressure	-0.029	0.023
Control Variables	Controlled	Controlled
ΔF value	4.032***	
R2	0.218	
$\Delta R2$	0.132	

Note: * represents $p < 0.05$, ** represents $p < 0.01$, *** represents $p < 0.001$; The control variables include gender, subject classification, school type, title, age, income, etc.

The results show that the research task has the greatest influence on teaching initiative, and the pressure of research task has a negative influence on teaching initiative, that is, the greater the pressure of research task, the lower the teaching initiative. Scientific research is an important index in the evaluation of professional titles, professional titles are proportional to income, in the evaluation of professional titles, scientific research accounts for the highest proportion, teaching only accounts for a small part, and in the school's reward and punishment regulations, the quantity and quality of published papers will be awarded the corresponding amount of bonuses, so most teachers are willing to put more energy into scientific research. The pressure of scientific research task and teaching initiative show negative influence. Moreover, when young teachers have no title evaluation, they can't lead graduate students, do experiments and write papers without help. For example, some experiments need to stay up late to observe the results of experiments; Some investigations require field trips to other places, which leads to a lack of energy in teaching and low initiative. At the same time, administrative affairs, employment assessment, conflict between teaching and research time, job income, teaching evaluation results and other pressure factors also have significant negative influence on teaching initiative. When teachers perform their duties as teachers, the management system and assessment system bring additional pressure. For example, when college leaders attend lectures, teachers need to prepare long in advance, teachers' class status will be affected, students will be nervous, and the classroom effect is not good enough. As a result of the grading system of classroom teaching, teachers have no choice but to meet some students who do not study hard. Moreover, there are unfair situations in the grading of students. Many teachers have worked hard for a year, although they have been recognized by leaders, but the students' grades are not high, which leads to some teachers being discouraged and negative emotions, which is not conducive to teachers' initiative.

The research shows that the appointment system of quantitative assessment inhibits the creativity and imagination of university teachers, and becomes one of the important factors causing the short-term behavior of academic production of university teachers and polluting the academic ecology by producing low-quality papers. Therefore, the complex assessment system is not conducive to the teaching initiative of teachers.^[6-7] Teacher-student relationship, colleague relationship, family and work time conflict did not have a significant impact on teaching initiative. As college teachers, they have a mature attitude and rich

life experience. Therefore, the influence of these problems on teaching initiative is reflected in a low level.

4. Conclusions and Recommendations

In this paper, teachers' teaching initiative is taken as the dependent variable to explore the current situation, influencing factors and mechanisms of teachers' teaching initiative in higher education. The results show that: among various pressure factors, professional title promotion, job income and scientific research capacity become the main pressure sources of teachers in higher education. However, the greater the pressure related to scientific research, the lower the teaching initiative of teachers. In both teaching and research universities, teachers have an obligation to conduct research, and their research achievements are closely related to their professional title and job income. Currently, in order to improve the teaching initiative of teachers, the research focuses on teaching evaluation, but ignores the external factors. Therefore, schools should pay attention to teachers' reactions to pressure outside of teaching and solve them in time. Specifically, it is particularly necessary to establish a reasonable return mechanism for labour payment, clearly stipulate the benefits that college teachers can obtain, and fundamentally improve the economic treatment of college teachers; to establish a reasonable evaluation system and management system; to appropriately distribute the proportion of teaching and scientific research, and weaken the quantitative assessment index, whether the evaluation method of college teachers is scientific and reasonable, not only related to the enthusiasm of college teachers, but also related to the working effect of college teachers. In addition, when designing the teaching evaluation system, the assessment of talent cultivation work should also be emphasized.

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