



# Research on the Influence of Tutor's Guidance Style on the Quality of Postgraduate Training<sup>[1]</sup>

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**Abstract.** At present, the international competition is becoming more and more fierce, and talent has become a scarce resource for each country to seize. In China, graduate students as the main talent force, constantly pushing forward the economic and social development. Wherein, the tutor's guiding style plays a vital role in graduate training. Therefore, based on many references, this paper constructs a theoretical analysis framework of the influence of mentoring styles on the quality of graduate training according to the different degrees of control and indulgence of students by tutors. Moreover, empirical tests are conducted by collecting data through questionnaires to study the influence of different mentoring styles on the quality of graduate training. The empirical analysis shows that the mentoring styles of supportive and relational tutors have a significant positive impact on the quality of graduate training, while the mentoring styles of controlling and free tutors have a significant negative impact on the quality of graduate training. Finally, according to the research conclusion and the actual situation, the paper puts forward some suggestions to improve the quality of graduate training.

**Keywords:** postgraduate education, Mentor guiding style, Culture quality

## 1 Introduction

With the continuous development of economy and society and the increasing international competition, high-quality innovative talents are urgently needed in all fields. As the core strength of talent elements, the training quality of postgraduates is related to the national economy and people's livelihood and the development plan. However, in the practice of graduate training, such problems as insufficient interaction between

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mentors, backward guidance methods have become increasingly prominent, and some mentoring relationships exist in a malignant state of alienation and tension. Then, whether the quality and output of graduate students are related to the guidance style of tutors, and what kind of guidance style is easier to obtain good guidance effect. Based on the above problems, this paper builds a theoretical analysis framework for the influence of tutor's guidance style on the quality of graduate training, and conducts empirical tests through questionnaire survey and data collection to study the relationship between tutor's guidance mode, content and style and the quality, learning harvest and output of graduate education, with a view to improving the quality and level of graduate students.

## **2 Research Progress and Analysis Framework**

### **2.1 Research Progress**

Relevant studies suggest that instruction is not limited to the process of professional progress, also including the career development, role and psychological support<sup>[1]</sup>. The style of tutor is usually divided into instruction, care, contract and dismissive<sup>[2]</sup>; Tight, democratic, controlling, loose, etc<sup>[3]</sup>. On the basis of combing related research and combining with the practice of graduate training, the research guidance style is expressed as support, control, relationship and free guidance style. In addition, the postgraduate students in the study refer to master students, excluding doctoral students. In recent years, students' innovation ability, writing ability, expression and understanding ability are all factors in the training quality, and the training quality of students will also be reflected by the number of papers published, the number of conferences attended, the quality of dissertations and other multiple factors. Scholars generally believe that supportive coaching style will have a positive impact and effectively inhibit individuals' negative emotions and behaviors, while controlling coaching style is on the contrary<sup>[4]</sup>. Have the results showed that support and control supervisor is conducive to the development of the graduate students creativity<sup>[5]</sup>.

The research on tutor's guidance to students has been very perfect, but the research on tutor's guidance mode remains to be perfected. For example, there are not enough researches on the relationship between tutor's guidance style and the quality of students' training, and there is a lack of researches on the limits of tutor's guidance. Therefore, from the perspective of graduate students, this paper summarizes and classifies the mentor's guidance style and studies the influence of the guidance style on the quality of student training.

### **2.2 mentor guiding style analysis framework of affecting the quality of graduate education**

Supportive tutors provide support for students' scientific research and study, without strong desire for control but not completely laissez-faire. Based on the theory of internal and external motivation and expectation theory, supportive mentors have high expectations for students, and their various supportive behaviors can better stimulate students' progress, generate sufficient expectations, media intuition and titer, and thus gain more

learning and scientific research results. Therefore, this paper proposes the following hypothesis:

H1: Supportive mentor's guidance style has a significant positive impact on students' training quality.

Controlling tutors have a very high degree of control over students and a very low degree of *laissez-faire*, which is equivalent to a top-down appointment and obedience, and students have little opportunity and freedom to choose themselves. Controlling tutors mainly provide external motivation. Although the incentive effect is direct and obvious, it lacks continuity and is easy to produce fatigue. According to the interpersonal relationship theory, the relationship between controlling tutors and students is more tense or even worse. The smaller the expectation of students, the less obvious the incentive effect. Therefore, this paper proposes the following hypothesis:

H2: The controlling tutor style has a significant negative influence on the quality of student training.

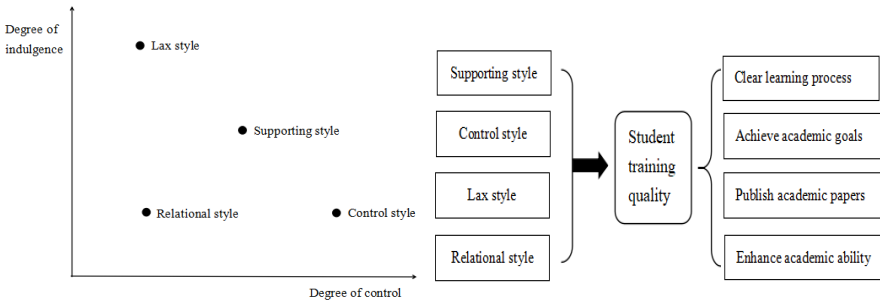
Under *Laissez-faire* tutors' guidance, students have sufficient freedom and right to choose, and there is a serious lack of communication and interaction between teachers and students. Students have neither internal motivation for their own progress, nor external motivation brought by various requirements, resulting in the lack of motivation for students in learning and scientific research, unable to produce high expectations, so the incentive effect is very small. So in the absence of teacher guidance, the graduate training quality will be adversely affected. Therefore, this paper proposes the following hypothesis:

H3: *Laissez-faire* tutor guidance style has a significant negative impact on the quality of student training.

A striking feature of relational mentor to maintain good relationship between teacher and student, teacher to student's control and let the degree is low, in addition to learning and scientific research and life on the exchange. So teachers and students give each other enough respect and attention, rarely produce contradictions between teachers and students. According to the interpersonal relationship theory, good relationship can make students feel a strong sense of security and belonging, improve learning enthusiasm and expectations, and promote the progress of learning and scientific research. Therefore, this paper proposes the following hypotheses:

H4: relational mentor guiding style has significant positive influence on the quality of students.

Based on the above discussion, this paper divides four guidance styles according to the degree of control and *laissez-faire* of tutors: high control and low *laissez-faire* as control style, low control and high *laissez-faire* as *laissez-faire* style, medium control and low control and low *laissez-faire* as supportive style, and low control and low *laissez-faire* as relational style. Furthermore, with the tutor's guidance style as the independent variable and the student's training quality as the dependent variable, the concrete embodiment of the four kinds of guidance styles in practice is studied, and the theoretical model of the influence of the tutor's guidance style on the training quality of students is constructed, as shown in Figure 1.



**Fig. 1.** Results are divided according to the degree of laissez faire and control & Theoretical model of the influence of tutor's guidance style on student training quality

Figure source: Collated by author.

### 3 Research Design

#### 3.1 Data source and variable measurement

Starting from February 2023, the research will take graduate students from Southwest Jiaotong University as the main body of research, while collecting some data from universities such as University of Electronic Science and Technology of China and Anhui University. A total of 245 questionnaires were sent out, 238 were collected and 224 were valid. In order to ensure the reliability and validity of the measurement tool, this paper adopts Likert five-point method to design the questionnaire according to the maturity scale of various guidance styles and students' training quality, combined with the actual situation of the current tutor's guidance style. Options 1-5 indicate "completely disagree", "somewhat disagree", "neutral", "somewhat agree" and "fully agree" respectively.

#### 3.2 Reliability and validity test

SPSS26.0 was used to test the reliability and validity of the questionnaire. Reliability test is to test the reliability of the scale used in the questionnaire. According to Table 1, Cronbach's Alpha in all variables is greater than 0.7, indicating high reliability of the scale, which can be used for subsequent analysis. CITC values are greater than 0.4, basically have a good correlation, do not need to delete any items. The validity test is mainly used to test the degree to which the design of the scale can effectively measure the research variables. In the measurement, factor analysis should be carried out after passing KMO test and Bartlett ball test. The results show that the KMO value is close to 1, and the significance of Bartlett sphericity test is less than 0.01, indicating that there is a correlation between variables, which is suitable for factor analysis. Six factors were extracted from the factor analysis, which corresponded to the six research variables set in the questionnaire. In view of this, the scale used in this study has good reliability and validity.

**Table 1.** test reliability and validity of variable indicators

variable	Population Cronbach's $\alpha$	KMO	Bartlett sphericity test		
			Approximate chi-square	Degree of freedom	significance
Supportive coaching style	0.913	0.827	1307.332	325	.000
Controlling coaching style	0.801				
Laissez-faire coaching style	0.775				
Relational coaching style	0.778				
Student training quality	0.824				

Table source: Author's calculation.

### 3.3 Linear regression analysis

Among the respondents, 46 percent were men and 54 percent were women. In the grade, the proportion of research 1 is 38.4%, the proportion of research 2 is 30.8%, and the proportion of research 3 is 30.8%. The numbers were roughly equal across genders and grades, and the results were universal and representative. Among the tutors of the surveyors, associate professors are the main ones, accounting for 50.9%, and lecturers are the least. Most of the graduate students determine their supervisors after having communication with them before admission, and only 18.3% of them are arranged by the college to determine their supervisors. In the communication between teachers and students, the situation of often taking the initiative to find the tutor and the tutor often taking the initiative to find themselves is roughly the same, but this situation does not appear in the casual style of guidance. Judging from the evaluation of tutors, most of them are approachable, and only 13.4% of them are strict and serious, and the latter are basically controlling tutors.

Through the correlation analysis, it is found that the four independent variables of coaching style have a significant correlation with training quality at 0.01 level. There is a significant positive correlation between supportive and relational coaching styles and training quality. There is a significant negative correlation between the coaching styles of control and free style and the training quality. In order to further clarify the correlation, OLS multiple linear regression model was used to verify the sample data.

**Table 2.** regression model coefficient table

	Unnormalized coefficient		Standardization coefficient Beta	t	significance	B, 95.0% confidence interval	
	B	Standard error				Lower limit	upper limit
(constant)	1.324	0.335		3.950	0.000	0.664	1.985
Supporting type	0.268	0.056	0.307	4.802	0.000	0.158	0.379
Control type	-0.106	0.054	-0.108	-1.981	0.049	-0.212	-0.001
Lax style	-0.197	0.054	-0.203	-3.663	0.000	-0.303	-0.091
Relational type	0.466	0.069	0.420	6.784	0.000	0.330	0.601

Table source: Author's calculation.

The adjusted R square is greater than 0.5, the model shows that the model has more than half of the explanatory power to the dependent variable, an acceptable goodness-of-fit. F value is 60.101, P value is less than 0.001, shows that there exists a linear

relationship between dependent and independent variables and coefficient of regression model as shown in table 2, the independent variables in the model the significance test results are less than 0.05, to illustrate the four variables in the regression model has statistical significance, there were significant correlation.

Based on the data in the table, the model is:

$$Y_i = 1.324 + 0.268S_i - 0.106C_i - 0.197I_i + 0.466R_i + \varepsilon_i, i = 1, 2, 3, \dots, n$$

## 4 Conclusions

Based on the above discussion, the four hypotheses proposed in this paper are verified. The empirical analysis found that: supportive mentor for graduate training quality has significant positive influence, controlling tutors have a significant negative impact on the quality of graduate training, the casual tutor has a significant negative impact on the quality of graduate training and relational tutors have a significant positive impact on the quality of graduate training.

Starting from the three levels of tutors, postgraduates and universities, this paper puts forward some suggestions to improve the quality of postgraduate training, so as to improve the relationship between tutors and postgraduates and realize the common progress of tutors and postgraduates. For tutors, they should grasp the degree of control, reduce their own laissez-faire behavior, change the style of guidance, improve the effect of guidance, and enhance the internal motivation of students. For postgraduates, they need to clarify their academic goals, enhance their learning initiative, choose suitable tutors, and strengthen communication and exchange with tutors. As for colleges and universities, they should provide sufficient guidance resources, establish flexible selection mechanism of tutor graduate students, but also strengthen supervision and assessment of tutors. As an exploratory and confirmatory study, this paper still has some shortcomings. For example, tutor's guidance style and postgraduate training quality are impossible to conduct a comprehensive and complete index measurement of each dimension. Besides this paper, other factors need to be further studied.

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