

Research on the Path of Strengthening Teachers' Moral and Ethics Construction by Analyzing the Survey of Harmonious Teacher-Student Relationship

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Abstract: In order to understand the situation of teacher-student relationship in civil engineering majors in a local college, the statistical results of the questionnaire on the four dimensional factors of teacher-student relationship, namely, intimacy, conflict, support and satisfaction were analyzed from the perspective of the students using SPSS 22.0. The results shown that the total score of teacher-student relationship is 95.11, which was very harmonious overall. There was no significant difference between the teacher-student relationships of each factor in terms of gender. There was a significant difference in different grades, specifically in the intimacy and satisfaction dimensions, where freshman students differed significantly from other grades. Conflicting aspects were primarily characterized by a significant gap in teacher-student relationships between freshmen and seniors over sophomore and junior. Finally, based on the results of the analysis, targeted recommendations were made from the teachers' point of view to promote the construction of teachers' moral and ethics in the college.

Keywords: Teacher-student Relationship; Teachers' Moral and Ethics; Civil Engineering Majors; Variance Analysis

1. Introduction

Interpersonal relationships in universities can be broadly divided into teacher relationships, teacher-student relationships, peer relationships, leadership relationships and other relationships, of which teacher-student relationships are the most basic and important relationships in

colleges and universities and are at the core of various types of interpersonal relationships^[1-2]. Teacher-student relationship is an emotional interpersonal relationship formed between teachers and students through the transmission of knowledge, information and the exchange of emotions and ideas in order to achieve the goals of education and teaching^[3]. It is not only an educational relationship, but also a special social relationship^[4,5]. Harmonious teacher-student relationship is the psychological demands and development needs of both sides of the teaching subject, which can make students perceive that their emotions are accepted by their teachers and get positive responses, and at the same time integrate the value shaping of students, knowledge transfer and ability cultivation, help students shape the correct worldview, outlook on life, values, stimulate students' strong learning motivation, and achieve the fundamental purpose of establishing moral education. Lu Genshu believed that the relationship between teachers and students in universities is a neglected and urgent research area that needs to be strengthened^[6]. The research of some scholars showed that at present, most teachers and students of science and technology in local universities believed that the emotional dilution between teachers and students was more common, and the sense of alienation between teachers and students was stronger^[7]. Teacher-student relationships in undergraduate colleges and universities were generally harmonious, but there was also mutual emotional indifference, a tendency toward utilitarianism, a decrease in teacher-student

exchanges, the concept of authoritarianism still exists, and a lack of mechanisms for common growth, etc^[8-9]. Some university teachers overly valued the authority of teachers, resulting in a weaker status of students as the main body, and cases of conflict, tension, utilitarianism, and indifference in teacher-student relationships occur from time to time^[10]. This paper took the civil engineering college of an university in Hebei province as an example, investigated the status quo of teacher-student relationship in civil engineering majors through questionnaires, and put forward targeted suggestions by analyzing its shortcomings.

2. Research Objects and Methods

2.1 Research Objects

This study selected students majoring in civil engineering from the school of civil engineering as the research subjects. The questionnaire was designed and distributed through the network, and 513 valid questionnaires were collected. Among them, 453 were male students, accounting for 88.3%, and 60 were female students, accounting for 11.7%, which was in line with the reality that there were more males than females in the civil engineering majors; there were 103 freshmen, 135 sophomores, 150 juniors, and 125 seniors, as shown in Table 1

Table 1. Distribution of students participating in the study

Genders Grade	freshmen	sophomore	junior	senior
male	98	121	131	103
female	5	14	19	22

2.2 Research Methods

Referring to the "Teacher-Student Relationship Scale" compiled by scholars Zhiyong Qu, the questionnaire was designed to measure 2 objective questions and 23 subjective questions, and the questionnaire used a Likert 5-point scale, with option "1" representing no compliance at all, "2" representing less compliance, "3" representing general compliance, "4" representing more compliance, and "5" representing full compliance. The higher the score, the more harmonious teacher-student relationship. Therefore, it was

necessary to correct the scores of the reverse-indicator type questions similar to "the teacher is not fair to me". For example, the score of the questionnaire was "1", which meant that the teacher was completely fair to me, and the score was corrected to "5". The reliability coefficient of the questionnaire was 0.90, which was very good, indicating that the sample answer results were reliable; The KMO value of validity was 0.931, indicating high validity of the questionnaire.

3. Analysis of Teacher-Student Relationship

3.1 Overall Analysis

The four dimensions of harmony in the teacher-student relationship in civil engineering majors were satisfaction, support, conflict and intimacy from high to low. With a maximum score of 115, this study believed that a score exceeding 92 indicates a harmonious teacher-student relationship. The overall score of this survey was 95.11, which showed that the teacher-student relationship in the civil engineering major of this college was very harmonious.

The current teacher-student relationship in civil engineering majors in this college was at a very harmonious level in terms of conflict, support and satisfaction with the average value of more than 4 points, which was at a very harmonious level, indicating that the level of support that teachers could and were willing to provide to students and the degree of recognition and pleasure that students had for the teacher-student relationship were high, and the degree of conflict in the teacher-student relationship was low. The intimacy score was 3.94, indicating that the relationship was at a relatively harmonious level, that is, the interaction and communication between teachers and students was relatively close, but closed to a very harmonious level. The standard deviation of each factor was less than 1, indicating that the teacher-student relationship was evaluated at a low level of difference across the four dimensions. The descriptive statistics of factors were shown in Table 2.

Table 2. Descriptive Statistics of Sample Characteristics for Each Factor

Relationship factor	N	Mean	Std.deviation
intimacy	513	3.941	0.890
conflict	513	4.110	0.818

support	513	4.303	0.769
satisfaction	513	4.309	0.690

3.2 Teacher-Student Relationship in Various Dimensions

The lowest score in the intimacy factor was question A18 with a score of 3.39, indicating that students were more willing to tell their teachers about their affairs, but it was close to the level of general willingness. The highest score in the factor was question A23, with a score of 4.22, which indicated that the students were very willing to do things together with their teachers. The lowest score in the conflict factor was question A14, with a mean score of only 3.66, indicating that the teacher's proactive concern for the student when the student was sad or aggravated had yet to be improved. The highest score was question A2,

with a score of 4.58, indicating that the teacher rarely sought out the student's problems. In the support factor, all the questions scored more than 4, with the lowest questions score of 4.10 for question A3, and the lowest score of 4.13 for the satisfaction factor. Among the various dimensional factors, question A14 scored the lowest, while question A4 scored the highest at 4.68, indicating that students were very eager to improve their relationship with the teacher. 18 questions scored more than 4 points, accounting for 78.2%, indicating that the teacher-student relationship was very harmonious on these issues, and 5 questions scored more than 3 points, accounting for 21.7%, indicating that the teacher-student relationship was relatively harmonious in some links. The scores for each question were shown in Table 3 below.

Table 3. Descriptive Statistics of Overall Samples

Intimacy	Mean	SD	Conflict	Mean	SD	Support	Mean	SD	Satisfaction	Mean	SD
A1	3.934	1.084	A2	4.578	1.060	A3	4.092	1.061	A4	4.679	0.801
A5	3.710	1.235	A6	4.277	1.113	A7	4.526	0.787	A8	4.171	0.989
A13	4.124	1.029	A12	4.257	1.279	A9	4.418	0.901	A10	4.240	0.929
A17	4.060	1.106	A14	3.663	1.446	A16	4.172	1.031	A11	4.128	1.012
A18	3.389	1.364	A15	4.085	1.294				A20	4.327	0.925
A21	4.151	1.004	A19	4.089	1.271						
A23	4.215	1.018	A22	3.820	1.303						

3.3 Gender Difference Analysis

The intimacy score of the relationship between male students and teachers was 3.95 and that of female students was 3.84. The conflict score between male students and teachers was 4.10, and that of female students was 4.18. The support score between male students and teachers was 4.32 and that of female students was 4.20. The satisfaction score between male students and teachers was 4.32 and that of female students was 4.20. Statistical methods were used to analyze the differences in gender factors in the four dimensions. For the analysis of differences between two groups of samples, it is appropriate to use the Independent-Sample T Test or the Independent-Sample Non-parametric Test, and the former requires continuous numerical variables to obey a normal distribution. The normality test results of each factor were shown in Table 4.

Table 4. Normality Test for Gender Factors

	Gender	Shapiro-Wilk		
		F	df	Sig.
Intimacy	1	.916	453	.000

Conflict	2	.949	60	.018
	1	.889	453	.000
	2	.833	60	.000
Support	1	.840	453	.000
	2	.838	60	.000
Satisfaction	1	.872	453	.000
	2	.909	60	.000

The significance of the factors in the four dimensions was all less than 0.05, indicating that the sample did not conform to the normal distribution, so a two-independent sample non-parametric test was required. The results of the two independent-sample non-parametric tests were shown in Table 5.

Table 5. Two Independent-Sample Non-Parametric Test for Gender Differences

	intimacy	conflict	support	satisfaction
Mann-Whitney U	11028.5	11697	11042.0	10801.5
Wilcoxon W	12681.5	102648	12695.	12454.5
Z	-1.13	-.45	-1.10	-1.38
Asymp.Sig (.2-tailed)	0.258	0.65	0.25	0.17

The p-values of all four dimensions were

greater than 0.05, indicating that there was no significant difference in teacher-student relationship harmony over gender. However, the teacher-student relationship of male students was slightly better than that of female students in terms of intimacy, support and satisfaction, and only in terms of conflict, female students were slightly better than male students. It shown that the interaction between students and teachers in the college would not be affected by the gender difference among students.

3.4 Analysis of Grade Differences

In the intimacy factor, the teacher-student relationship scored 3.66 among freshmen, 3.97 among sophomores, 3.94 among juniors, and 4.07 among seniors. In the conflict factor, the teacher-student relationship scored 3.95 among freshmen, 4.22 among sophomores, 4.20 among juniors, and 3.97 among seniors. In the support factor, the teacher-student relationship scored 4.15 among freshmen, 4.31 among sophomores, 4.33 among juniors, and 4.35 among seniors. In the satisfaction factor, the teacher-student relationship scored 3.99 among freshmen, 4.39 among sophomores, 4.33 among juniors, and 4.38 among seniors. The results of variance homogeneity test of each factor were shown in Table 6

Table6. Variance Homogeneity Test

Factor	Levene	df1	df2	Sig.
intimacy	1.045	3	479	.372
conflict	2.137	3	479	.095
support	.226	3	479	.879
satisfaction	.508	3	479	.677

According to Table 6, the significance P-values of each factor were all greater than 0.05, thus meeting the conditions for One-Way ANOVA. The results of variance analysis were shown in Table 7.

Table7. ANOVA Results for Factors

		df	Means- quare	F	Sig.
intimacy	Among groups	3	2.741	3.516	.015
conflict	Among groups	3	2.362	3.584	.014
support	Among groups	3	1.065	1.857	.136
satisfaction	Among groups	3	2.986	6.482	.000

According to Table 7, except for the support

factor, the significant P-values of the other factors were all less than 0.05, indicating significant differences in the teacher-student relationship among the four grades. As for which grades had significant differences, multiple comparative analysis was still needed.

Table 8. Multiple Comparison

Grade	Grade	Intimacy Sig.	Conflict Sig.	Satisfaction Sig.
1	2	0.015	0.028	0.000
	3	0.022	0.036	0.001
	4	0.001	0.939	0.000
2	1	0.015	0.028	0.000
	3	0.831	0.867	0.467
	4	0.334	0.013	0.935
3	1	0.022	0.036	0.001
	2	0.831	0.867	0.467
	4	0.231	0.017	0.529
4	1	0.001	0.939	0.000
	2	0.334	0.013	0.935
	3	0.231	0.017	0.529

According to Table 8, there were significant differences in intimacy between freshmen and students in other grades. In terms of conflict, there were statistically significant differences between freshmen and sophomores, freshmen and juniors, also exist in seniors and sophomores, seniors and juniors. The conflict in the teacher-student relationship among sophomores and juniors was significantly weaker than other grades. In terms of satisfaction, there was a significant difference between freshmen and senior students.

4. Conclusion.

Harmonious teacher-student relationship is a guarantee for the high-quality development of universities. Through a questionnaire survey and statistical analysis of civil engineering students, the following conclusions were drawn:

1. The teacher-student relationship was overall very harmonious. The scores of satisfaction, support, conflict and intimacy were 4.309, 4.303, 4.110 and 3.941 respectively. Teachers were willing to provide help and encouragement to students. Students were very satisfied with the current teacher-student relationship, and conflicts rarely occurred. However, the intimacy was slightly insufficient, and students were not yet able to talk to their teachers about everything. All questions scored more than 3 points, and

78.2% scored more than 4 points. There was little difference in students' evaluation of the teacher-student relationship.

2. There was no significant gender difference in the teacher-student relationship across all four dimensions. However, there were significant differences in grades except for support factor. The teacher-student relationship of freshmen should be highly valued in three dimensions: intimacy, conflict, and satisfaction. The teacher-student relationship of seniors should focus on conflict.

3. Building a harmonious teacher-student relationship can not only enhance teachers' moral and ethics but also promote the harmonious and stable development of the university. This requires teachers to have good emotional intelligence and communication skills, and it also requires students to have good quality and educational awareness.

5. Suggestions on the Path of Strengthening Teachers' Moral and Ethics to Promote Harmonious Teacher-student Relationship

Based on the conclusion, path suggestions were put forward from three aspects: increasing teacher-student intimacy, enhancing freshman teacher-student relationship, and reducing teacher-student conflicts among seniors.

Strengthen the intimacy of the teacher-student relationship by building trust and communication, focusing on individual differences and providing emotional support. Specific suggestions are that teachers should endeavor to build trusting relationships with students and encourage them to open up and share problems and ideas. Communicate with students regularly to understand their needs, interests and confusion, and provide timely support and guidance. Teachers should respect and pay attention to their individuality and differences. By understanding students' strengths, preferences, and learning styles, teachers can personalize instruction and support their growth. In addition to academic guidance, teachers should give students emotional support and encouragement. Care for their emotional state, help them deal with setbacks and difficulties, and enhance their mental resilience and adaptability.

Enhancement of the teacher-student relationship among freshmen through the development of a mentorship system, the

provision of mental health services, and teacher-student interaction activities. Specific suggestions are that schools can establish a mentor system in the freshman year by assigning a teacher or senior student as a mentor to each freshman, responsible for guiding their study and life, and providing emotional support and assistance to strengthen the connection between teachers and students. For the mental health problems of new students, schools should provide professional psychological counseling and support services to help them adapt to the new environment, relieve the pressure of study and life, and reduce conflicts with teachers or classmates. Schools can organize activities for teacher-student interaction, such as tea parties and thematic discussions, to build a platform for communication between new students and teachers, to enhance mutual understanding and comprehension, and to reduce possible misunderstandings and conflicts.

Reducing conflict of senior student-teacher relationships by listening to students, providing personalized guidance and actively guiding career planning. Specific suggestions are that teachers should give senior students more voice, encourage them to express their ideas and opinions, and listen carefully to their opinions and suggestions. Teachers should provide personalized guidance and support for senior students' personality characteristics and learning needs, and help them solve problems in learning and life. Senior students are faced with the pressure of graduation and employment. Teachers can actively guide them in career planning and employment preparation, provide necessary help and guidance, and reduce conflicts arising from employment issues.

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