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Factors Impacting Teachers' Happiness on Higher Education in Zhanjiang University of Science and Technology, China

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Abstract

Purpose: The study explores the correlation between factors such as teachers' income, teachers' wealth, teachers' health, sense of gain, sense of fairness, and teachers' happiness. By strengthening the influencing factors, an appropriate strategic plan is identified to enhance teachers' happiness level ultimately. **Research design, data, and methodology:** The study employed the Instrument of Organization Culture (IOC) as a measure of validity and Cronbach's alpha (n=30) as a measure of reliability. Multiple linear regression (MLR) analysis was conducted on the valid questionnaires of 228 teachers from Zhanjiang University of Science and Technology to validate the significant relationships between variables. Subsequently, a strategic plan was implemented for 16 weeks involving a selected group of 30 teachers. Quantitative pre- and post-strategic plan stage results were compared using paired-sample t-tests. **Results:** In the multiple linear regression study, we found that teachers' income, teachers' wealth, teachers' health, sense of gain, and sense of fairness have a significant impact on teachers' happiness. The results of the paired-sample t-test indicate that all variables between the pre-and post-strategic plan stages show significant differences. **Conclusions:** Teachers' income, teachers' wealth, teachers' health, sense of gain, and sense of fairness can enhance the happiness of teachers at Zhanjiang University of Science and Technology.

Keywords : Teachers' Wealth, Teachers' Health, Sense of Gain, Sense of Fairness, Teachers' Happiness

JEL Classification Code: I23, J28, L2

1. Introduction

Having a sense of happiness in their profession is a fundamental right of teachers, influencing both the quality of their personal lives and professional development and impacting the healthy and sustainable development of the national education system. From the teachers' perspective, a sustained decline in happiness will lead to a chain reaction affecting the attractiveness of the education profession, resulting in teacher resignations and shortages. From the students' viewpoint, the premise for students to experience happiness is that teachers have higher happiness levels (Murphy & Mannix-McNamara, 2021). From the perspective of educational institutions, the happiness levels of teachers are closely related to their ability to teach effectively and creatively (Day & Gu, 2009), thereby influencing the overall effectiveness of teaching in the entire school. In China, the Central Committee of the Communist Party of China and the State Council attach great importance to the construction of the teaching staff. However, due to factors such as excessive school intervention in teachers' teaching, there is a significant gap between the results of teacher-staff construction practices and expectations, and the level of teacher happiness still needs to be higher. Effectively improving teachers' happiness has become a focal point of attention for the Central Committee and the State Council.

The academic community also places great emphasis on teacher happiness research, focusing on defining teacher happiness, delineating its dimensions, and exploring influencing factors. However, limited research focuses on privately funded undergraduate institutions.

In 2020, responding to the national call, Zhanjiang

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University of Science and Technology transformed into a private undergraduate independent university, adjusting faculty compensation and welfare benefits. Building upon the research findings above, this study takes the Zhanjiang University of Science and Technology teachers as its sample. It intervenes in factors influencing teacher happiness, such as income, wealth, health, sense of accomplishment, and sense of fairness, through a strategic planning approach. The objective is to test whether there are significant differences in teacher happiness levels before and after implementing the strategic plan.

2. Literature Review

2.1 Teachers' Happiness

Teachers' happiness is a positive and pleasant emotional experience relative to their stress or anxiety levels (Scott, 1998). Subjective well-being can be measured across three dimensions: overall life satisfaction, positive emotions, and negative emotions (Dzuka & Dalbert, 2007). Given the variations in the definitions and dimension divisions of teachers' happiness among different scholars, this study adopts Scott's definition (1998) and Dzuka and Dalbert's dimension measurement (2007).

2.2 Teachers' Income

The teachers' income refers not only to their subjective perception after comparing their actual income with their expected income but also includes their subjective perception after comparing their received income with the income of other university teachers and professionals in other industries, as well as their own perceived efforts in their work (Li & Hu, 2022).

The study of income is a dynamic and evolving field. It can be divided into absolute income and relative income. The general belief is that as absolute income increases, individuals' sense of happiness tends to increase (Stevenson & Wolfers, 2013), showing diminishing marginal returns (Clark et al., 2008; Layard et al., 2008). However, due to different data processing methods, there may be a phenomenon where individuals with higher incomes report lower happiness levels (Jebb et al., 2018). This has led to a shift in research towards the study of relative income, including comparative studies of relative income among different groups and between the present and the past. According to the "hedonic treadmill" theory, in the short term, there is a negative correlation between past income and current individual happiness, but in the long term, this negative correlation will be mitigated.

H1: Teachers' income has a significant impact on teachers' happiness.

2.3 Teachers' Wealth

Wealth can be broadly categorized into two main types: material and spiritual. This study focuses on spiritual wealth, specifically the satisfaction of teachers with their welfare level (Li & Hu, 2022).

Existing literature has investigated the phenomenon of teachers' self-control over welfare. Work procedures, job tasks, job positions, and job units are the main channels through which university teachers exercise self-control over welfare (Wang et al., 2010). University teachers may weigh their energy input and welfare outcomes and choose to prioritize tasks with higher welfare outcomes (Metsch & Pollack, 2005). When choosing positions, university teachers tend to choose positions with more significant opportunities for self-control, greater autonomy, and more extensive sources of welfare (Liu & Dong, 2009). When the welfare of undertaking off-campus work is higher than that of internal work, teachers may increase their off-campus work time to gain higher welfare (Yang, 2009). For example, many university teachers teach on campus while running their businesses outside or taking on cooperative projects to obtain additional welfare (Atkinson, 2000). As self-controlled welfare is relatively hidden, many university managers may not be aware of teachers' welfare self-control behavior (Cui & Zhang, 2006).

Although many university managers overlook teachers' welfare and self-control behavior, scholars have begun to pay attention to the impact of the school work environment, organizational support for teachers, and professional development space on teachers' happiness. Deng and Li (2021) constructed a moderated mediation model based on the "job demands-resources model" and conducted a questionnaire survey based on this model. They found that professional development space is conducive to shaping teachers' occupational beliefs, affecting teachers' happiness.
H2: Teachers' wealth has a significant impact on teachers' happiness.

2.4 Teachers' Health

Teachers' mental health includes three specific dimensions: anxiety and depression, social dysfunction, and lack of confidence (Goldberg & Williams, 1988).

Existing research indicates that Chinese teachers face significant occupational stress, leading to high negative emotions (Yao, 2019; Zhao et al., 2023). Teaching stress not only negatively impacts teachers' performance and job satisfaction (Capone & Petrillo, 2020) but also hinders the improvement of teachers' happiness levels. Jiang and He

(2022) found that the greater the occupational stress experienced by teachers, the more significant the negative impact on their psychological capital, resulting in lower happiness levels. Differences in teachers' happiness were observed across job titles, revealing a U-shaped trend where the happiness of clerks and department-level teachers was higher than that of section-level teachers (Xiao, 2022). Liu and Zeng (2021) found that the positive psychological capital of young university teachers in Jiangxi was significantly positively related to their level of occupational happiness.

H3: Teachers' health has a significant impact on teachers' happiness.

2.5 Sense of Gain

"Sense of gain" originates from the discourse system of domestic policies in China; it refers to a positive psychological experience that teachers subjectively evaluate after obtaining material or spiritual gains. It includes four dimensions: environmental comfort, interpersonal warmth, teaching achievement, and school belongingness (Xing, 2020).

The sense of gain for teachers impacts their job satisfaction, and teachers' job satisfaction also influences their sense of happiness. Perie and Baker (1997), based on large-scale data surveys in the United States, showed that the work environment, such as school management support and student behavior, is highly related to teachers' job satisfaction. Wu (2022) found that material and environmental gains significantly influence teachers' job satisfaction. Yao et al. (2016) found that teachers' job satisfaction significantly correlated with their sense of happiness in Hunan Province. The higher the job satisfaction of teachers, the higher their sense of happiness. Liu and Cao (2016) also supported this view in their research.

H4: Sense of gain has a significant impact on teachers' happiness.

2.6 Sense of Fairness

At the heart of our study is a sense of fairness, a crucial aspect of the social environment in which teachers operate. This perception of fairness, experienced at the micro-level of work, is primarily shaped by two key factors: distributive fairness and procedural fairness (Leventhal, 1980). These factors, in turn, are further divided into three dimensions: distributive fairness, which concerns the perceived fairness of resource allocation; procedural fairness, which focuses on the perceived fairness of decision-making processes; and interactional fairness, which relates to the perceived fairness of interpersonal interactions.

A sense of fairness influences teachers' job satisfaction, which in turn affects teachers' happiness. According to Adams' equity theory, as university teachers' work often involves implicit inputs, resulting in relatively small variations in rewards among teachers, the inequality between inputs and rewards may lead some teachers to perceive the distribution as unfair, causing dissatisfaction and a decrease in job satisfaction. Procedural fairness theory suggests that if the distribution process is fair, even if the distribution outcomes are unsatisfactory, it will not significantly lower job satisfaction. Song (2017), based on organizational fairness theory, conducted on-site surveys of 431 teachers from three universities in Tianjin using questionnaires. The study found that when organizational fairness (distributive, procedural, and interactional fairness) was high, teachers' sense of fairness and job satisfaction also increased. The above argument indicates that job satisfaction positively correlates with teachers' happiness. Some scholars have directly investigated the relationship between a sense of fairness and teachers' happiness. Liang and Gao (2021) found that teachers' perceived sense of fairness in professional development significantly positively impacted their perceived happiness, with teachers' mental state and professional identity playing a partial mediating role. Liang and Gao (2021) suggested that by focusing on emotions, enriching resources, enhancing capabilities, and valuing people, teachers' perception of fairness could be improved, improving their overall happiness.

H5: Sense of fairness has a significant impact on teachers' happiness.

3. Research Methods and Materials

3.1 Research Framework

The researcher applied four model theories from Shao (2022), Anasori et al. (2022), Qiao (2022), and Liang and Gao (2021). All four theoretical frameworks above supported and developed the conceptual framework in Figure 1.

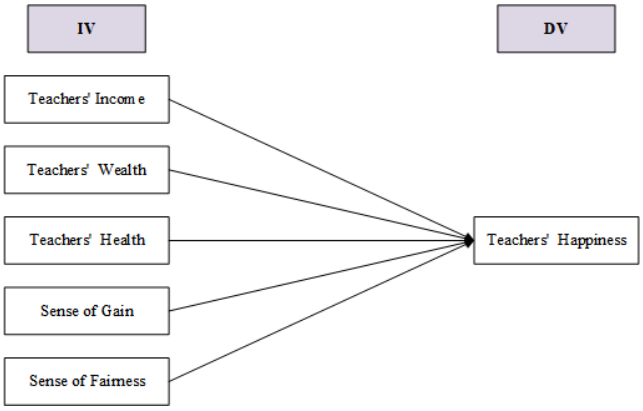

Figure 1: Conceptual Framework

H1: Teachers' income has a significant impact on teachers' happiness.
H2: Teachers' wealth has a significant impact on teachers' happiness.
H3: Teachers' health has a significant impact on teachers' happiness.
H4: Sense of gain has a significant impact on teachers' happiness.
H5: Sense of fairness has a significant impact on teachers' happiness.

3.2 Research Methodology

This study can be divided into four specific stages. In the first stage, a survey was conducted on the entire research population (n=240). Based on the survey data, a multiple linear regression analysis was performed to determine whether the hypotheses were supported at a 95% significance level. The second stage involved a pre-strategic plan survey of the 240 teachers. The third stage was the strategic plan, involving the participation of 30 teachers. The fourth stage was the post-strategic plan, where a questionnaire survey was conducted again on the 30 teachers involved in the strategic plan. The data obtained were subjected to paired-sample t-tests, comparing the pre-and post-strategic plan stages.

3.3 Research Population, Sample Size, and Sampling Procedures

3.3.1 Research Population

In this study, the research population consists of 781 teachers from the 11 secondary colleges of Zhanjiang University of Science and Technology, represented by the School of Economics and Finance. A quota sampling method was employed to select 240 teachers, and survey questionnaires were distributed. In the end, 228 valid questionnaires were received and considered suitable for further research.

3.3.2 Sample size

For the initial diagnostic phase, 12 teachers were randomly selected as interviewees. In the pre-strategic plan stage, 30 teachers were chosen to participate in the strategic plan implementation. In the post-strategic plan stage, these 30 teachers will be interviewed again using the same research methods as in the pre-strategic plan stage. The final sample size for this study is 228 teachers.

3.3.3 Sampling Procedures

Firstly, the target population is all Zhanjiang University of Science and Technology teachers. These four special colleges were excluded from the sample selection to ensure the effectiveness of factors influencing teachers' happiness. Therefore, this study only involves the 11 colleges, such as the School of Economics and Finance.

Secondly, quota sampling was chosen to ensure that the sample can represent the entire target population and select teachers based on the size proportion of each college. Two hundred forty questionnaires were distributed, and 228 valid responses were collected.

Thirdly, we conducted purposeful sampling, a method that allowed us to select 30 teachers from the 228 Zhanjiang University of Science and Technology teachers who participated in the questionnaire survey. This approach was instrumental in ensuring a diverse range of perspectives, enriching our understanding of the factors influencing teachers' happiness at the university.

3.4 Research Instruments

3.4.1 Design of Questionnaire

This study designed the survey questionnaire through three steps.

Step 1: Identify questionnaire sources (Goldberg & Williams, 1988; Greenberg & Leventhal, 1976; Leventhal, 1980; Li & Hu, 2022; Xing, 2020).

Step 2: Adjust questionnaire items in conjunction with the background of Zhanjiang University of Science and Technology.

Step 3: Implementing Item-Objective Congruence (IOC).

3.4.2 Components of Questionnaire

The questionnaire is divided into three parts.

The first part includes demographic questions about teachers. This part collects basic background information of teachers, such as age, gender, and educational background.

The second part consists of all the questions designed for factors influencing teachers' happiness: teachers' income, wealth, health, sense of gain, and sense of fairness. All questions are derived from publicly available published literature (Goldberg & Williams, 1988; Greenberg &

Leventhal, 1976; Leventhal, 1980; Li & Hu, 2022; Xing, 2020).

The third part concerns teachers' happiness. It includes six evaluation items adapted from Diener et al.'s (1985) Satisfaction with Life Scale (SWLS).

3.4.3 IOC Results

To enhance the validity of the happiness survey questionnaire for teachers, this study invited five experts to provide professional evaluations on the effectiveness of the questionnaire design. Among these experts, two are specialized teachers in vocational education, one is a university leader responsible for teaching work, and two possess doctoral degrees in educational management and leadership. In this IOC process, experts marked +1 for Consistent, 0 for Dubious, and -1 for Inconsistent. Excluding TIN 4, THE 1, and GOG 3, the scores for all remaining dimensions exceed the standard of 0.67.

3.4.4 Pilot survey and Pilot test results

After the IOC testing, the study proceeded to the reliability testing phase. In the reliability testing, the happiness questionnaire for teachers, consisting of 29 questions, was administered to 30 respondents. Sekaran (1992) suggested that an acceptable value for Cronbach's alpha coefficient should be 0.6 or above. Following the reliability testing, all evaluation items were retained. The table below presents the test results and their corresponding reliability coefficients. All evaluation items of the research instrument achieved scores of 0.6 or above in the reliability testing.

Table 1: Pilot Test Result

Variables	No. of items	Sources	Cronbach's Alpha	Strength of association
Teachers' Income (TIN)	4	(Cheng, 2020)	0.958	Excellent
Teachers' Wealth (TWE)	4	(Gashi et al., 2022)	0.861	Good
Teachers' Health (THE)	5	(Gashi et al., 2022)	0.769	Acceptable
Sense of Gain (SOG)	5	(Cheng, 2021)	0.885	Good
Sense of Fairness (SOF)	6	(Cheng, 2021)	0.873	Good
Teachers' Happiness (THA)	5	(Cheng, 2021)	0.886	Good

4. Results and Discussion

4.1 Results

4.1.1 Demographic Profile

This study demonstrated the demographic profile of the entire research population (n=228), followed by the selected teachers' group (n=30), who participated in the strategic plan, as shown in Table 2.

Table 2: Demographic Profile

Entire Research Population (n=228)		Frequency	Percent
Gender	Male	108	47.37
	Female	120	52.63
Age	Under 30 years old	60	26.32
	30-39 years old	67	29.39
	40-49 years old	50	21.93
	50-59 years old	31	13.60
	60 years old and above	20	8.77
Academic title	Lecturer and below	177	77.63
	Associate professor	35	15.35
	Professor	16	7.02
Total		**228**	**100%**
Strategic Plan (n=30)		**Frequency**	**Percent**
Gender	Male	17	56.67%
	Female	13	43.33%
Age	Under 30 years old	12	40.00%
	30-39 years old	11	36.67%
	40-49 years old	6	20.00%
	50-59 years old	1	3.33%
	60 years old and above	0	0.00%
Academic title	Lecturer and below	26	86.67%
	Associate professor	3	10.00%
	Professor	1	3.33%
Total		**30**	**100%**

4.1.2 Results of multiple linear regression

This study conducted multiple linear regression analysis (MLR) on 228 valid questionnaire responses to validate the support for each hypothesis. In this study, there are a total of 5 research hypotheses related to the dependent variable, teacher happiness (THA). Based on the analysis of variance inflation factors (VIF), all VIF values for the independent variables in this study are below 5, indicating the absence of multicollinearity among the independent variables (Hair et al., 1995). As shown in Table 3, this study's multiple linear regression model has an acceptable fit, with an R^2 of 0.830.

The adjusted R^2 is 0.689, suggesting that the cumulative explanatory power of the five independent variables, including teacher income (TIN), on teacher happiness (THA) is 68.9%.

Table 3: The multiple linear regression of five independent variables on teachers' happiness.

Variables	Standardized Coefficients Beta	t-value	P-value	R	R^2
Teachers' Income	0.433	3.05	0.005***	0.830	0.689
Teachers' Wealth	0.268	2.15	0.042**		
Teachers' Health	0.481	2.17	0.04**		
Sense of Gain	0.429	3.09	0.005***		
Sense of Fairness	0.604	2.62	0.015**		
Dependent variable: Teachers' Happiness.					

Note: p-value <0.05*, p-value <0.001**

Based on the analysis of the questionnaire data, among the 228 teachers surveyed from the 11 secondary schools of Zhanjiang University of Science and Technology, teachers' income (TIN), teachers' wealth (TWE), and teachers' health (THE) are at a relatively higher than average level. However, the sense of gain (SOG) and the sense of fairness (SOF) are at a relatively lower than average level. Overall, teachers' happiness (THA) remains at an average level. The current situation can be described as follows: the lower levels of sense of gain and sense of fairness have reduced the overall level of happiness among teachers at Zhanjiang University of Science and Technology. This situation is generally consistent with the actual development of Zhanjiang University of Science and Technology.

Based on the previous analysis, the research hypotheses of this study have been tested and supported by the results of multiple linear regression (MLR). The following are the final research hypotheses related to the changes in all variables between the pre- strategic plan and post- strategic plan stages:

H6: There is a significant mean difference in Teachers' Income between pre- and post- strategic plan stages.

H7: There is a significant mean difference in Teachers' Wealth between pre- and post- strategic plan stages.

H8: There is a significant mean difference in Teachers' Health between pre- and post- strategic plan stages.

H9: There is a significant mean difference in Sense of Gain between pre- and post- strategic plan stages.

H10: There is a significant mean difference in Sense of Fairness between pre- and post- strategic plan stages.

H11: There is a significant mean difference in Teachers' Happiness between pre- and post- strategic plan stages.

4.2 Strategic Plan Process

Based on the results from the pre-strategic plan stage interviews, this study designs the strategic plan for the strategic plan stage. The strategic plan takes guidance and goal setting as the entry point to help the participants establish a clearer vision and find suitable methods to achieve their goals. Tools like SWOT analysis and appreciative inquiry are used to assist participants in self-diagnosis and guide them in setting reasonable goals. On this basis, group guidance and individual consultations encourage active participation and feedback, fostering a supportive and cooperative atmosphere to enhance teachers' happiness.

Week 1: The researcher randomly selected 30 teachers from 228 valid questionnaires to form the participant team and completed the ice-breaking journey. Firstly, there is group awareness and goal setting. Secondly, individual awareness and goal setting are conducted. Lastly, goal reinforcement and finding ways to achieve goals are emphasized.

Week 2: This week focuses on optimizing some individual strategic plans.

Week 3 to Week 7: During this stage, the 30 teachers carry out specific activities based on their practice plans, and the researcher provides group guidance, individual consultations, and practical feedback to help them achieve their goals.

Week 8 to Week 14: During this stage, individual consultations play a more significant role than group counseling and feedback meetings, becoming the primary strategic plan tool. With the help of the researcher and experts, each teacher further deepens their understanding of teachers' happiness. Based on practice and feedback, they combine the researcher's analysis to find better ways to enhance their teachers' happiness that align with their characteristics and abilities.

Week 15 to Week 16: All participating teachers need to reflect on how they have applied what they have learned and experienced during the strategic plan.

4.3 Results Comparison between Pre-IDI and Post-IDI

This study conducted paired sample t-tests for all variables to determine whether there are significant differences in teachers' happiness and its influencing factors between the Pre- and Post-Strategic Plan stages. Please refer to Table 4 for details.

Table 4: Paired-Sample T-Test Results

Variables	Mean	SD	t-value	Sig.
Teachers' Income				
Current Situation	3.54	1.097	-5.58	< .001
Expected Situation	4.32	0.517		
Teachers' Wealth				
Current Situation	3.82	0.688	8.27	<0.01
Expected Situation	4.42	0.501		
Teachers' Health				
Current Situation	3.85	0.512	-12.26	<0.01
Expected Situation	4.45	0.413		
Sense of Gain				
Current Situation	2.02	0.943	-9.69	<0.01
Expected Situation	3.59	0.741		
Sense of Fairness				
Current Situation	2.15	0.616	-15.19	< .001
Expected Situation	3.55	0.600		
Teachers' Happiness				
Current Situation	2.73	0.992	-8.91	<0.01
Expected Situation	3.87	0.497		

Table 4 shows that the teachers' income in the post-strategic plan stage (M=4.32, SD=1.0971) is significantly higher than the teachers' income in the pre-strategic plan stage (M=3.54, SD=0.517). The t-value is -5.58, and the p-value is less than 0.01, with a mean difference of 0.78. Therefore, based on the p-value being less than 0.05, the statistical data results support hypothesis 6: There is a significant difference in Teachers' Income between the pre-and post-strategic plan stages.

Table 4 shows that the teachers' wealth in the post-strategic plan stage (M=4.42, SD=0.501) is significantly higher than the teachers' wealth in the pre-strategic plan stage (M=3.82, SD=0.688). The t-value is -8.27, and the p-value is less than 0.01, with a mean difference of 0.61. Therefore, based on the p-value being less than 0.05, the statistical data results support hypothesis 7: There is a significant difference in Teachers' Wealth between the pre-and post-strategic plan stages.

Table 4 presents a clear picture of the positive impact of the strategic plan on teachers' health. The teachers' health in the post-strategic plan stage (M=4.45, SD=0.413) is significantly higher than the teachers' health in the pre-strategic plan stage (M=3.85, SD=0.512). The t-value is -12.26, and the p-value is less than 0.01, with a mean difference of 0.59. These compelling statistical data results strongly support hypothesis 8: There is a significant difference in Teachers' Health between the pre-and post-strategic plan stages.

Table 4 shows that the sense of gain in the post-strategic plan stage (M=3.59, SD=0.741) is significantly higher than the sense of gain in the pre-strategic plan stage (M=2.02, SD=0.943). The t-value is -9.96, and the p-value is less than 0.01, with a mean difference of 1.57. Therefore, based on the p-value being less than 0.05, the statistical data results support hypothesis 9: There is a significant difference in the Sense of Gain between the pre-and post-strategic plan stages.

Table 4 shows that the sense of fairness in the post-strategic plan stage (M=3.55, SD=0.600) is significantly higher than the sense of fairness in the pre-strategic plan stage (M=2.15, SD=0.616). The t-value is -15.19, and the p-value is less than 0.01, with a mean difference of 1.40. Therefore, based on the p-value being less than 0.05, the statistical data results support hypothesis 10: There is a significant difference in the Sense of Fairness between the pre-and post-strategic plan stages.

Table 4 shows that teachers' happiness in the post-strategic plan stage (M=3.87, SD=0.497) is significantly higher than that in the pre-strategic plan stage (M=2.73, SD=0.992). The t-value is -8.91, and the p-value is less than 0.01, with a mean difference of 1.15. Therefore, based on the p-value being less than 0.05, the statistical data results support hypothesis 11: There is a significant difference in Teachers' Happiness between the pre-and post-strategic plan stages.

In summary, variables such as teachers' income (TIN), teachers' wealth (TWE), teachers' health (THE), sense of gain (SOG), and sense of fairness (SOF) show significant changes between the pre-and post-strategic plan stages. Hypotheses 6 to 11 are supported in a statistically significant manner.

5. Conclusions, Recommendations and Limitations

5.1 Conclusions & Discussions

The study employed both quantitative and qualitative methods to comprehensively verify the extent to which teachers' income, teachers' wealth, teachers' health, sense of gain, and sense of fairness influence teachers' happiness levels, as well as the effectiveness of the strategic plan methods related to teachers' happiness.

Prior to the strategic plan activities, the researchers meticulously conducted quota sampling and distributed 240

questionnaires to 781 teachers from 11 faculties at Zhanjiang University of Science and Technology. This rigorous sampling process ensured a representative sample, making the findings more reliable. The data from these questionnaires revealed significant potential for improvement in various factors influencing teachers' happiness at the university. Subsequently, 30 participants were randomly selected from the 228 valid questionnaires to participate in the strategic plan phase and underwent evaluations.

At both pre- and post- strategic plan stages, the research team collected feedback from participants through a comprehensive process of questionnaires, interviews, and observations. This thorough feedback collection process allowed for a nuanced understanding of the impact of the strategic plan activities on the happiness levels of teachers at Zhanjiang University of Science and Technology. The results were clear-the strategic plan activities designed in this study had a positive impact on the teachers' happiness levels, with significant improvements in various factors after the strategic plan.

The study also conducted quantitative analysis. Adapting a teacher happiness scale based on previous research findings, the study employed multiple linear regression analysis, with an R square value of 0.689, indicating that the independent variables explained approximately 68.9% of the variance in the dependent variable. The coefficient analysis ($P < 0.05$) indicated that teachers' income, wealth, health, sense of gain, and sense of fairness contributed to the improvement of teachers' happiness levels.

5.2 Recommendations

Based on the research results and discussions on the factors influencing teachers' happiness, this study provides targeted recommendations as follows:

Firstly, pay attention to improving teachers' income. Schools should strive to provide reasonable and competitive salary packages for teachers. By enhancing teachers' income, not only can their happiness be improved, but it can also motivate them to work harder and contribute to the school's development.

Secondly, recognize the essential improvement of teachers' welfare level. Schools should focus on offering adequate welfare support, enabling teachers to concentrate more on their teaching work and enhancing their sense of belonging and loyalty to the institution.

Thirdly, teachers' mental health should not be overlooked. Teachers often face various pressures and challenges in their work and need sufficient support and care. Schools can establish mental health counseling services and foster a supportive and collaborative work environment, helping teachers effectively cope with psychological challenges in their work.

Fourthly, it enhances teachers' sense of achievement through various channels. For example, encouraging teachers to participate in educational research and professional development training can make them feel their abilities and value continuously improve.

Fifthly, fairness guarantees happiness, and it is crucial to teachers' happiness. Schools should establish a fair evaluation system to ensure that teachers' efforts receive just recognition. Additionally, attention should be given to fostering positive teacher relationships and creating a harmonious work atmosphere.

In summary, by emphasizing the improvement of teachers' income and welfare, focusing on teachers' mental health, enhancing their sense of achievement, and promoting fairness, schools can effectively enhance teachers' happiness and contribute to the school's steady development. These recommendations will help demonstrate genuine care and support for teachers, inspiring their enthusiasm and creativity and creating a conducive educational environment that provides better quality education for students.

5.3 Limitations for Future Research

Although this study has yielded valuable conclusions regarding teachers' happiness and its influencing factors, there are still some limitations and shortcomings. Future research can be expanded in the following areas:

Firstly, the sample size was expanded. This study focused on 781 teachers from 11 secondary colleges of Zhanjiang University of Science and Technology as the research subjects. While this selection allowed for an in-depth study of a specific group, future research could consider enlarging the sample size to include teachers from various regions, different types of schools, and diverse professional backgrounds to enhance the generalizability of the research findings.

Secondly, the duration of the strategic plan was increased. In this study, the strategic plan period was limited to one semester. Future research could consider extending the strategic plan duration for a more extended period to conduct long-term follow-up observations. This would help understand the long-term effects of factors such as teachers' income on teachers' happiness and further investigate the durability and stability of the strategic plan effects.

Thirdly, additional strategic plan factors were introduced. While this study mainly focused on the impact of teachers' income on teachers' happiness, future research could introduce more strategic plan factors, such as teachers' career development plans and job satisfaction. This comprehensive approach would consider the combined effects of different factors on teachers' happiness.

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