

A Study on the Level of Teachers' Well-Being and the Influencing Factors under Double Reduction—A Case of Teachers in Compulsory Education in Guangxi

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Abstract: Based on the PERMA well-being model proposed by Martin E.P. Seligman, this study examined the current situation and factors influencing teachers' well-being in Guangxi's compulsory education from five dimensions: positive emotions, meaning, achievement, commitment, and relationships in the context of the double reduction policy. The results show that teachers' well-being is generally at an intermediate level, with uneven development of each dimension; individual factors such as teachers' professional competence, organizational factors such as students and families, and social factors such as teachers' treatment and policy implementation all influence the level of teachers' well-being. This paper then goes on to construct pathways to enhance teachers' happiness at the micro, meso, and macro levels

Keywords: Teacher Well-being; Double Reduction; Compulsory Education

1. Introduction

On July 24, 2021, The State Council released the Opinions on Further Reducing the Homework burden and Off-campus Training burden of students in compulsory education,^[1] indicating that China has entered a new stage of compulsory education reform. Among them, the requirements for teachers such as “after-school service” and “five management” have also been firmly implemented. On January 20, 2018, The State Council released the Opinions on Comprehensively Deepening the reform of the Construction of teachers in the New Era,^[2] which focuses on the development of teachers in the new era and their physical and mental health. Teachers' well-being is one of the important indicators of their physical and mental health. After the implementation of the policy of “double reduction”, which has had a great influence on teachers, the research on teachers' well-being is particularly important.

According to Seligman's well-being theory^[3] and its PREMA well-being model, well-being consists of five basic factors: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment. Based on Seligman's well-being theory, this paper investigates the current situation and influencing factors of primary and secondary school teachers' well-being in Guangxi under the background of the double-declination policy through qualitative and quantitative research, aiming to understand the current level of teachers' well-being under the background of double-declination policy. According to the influencing factors of teachers' well-being under the background of the double-declination policy, a path model for improving teachers' well-being under the background of the double-declination policy is constructed in order to provide a reference for improving teachers' well-being in the compulsory stage under the background of double-decrement.

2. Research Design

2.1 Participant

This study selected a random sample of teachers at the compulsory education level in Guangxi Zhuang Autonomous Region as the research subjects. 250 questionnaires were distributed, 201 were returned, and 192 were valid, with a valid return of 95.5%. The details of the survey subjects are shown in Table 1.

Table 1: Information of survey respondents

Type	Amount	%			Amount	%	
Gender	Male	43	22.3	Marital Status	Married	101	52.6
	Female	149	77.6		Unmarried	91	47.3
Educational Experience	High school	2	1.0	Title	Junior	110	57.2
	College	16	8.3		Intermediate	50	26.0
	Bachelor	153	79.6		Associate Senior	30	15.6
	Master	21	10.9		Senior	2	1.0
Teaching Age	Under 5years	97	50.5	School type	Primary School in Town	28	14.5
	5-10years	32	16.6		Junior School in Town	36	18.7
	11-20years	22	11.4		Primary School in City	17	8.8
	Over 20 years	41	21.3		Junior School in City	111	57.8
Annual wage (RMB)	Under30k	36	18.7	In charge of a class or not	Yes	70	36.5
	30k-50k	49	25.5		No	122	63.5
	50k-80k	57	29.6				
	80k-100k	34	17.7				
	Over100k	16	8.3				

2.2 Method

2.2.1 Questionnaire

This study uses a self-administered questionnaire, the Well-being Scale for Primary and Secondary School Teachers. The scale is based on the PERMA model of well-being proposed by Martin E.P. Seligman, combined with the double reduction policy and the Chinese national context. The scale consists of 2 parts. The first part contains basic information about teachers; the second part is used to measure the well-being of primary and secondary school teachers in compulsory education and includes five dimensions: positive emotions, meaning, achievement, engagement, and relationships. A 6-point Likert scale was used, ranging from 1 (totally disagree) to 6 (totally agree). After the questionnaires were collected, the reliability of the questionnaires was tested by SPSS 26.0. The results showed that Cronbach's Alpha coefficient for the total scale was 0.939 (>0.7) and the Cronbach's Alpha coefficients for the dimensions of positive emotions, meaning, achievement, engagement, and relationships were all greater than 0.7, indicating good reliability of the questionnaire.

2.2.2 Interview

Following data analysis, interviews were conducted with a purposive sample of study participants based on the principle of maximum differentiation. Purposive sampling is the sampling of subjects that provide the maximum amount of information for the research question according to the purpose of the study.^[4] A total of eight teachers were interviewed, who were from different geographical areas of different school years. The total length of the interviews was 471 minutes and 69,000 words of transcribed text. Interviews were conducted with participants in order to obtain more in-depth information and to analyze at a deeper level the factors affecting teachers' well-being in the context of double reduction, with a view to increasing the value of the study.

3. Results

3.1 The current situation of Well-being

The mean and standard deviation statistics for each dimension of the questionnaire scale are shown in Table 2. The data show that the mean value of overall well-being is 3.78 and the standard deviation is 1.43, indicating that teachers in compulsory education currently have a moderate level of well-being overall. Of the five dimensions of the PERMA model, all four dimensions, except the positive emotion dimension, had mean values greater than 4.0, indicating a moderate level of well-being in these four dimensions at the compulsory education level. Of these, relationships had the highest mean (4.60) and

the lowest standard deviation (1.04) followed by, meaning (M=4.59, SD=1.16), engagement (M=4.52, SD=1.03) and achievement (M=4.10, SD=1.17). The positive emotion dimension had the lowest mean (3.70) and the highest standard deviation (1.41), indicating that they had the lowest teacher well-being on the positive emotion dimension and the greatest inter-teacher variation.

Table 2: Mean and standard deviation statistics by dimension

	Positive Emotions	Meaning	Achievement	Engagement	Relationships	Well-being
M	3.7014	4.5903	4.0955	4.5208	4.6076	3.78
SD	1.41379	1.16321	1.16754	1.03607	1.03796	1.430

3.2 Influencing factors

3.2.1 Demographic factors

Analysis by independent samples t-test revealed a significant difference (sig=0.004) in overall well-being by gender, with a small difference (R=0.2). Significant differences were found in the dimensions of positive emotions (sig=0.001, R=0.23), and achievement (sig=0.006, R=0.20). In terms of the mean scores for each dimension, male teachers were happier than female teachers on the dimensions of general well-being (4.33>3.62), positive emotions (4.31>3.53), and achievement (4.53>3.97).

The independent samples t-test, one-way ANOVA, revealed (as in Table 3) that there was no significant effect relationship between being a classroom teacher or not, marital status, education level and overall well-being, positive emotion, meaning, achievement, commitment, and interpersonal relationship.

Table 3: Results of analysis of demographic variables

Variate	Overall Well-being		Positive Emotion		Meaning		Achievement		Engagement		Relationship	
	Sig.	R	Sig.	R	Sig.	R	Sig.	R	Sig.	R	Sig.	R
Gender	.004	0.205	.001	0.23	.153	0.17	.006	0.20	.136	0.18	.172	0.16
School type												
Teaching Section	.027	-	.059	-	.280	-	.097	-	.702	-	.249	-
Annual Wage	.355	-	.329	-	.160	-	.029	-	.211	-	.330	-
Class leader	.152	0.10	.075	0.12	.579	0.15	.998	0.00	.482	0.05	.863	0.01
Marital Status	.318	0.07	.879	0.01	.479	0.05	.322	0.07	.637	0.03	.058	0.14
Title	.170	-	.196	-	.222	-	.195	-	.117	-	.378	-
Teaching Age	.459	-	.731	-	.103	-	.727	-	.636	-	.331	-
Educational Experience	.328	-	.586	-	.417	-	.240	-	.538	-	.291	-

One-way ANOVA with LSD test on school type and school section showed that (1) the type of school and school section of teachers significantly affected teachers' well-being (Sig.=0.027, p<0.05); (2) in terms of overall well-being, there was a significant difference between the well-being of teachers in rural junior high schools and rural primary schools (Sig.=0.014, p<0.05), a significant difference between teachers in rural junior high schools and (Sig.=0.02, p<0.05), and there was a significant difference between the well-being of teachers in rural junior high schools and urban primary schools (Sig.=0.013, p<0.05). (3) On the positive emotion dimension, there was a significant difference between rural primary schools and rural junior high schools (Sig.=0.034, p<0.05), a significant difference between rural junior high schools and urban primary schools (Sig.=0.038, p<0.05); and a significant difference between rural junior high schools and urban junior high schools (Sig.=0.016, p<0.05). (4) On the achievement dimension, there was a significant difference between rural primary schools and rural junior high schools (Sig.=0.041, p<0.05), and between rural junior high schools and urban junior high schools (Sig.=0.046). Combining the overall well-being with the mean values of each dimension, it can be found that: (1) teachers' well-being is highest in urban primary schools, followed by rural primary schools, urban junior high schools, and rural junior high schools; (2) on the positive emotion and achievement dimensions, urban primary schools are better than rural primary schools, urban junior high schools, and rural junior high schools.

A one-way ANOVA on annual salary income showed that there was a significant difference in the achievement scores of teachers in compulsory education in terms of salary income (Sig.=0.029, p<0.05). An LSD post-hoc test revealed that the overall well-being scores of teachers in compulsory education were significantly higher above 100,000 than 50-80,000 (Sig.=0.048, p<0.05); the positive

emotion scores were significantly higher above 100,000 than 30-50,000 (Sig.=0.035, $p<0.05$); and the significance dimension scores were significantly higher above 100,000 than 30-50,000 (Sig.= 0.012, $p<0.05$) and also higher than 50-80k; on achievement dimension scores, significantly higher than 30-50k (Sig.=0.017, $p<0.05$) and also higher than 50-80k, 80-100k, and less than 30k; and on input scores, significantly higher than 100k than 30-50k.

A one-way ANOVA on teaching age showed that there were no significant differences in overall well-being, positive emotions, meaning, engagement, achievement, and interpersonal relationship scores. An LSD posthoc test revealed that there was a significantly higher presence of teachers with 20 years or more than 11-20 years on the meaningfulness score in compulsory education (Sig.=0.017, $p<0.05$).

A one-way ANOVA on job titles revealed that there were no significant differences in overall well-being, positive emotions, meaningfulness, engagement, achievement, or interpersonal relationship scores. An LSD postdoc test revealed that positive emotion scores for teachers in compulsory education were significantly higher for positive senior titles than for intermediate titles (Sig.=0.049, $p<0.05$).

3.2.2. Other Factors

The questionnaire investigated the factors influencing the well-being of teachers in compulsory education in the context of the “double reduction” policy in the form of multiple-choice questions. The results showed that the top four factors influencing the well-being of teachers in the context of the “double reduction” policy were: joint growth and progress of teachers and students (51.5%), love for the teaching profession (43.2%), recognition and support from family members (34.3%), and respect and affection from students (39%). The top five factors contributing to the lack of well-being of teachers in compulsory education in the context of the “double reduction” policy were: tedious and mechanical work (68.2%), pay not commensurate with effort (60.4%), uncooperative and unhelpful parents (53.6%), longer working hours (41.6%), and difficulty in combining family responsibilities (33.3%). This shows that teacher-student relations, family, workload and difficulty, parents, and salary are the main factors affecting the well-being of teachers in compulsory education in the context of the “double reduction” policy.

In addition, the analysis of the interview data revealed that the factors affecting the well-being of teachers in the context of “double reduction” include personal, organizational and social factors. Personal factors include gender, teaching section, professional competence, and professional identity. The organizational factors include students, parents, teacher setting, and family. The social factors include social status, policy implementation, and teacher treatment. This shows that the multiple-choice questions are generally consistent with the interview data.

4. Suggestions

Based on the findings of this study, combined with the Society Ecosystem Theory Framework proposed by Brenneri, the influencing factor model is constructed from micro, meso, and macro perspectives^[5] (Figure 1), thus pointing out the strategies to improve the well-being of compulsory education teachers under the background of “double reduction” policy.

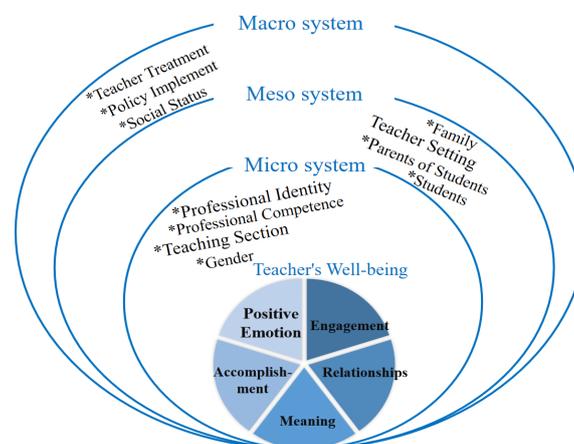


Figure 1: Influencing factor model based on human development ecology

4.1 Implementing the concept of lifelong learning and cultivating positive psychological qualities

The wise survival of a teacher is to become a lifelong learner and a person of complete meaning. Stick to the heart, keep the love of the profession, and improve teachers' sense of self-efficacy. Teachers can participate in teaching skills training, improve professional skills, improve work quality and efficiency; Participate in happiness psychology training, read books and articles related to teachers' psychology, have an in-depth understanding of teachers' psychological development, cultivate positive psychological quality, and improve teachers' resilience. Cultivate a good view of teachers, teaching, and students, with a positive, optimistic attitude in the face of teaching reform and change.

4.2 Optimizing the allocation of education and teaching and building an education community

The implementation of the "double reduction" policy is mainly to reduce students' homework burden and off-campus training burden, increase students' opportunities for sports, art, outdoor sports and labor, and increase students' time and opportunities for extracurricular training in sports, music and art, without reducing teachers' responsibility, teaching quality and student growth. This means that teachers' working hours will be extended, their workload will be increased, and their work pressure will be increased. At the same time, after the implementation of the "double reduction" policy, more compulsory education teachers will face the problem of coordination between work and life. Schools should provide training opportunities for teachers by classification, improve teachers' personal ability and cultivate positive psychological qualities. Harmonious peer relationships can contribute to teachers' well-being^[6] Cultivate an education community with an open mind, build a harmonious teaching and research atmosphere, provide good conditions for the professional development of teachers, and help improve the quality of teacher input.^{[7][8]} Create a culture of respecting teachers, loving teachers and helping teachers to enhance teachers' sense of achievement and achievement. Provide good humanistic care services to help teachers solve the problem of difficult coordination between home and school life, relieve teachers' anxiety and job burnout, and improve teachers' happiness. In addition, carrying out activities for parents to enter the campus can help parents understand education and teaching, promote the development of home-school collaborative education, improve parents' recognition and cooperation, and enhance teachers' sense of achievement.

4.3 Improving social recognition and implementing teacher education policies

Firstly, social recognition and praise from others are one of the sources of teachers' happiness. In September 2019, our Chinese President signed a presidential order to award Yu Yi the national honorary title of "People's Educator", which not only improved the status of teachers in society but also encouraged teachers.^[9] Secondly, salary is still an important factor affecting teachers' happiness. Gradually improving teachers' economic status is helpful to improve teachers' happiness and enhance their career attraction. Relevant departments at all levels should implement national policies and guidelines. In recent years, the state has gradually introduced various policies and measures to improve teachers' salaries and provide security for teachers' economic life. Effectively ensure the economic living standards of teachers. Thirdly, we should improve the management system and incentive mechanism, deepen the reform of professional title and broaden the path of teacher career development. Education departments will further improve the supervision and verification mechanism to effectively ensure the implementation of relevant policies on compulsory education for teachers.

5. Conclusion

Based on the PERMA well-being model proposed by Martin E.P. Seligman, this study examined the current situation and factors influencing teachers' well-being in Guangxi's compulsory education from five dimensions: positive emotions, meaning, achievement, commitment, and relationships in the context of the double reduction policy. The results show that teachers' well-being is generally at an intermediate level, with uneven development of each dimension; individual factors such as teachers' professional competence, organizational factors such as students and families, and social factors such as teachers' treatment and policy implementation all influence the level of teachers' well-being. This paper then goes on to construct pathways to enhance teachers' happiness at the micro, meso, and macro levels.

However, the following limitations remain in this study. Firstly, the data collected in this study is inadequate. In this study, the study area was located in the Guangxi Zhuang Autonomous Region, but

due to the researcher's limited capacity, only two hundred questionnaires were collected, which resulted in insufficient data for the study. Secondly, the enhancement pathway proposed in this study has not been perfected. In the next study, the researcher needs to continue to improve the improvement path system and find a scientific and effective method to improve teachers' well-being in the context of double reduction.

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