

A Study on the Satisfaction of Novice Special Education Teachers to Education Practice

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Abstract: *Education practice is an important practice activity to cultivate the professional practice ability of special education teachers. Through the investigation of 263 special education teachers who have been employed for 1-3 years, the satisfaction of teachers on education practice is understood. The results showed that the novice teachers were generally satisfied with the education practice, among which the content of the practice was the most satisfactory and the base of the practice was the least. The gender has significant difference in the content of practice and the guidance of college practice. There are significant differences in the guidance of school practice in different stages of practice at internship schools. Teachers whose internship subjects are consistent with the teaching subjects have significant differences in the dimensions of internship content, college internship guidance, student perception, and overall satisfaction with educational internship.*

Keywords: *novice, special education teachers, education practice, satisfaction*

1. Introduction

The field education experience, aim to bridge the gap between the real world of professional practice and the theoretical world of academe, it provides students with the opportunity to apply, integrate and validate what is learned in the classroom, and facilitate knowledge and value guided practice.^[1]As the major agency in promoting education development, teaching practice ability of the teaching staff in special education plays a decisive role in fulfilling their teaching responsibilities and improving their teaching quality, which means that it is also of vital importance to guarantee teaching effect, and to the general teaching quality of special education.

In 2010, *The Outline of Chinese National Medium and Long-term Education Reform and Development Plan (2010-2020)* proposes that China will strengthen education practice part, improve teachers' virtues and teaching skills, enhance the quality of teacher training.^[2]In 2019, *Opinions on Strengthening and Standardizing the Practice Management of General Undergraduate Universities* issued by the Ministry of Education of the People's Republic of China pointed that the improvement of colleges students' practical ability, creative spirit, and the cultivation of social responsibility are of vital importance to enhance the quality of Chinese higher education.^[3]Practice is one of the significant parts of practice teaching in universities, the policies mentioned above illustrate the importance of practical teaching. Competent professional practice is dependent on the field learning and integration of academic, efforts to enhance the quality of social work education have always given attention to the outcomes of field education(Fernandez, 1998).^[4]Educational internship is an important approach to cultivate teachers' practical teaching ability, so it's necessary to strengthen the weak point of the teaching ability of the pre-service teachers through researching the novice teachers' educational practice and improving the teaching effect. But it can be seen from documents that currently researches on satisfaction to educational practice mainly limit in the fields like hotel management and tourism, medical nursing, physical education, pre-school, and elementary school, etc. And there are just a few researches on the satisfaction of novice special education teachers and students who major in special education. The paper aims to train special education teachers in Xinjiang. The author selected teachers who have taught in special education schools within 3 years in Xinjiang to research the teachers' responses and recognition to their educational practice.

2. Compilation of a preliminary questionnaire for novice special education teachers' satisfaction with educational practice

2.1 The compilation of preliminary questionnaire

On the basis of a great number of literatures, the questionnaire refers to the "Questionnaire for Novice Kindergarten Teacher's Satisfaction to Education Practice of University or College" (Li Hui li, 2016),^[5] and the "Questionnaire for Novice Primary Teachers' Satisfaction to Education Practice of University" (Li Min, 2019).^[6] The author adopted a random sample of 78 novice special education teachers across the open style questionnaire, moreover, the author respectively interviewed 6 teachers who awarded the Prize for Excellent Internship when they were in colleges, 6 backbone teachers and 5 administrators in special education schools, as well as 5 administrators who have mastered special education internship in universities. At the same time, the author asked suggestions from 3 experts in special education, 3 skeleton teachers, and numerous administrators in the field to form the questionnaire. After the interviews, the initial view of the author was that the questionnaire for novice special education teachers' satisfaction to education practice should be consist of 9 parts: professional image, practice contents, internship bases, practice supervision of the higher institution and practice schools, the organization and management of internship, the perceptions of interns, the loyalty and complaint of interns. The author set up 59 items in accordance with Likert Scale: 5 means excellent, 4 is better, 3 indicates normal, 2 means worse, 1 is worst.

2.2 Compilation of the formal questionnaire

The author examined the first version of the questionnaire as soon as it accomplished. By sending out 250 questionnaires, and 238 were recovered, of which 12 questionnaires were invalid, so the effective rate is 95.2%.

2.2.1 Project analysis

The paper utilized several methods to analyse the preliminary questionnaire, such as measuring the CR value, the correlation coefficient between questions and the total scores, the α value of the deleted questions, and the communality. The author deleted 29 items of the preliminary questionnaire, of which were the 2nd and the 3rd items in the part of professional image, the 1st, the 2nd and the 6th items in practice contents, the 6th item in practice bases, the 1st, the 2nd, the 3rd, and the 4th in practice supervision in universities, the 1st, the 2nd, the 3rd, and 4th in practice schools, the items from the first one to the eighth one in the organization and management in practice, and also deleted two factors: students' loyalty as well as students' complaint. In the end, the author selected 30 items to form the valid questionnaire (Table1).

Table 1 Abstracts of project analysis.

Items number	Critical ratios	Correlations to total score	Correction of correlation coefficient	Values of α after the items deleted	Communalities	Notes
B1	4.838	.456**	.426	.953	.697	Retain
B2	3.424	.354**	.322	.954	.105	Delete
B3	4.391	.376**	.346	.954	.124	Delete
C1	6.075	.452**	.425	.953	.189	Delete
C2	4.700	.422**	.393	.953	.158	Delete
C6	6.310	.587**	.564	.953	.135	Delete
C4	5.737	.572**	.546	.953	.322	Retain
C5	4.922	.548**	.524	.953	.301	Retain
C3	5.801	.580**	.555	.953	.332	Retain
D1	4.547	.599**	.577	.953	.355	Retain
D6	2.720	.538**	.513	.953	.289	Delete
D3	5.567	.558**	.532	.953	.305	Retain
D4	7.050	.579**	.553	.953	.342	Retain
D5	6.061	.585**	.561	.953	.349	Retain
D2	7.623	.580**	.557	.953	.342	Retain
D7	4.831	.566**	.545	.953	.340	Retain
D8	6.567	.604**	.581	.953	.357	Retain
D9	6.384	.641**	.620	.952	.418	Retain
E1	2.620	.541**	.543	.952	.453	Delete
E2	2.678	.386**	.357	.954	.235	Delete
E3	2.865	.607**	.589	.953	.377	Delete

E4	3.345	.350**	.326	.954	.205	Delete
E5	6.030	.643**	.628	.952	.456	Retain
E6	6.646	.646**	.630	.952	.446	Retain
E7	6.511	.634**	.619	.952	.449	Retain
E8	5.092	.617**	.119	.952	.431	Retain
E9	6.523	.641**	.629	.952	.466	Retain
E10	4.315	.561**	.551	.953	.365	Retain
E11	4.197	.610**	.610	.952	.435	Retain
F1	2.688	.386**	.457	.954	.239	Delete
F2	2.876	.561*	.544	.952	.475	Delete
F3	4.732	.422**	.356	.953	.254	Delete
F4	3.578	.365**	.367	.953	.287	Delete
F5	5.389	.623**	.604	.953	.421	Retain
F6	5.746	.583**	.559	.953	.358	Retain
F7	6.185	.645**	.626	.952	.448	Retain
F8	5.565	.598**	.579	.953	.379	Retain
F9	6.020	.574**	.551	.953	.350	Retain
G1	2.815	.402**	.376	.953	.132	Delete
G2	2.000	.342**	.316	.954	.088	Delete
G3	1.830	.321**	.296	.954	.082	Delete
G4	1.752	.314**	.283	.954	.072	Delete
G5	2.732	.364**	.331	.954	.102	Delete
G6	2.678	.386**	.357	.954	.119	Delete
G7	2.730	.312**	.280	.954	.068	Delete
G8	3.149	.341**	.315	.954	.090	Delete
H1	3.009	.539**	.511	.953	.273	Retain
H2	4.097	.563**	.538	.953	.305	Retain
H3	4.448	.567**	.543	.953	.307	Retain
H4	3.719	.481**	.454	.953	.227	Retain
H5	4.112	.530**	.507	.953	.289	Retain
H6	4.094	.521**	.497	.953	.270	Retain
H7	2.005	.489**	.463	.953	.234	Retain
I1	2.430	.407**	.378	.953	.140	Delete
I2	3.155	.430**	.397	.953	.153	Delete
I3	3.327	.387**	.349	.954	.115	Delete
J1	1.972	.393**	.351	.954	.120	Delete
J2	.795	.161*	.146	.954	.022	Delete
J3	2.710	.379**	.332	.954	.108	Delete
Judgment Standard	≥3.000	≥4.000	≥4.000	≤0.955	≥2.000	

2.2.2 Exploratory factor analysis

Suitability test of factor analysis: It can be seen from table 2 that the KMO coefficient= 0.907, the Chi-square coefficient of Bartlett sphere=4334.405, and the significant level is $0.000 < 0.001$, which means the data are suitable for the analysis. The cumulative interpretation of the five-dimension construct model to the data mutation is 64.390% in the scheme, which means the model is feasible. Therefore, the novice special education teachers' satisfaction to the current education practice, and the correspondences between the five factors and all items, and factor loadings could be evaluated after the rotated factor via the questionnaire (Table 2). Moreover, the factor loading in all items over 0.45, and the correspondences between all dimensions and items are consistent to the author's speculation.

Table 2 The test of KMO and Bartlett.

Take adequate Kaiser-Meyer-Olkin metric approximation chi-square for sampling	.907
Spherical test of Bartlett	4334.405
df	435
Sig.	.000

Naming factor: The author named the factors as follows: the satisfaction factor of practice contents mainly expresses the overall impact on the curriculum, the management of classes and the practice schools own; The satisfaction factor of the practice bases mainly shows the satisfaction to the arrangement, the logistics life guarantee, and the hardware facilities of the practice schools; The factors of university internship satisfaction are mainly the satisfaction with the content and frequency of the intern's guidance by university tutors;; The satisfaction factor of practice bases mainly focuses on the satisfaction of the contents and methods of the internship school instructors; The satisfaction factor of the perceptions of students mainly expresses the student's satisfaction to the education practice to improve their abilities in all respects.

Table 3 The factors' structure and the factor loading of all items.

Items	3	5	4	2	1	communalities
B1					.635	.461
C3					.654	.567
C4					.716	.643
C5					.631	.549
D1				.656		.616
D2				.646		.595
D3				.783		.686
D4				.722		.659
D5				.534		.583
D7				.559		.532
D8				.453		.495
D9				.442		.510
E5	.648					.669
E6	.632					.654
E7	.745					.708
E8	.745					.693
E9	.780					.736
E10	.765					.658
E11	.782					.704
F5			.665			.666
F6			.773			.712
F7			.776			.777
F8			.790			.745
F9			.756			.690
H1		.680				.545
H2		.736				.637
H3		.771				.676
H4		.664				.506
H5		.753				.655
H6		.735				.618
H7		.667				.514

Note: Practice contents=1, Practice bases =2, Practice supervision of universities=3, Practice supervision of internship schools=4, Perceptions of students=5.

2.3 The test of validity and reliability

2.3.1 The test of reliability

If α the reliability coefficient of the whole scale reaches or over 0.80 that indicates the questionnaire is near perfect; The questionnaire is acceptable if the value between 0.65-0.7, and if the value of α between 0.7-0.8, which means the questionnaire or scale has a high reliability. The reliability coefficient of the sub-scale must over 0.60 at least, and if the value over 0.7, ^[7] the questionnaire is most nearly perfect. The table 4 shows that in the questionnaire both the split-half reliability coefficient and the α coefficient possess higher reliability. All dimensions in the questionnaire have higher reliability coefficient, and all settings in the scheme are reliable.

Table 4 The reliability coefficient of the questionnaire.

project	The coefficient of Crobach's Alpha	Split-half reliability coefficient
Practice contents	0.792	0.751
Practice bases	0.817	0.815
Practice supervision of universities	0.926	0.887
Practice supervision of internship schools	0.904	0.854
Perceptions of students	0.880	0.848
The completed questionnaire	0.955	0.844

2.3.2 The test of validity

It can be seen from the table 5 that the correlation coefficients between the dimensions and the questionnaire are moderately correlated, floating from 0.368 to 0.610, which indicates that to some extent the dimensions are independent from each other. And the correlation coefficients between the dimensions and total points are highly correlated between 0.648-0.819. Therefore, the questionnaire can reflect the current situation of the satisfaction of the new special education teachers to education practice.

Table 5 The correlation among all factors and that of all factors and the completed questionnaire.

	Practice contents	Practice bases	Practice supervision of universities	Practice supervision of internship schools	Perceptions of students	Completed questionnaire
Practice contents	1					
Practice bases	.610**	1				
Practice supervision of universities	.374**	.544**	1			
Practice supervision of internship schools	.395**	.489**	.554**	1		
Perceptions of students	.368**	.477**	.407**	.442**	1	
Completed questionnaire	.648**	.819**	.810**	.757**	.723**	1

2.4 Confirmatory factor analysis

To further examine the fitting between the actual model and the author's anticipation, 238 questionnaires were calculated through the Amos 24.0. [8] The paper aims to test whether fitting exists in the model that consists of the available data and exploratory factor. It can be seen that (from the table 6) the actual data fit the theoretical model of the internship satisfaction questionnaire for teachers well indicating that the questionnaire is composed of 5 factors.

Table 6 The five-dimensional structure confirmatory factor analysis and fitting index of novice special education teachers' satisfaction to educational practice.

CMIN/DF	RMR	GFI	AGFI	IFI	CFI	RMSEA
1.548	0.035	0.856	0.828	0.946	0.945	0.049

2.5 Summary

The theoretical hypothesis and projects in the research are based on documents, open style questionnaires, and interview. The author also invited special education experts, backbone teachers and administrators of special education schools, and administrators in universities to revise the questionnaire to ensure the questionnaire reflects the characteristics of novice teachers satisfaction to educational practice in all respects. The results showed that the structure of the questionnaire conforms to the theoretical framework conceived by the research and has good structural validity after the analysis of the project, the factors of exploratory, reliability and confirmatory. Therefore, the questionnaire about the novice special education teachers satisfaction to education practice can be utilized as an instrument to measure their satisfaction to education practice.

3. The current situation of the novice special education teachers satisfaction to education practice

3.1 Research object

The author randomly sent out 285 questionnaires to the novice special education teachers, and 275 were returned (the recovery rate is 95.2%), of which 263 were valid (effective rate is 96%). The basic information of the research objects listed below

Table 7 The basic information of the research objects.

demography variable	Items	Number of the scheme	Percentage
Gender	Male	48	18.3
	Female	215	81.7
Education background	College degree or below	90	34.2
	Bachelor degree or above	173	65.8
Practice bases	Comprehensive special education school	207	78.7
	Ordinary school	2	0.8
	Rehabilitation facility	13	4.9
	Other places	41	15.6
Whether tuition-free normal university students	Yes	142	54
	No	121	46
Teaching phase	Elementary schools and below	202	76.8
	Junior high school and above	61	23.2
Whether practice and teach the same discipline	Yes	196	74.4
	No	67	25.6

3.2 Statistics

The paper adopted statistical software SPSS25.0 to process and analyze data.

3.3 The result

3.3.1 Analysis of the overall situation of novice special education teachers' satisfaction to educational practice

Table 8: Analysis of the overall situation of novice special education teachers' satisfaction to educational practice.

	1	2	3	4	5	Overall satisfaction
M	3.83	3.70	3.77	3.73	3.81	3.77
SD	0.675	0.772	0.803	0.841	0.753	0.657

Note: Practice contents=1, Practice bases =2, Practice supervision of universities=3, Practice supervision of internship schools=4, Perceptions of students=5.

From the perspectives of practice contents, practice bases, practice supervision of universities, practice supervision of internship schools, the perceptions of students and overall satisfaction, the novice special education teachers were generally satisfied with the education practice. The rank of the main values was practice contents>the perceptions of students>internship supervision of universities>practice supervision of internship schools>practice bases, which indicates the novice teachers are most satisfied with the practice contents, and most unsatisfied with the internship schools. However, the differences among all factors are not so significant.

3.3.2 Analysis the satisfaction of novice special education teachers with different features to educational internship

Analysis of the satisfaction differences of the teachers with different genders, whether tuition-free normal university students, whether teach in different practice phases, and practice and teach in different disciplines.

Table 9: Analysis the satisfaction of novice special education teachers with different features to educational internship.

	1	2	3	4	5	Overall satisfaction
Male	14.45±2.90	29.06±6.69	24.66±6.17	18.00±4.21	25.70±4.68	23.40±4.04
Female	15.28±2.70	29.68±6.07	26.80±5.43	18.81±4.20	26.87±5.38	23.54±4.14
T	1.971*	0.637	2.408*	1.218	1.396	1.728
P	0.028	0.852	0.017	0.960	0.495	0.725
College degree or below	14.64±2.45	28.07±6.51	25.39±5.83	18.13±4.21	26.33±4.89	22.53±3.84
Bachelor degree or above	15.38±2.89	30.31±5.89	26.92±5.47	18.92±4.20	26.81±5.48	24.73±4.24
T	2.325	2.872	2.117	1.458*	0.717	2.241
P	0.074	0.493	0.823	0.011	0.342	0.368
Elementary schools and below	15.33±2.65	30.06±5.71	26.84±5.40	19.01±3.84	27.02±4.89	23.69±3.82
Junior high school and above	14.45±3.014	27.91±7.33	25.00±6.14	17.47±5.08	25.42±6.27	22.12±4.89
T	1.772	2.115	2.266	2.202*	2.110	2.627
P	0.111	0.13	0.147	0.009	0.055	0.12
Tuition-free normal university students	15.94±2.63	30.16±5.71	26.88±5.19	19.09±4.15	27.34±4.96	24.81±3.93
Non	15.88±2.90	28.86±6.64	25.85±6.076	18.15±4.23	25.84±5.53	23.76±4.31
T	1.128	1.724	1.497	1.827	2.361	2.076
P	0.440	0.230	0.228	0.978	0.805	0.424

Note: Practice contents=1, Practice bases=2, Practice supervision of universities=3, Practice supervision of internship schools=4, Perceptions of students=5.

It can be seen from the table that teachers with different education background have significant differences in instructions in practice schools, of which the mean value of teachers with a bachelor degree and above is higher than that College degree or below. From the perspective of internship phases, teachers teaching in different internship phases have significant differences in the practice

supervision of internship schools, and the mean value of teachers who teach in elementary school and below is higher than that of teachers who teach in junior high school and above; In terms of whether teachers are tuition-free normal university students, the difference in the factors of satisfaction to education internship and total average are not so significant. From the perspective of teachers whether they practice and teach the same course, there have significant differences in internship contents, practice bases, practice instruction in colleges, and overall satisfaction to educational internship. After comparing the mean values, the author discovered that the mean value of teachers who practice and teach the same course is higher than that of teachers whose are inconsistent.

4. Discussion

4.1 The general analysis of novice special education teachers' satisfaction to their education practice

The results show that the novice special education teachers are relatively satisfied with their education practice, of whom 84.5% of teachers believed that education practice plays an important role in their professional skill development, and 81.5% of the subjects thought that they have gained a lot from their internship. After comparing the mean values of all dimensions, the author found that novice teachers are most satisfied with the practice contents, which indicates that they say highly with the skills and knowledge like class management, curriculum design, and initiation and conduct of after class activities during their internship. However, the lowest scores are with the workloads, study arrangements, payment, their acceptance received from schools, etc. It can be seen that, as one of the external parts of education practice, special education schools play a great influence on the satisfaction of education practice. The more assistance practice schools offer, the more support interns would receive, so the more satisfied the interns would be. It also indicates that practice schools should pay more attention to the actual situation of the interns in order to better arrange the practice activity from both the software and hardware aspects during the subsequent internship.

4.2 Analysis of factors influencing new teachers' satisfaction to education practice

The results also show a significant gender differences in practice contents and practice supervision of high institutions. Females are more satisfied than male, which is consistent to the previous researches'.^[6] Facing with the complex challenges and vulnerable students, the female teachers are easier to show their maternal love because their publicly supposed sensitivity, delicate feelings and sympathy. During their practice process, they are more patient than male, and when they encounter problems, they will communicate more with the instructors to solve them in time.

Though there are no significant differences among teachers with different education background, the mean value shows that teachers at the bachelor's degree are more satisfied than those under college's degree. Through the investigation, the author finds that the teachers with a bachelor's degree or above take a one-semester practice in the second semester of their junior year under the unified arrangement by colleges. In this model, high institutions and practice schools are closely connected, and the interns are instructed by dedicated instructors in universities and colleges and practice schools. As to the teachers without a college's degree, most of them have to find the practice schools by themselves without any systematic management and guidance, which is called "scattered practice". Without the unified management and guidance, maybe the interns have less motivation to practice, which would impair the practice effect.

What's more, interns teaching in different internship phases and practice schools show marked differences in practice supervision. The mean value of the interns teaching in primary schools and below is higher than that of those in junior middle school for the following reasons: firstly, it can be seen from the table 7 that 78.7% of teachers practice in special education schools, and most of the special education schools only offer education to pupils. Secondly, the college education of novice teachers mainly focus on the education of elementary school children, so practicing at elementary schools and below is more suitable for them. Thirdly, it's convenient for instructors in practice schools to instruct interns better.

The table 9 exhibits that the mean values of tuition-free normal university students are higher than non- tuition-free normal university students in all dimensions and the overall satisfaction. And since 2012, the cultivating mode of tuition-free normal university students in special education has changed from free cultivating and independent job-haunting to free training and targeted employment. Considering the integration of internship and employment, colleges and universities arrange tuition-free

normal university students to practice at special education schools in their hometown, where students will work there in the future, and students are full of expectations to their future career. Some studies have shown that students' expectations have a significant positive effect on perceptions of quality and value. The perceptions of quality and value would be higher once the students' expectations are met.^[9] In order to leave a good beginning, the students who have high career expectations would follow more with the internship arrangements of their colleges or universities and practice schools before practice, and make full preparations for the internship. During the practice, the interns would work hard and perform actively to realize their goals, so they could integrate into the practice schools quickly, and could perceive more support from the schools. Accordingly, the main values of the tuition-free normal university students are higher than the non- tuition-free normal university students.

There are significant differences in practice contents, practice bases, the perceptions of students', practice supervision and overall satisfaction among the novice teachers whose internship discipline is consistent with the subject they learned in their colleges. The satisfaction of the novice teachers whose internship discipline is consistent with their college subjects is higher than that of those whose internship discipline is inconsistent, which indicates that practice in special education schools plays a vital important role in students' teaching practice.

5. Conclusion

The aim of this paper is to provide reference for the further study and offer suggestions for the development of practice teaching for students majoring in special education through investigating new special education teachers' satisfaction on the education practice, and exploring the influence of demographic variables on the satisfaction of education practice. The main conclusions of the research are as follows: Generally, the practice contents gained the most satisfaction from the novice teachers in special education, while the practice bases scored lowest; Secondly, there are significant differences in practice contents and practice supervision in universities and colleges of new teachers in special education of different gender; in practice supervision of interns who teach in different practice phases in training schools; and in practice content, practice supervision in universities and colleges, the perceptions of students, and overall satisfaction in education practice of teachers practicing and teaching in different disciplines; While the differences of satisfaction between the teachers' education background and whether they are tuition-free normal university students are not so marked.

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