

# Occupational Support and Mental Health in Special Education Teachers: Resilience and Years of Teaching Experience as Mediator and Moderator

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## Abstract

**Objective:** The research focused on the roles of resilience and years of teaching experience between special education teachers' occupational support and their mental health.

**Methods:** 681 participants were surveyed by the questionnaires of SETOSQ, CARS and SCL-90.

**Results:** There were significant correlations between occupational support and resilience ( $r = 0.50, p < .01$ ), occupational support and mental health symptoms ( $r = -0.28, p < .01$ ), mental health symptoms and resilience ( $r = -.39, p < .01$ ). Occupational support could make a significant prediction on mental health symptoms; resilience played a role of partial mediator between occupational support and mental health symptoms; years of teaching experience played a role of moderator between mental health symptoms and resilience.

**Conclusion:** The research found that occupational support had a significant predictive effect on special education teachers' mental health, among them, resilience played a mediating role, and years of teaching experience played a moderating role.

**Keywords:** occupational support, resilience, mental health, mediating effect, moderating effect, special education teachers

## 1. Introduction

Recently mental health promotion has become an important political debate, and the fundamental knowledge to individuals (Jané-Llopis, 2007). In the field of special education, because mental health would affect not only special education teachers' qualities of life, but also special education's development (Zhang, Bai, & Li, 2020), both researchers and educational management departments have paid more attention to special education teachers' mental health. Facing a particular professional environment, it was easier for special education teachers to bear higher stress and higher job burnout (Garwood, Van Loan, & Werts, 2018). Some researches also found that the detection rate of special education teachers' mental health symptoms was higher than other groups (Xu, 2004; Feng, 2019). Therefore, it has

become an urgent task to explore the influencing factors of mental health.

In real life, a large number of factors would have some effects on an individual's mental health, and researches have also found that external supports were important factors that could not be ignored. All of the external supports, as a kind of social support, occupational support was especially important factors for professionals. Because of the important resource of social supports for individuals to cope with social stress (Cohen & Wills, 1985), teachers who failed to receive social support would face more professional stress, increase the job burnout, and weaken the satisfaction (Yang & Meng, 2013), or would reduce their sense of self-efficacy (Schneiderman, Ironson, & Siegel, 2005). Studies have shown that occupational stress and burnout would not only have negative effects on teachers' work, but also trigger their negative responses of reducing the interests in interpersonal communication, or increasing the risk of anxiety and depression (Chen, 2017; Xu, 2016). In a special education environment, various kinds of supports from the outside have become the

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important factors for mental health development of the special education teachers. Due to the particularity environment, special education teachers should need more occupational support than other ordinary teachers. Previous researches have found that the stresses faced by special education teachers mainly from lack of teaching resources in the teaching environment, such as lack of attention and cooperation from the school and parents (Antoniou, Polychroni, & Vlachakis, 2006), or the complexity of teaching objects and the limitations of their professional qualities (Antoniou, Polychroni, & Walters, 2000). Simultaneously, studies also found that positive feedback from special children, cooperation between parents and schools, mutual encouragement among colleagues could stimulate special education teachers' generation of positive emotions (Hämeenaho, 2016), effective management of special children, reasonable performance evaluation and reward in schools could better promote special education teachers' professional quality, physical and mental health (Zhao & Xia, 2007). Moreover, special education teachers who felt more emotional happiness in family and society were more likely to obtain professional happiness (Gyimah, Sugden, & Pearson, 2008).

As a positive psychological phenomenon, resilience referred to "successful adaptation despite risk and adversity" (Masten, 1994, 2007), or was defined as "resiliency factors" or "protective personality traits" (Wolin & Wolin, 1993). Some researches found that certain correlation was between mental health and resilience; and loneliness, depression or anxiety of mental health symptoms could be negatively predicted by resilience (Wang, Jin, & Yan, 2014; Zhang, Li, Peng, et al., 2011). To some extent, the essence of resilience was to provide protective factors for individuals, to extract protective factors from external or internal supports, to help individuals to deal with stress, and to reject those negative experiences (Zeng & Li, 2003). When individuals encountering difficulties, it would trigger the protection mechanism of individuals and alleviate the adverse impact on the individuals' body and mind (Tait, 2018; Hua, He, & Wu, 2017).

Also, positive psychology Diener believed that mental health had three standards, and mental health should include all aspects of an individual's life and be affected by various demographic factors (such as age, gender, working years, etc.) (Diener, 2000). By these theoretical perspectives, the individual differences of demographic factors affecting mental health should be paid attention to

by researchers. In those demographic factors, years of teaching experience has always been attached importance to mental health. Some researches found that the special education teachers' mental health levels increased with the growth of years of teaching experience (Xu, 2004), the higher years of teaching experience, the stronger vocational adaptability of teachers (Lei & Wang, 2017). The other researches have also found that psychological levels of special education teachers declined firstly but then increased with the growth of years of teaching experience (Zhou & Liu, 2013). Compared with teachers with short years of teaching experience, teachers with long years could better deal with difficulties, help themselves out of difficulties more quickly and protect themselves from negative events.

To sum up, to more effectively explore the effective ways to promote special education teachers' mental health levels, this study attempts to examine the relationships among the three factors of occupational support, mental health, resilience, and the role of years of teaching in these relationships. **Furthermore**, to achieve the above objectives, this research proposes the three hypotheses, i.e., Hypothesis 1: Occupational support has a significant predictive effect on special education teachers' mental health; Hypothesis 2: Resilience could play a mediating role in the influence of occupational support on mental health; Hypothesis 3: Years of teaching experience could play a moderating role in the influence of occupational support on resilience and mental health.

## 2. Methods

### 2.1 Participants

Through an online platform of "Questionnaire Star", this study investigated the full-time special education teachers in China. As a result, the study collected 681 valid questionnaires of participants (119 male teachers & 562 female teachers). Among them, 351 had 0-5 years of working experience, 127 had 6-15 years, and 203 had 15 years or more. The research was approved by "the Institutional Review Board of the College of Education at Huaibei Normal University in China".

### 2.2 Research Instruments

#### Special Education Teacher's Occupational Support Questionnaire (SETOSQ)

It was comprised of fourteen items and four subscales, and a four-point scoring method of 1-4 was adopted, and higher scores showed more occupational support (Cheng, & Zhang 2019). In our

research, the total scale reliability (Coefficients  $\alpha$ ) was .80.

### Chinese Adult Resilience Scale (CARS)

It was comprised of thirty items and five subscales. The scale also used a four-point coring method of 1-4, and higher scores showed more resilience (Liang & Cheng, 2012). In our research, the total scale reliability (Coefficients  $\alpha$ ) was .92.

### Symptom Checklist (SCL-90)

It was comprised of ninety items and ten subscales. It was scored of 1-5 ("Other" factor was not scored), and higher scores showed more mental health symptoms (Wang, Wang, & Ma, 1999). In our research, the total scale reliability (Coefficients  $\alpha$ ) was .99.

## 2.3 Data analysis

SPSS 22.0 was used to analyse the data for Mean, Standard Deviation and Pearson's correlations. SPSS 24.0 and PROCESS 3.0 were used for testing mediating and moderating effects.

## 3. Results

### 3.1 General Analysis

From Table 1, it can be seen that females reported significantly lower resilience scores and higher mental health symptoms scores than males

( $t = -1.971, p < .05$ ;  $t = 2.674, p < .01$ ), having no differences in occupational support scores. There are also significant age and years of teaching experience differences in resilience scores, with older and long years of teaching experience special education teachers reporting higher resilience scores than younger and short years of teaching experience ( $F = 10.921, p < .001$ ;  $F = 15.641, p < .001$ ), but all having no differences in occupational support scores and mental health symptoms scores.

From Table 1, it also can be seen that significant correlations are obtained between scores of resilience and scores of occupational supports ( $r = .50, p < .01$ ), as well as scores of mental health symptoms ( $r = -.39, p < .01$ ); and significant correlations between scores of occupational support and scores of mental health symptoms ( $r = -.28, p < .01$ ). Our research results also show that small but significant correlations are obtained between gender, years of teaching experience and the three psychological variables scores, and among the two socio-demographic variables of gender and years of teaching experience. In order to reveal the moderation effect of years of teaching experience, gender is handled as a controlled variable for in all further analysis in this study.

Table 1. General analysis among research variables

	M	SD	1	2	3	4	5
1. Gender	1.83	0.38	1				
2. Years of Teaching Experience	2.13	1.32	-0.16**	1			
3. Resilience	2.87	0.34	-0.07	0.23**	1		
4. Occupational Support	2.92	0.38	-0.05	0.13**	0.50**	1	
5. Mental Health Symptoms	1.67	0.55	0.08	-0.06	-0.39**	-0.28**	1

Note: \*\* $P < 0.01$ .

### 3.2 Moderated Mediation Effect Analysis

In this study, the first regression equation, i.e.,  $Y = c_0 + c_1 \text{ occupational support} + c_2 \text{ years of teaching experience} + c_3 \text{ occupational support} \times \text{years of teaching experience} + e_1$  (model 1), is established to examine years of teaching experience's role in the direct effect of occupational support on mental health symptoms. Our research results find that mental health symptoms are negatively predicted by occupational support ( $\beta = -.33, t = -6.26, p < .001$ ), are also negatively predicted by the interaction between occupational support and years of teaching experience ( $\beta = -.13, t = -2.06, p < .05$ ), meaning that the direct effect of occupational support on mental health symptoms is moderated by years of teaching experience (see Table 2).

According to the above results, we establish a

moderated mediation model (by two equations) to examine the moderating effect of years of teaching experience in the mediation effect of resilience in the association between occupational support and mental health symptoms. The two equations are  $Y = a_0 + a_1 \text{ resilience} + a_2 \text{ years of teaching experience} + a_3 \text{ resilience} \times \text{years of teaching experience} + e_2$  (model 2) and  $Y = c_0' + c_1' \text{ occupational support} + b_1 \text{ resilience} + e_3$  (model 3), and model 3 is used to examine the mediation of resilience between occupational support and mental health symptoms. Our research results of examined model 2 show that mental health symptoms are negatively predicted by resilience ( $\beta = -.52, t = -9.36, p < .001$ ), are also negatively predicted by interaction between resilience and years of teaching experience ( $\beta = -.17, t = -2.71, p < .01$ ). The

results of examined model 3 demonstrated that mental health symptoms are negatively predicted by occupational support ( $\beta = -.15, t = -2.53, p < .05$

), as well as resilience on mental health symptoms ( $\beta = -.42, t = -6.69, p < .001$ ) (also see Table 2).

Table 2. Results of the Moderated Mediation Effect Analyses

Variable	Model 1			Model 2			Model 3		
	$\beta$	SE	95% CL	$\beta$	SE	95% CL	$\beta$	SE	95% CL
Occupational Support	-0.33***	0.05	[-0.44, -0.23]				-0.15*	0.06	[-0.26, -0.03]
Resilience				-0.52***	0.06	[-0.62, -0.41]	-0.42***	0.06	[-0.55, -0.30]
Years of Teaching Experience	0.04	0.04	[-0.04, 0.12]	0.05	0.04	[-0.03, 0.13]			
Occupational Support $\times$ Years of Teaching Experience	0.13*	0.06	[0.01, 0.24]						
Resilience $\times$ Years of Teaching Experience				0.17**	0.06	[0.05, 0.29]			
Gender	0.09	0.05	[-0.01, 0.18]	0.09*	0.05	[0.01, 0.18]	0.08	0.05	[-0.01, 0.17]
$R^2$		0.08			0.14			0.14	
$F$		11.83			21.07			25.58	

In this study, two groups with long years of teaching experience (+1SD) and short years of teaching experience (-1SD) were divided to test the predictive effect of resilience on mental health symptoms. The research results show that teacher with low resilience reported significantly higher mental health symptoms scores than those of with

high resilience, whether a group with long or short years of teaching experience ( $t = -8.62, p < .001$ ;  $t = -4.97, p < .001$ ). Compared with the group with long years of teaching experience, resilience can predict mental health symptoms in the group with short years of teaching experience ( $\beta_{low} = -.65, p < .001$ ;  $\beta_{high} = -.37, p < .001$ ) (see Figure 1).

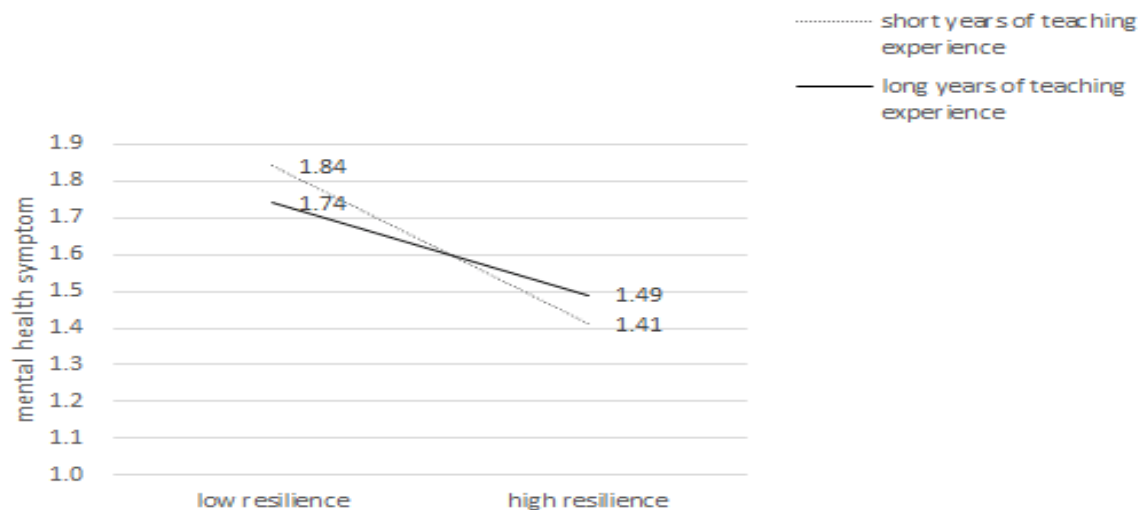


Figure 1. The standardised moderating effect of years of teaching experience.

#### 4. Discussion

Our research has found that occupational support could predict mental health, as well as resilience mediated the positive relationship between occupational support and mental health, i.e., mental health symptom scores could gradually decrease with the enhancement of resilience.

Because of “one of the core area of positive psychology research” (Seligman & Csikszentmihalyi, 2000), as well as the central protective factors identified in helping individuals to recover to the pre-stress functional state when they had experienced major stress events and suffered psychological trauma (Masten, 2007; Liang &

Cheng, 2012), resilience was getting more and more attentions from researchers. So, the results of this research suggested that resilience as one of positive psychological resources may play important function as a personal psychological resource through occupational support affecting on mental health. Our research results could also be in line with some evidences showing the effect about occupational support on mental health and the role about resilience as an important personal psychological resource when human mental health was concerned (Abolghasemi & Varaniyab, 2010).

The study also found that years of teaching experience of special education teachers can mediate resilience and mental health symptoms. With the increase of the special education teachers' years of teaching experience, the resilience has a stronger protective effect on mental health's levels, which were consistent with the other research results (Xu, 2004). In a real special education environment, excessive teaching and difficult student management would bring extra career stress and burnout to special education teachers (Liu, 2006), there were also some special education teachers having mental health problems due to their academic qualifications, professional titles, and occupational stress from home and school. But with the growth of years of teaching experience, teachers' professional quality could be improved, and they could have rich experience in dealing with stress and difficulties, and adopt the correct way to deal with them (Lei & Wang, 2017). However, some studies pointed out that the degree of job satisfaction burnout changed among a u-shaped curve with the increase of years of teaching experience, teachers with 6-10 years had the most job burnout (Zhao, 2009), which may be due to the different test subjects in the sample, the different environment and teaching objects.

In summary, the results of this research were of great significances to related theories and practices. On the one hand, the results could enrich theories related to mental health promotion and resilience, and construct an effective theoretical model of mental health promotion. On the other hand, the results could be effectively applied to practice. According to the results of this study, occupational support could predict mental health, indicating that we could improve the levels of mental health by strengthening the protective factors from several aspects of occupational support, such as organizational care, positive feedback, respectful understanding, and organizational support. The study also found that resilience played a mediating role of special

education teachers' resilience in occupational supports affecting on mental health, which showed that it was also a key point for special education teachers to improve their resilience. Also, since years of teaching played a moderator of resilience influencing on mental health, so, in daily education practice, we must pay close attentions and more cares to the special education teachers they had the short years of teaching.

### 5. Limitations and Future Research

This study was three limitations: One limitation was participants. Because of focusing on Chinese special education teachers, although this study obtained some results that could explain Chinese special education teachers' occupational support, mental health, resilience, years of teaching experience, and the relations among them, the research results could not be extended to other countries or regions. In the future, we need to select special education teachers outside China to expand the research participants. So, the research results of different countries and regions could be compared with each other to verify the universal applicability of the research conclusions. The other limitation was instruments. Although the two other scales of CARS and SCL-90 have been widely used in the studies, our self-developed SETOSQ was only a preliminary application. So relevant studies about special education teachers' occupational support, such as the relations between special education teachers' occupational support and social support, occupational stress, well-being, should be verified by providing some reliable calibration in the future. The final limitations were data. The research only examined the total scores' relationships, which could find the mediation or moderation mechanisms among the four variables, but the research results could not be applied in practice. In the future, the relations among the components of three psychological variables need to be revealed and dug deeper to improve the applicability of the research results.

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