

Special education teachers' emotional intelligence and its relationships with social support, work engagement and job performance: a job demands-resources theory's perspective

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Based on the Job Demands-Resources theory, this research investigated the multiple mediating role of special education teachers' social support and work engagement in the relationship between their emotional intelligence and job performance. Data of 710 Chinese mainland teachers in special education schools were analyzed. The results showed that emotional intelligence directly predicted job performance. Both social support and work engagement partially mediated the relationship between emotional intelligence and job performance. Furthermore, social support and work engagement serially mediated the relationship between emotional intelligence and job performance. The limitations and implications for future studies and practices are discussed.

Keywords: emotional intelligence; job performance; social support; work engagement; special education teachers

Introduction

The quality and effectiveness of special education teachers have been concerned by international researchers for a long time (Brownell *et al.* 2008, Brownell *et al.* 2010). Job performance, originating from the industrial and organizational psychology, is conceptualized as relevant behaviors individuals performed to achieve organizational goals and being regarded as basic indicators of organizational effectiveness (Campbell 1990, Van Scotter and Motowidlo 1996, Ali and Haider 2017). Like other sectors, the quality of the education process largely depends on teachers' performance, which has a direct impact on the progress and development of students (Ali and Haider 2017, Werang and Lena 2014). Furthermore, work is part of individual's life, and teachers' performance at work will also affect their mental health and family life (Winefield *et al.* 2014). As for administrators, researchers, and school leaders, they thus must tackle the issue of how to improve teachers' job performance. Although the number of research relevant to job performance in

education contexts is increasing, they have mainly focused on general education teachers (Asrar-ul-Haq *et al.* 2017, Li *et al.* 2018). To fill the research gap, the present study aims to examine Chinese mainland special education teachers' job performance and the corresponding influencing factors.

Empirical studies focused on employees have found that emotional intelligence is a critical driver of job performance (Joseph *et al.* 2015, O'Boyle *et al.* 2011, Joseph and Newman 2010). For instance, O'Boyle *et al.* (2011) conducted a meta-analysis and found emotional intelligence positively predicts job performance, but also argued the importance of emotional intelligence varies with the job categories. Therefore, future studies should consider exploring occupations related to more emotional labor and social interaction. Teaching is an emotional practice (Hargreaves 1998), which may be more obvious for special education teachers who are responsible for students with disabilities. However, little is known about the relationships between teachers' (especially special education teachers) emotional intelligence and their job performance.

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Furthermore, the underlying mechanism of how emotional intelligence impacts individuals' job performance is unclear. Notably, the job demands-resources theory (JD-R theory), one of the most popular for exploring individuals' job performance around the world (Bakker and Demerouti 2017), provides us with a reasonable framework to investigate the internal relationships between emotional intelligence and job performance. According to JD-R theory, both individuals' personal resources (e.g. self-efficacy and emotional intelligence) and job resources (e.g. social support, feedback) contribute to improving work engagement and thus bring excellent job performance (Mérida-López et al. 2019, Bakker and Demerouti 2007, Bakker and Demerouti 2017).

Learning in Regular Classrooms (LRC), a Chinese inclusive education pattern, has provided school access for children with disabilities who used to be refused by education in any form (Deng et al. 2017). However, unlike Western countries where inclusive education has developed well, special education schools still play a key role in China (Fu et al. 2021). Until 2020, there were 2244 special education schools nationwide where 320,775 students with moderate or severe disabilities studying in and 66169 special education teachers working in (Ministry of Education 2021a). Besides, to make LRC more inclusive, the Chinese government also encourages special education schools which enjoy considerable special resources to transform into special education resource centers to support the surrounding general education schools that provide education to children with disabilities (Ministry of Education 2021b). This thus implies that teachers in special education schools will face with teaching, assessment, rehabilitation, and counseling services to general education schools (Zhu 2021), which certainly demands higher emotional and social interaction in their work. In this context, emotional intelligence may play a protective and promoting role in special education teachers' work engagement and performance. In addition, Chinese special education teachers suffer marginalization and stigmatization in a sense due to the public's misunderstanding of the value of special education (Yang 2016). Separated curriculum standards, evaluation and management systems for special education schools may also exacerbate the need for social support for special education teachers.

The JD-R theory has inspired many studies that aim to increase employee job performance. Therefore, based on this theory, the current study has been designed first to explore the relationship between the emotional intelligence and job performance of special education teachers in Chinese mainland and then to examine how social support and work engagement mediate this relationship. Comparing to the existing research, the present study makes some potential contributions. First,

this study is a pioneering attempt to exploring the relationship between emotional intelligence and job performance of special education teachers in Chinese mainland to our knowledge, thus enriching this relationship investigation in educational and Eastern culture contexts. Second, this study regards emotional intelligence as personal resource, social support as job resources, and uncovers the crucial role that both personal and job resources play in work engagement and job performance increase, contributing to the application and development of the JD-R theory.

Literature review and hypotheses

Theoretical framework

According to the JD-R model, job characteristics can be categorized into job demands and resources. Job demands are related to the aspects that lead to sustained physical and psychological effort, while job resources related to the aspects that contribute to the achievement of work goals, job demand reduction and personal growth (Demerouti et al. 2001, Bakker and Demerouti 2007). The JD-R model also proposed the motivational process which assumes that job resources have the effect of motivating high work engagement and thus improving excellent performance (Bakker and Demerouti 2007). However, Bakker and Demerouti (2017) claimed that the original JD-R model takes a top-down perspective of job design and emphasizes the critical role of management and the resource departments in creating work environment. Therefore, they extended the JD-R model by incorporating personal resources that refer to individuals' ability to control and impact their environment successfully (Hobfoll et al. 2003), and proposed that personal resources also have a direct impact on work engagement and job performance (Bakker and Demerouti 2017). Besides, emotional intelligence and social support are identified as typical personal and job resources based on other empirical studies and theoretical proposes (Mérida-López et al. 2019, Bakker and Demerouti 2007). It is noteworthy that when individuals are with high emotional intelligence, they would be willing and capable to construct constant social resources (e.g. social relationships) (Bozionelos and Singh 2017, Fredrickson 2001). Thus, the JD-R theory provides a reasonable framework to explore the relationships between special education teachers' emotional intelligence, social support, work engagement, and job performance in Chinese context.

Emotional intelligence and its impact on job performance

During the past three decades, emotional intelligence has attracted considerable attention in management and psychological research (Miao et al. 2017). Mayer and Salovey (1997) defined emotional intelligence as a set of interrelated skills, referring to 'the ability to perceive

accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth' (p10). Many individuals' outcomes (e.g. academic achievement, job satisfaction, burnout, work engagement, and job performance) are associated with emotional intelligence (Billings *et al.* 2014, Vratskikh *et al.* 2016, Zysberg *et al.* 2017, Asrar-ul-Haq *et al.* 2017, Febrina *et al.* 2021). There is a consensus in the industrial and organizational psychological literature that emotional intelligence is a positive predictor of individuals' job performance (Joseph *et al.* 2015, Febrina *et al.* 2021).

In educational contexts, teachers are required to interact with school members, especially students, to achieve teaching goals. Given that teaching cannot be detached from emotion (Hargreaves 1998), teachers are required to maintain stable and positive emotions in addition to professional knowledge and skills (Hosotani and Imai-Matsumura 2011, Hou *et al.* 2014). If teachers are with high emotional intelligence, they would be more likely to be concerned about students' diverse needs, and form close student-teacher relationships (Nizielski *et al.* 2013, Poulou 2016). Several studies have indicated that teachers' emotional intelligence is positively associated with their job performance (Asrar-ul-Haq *et al.* 2017, Li *et al.* 2018).

However, most of previous studies focused on general education teachers in diverse culture background. O'Boyle (2011) *et al.* argued that the impact of emotional intelligence on job performance varies with job categories. For this reason, future studies should target occupations perceived as high in emotional labor and social interaction. Teaching is a challenging and high-stress endeavor, given that teachers are required to be responsible for complicated tasks (e.g. lesson planning, classroom management, collaboration with families) (Kebbi 2018). Studies have indicated that a cluster of factors (e.g. challenging student behaviors, role overload, and paperwork) lead to special education teachers' job burnout (Hastings and Brown 2002, Adera and Bullock 2010). Furthermore, it has been recognized by anthropologists that culture has specific 'display rules' or norms that influence individuals' emotional management and responses from different backgrounds (Stubbs-Koman *et al.* 2007). Similarly, Law *et al.* (2004) claimed that although the construct of emotional intelligence is universal, behaviors resulting from individuals' emotional intelligence are less consistent across cultural contexts. Thus, it would be meaningful and necessary to explore the relationship between emotional intelligence and job performance concentrate on special education teachers in Chinese cultural contexts. Based on the above discussion, we postulate the following hypothesis.

H1: The emotional intelligence of special education teachers will positively predict their job performance.

Social support and its mediating role

Since 1970s, social support research has made significant progress in various fields (Cobb 1976, Cohen *et al.* 1984). However, the concepts and measures of social support are diverse. Barrera (1986) divided social support concepts into three categories and named social embeddedness, perceived social support, and enacted support, respectively. A three-component model proposed by Xiao (1994) is widely used in Chinese mainland, which consists of subjective support (i.e. assistance from family members, friends, and organization), objective support (i.e. the perception of being understood and supported), and the utilization of support (i.e. the extent to which individuals make use of the support) (e.g. Lei and Kantor 2022). From a perspective of the JD-R theory, social support, as one of the typical job resources, has the motivating potential and contributes to excellent work performance (Demerouti *et al.* 2001). Empirical studies have also consistently shown that social support positively impacts teachers' job performance (Lavy 2019, Chang *et al.* 2020)

Regarding the influencing factors of social support, growing studies have shown that teachers' emotional intelligence is positively related to social support (Mérida-López *et al.* 2022, Fiorilli *et al.* 2019, Ju *et al.* 2015). This is aligned with the proposition of the JD-R theory that personal resources are associated with job resources (Bakker and Demerouti 2017). Moreover, the Broaden-and-Build theory provides a framework for explaining the relationship between emotional intelligence and social support. And it proposes positive affect leads to constant resources, such as interpersonal resources (Fredrickson 2001). Although the mediating role of social support in the relationship between emotional intelligence and job performance remains relatively under-explored, some empirical educational studies have shown that social support mediates the effects of emotional intelligence on the variables directly related to teacher' job performance (e.g. life satisfaction) (Ju *et al.* 2015). As with these, the following hypothesis is made:

H2: Special education teachers' social support plays an independently mediating role in the relationship between their emotional intelligence and job performance.

Work engagement and its mediating role

There has been an increasing interest in work engagement with the development of positive psychology (Kristine Field and Hendrina Buitendach 2012). Schaufeli *et al.* (2002) conceptualized work engagement as 'a positive, fulfilling, work-related state of mind that

is characterized by vigor, dedication, and absorption' (p.74). The JD-R theory provides a theoretical framework for understanding the influencing factors of and outcome variables of work engagement (Bakker and Demerouti 2017). According to JD-R theory, individuals with high engagement would be more goal-oriented, enthusiastic and energetic, and thus easier to achieve better performance at work (Bakker and Demerouti 2017). In educational settings, empirical studies have found that teacher's job performance can be positively predicted by their work engagement (Choochom 2016, Bakker and Bal 2010).

In addition, emotional intelligence has been regarded as part of personal resources, and plays a crucial role in promoting individuals' work engagement (Bakker and Demerouti 2017). Individuals with high emotional intelligence are more skilled at perceiving and regulating emotions so they can alleviate negative emotions and then conserve positive emotional resources (Dong et al. 2014). Empirical studies conducted with teacher samples, including special education teachers have reached the consensus that emotional intelligence is positively related to work engagement (Fu et al. 2021, Mérida-López et al. 2020, Lestari & Sawitri 2017). Noteworthy, Mérida-López et al. (2020) found that work engagement mediates the relationship between teachers' emotional intelligence and withdrawal intention. Similarly, Choochom (2016) found that teachers' work engagement is a mediator between personal resources (e.g. psychological immunity, intrinsic motivation) and job performance. Therefore, we put forward the following hypothesis:

H3: Special education teachers' work engagement plays an independently mediating role in the relationship between their emotional intelligence and job performance.

Social support and work engagement

The above literature reviews imply that both social support and work engagement can independently mediate the relationship between teachers' emotional intelligence and job performance. It is necessary to further analyze the relationship between social support and work engagement to understand the mechanisms underlying the impact of emotional intelligence on job performance.

According to social exchange theory, when employees receive economic or non-economic rewards from their organization, they would have a sense of obligation to repay the organization. Improving work engagement is one way for employees to repay the organization (Saks 2006). As a result, teachers will be more engaged in work in response to the support they receive from the school. Considerable studies have also confirmed the positive associations between teachers' social support and work engagement (Han et al. 2020,

Addimando 2019, Minghui et al. 2018). Teachers supported by others (e.g. leaders, colleagues, and families) tend to be more engrossed in their work. In contrast, insufficient social resources link to burnout and lower effectiveness (Cheng and Gao 2019, Hultell and Gustavsson 2011). Furthermore, Choochom (2016) found that social support can indirectly affect job performance by influencing work engagement. In other words, support from social networks, such as school leaders and colleagues, motivates teachers to be more engaged and then improve their job performance.

As described earlier, the JD-R theory posits that both personal and job resources are functional in motivating individuals to be enthusiastic at work and achieve higher performance (Bakker and Demerouti 2017). On the one hand, workers with sufficient personal resources are more likely to perceive and create a more resourceful work environment (Kohn and Schooler 1982). On the other hand, previous studies have shown that job resources mediate the effect of personal resources on work engagement (Xanthopoulou et al. 2007). Hence, we postulate the hypothesis as follows:

H4: Special education teachers' social support and work engagement serially mediate the relationship between emotional intelligence and job performance.

Method

Participants and procedure

Using the convenience sampling method, teachers from special education schools in Beijing, Hubei, Guangdong, Zhejiang, Shanghai, Sichuan, and Chongqing in Chinese mainland were invited to participate in this study in 2020, running from July to December. Electronic questionnaires were distributed to participants who were willing to participate. Moreover, participants were informed that participation was anonymous. Among the 771 questionnaires returned, 61 were considered invalid (e.g. obviously filled out incorrectly), yielding a response rate of 91.2%. The 710 participants included 136 males (19.2%) and 574 females (80.9%). Of the total sample, 2.4% of teachers taught at the pre-school level, 59.6% in the elementary schools, 18.9% in the junior middle schools, and 19.2% in the senior high schools or vocational schools. And 10.7% of teachers had college's degrees or below, 80.9% of teachers had a bachelor's degree, 8.5% of teachers had a master's degree or above. In terms of their teaching span, 30.9% were less than 5 years, 23.8% were from 5 to 9 years, 15.9% were between 10 and 14 years, 10.3% were from 15 to 19 years, and 19.2% were more than 20 years. In addition, 82.4% of the participant provided services to students with intellectual disabilities, 14.5% provided services to students with hearing disabilities, and 3.1% provided services to students with visual disabilities.

Instruments

Emotional intelligence

Special education teachers' emotional intelligence was measured using the Wong and Law Emotional Intelligence Scale (Wong and Law 2002). The 16 items of the scale reflect the four subscales established by the author for defining emotional intelligence: self-emotion appraisal, other-emotion appraisal, use of emotion, and regulation of emotion, each of them is with 4 items. Participants are asked to give responses using a 7-point Likert scale ranging from 1('Strongly disagree') to 7('Strong agree'). The Cronbach alpha's coefficient was 0.90 for self-emotion appraisal, 0.87 for other-emotion appraisal, 0.86 for use of emotion and 0.92 for regulation of emotion, respectively.

Social support

To measure the social support for special education teachers, the Social Support Rate Scale developed by Xiao (1994) was adopted in the study. It consists of 10 items measuring subjective support, objective support, and the utilization of support. The high score indicated the high level of social support. In the present study, the Cronbach's alpha for the whole scale was 0.80. The reliability indices were 0.75 for subjective support, 0.68 for objective support, and 0.51 for the utilization of support. All subscales expect for the utilization of support were with acceptable internal reliability. Thus, the third subscale has been eliminated in this study during later analysis.

Work engagement

To estimate the work engagement of special education teachers, the Work Engagement Scale was applied (Schaufeli *et al.* 2002) in the Chinese validation by Zhang and Gan (2005). It presents 15 items assessing vigor, dedication, and absorption. In the three subscales, participants responded on a 7-point Likert scale ranging from 0 ('Never') to 6 ('Always'). In the present study, each subscale had good reliability with Cronbach's alpha values of 0.92, 0.87, and 0.90, respectively.

Job performance

Van Scotter and Motowidlo (1996) noted that job performance consists of task performance, job dedication and interpersonal facilitation. Based on this, Xu and Zhang (2011) developed the Job Performance Scale for Chinese teachers. The first subscale, named by the authors as 'Job Dedication', includes 4 items. Both the second and last subscales, named by the authors as 'Interpersonal Facilitation' and 'Task performance', include 5 items. Responses were given on a five-point scale ranging from 'totally disagree' (1) to 'totally agree'(5). In the current study, The Cronbach's alpha

was 0.84 for job dedication, 0.87 for interpersonal facilitation, and 0.89 for task performance, respectively.

Statistical analysis

First, Cronbach's alpha test was conducted to identify whether the reliability of all scales was good. Next, the common method variance was calculated. Moreover, Pearson correlation analysis was utilized to confirm whether there were significant relationships between variables. Then, structural equation modeling (SEM) using Amos 24.0 was performed to explore relationships between variables. Consistent with the two-step approach proposed by Byrne (2010), the measurement and structural model were both estimated. And confirmatory factor analysis (CFA) was used to validate the construct of both the measurement and structural model. With regards to fit indices, well-established indices, such as chi-square divided by degree of freedom (χ^2/df), the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA) were utilized. For both CFI and TLI, values greater than 0.90 indicated a good fit. Value below 0.08 for RMSEA indicated an acceptable fit (Hu and Bentler 1999). Finally, bootstrap analysis was conducted to analyze the mediated relations between variables (Preacher and Hayes 2008). 5000 bootstrap samples were selected randomly, and a 95% bias-corrected percentile interval and a percentile confidence interval were constructed (Taylor *et al.* 2008). Before estimating the medication effects, the direct effect of emotional intelligence on job performance was examined. The results showed that emotional intelligence significantly and positively predicted job performance ($\beta = 0.45, p < 0.001$).

Results

Assessment of common method variance

Harman's single-factor test was used to test the common method variance (Podsakoff *et al.* 2003). Eleven factors were extracted by exploratory factor analysis that explains 70.30% of the total variance, and the first factor accounts for 33.5% of the variance. Moreover, the results of CFA showed that a single factor model had not good fit to the data ($\chi^2/df = 22.38$, CFI = 0.78, TLI(NNFI)=0.73, RMSEA = 0.17, SRMR = 0.11). Hence, common method variance was not a significant issue in the present study.

Descriptive statistics and correlations

The means and standard deviations of all variables in the current study are presented in Table 1, in addition to bivariate correlations.

Measurement model

As shown by the results of CFA ($\chi^2/df = 4.53$, CFI = 0.97, TLI (NNFI) = 0.96, RMSEA = 0.07, SRMR =

0.04), the measurement model which is consisted of four-factors fitted the data well. And the standardized factor loadings, representing the relationships between the indicators and the latent variables, ranged from 0.51 to 0.95 and all were statistically significant ($p < 0.001$). Furthermore, all correlations between the latent variables of the model were significant ($p < 0.001$).

Structural model

SEM procedure was then performed to test the initial hypotheses regarding the relationships between emotional intelligence, social support, work engagement and job performance. The indices show that the structural model fit the data well ($\chi^2/df = 4.53$, CFI = 0.97, TLI (NNFI) = 0.96, RMSEA = 0.07, SRMR = 0.04). As depicted in Figure 1, emotional intelligence positively predicted social support ($\beta = 0.45$, $p < 0.001$), work engagement ($\beta = 0.56$, $p < 0.001$) and job performance ($\beta = 0.27$, $p < 0.001$), respectively. The results also confirmed that social support positively predicted work engagement ($\beta = 0.21$, $p < 0.001$) and job performance ($\beta = 0.08$, $p < 0.05$). In addition, work engagement positively predicted job performance ($\beta = 0.56$, $p < 0.001$).

Mediated relationships

To test the indirect effects of emotional intelligence on job performance, bootstrapping was then conducted. As shown in Table 2, emotional intelligence was directly

related to job performance ($\beta = 0.27$, $p < 0.001$). Furthermore, emotional intelligence was indirectly related to job performance. First, the positive specific indirect effect of emotional intelligence on job performance via social support was significant at ($\beta = 0.04$, $p < 0.05$). Next, the positive specific indirect effect of emotional intelligence towards job performance via work engagement was also significant at ($\beta = 0.31$, $p < 0.001$). Last, the positive serial mediating role of social support and work engagement in the relationship between emotional intelligence and job performance was significant with an effect size of 0.05 ($p < 0.001$). With respect to the total indirect from emotional intelligence to job performance, the result showed the total indirect was significant at ($\beta = 0.40$, $p < 0.001$).

Discussion

This study examined the relationship between special education teachers' emotional intelligence, social support, work engagement and job performance. Several salient points are derived from the findings of this study.

First, this study confirmed that emotional intelligence directly and positively predicted job performance, as which is consistent with previous studies on teacher samples (Asrar-Ul-Haq et al. 2017, Li et al. 2018, Hou et al. 2014). Thus, the hypothesis 1 has been supported. This result indicated that teachers with high emotional intelligence are more likely to achieve excellent job performance. Notably, this study found that special education teachers' emotional intelligence is more strongly associated with their job performance compared with other careers' employees (Joseph and Newman 2010). This finding contributes to extend current knowledge by confirming O'Boyle et al. (2011) hypothesis that the association between emotional intelligence and job performance varies with job categories. Under the background of LRC, increasing students with serve

Table 1. Descriptive statistics and correlations between all variables in this study.

	M	SD	1	2	3	4
1. Emotional intelligence	5.59	0.73	-			
2. Social support	4.75	1.05	0.32**	-		
3. Work engagement	5.13	1.03	0.53**	0.39**	-	
4. Job performance	4.16	0.53	0.51**	0.40**	0.62**	-

Note: ** $p < 0.01$.

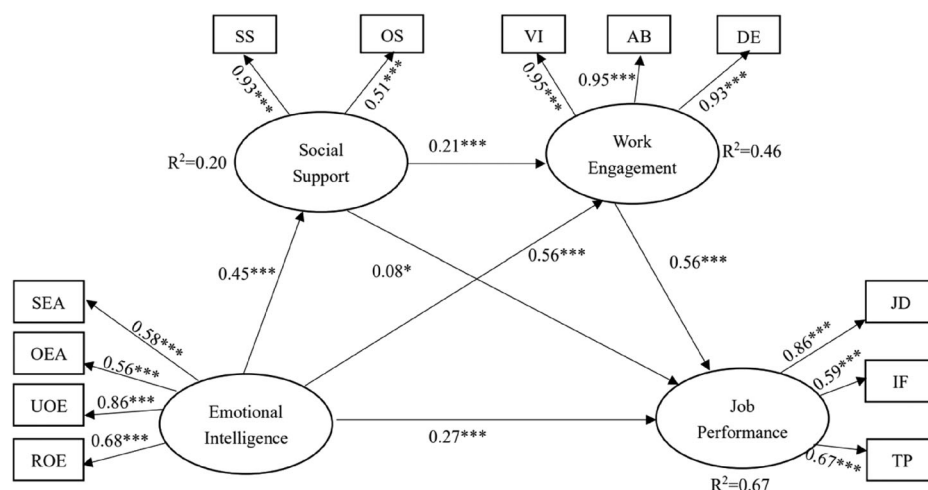


Figure 1. Serial multiple mediation of social support and work engagement in the relationship between emotional intelligence and special education teachers' job performance with standard path coefficients. * $p < 0.05$, ** $p < 0.01$, * $p < 0.001$.**

Table 2. Direct and indirect relations of emotional intelligence to special education teachers' job performance in the serial multiple mediation model (n = 710).

Effects	Estimate	SE	Bootstrapping Bias-corrected percentile 95%CI		Two-tailed significance (p)
			Lower	Upper	
Direct effect					
Emotional intelligence → Job performance	0.27	0.06	0.16	0.38	< 0.001(***)
Indirect effects					
Emotional intelligence → Social support → Job performance	0.04	0.02	0.00	0.08	0.04(*)
Emotional intelligence → Work engagement → Job performance	0.31	0.04	0.25	0.39	< 0.001(***)
Emotional intelligence → Social support → Work engagement → Job performance	0.05	0.01	0.03	0.08	< 0.001(***)
The total indirect effects of emotional intelligence on job performance	0.40	0.04	0.34	0.48	< 0.001(***)

Note. *p < 0.05, **p < 0.01, ***p < 0.001. SE = standard error. 95% CI = 95% confidence interval.

disabilities are enrolled in special education schools which are also required to transform to special education resources centers. As a result, the roles of special education teachers are changing, which means they shoulder a range of responsibilities: assessment, individual educational plan, rehabilitation, and collaboration with general education teachers (Zhu 2021). Consequently, the high demand for social interactions and emotions has a great impact on the link between emotional intelligence and the job performance of special education teachers.

Second, this study demonstrated that social support served as a partial mediator variable in the association between emotional intelligence and job performance, which was consistent with hypothesis 2. This finding corroborates a previous study on higher education teachers conducted by Li et al. (2016). According to Broaden-and-Build Theory, positive emotions are beneficial to increasing interpersonal resources, such as the broad social network (Fredrickson 2001). Individuals with high emotional intelligence tend to experience positive emotions that contribute to obtaining more social support and motivate them to achieve high performance (Demerouti et al. 2001, Dong et al. 2014). In general, this finding indicated that special education teachers' emotional intelligence contributes to building positive relationships, accumulating social capital, and then improving their job performance.

Third, consistent with hypothesis 3, this study found that work engagement played a partial mediating role in the relationship between emotional intelligence and job performance. This finding is in line with a previous study with an elementary teacher sample which also highlighted the mediating role of that work engagement played (Choochom 2016). As an important personal resource, emotional intelligence is considered to impact teachers' occupational psychological health (Taris et al. 2017). Teachers with high emotional intelligence can effectively regulate their emotions and behaviors in the face of stress, and engage in their work rather than get stuck in burnout (Mérida-López et al. 2020). In

addition, personal resources are beneficial to improving one's job performance. Thus, our finding shows that special education teachers' emotional intelligence is beneficial for promoting work engagement and then facilitating performance at work.

Lastly, this study also showed that the positive relationship between emotional intelligence and job performance was serially mediated by social support and work engagement. As such, hypothesis 4 has been confirmed. This finding is in accordance with the proposition of the JD-R theory, which assumes that personal and work resources contribute to work engagement improvement, and individuals with high work engagement tend to be goal-oriented and focus on tasks to achieve good performance (Bakker and Demerouti 2017). Meanwhile, emotional intelligence, as the ability to identify, regulate and use emotions, will enable individuals to maintain positive emotions and thus gain access to more interpersonal resources (Bozionelos and Singh 2017, Fredrickson 2001). Therefore, this study provided empirical evidence for the JD-R theory and demonstrated the critical role of social support and work engagement in the relationship between emotional intelligence and the performance of special education teachers.

Conclusion, implications, limitations, and future directions

The present study concludes that special education teachers' emotional intelligence can positively impact job performance. And their social support and work engagement not only play independently partial but also serial mediating roles in the relationship between emotional intelligence and job performance. The results of this study make some theoretical contributions to the emotional intelligence and job performance literature. First, it enriches cross-culture and cross-occupation studies focused on the association between emotional intelligence and job performance by targeting special education teachers in China. Second, the current study explains how personal and job resource impact special

education teachers' work engagement and job performance, providing empirical evidence for the JD-R theory. Third, given the positive impact of social support on special education teachers' work engagement, social exchange theory is further supported.

Furthermore, this study has two key practical implications for administrators, researchers, and school leaders. First, the present study demonstrated the importance of emotional intelligence for special education teachers. Although teachers' emotion has attracted much attention, there is still a lack of policies specifically aimed to emotional intelligence in Chinese pre-service teacher education and in-service teacher training (Cheng et al. 2021). Notably, recent studies in Western countries have reported that teachers' emotional intelligence can be improved by effective training program (Kyriazopoulou and Pappa 2021, Vesely et al, 2014). Thus, ways to improving emotional intelligence should be included in special education teachers' education programs.

Second, social support was a partial mediator of the relationship between emotional intelligence and job performance, which suggests that comprehensive and effective social support would be beneficial to special education teachers' job performance. Therefore, more support should be provided to special education teachers. For instance, changing the misconceptions held by the public towards special education, improving the social status of special education teachers and building learning communities which encourage teachers to collaborate with each other.

However, some limitations need to be addressed. First, this study only used convenience sampling. Future research may consider stratified or random sampling to improve the generalization of results. Second, the self-reporting questionnaires were used to collect data. However, job performance reported by teachers may not be consistent with actual performance. Future research should take multi-sources to evaluate special education teachers' job performance. Third, a cross-sectional data set was used in this study and thus could not determine the causal relationship between variables. Future research could consider a longitudinal research design or experimental method to further clarify the causal relationship between them. Fourth, this study provided empirical evidence for JD-R theory by examining the direct and indirect impacts of special education teachers' emotional intelligence on their job performance. Nevertheless, this mechanism still calls for further examinations. Given that job performance is also influenced by job demands and job crafting, future research may be able to consider the effects of personal resources, job resources, job demands, and job crafting on the job performance of special education teachers.

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