

The Relationship between Transformational Leadership and Early Childhood Teachers' Occupational Well-being: A Moderated Mediation Model

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Abstract. Enhancing the occupational well-being of early childhood teachers is of vital importance for the stability of the teaching workforce and the improvement of educational quality, as well as the healthy development of young children. This study surveyed 327 early childhood teachers using the Principal Transformational Leadership Scale, the Early Childhood Teacher Occupational Well-being Scale, the Psychological Empowerment Scale, and the Perceived Social Support Scale. The results are as follows: (1) Transformational leadership has a positive influence on the occupational well-being of early childhood teachers, and psychological empowerment mediates the relationship between transformational leadership and occupational well-being. (2) Perceived social support among early childhood teachers moderates the relationship between psychological empowerment and occupational well-being. Specifically, when teachers have a lower level of perceived social support, the predictive role of psychological empowerment on occupational well-being is stronger. Conversely, when teachers have a higher level of perceived social support, the predictive role of psychological empowerment on occupational well-being is not significant.

Keywords: Transformational Leadership; Occupational Well-being; Perceived Social Support; Early Childhood Teachers.

1. Introduction

It is essential for early childhood teachers to experience high levels of occupational well-being as it enables them to cope with work-related stress, improve work efficiency, provide better emotional support for children, facilitate children's adaptation to the preschool environment, and directly influence their level of commitment and occupational well-being, thereby reducing teacher turnover and ensuring the stability of the educational workforce. Conversely, low levels of occupational well-being among early childhood teachers may have detrimental effects on education and children, such as teaching fatigue due to high work pressure, lack of motivation, and emotional fluctuations, which can hinder effective teaching and impede children's healthy development. Therefore, it is of significant importance to study the occupational well-being of early childhood teachers. Occupational well-being refers to the relatively stable positive emotional experiences accompanying teachers' recognition, evaluation of their profession, educational and teaching activities, and career rewards [1]. Previous studies have explored the influencing factors of teachers' occupational well-being from various perspectives, many of them have focused on a single factor or examined the relationship between occupational well-being and other internal psychological factors, lacking integrated empirical research that considers multiple factors [2]. Therefore, this study aims to integrate the individual-environment interaction perspective and focus on key factors such as transformational leadership (TL), psychological empowerment (PE), and perceived social support (PSS). This study aims to examine the underlying mechanisms of early childhood teachers' occupational well-being (OW). It helps us to understand the conditions and differences in the development of occupational well-being and clarify the relationships among transformational leadership, psychological empowerment, occupational well-being, and perceived social support.

2. Literature Review and Research Hypotheses

2.1 The Relationship between Transformational Leadership and Occupational Well-being

TL is a leadership style that utilizes the leader's internalized moral perspectives and qualities of sincerity and kindness to establish positive and interactive relationships with organizational members, enhancing employees' positive psychological capabilities and facilitating the construction of a positive psychological environment [3]. The Conservation of Resources theory finds that individuals' well-being and job satisfaction significantly increase when they acquire and preserve valuable work resources [4]. Conversely, if individuals perceive threats to their resources, their negative emotions and stress levels significantly increase, leading to occupational burnout. Empirical studies focusing on healthcare professionals and employees in companies have found that TL behaviors, such as creating environments that support personal growth and addressing employees' personal needs, can enhance employee well-being [5]. Research on teachers has also identified a significant positive predictive effect of TL on teachers' well-being [3]. Therefore, H1 is proposed in this study: TL of principals significantly predicts the OW of early childhood teachers.

2.2 The Mediating Role of Psychological Empowerment

PE serves as a bridge between TL and the OW of early childhood teachers. PE is a psychological state or cognitive process perceived by individuals in their work [6]. On one hand, TL may be an antecedent of PE. According to the Social Exchange Theory, as the exchange relationship between leaders and subordinates strengthens, the obligations of subordinates to reciprocate also increase. TL fosters interpersonal trust, mutual loyalty, and emotional identification, as well as ongoing reciprocal actions resulting from social exchanges, which fulfill employees' psychological needs. Employees derive a sense of PE and other psychological benefits from these exchanges, thus feeling obligated to repay the organization through their dedicated work. They are more willing to contribute and take on greater responsibilities. [7]. This behavior enhances the emotional connection and PE between employees and the organization, fostering a positive exchange relationship. Empirical research has demonstrated the positive impact of TL on individuals' PE [8]. On the other hand, PE of early childhood teachers may be a precursor to OW. The self-determination theory also suggests that intrinsic regulation is the highest level of behavioral motivation. As an intrinsic behavioral motivation based on inner values and interests, PE can effectively stimulate individuals' intrinsic regulation levels, leading to higher levels of well-being in the workplace [9]. Enhancing the PE of early childhood teachers allows them to experience the value and significance of their work, feel respected and trusted, and stimulate their self-regulation and intrinsic motivation, thereby improving their OW. Empirical studies in other industries also indicate that PE can effectively enhance individuals' OW [10]. Based on the aforementioned relationships, H2 is proposed in this study: PE mediates the relationship between TL of principals and the OW of early childhood teachers.

2.3 The Moderating Role of Perceived Social Support

This study explores the impact of TL on the OW of early childhood teachers, with a particular focus on the potential moderating role of PE. PSS refers to individuals' experiences and satisfaction with recognition and respect in society, including the perception and evaluation of support from family, friends, and significant others [11]. Previous research has shown that social support has a positive influence on teachers' psychological well-being and job satisfaction [12]. The buffering effect model of social support suggests that PSS serves as a protective mechanism for individuals, buffering the negative impact of stressors on their mental and physical well-being, and maintaining or improving their overall health levels [11]. High-quality social support can enhance teachers' recognition and satisfaction with their profession, while low levels of social support can lead to negative emotions and burnout, affecting OW. Therefore, this study hypothesizes that PSS plays a moderating role in the relationship between PE and OW among early childhood teachers. Specifically, higher levels of PSS will enhance feelings of efficacy and autonomy, thereby strengthening the effect

of PE and ultimately increasing OW. Therefore, Hypothesis 3 is proposed in this study: PSS moderates the relationship between PE and OW among early childhood teachers.

In summary, current research has investigated the influencing factors of teacher OW and their relationships with other internal psychological factors. However, there is a lack of integrated multi-factor empirical studies, particularly from the perspective of the interaction between individuals and the external environment, to explore the mechanisms by which these factors influence the OW of early childhood teachers. Therefore, this study aims to examine the impact of TL on the OW of early childhood teachers, as well as the mediating role of PE and the moderating role of PSS (Figure 1).

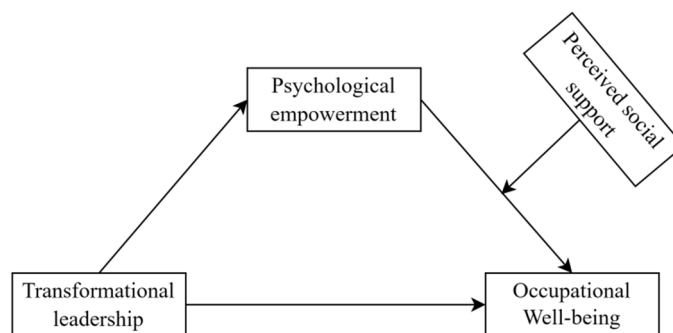


Fig 1. Hypothetical Model

3. Research Methods

3.1 Participants

This study selected preschool teachers from Y City in the eastern region as the participants. A total of 335 questionnaires were distributed, and 327 valid questionnaires were collected, resulting in a response rate of 97.6%. Among the participants, there were 20 male teachers (6.1%) and 307 female teachers (93.9%). Regarding teaching experience, 76 teachers had less than 5 years of experience (23.3%), 95 teachers had 5 to 10 years of experience (29.1%), 74 teachers had 10 to 20 years of experience (22.6%), and 82 teachers had more than 20 years of experience (25.1%).

3.2 Research Instruments

3.2.1 Transformational Leadership Scale

The revised version of the Transformational Leadership Scale developed by Ji Meng and compiled by Li Chaoping et al. was used for measurement [13]. The scale consists of four dimensions: vision stimulation, leadership charisma, individualized consideration, and moral exemplification, with a total of 22 items. The scale adopts a 5-point Likert scale.

3.2.2 Preschool Teachers' occupational well-being Scale

The measurement of preschool teachers' OW was adapted from the questionnaire developed by Wang Xin for special education teachers' OW [14]. It consists of five dimensions: emotional well-being, professional satisfaction, physical and mental pleasure, environmental satisfaction, and interpersonal harmony, with a total of 25 items. The scale uses a 5-point Likert scale.

3.2.3 Psychological Empowerment Scale

The measurement of PE used the scale developed by Spreitzer and translated and revised by Li Chaoping [15]. It consists of four dimensions: meaning, autonomy, self-efficacy, and impact, with a total of 12 items. The scale adopts a 5-point Likert scale.

3.2.4 Perceived Social Support Scale

The Perceived Social Support Scale developed by Zimet et al. and translated and revised by Jiang Qianjin was used to measure PSS [16]. It consists of three dimensions: family support, friend support, and significant others' support, with a total of 12 items. The scale adopts a 7-point Likert scale.

3.3 Research Procedure and Data Analysis

The questionnaires were distributed and collected using the Wenjuanxing platform. The participants were informed that the test content would be strictly confidential and that the results would be used for research purposes only. Data entry was performed using SPSS 26.0, and data analysis included tests for common method bias, analysis of variance, and correlation analysis. The SPSS plugin Process 4.1 was used to examine mediation and moderation effects.

4. Research Results and Analysis

4.1 Test for Common Method Bias

Since all data were derived from self-reported measures, common method bias might exist. To address this issue, the Harman's single-factor test was conducted as suggested, and the first factor explained 31.33% of the variance, which is below the critical threshold of 40%. Therefore, this study did not suffer from serious common method bias [17].

4.2 Descriptive Statistics

As shown in Table 1, there were significant positive correlations among TL, OW, PE, and PSS.

Table 1. Descriptive analysis and bivariate correlations among key variables

| | M | SD | 1 | 2 | 3 | 4 |
|-------|------|------|---------|---------|---------|---|
| 1.TL | 4.52 | 0.68 | — | | | |
| 2.OW | 4.11 | 0.66 | 0.69*** | — | | |
| 3.PE | 4.34 | 0.56 | 0.59*** | 0.60*** | — | |
| 4.PSS | 5.73 | 1.01 | 0.45*** | 0.55*** | 0.67*** | — |

***p<0.001.

4.3 The Relationship between Principal's Transformational Leadership and Teachers' Occupational Well-being: Moderated Mediation Model Test

The data were centered, and a moderated mediation analysis (Model 14) was conducted using the PROCESS plugin in SPSS 26.0. The results are presented in Table 2.

Table 2. Regression analysis among variables in the chain model

| | PE | | OW | | |
|----------------------|-----------|--|-----------|-----------|-----------|
| | M1 | | M2 | M3 | M4 |
| Independent variable | | | | | |
| TL | 0.48*** | | 0.66*** | 0.49*** | 0.46*** |
| Mediator variable | | | | | |
| PE | | | | 0.35*** | 0.18*** |
| Moderator variable | | | | | |
| PSS | | | | | 0.14*** |
| Interaction term | | | | | |
| PE × PSS | | | | | -0.09** |
| R ² | 0.35 | | 0.47 | 0.53 | 0.56 |
| F | 171.11*** | | 287.07*** | 180.62*** | 103.09*** |

p<0.01; *p<0.001.

Model 2 showed that TL significantly predicted OW ($\beta = 0.66, p < 0.001$), supporting H1. Model 1 revealed that TL had a significant positive effect on PE ($\beta = 0.48, p < 0.001$). Model 3 showed that PE had a significant positive effect on OW ($\beta = 0.35, p < 0.001$). Table 3 indicated that the indirect effect of TL on OW through PE was 0.16, with a 95% confidence interval of [0.11, 0.23]. Since the confidence interval does not include 0, it suggests that PE partially mediated the relationship between TL and OW, supporting H2. Model 4 demonstrated that PSS significantly predicted OW ($\beta = 0.14, p < 0.001$), and the interaction between PE and PSS had a significant effect on OW ($\beta = -0.09, p < 0.01$). This indicates that PSS significantly moderated the relationship between PE and OW, supporting H4.

Table 3. Effect sizes and Bootstrap analysis results of mediating effect

| | Effect | SD | 95 % C. I. | |
|-----------------|--------|------|------------|-------|
| | | | Lower | Upper |
| Total effect | 0.66 | 0.39 | 0.58 | 0.73 |
| Direct effect | 0.50 | 0.45 | 0.40 | 0.58 |
| Indirect effect | 0.16 | 0.31 | 0.11 | 0.23 |

To examine how PSS moderates the relationship between PE and OW, participants were divided into high and low groups based on the values of PSS (± 1 SD). A simple slope analysis (Fig 2) was conducted to illustrate the interaction between PSS and PE on OW. The results showed that when PSS was low (-1 SD), PE significantly and positively predicted OW ($\beta = 0.27, p < 0.001$), with a 95% confidence interval of [0.124, 0.415]. However, when PSS was high (+1 SD), the predictive effect of PE on OW was not significant ($\beta = 0.08, p > 0.05$), with a 95% confidence interval of [-0.077, 0.236].

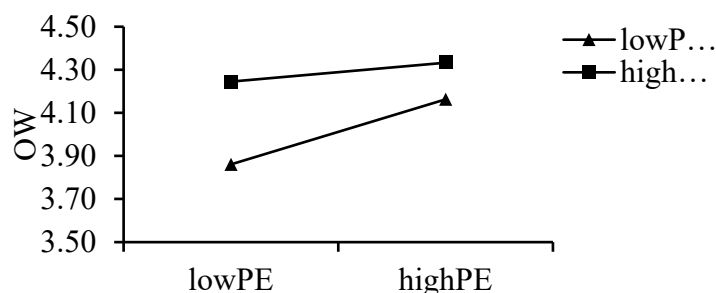


Fig 2. Simple Slope Analysis Testing

5. Discussion

5.1 Direct Effects of Transformational Leadership on Early Childhood Teachers' Occupational Well-being

This study found that TL significantly predicts OW among early childhood teachers, which supports H1 and is consistent with previous research findings. TL is essentially a form of moral and relational leadership that stimulates teachers' proactivity and utilizes higher-level needs and motivations [3]. It provides clear work goals and directions, creates a supportive work environment, and fosters a sense of organizational identification and support among early childhood teachers. By encouraging and appreciating teachers' work performance, it enhances their self-efficacy and, consequently, their sense of meaningfulness and OW. This finding also supports the perspective of the job demands-resources model, indicating that TL can enhance OW by providing them with necessary job resources, such as support, trust, and empowerment, thereby improving their work efficiency and OW.

5.2 Mediating Role of Psychological Empowerment in the Relationship between Transformational Leadership and Early Childhood Teachers' Occupational Well-being

This study found that PE mediates the impact of TL on the OW of early childhood teachers, confirming H2. On one hand, TL positively predicts individual PE, which is consistent with previous research and aligns with the social exchange theory. When kindergarten principals provide sufficient psychological resources such as trust and support to early childhood teachers, they generate a sense of reciprocity, enhance their loyalty to the organization, and influence their attitudes and behaviors at work, thereby affecting the level of PE. This leads to a positive role orientation, where individuals engage in their work with a more positive mindset, experiencing a sense of pride and happiness in their work [18]. On the other hand, PE significantly and positively predicts early childhood teachers' OW, which is consistent with previous research findings. According to self-determination theory, TL encourages employees to explore and solve problems, fulfilling their need for autonomy in their work. Moreover, with the significant charisma of the leader, employees often perceive the leader as a role model, which enhances their intrinsic motivation, strengthens their self-efficacy, and subsequently elevates their level of PE. The stronger the autonomy motivation, the more proactive individuals are in their activities, resulting in a stronger perception of happiness [19].

5.3 Moderating Role of Perceived Social Support in the Influence of Psychological Empowerment on Occupational Well-being

The research findings indicate a positive correlation between PSS and teachers' OW, which is consistent with previous research results and aligns with social support theory. Social support helps individuals maintain good emotional and physical well-being, provides them with a sense of belonging, and helps avoid negative emotional experiences. [20]. Furthermore, this study found that PSS moderates the impact of TL on the OW of early childhood teachers through PE. When the level of social support among early childhood teachers is low, the impact of PE on OW is stronger, suggesting that teachers lacking social support require the protective function of PE. On the other hand, when the level of social support among early childhood teachers is high, regardless of the level of family support, their OW is higher. This indicates that PE plays an important role in the OW of early childhood teachers, consistent with previous research findings. Therefore, social support is crucial for individual development, and meeting the need for social support is a necessary condition for psychological well-being and happiness.

In conclusion, this study explores the underlying mechanisms that influence OW among early childhood teachers from the perspective of their interactions with the external environment. It establishes a moderated mediation model, examining the mediating effect of PE in the relationship between TL and OW among early childhood teachers, as well as the moderating role of PSS in this mediating process. This study expands the understanding of the relationship between TL and OW, providing empirical evidence for enhancing OW among early childhood teachers.

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