The Mediating Effect of Teacher Efficacy on the Relationship between Childcare Teacher’s Interpersonal Stress and Turnover Intention

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ABSTRACT

Introduction: Childcare teacher turnover is a factor that lowers the quality of childcare as it impedes the stability and continuity of childcare services. Therefore, it is crucial to find a way to decrease childcare teachers’ turnover by examining the teachers’ turnover intention. Against this backdrop, the purpose of this study is to analyze the effect of interpersonal stress and teacher efficacy as predictors of childcare teachers’ turnover intention.

Research Method: This study used the quantitative research design with questionnaires as the principal method for gathering data. The subjects of this study were 159 childcare teachers working in childcare centers in Seoul and Gyeonggi-do, South Korea. Baik’s (2007) interpersonal stress instrument, Kang’s (2019) turnover intention instrument, and Hyun’s (2003) teacher efficacy instrument were used as measurement tools. The collected data were analyzed using SPSS23.0. Specific analytical methods employed include descriptive statistics, correlation analysis, hierarchical regression analysis, and model 4 of PROCESS MACRO.

Findings: The findings of this study are twofold. First, the sub-factors of interpersonal stress, particularly the relationship with the director and the relationship with parents, had a significant positive effect on turnover intention, while the teacher efficacy of childcare teachers had a significant negative effect on turnover intention. Second, teacher efficacy had a mediating effect on the relationship between childcare teachers’ interpersonal stress and turnover intention.

Conclusion: Childcare teacher interpersonal stress and teaching efficacy are predictors of turnover intention. Moreover, teacher efficacy acts as a mediator between childcare teachers’ interpersonal stress and teacher efficacy. Therefore, in order to lower childcare teacher turnover intention, a counseling intervention meant to address childcare teacher interpersonal stress is necessary. It is also vital to develop a teacher education program that would further boost teacher efficacy.

Introduction

Childcare centers nurture infants and toddlers in a safe environment. In addition, these centers provide educational services that promote holistic development, such as cognitive, social, and emotional development of children [1]. Previous studies assert that the role of childcare teachers, the professionals who are responsible for childcare and education in childcare centers, is the most important factor in determining the quality of childcare [2-4]. Considering the importance of maintaining a stable role for childcare teachers, it can be inferred that the turnover of childcare teachers is a factor that lowers the quality of childcare by impeding the stability and continuity of childcare services. This has been previously examined in a number of studies [5,6]. A high rate of
turnover in childcare teachers has three significant implications. First, it makes it difficult to establish a stable and lasting relationship between childcare teachers and infants [7,8], which can thereby negatively affect the development of young children. Second, it can render building parental trust in daycare centers difficult [9]. Third, it can negatively affect teachers who are still employed in the institution, such as when workloads are increased, and training of new teachers is needed [10].

Some studies related to childcare teacher turnover intention have focused on emotional stress as a major factor that causes childcare teachers to consider resigning. In particular, interpersonal relationships involving childcare teachers in childcare centers were posited as a principal source of emotional stress. These studies underscore the need to pay attention to the childcare teachers’ relationship with the director, their fellow teachers, and the children’s parents [11-13]. Childcare teachers perform tasks under the purview of existing relationships. For one, childcare teachers assume the roles of an educator and caregiver for infants and toddlers who are learning their primary language and early communication skills. At the same time, childcare teachers are to establish a smooth relationship with the director and their fellow teachers, given that they are a part of the childcare center. More importantly, childcare teachers have to foster a collaborative relationship with the parents of the children to promote successful child development [14]. Given the multitude of responsibilities falling on the shoulders of childcare teachers, interpersonal stress is expected. Interpersonal stress is defined as negative experiences caused by various types of conflict and misunderstandings that occur when a member interacts with other members to perform a given task [15-17].

It acts as a factor that causes work deterioration or emotional exhaustion. As a result, it can be a major cause for members of an organization to decide to leave the organization [18-20]. Compared with other organizations, childcare centers have a relatively simple and small organizational structure. Therefore, interpersonal relationships are close. Studies reported that stress from interpersonal relationships experienced by childcare teachers within the organization directly affects their decision to leave the institution [12, 21]. Along with interpersonal relationships, teacher efficacy can also be considered as a variable related to the childcare teacher’s turnover intention. Teacher efficacy refers to the degree by which teachers believe that they can influence the behavior of young children and their overall ability to teach [22]. Teachers with high teacher efficacy are encouraged to overcome job stress or psychological exhaustion through confidence in their abilities as teachers [23]. According to a study by Lopez (2018), teachers with high teacher efficacy showed low turnover intentions [24]. Hence, it can be argued that teacher efficacy will play a mediating role in the relationship between interpersonal stress and turnover intention.

To clarify the relationship between interpersonal stress experienced by childcare teachers and turnover intention, scholars have conducted phenomenological studies on the difficulties of human relationships experienced during childcare [25,26]. However, it is difficult to find a systematic study on how stress from various human relationships experienced by childcare teachers affect each turnover intention [27]. In line with this, this study aims to analyze the mediating effect of teacher efficacy in the relationship between interpersonal stress and turnover intention of childcare teachers.

The research questions raised in this study are as follows:

- First, do interpersonal stress and teacher efficacy have a significant effect on turnover intention?
- Second, does teacher efficacy have a mediating effect in the relationship between interpersonal stress and turnover intention?

**Research Method**

**Sampling**

The subjects of this study were 159 childcare teachers working at childcare centers in Seoul and Gyeonggi-do, South Korea.

**Research Tool**

The researcher primarily measured the variables in this study using a 5-point Likert scale along with various research tools. To measure interpersonal stress, Baik’s (2007) measurement tool was used [28]. It consists of a total of 15 questions. Subfactors include the relationship with the director (5 items), the peer teachers (5 items), and the parents (5 items). Kang’s (2019) measurement tool was employed to measure the turnover intention, with 6 items in the questionnaire formulated for this variable [29]. To measure teacher efficacy, the study used the measurement tool of Hyun (2003). Following Hyun’s tool, a total of 13 items in the questionnaire were added [30].

**Analysis Method**

The collected data were treated using descriptive statistics, correlation analysis, and hierarchical regression analysis using SPSS 23.0. Mediating effect verification (model 4) and bootstrapping were performed through the PROCESS MACRO 3.4 of Hayes (2013) [31]. In addition, the Sobel test was conducted to verify the statistical significance of the mediating effect.

**Findings**

The demographic characteristics of the subjects are shown in Table 1. As for gender, 99.4% were females. For the age, 40.3% of them were in their 30s. 45.3% of the subjects were college graduates of education-related majors, while only 29.6% of the subjects have 5-10 yrs of teaching experience. Regarding the type of childcare
center, 60.4% are private childcare centers. (Table 2) presents the descriptive statistics of the variables. The average of interpersonal stress was 2.32 (SD = .59), and the mean of turnover intention was 3.01 (SD = .76). The average of teacher efficacy was 3.68 (SD = .63). Skewness and kurtosis did not appear to exceed 2, and normality was secured [32]. The correlation of each variable is shown in (Table 3). Interpersonal stress showed a negative correlation with turnover intention (r = -0.48, p < .001) and positive correlation with teacher efficacy (r = -0.39, p < .001). The results of examining the effects of interpersonal stress and teacher efficacy on turnover intention are presented in (Table 4). In Step 1, the relationship with the director (β = 0.33, p < .001) and the relationship with the peer teacher (β = 0.19, p < .05), which are subfactors of interpersonal stress, were statically significant vis-à-vis turnover intention.

Table 1: Demographic characteristics of the study participants.

| Demographic characteristic | Descriptive Statistics | Frequency (%) |
|----------------------------|------------------------|---------------|
| Gender                     | Male                   | 1 (0.6)       |
|                            | Female                 | 158 (99.4)    |
| Age                        | 20s                    | 33 (20.8)     |
|                            | 30s                    | 64 (40.3)     |
|                            | 40s                    | 54 (34.0)     |
|                            | 50s                    | 8 (5.0)       |
| Education Background       | High school            | 14 (8.8)      |
|                            | College (2~3yrs)       | 72 (45.3)     |
|                            | University (4yrs)      | 57 (35.8)     |
|                            | Graduate school        | 16 (10.1)     |
| Teaching career            | under 1yr              | 10 (6.3)      |
|                            | 1~3yrs                 | 35 (22.0)     |
|                            | 3~5yrs                 | 35 (22.0)     |
|                            | 5~10yrs                | 47 (29.6)     |
|                            | over 10 yrs            | 32 (20.1)     |
| Type of childcare center   | Public                 | 15 (9.4)      |
|                            | Corporation or workplace | 9 (5.7)   |
|                            | Private                | 96 (60.4)     |
|                            | Home                   | 39 (24.5)     |
| Total                      |                        | 159 (100)     |

Table 2: Descriptive statistics of variables.

|                         | M      | SD     | Skewness | Kurtosis |
|-------------------------|--------|--------|----------|----------|
| Interpersonal Stress    | 2.32   | .59    | -.24     | .41      |
| the relationship with the director | 2.48   | .81    | -.03     | .03      |
| the relationship with the peer teachers | 2.10   | .71    | .27      | -.20     |
| the relationship with parents | 2.40   | .76    | .40      | .41      |

Table 3: Correlation of variables.

|                         | 1       | 2       | 3       | 4       | 5       | 6       |
|-------------------------|---------|---------|---------|---------|---------|---------|
| 1. Interpersonal Stress |         | .77***  |         |         |         |         |
| 2. the relationship with the director | .77*** | .32     | 1       | .97***  |         |         |
| 3. the relationship with the peer teachers | .79*** | .46***  | 1       | .29***  | .39***  | 1       |
| 4. the relationship with parents | .72*** | .26**   | .39***  | 1       | .29***  | .39***  |
| 5. turnover intention   | .48***  | .43***  | .35***  | .32***  | 1       |         |
| 6. Teacher efficacy     | -.39*** | -.23*** | -.33*** | -.33*** | -.34*** | 1       |

Note: **p<.01, ***p<.001

Table 4: Hierarchical regression on turnover intention of interpersonal stress and teacher efficacy.

| Variables                  | Step 1 | step2 |
|----------------------------|--------|-------|
|                           | β      | t     | β     | t     |
| The relationship with the director | .33    | 4.07*** | .32  | 3.97*** |
| The relationship with the peer teachers | .12    | 1.35  | .07  | .86   |
| Teacher efficacy           | -.19   | -2.52* | .14  | 1.78  |

Note: *p<.05, ***p<.001

In addition, the explanatory power for the turnover intention of interpersonal stress was 24.2%. In Step 2, teacher efficacy was found to have a significant negative effect on turnover intention (β = -0.22, p < .05). The influence of interpersonal stress on teacher efficacy was 14.9%, and it was found to have a significant negative effect (B = -.42, p < .001). The influence of interpersonal stress and teacher efficacy on turnover intention was 25.8%. Interpersonal stress was found to have a significant positive effect on turnover intention (B = .54, p < .001), and teacher efficacy (B = -.22, p < .05) was found to have a significant negative effect. The mediating effect of interpersonal stress on turnover intention through teacher efficacy was found to be significant, and the mediating effect of teacher efficacy was verified. As a result of the Sobel test, z was statistically significant as 3.78 (p < .001).
Table 5: Mediating effect of teacher efficacy.

| Independent Variable | Dependent Variable | B     | SE  | t     | F     | R²  |
|----------------------|--------------------|-------|-----|-------|-------|-----|
| IS                   | TE                 | -.42  | .08 | -.509* | 25.880*** | .149 |
| IS                   | TI                 | .54   | .10 | 5.34*** | 25.532*** | .258 |
| TE                   |                    | -.22  | .09 | -2.32* |       |     |

Indirect effect path

| B     | SE  | 95% confidence interval |
|-------|-----|-------------------------|
| IS-TE-TI | .54 | .10 | LCLI | ULCI |

Note: *p<.05, ***p<.001
IS: Interpersonal Stress, TE: Teacher Efficacy, TI: Turnover Intention.

Discussion and Conclusion

This study was conducted to analyze the mediating effect of teacher efficacy in the relationship between childcare teacher’s interpersonal stress and turnover intention. The discussion based on the results of this study is as follows. First, results show that the childcare teacher’s interpersonal relationship stress and teacher efficacy have a significant effect on turnover intention. In particular, among the subfactors of interpersonal stress, the relationship with the director and relationship with parents have a significant positive effect. These results are similar to the results of a study that argued that interpersonal conflict had a significant effect on employees’ turnover intention [33]. In addition, it can be said that the results are similar to the results of Kwon & Kwon (2017) that the early childhood teachers’ teacher efficacy has a significant influence on the intention to turnover [34]. Therefore, the higher the childcare teachers’ stress from their interpersonal relationship with the director and parents, the higher the turnover intention. In line with this, it is necessary to mediate the interpersonal stress of childcare teachers to lower the turnover intention of childcare teachers. Teacher efficacy of childcare teachers was found to have a significant positive effect on turnover intention. This result is in the same light with previous findings that when the teacher experiences stress at the interpersonal level, the teacher’s ability is impaired, thereby creating a negative effect on the teacher [35]. Considering this, to lower the turnover intention of childcare teachers, it is necessary to develop an educational program that would improve teacher efficacy. Second, results confirm that teacher efficacy has a mediating effect in the relationship between childcare teacher’s interpersonal stress and turnover intention. This can be said to be similar to the results of the study by Yoo & Kwon (2017) that the job stress of childcare teachers has a significant effect on turnover intention through teacher efficacy and burnout [36]. In other words, interpersonal stress acts as a factor that lowers teacher efficacy, which in turn affects turnover intention. Therefore, counseling intervention is advisable to alleviate the interpersonal stress experienced by childcare teachers at work. Since this study primarily involves teachers working in daycare centers in Seoul and Gyeonggi-do in South Korea, subsequent studies related to this study’s focus may do well in broadening the research subject. Moreover, follow-up studies can opt to use alternative data gathering techniques such as in-depth interviews, instead of survey questionnaires, to provide a more in-depth examination of the relationship between interpersonal stress, teacher efficacy, and turnover intention among childcare teachers.

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