

# THE MEDIATING EFFECT OF JOB STRESS ON THE RELATIONSHIP BETWEEN INCIVILITY AND TEACHER EFFICACY OF KINDERGARTEN TEACHER

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## ABSTRACT

This study was conducted to examine the mediating effect of job stress on the relationship between incivility and teacher efficacy. The study subjects were 196 teachers working in kindergartens in Seoul and Gyeonggi-do, South Korea. The scale of Cortina et al. (2013) was used to measure the degree of incivility, while Shin's (2004) tools were used to measure teacher efficacy. Then to quantify job stress, the scale of D'Arienzo, Krajewski & Maracco (1982) was used. The collected data were analyzed using the SPSS 23.0 program. The results of the study are threefold. First, incivility and job stress showed significant negative correlation as incivility and job stress were also significantly negatively correlated with teacher efficacy. Second, incivility and job stress had a significant negative effect on teacher efficacy. Third, there was a mediating effect of job stress on the relationship between incivility and teacher efficacy. Based on these results, the researcher argues that job stress needs to be relieved in order to improve the teacher efficacy of kindergarten teachers.

## KeyWords

Incivility, teacher efficacy, job stress, kindergarten teacher, mediation effect

## I. Introduction

Kindergarten teachers occupy diverse roles. They assume parenting roles, teaching roles, and relational roles in early childhood education (Spodek, 1985). The kindergarten teacher's parenting role refers to how teachers take care of the health, safety, and protection of the young children. This responsibility includes being responsible for the physical and psychological needs of the young children in order to safely care and provide love and comfort to them. Such is the parenting role of a kindergarten teacher that it does not only involve simple care and parenting, but also close interaction with the

child being cared for (Nodding, 1996; Smidt&Lehrl, 2018). Caring as a kindergarten teacher requires substantial cognitive, emotional, and physical energy from the kindergarten teacher, since effectively nurturing young children necessitates positive emotions like affection, familiarity, and passion (Goldstein, 2002; Lee, 2018).

In addition to the parenting role, kindergarten teachers assume a teaching role that tasks them to provide a conducive learning environment for the learners. Interacting with young children, peer teachers, principals, and parents are constitutive of the relational role also assumed by kindergarten teachers. These interpersonal relationships, which the teacher has to foster, are crucial in early childhood education as the teacher and the children socialize within the educational institution and the bigger community. Kindergarten teachers also take other roles depending on the circumstances. These roles range from documentation, administrative affairs, facility management to event-specific roles like those involving the welcoming ceremony, graduation, and picnics (Kahlich&Domiey, 1993; Kim, 2018).

Kindergarten teachers experience conflict as they perform a variety of roles and tasks that result in difficulties and stress (Park & Jun, 2010). The factors of stress in kindergarten teachers include a poor working environment, heavy working hours, low wages, low social perception, lack of policy support, and excessive parental demands (Cho & Koo, 2005). These factors cause stress and exhaustion when early childhood teachers juggle their various roles (Park, Yeoul, 2012). The exhaustion of kindergarten teachers leads to rapid teacher turnover, reduced morale, and failure to secure stability and excellent manpower in early childhood education institutions. This situation eventually degrades the quality of early childhood education. In particular, the rudeness or incivility arising from the working environment results to the exhaustion of early childhood teachers (Shin, 2016).

The incivility experienced by kindergarten teacher causes job stress. This can potentially act as a factor that lowers teacher efficacy. Despite this reality, there are only a handful of existing studies on incivility toward teachers. Although burnout among teachers has been studied, studies examining the relationship between job stress and teacher efficacy remains scarce. Against this backdrop, this study aims to examine the mediating effect of job stress on the relationship between incivility and teacher efficacy for kindergarten teachers. The objective of this study is to provide a basic resource for developing a teacher program to mediate incivility and job stress that kindergarten teachers experience in early childhood education institutions in order to increase teacher efficacy.

## Research Question

This study raises the following research questions:

1. What is the relationship among incivility, job stress, and teacher efficacy?
2. What is the effect of incivility and job stress on teacher efficacy?
3. What is the mediating effect of job stress on the relationship between incivility and teacher efficacy?

## Purpose of Study

The aims of this study are as follows:

1. To analyze the relationship between incivility, job stress, and teacher efficacy
2. To examine the effects of incivility and job stress on teacher efficacy
3. To examine the mediating effect of job stress in the relationship between incivility and teacher efficacy

## II. Method

### Study Design

The conceptual framework of this study is shown below:

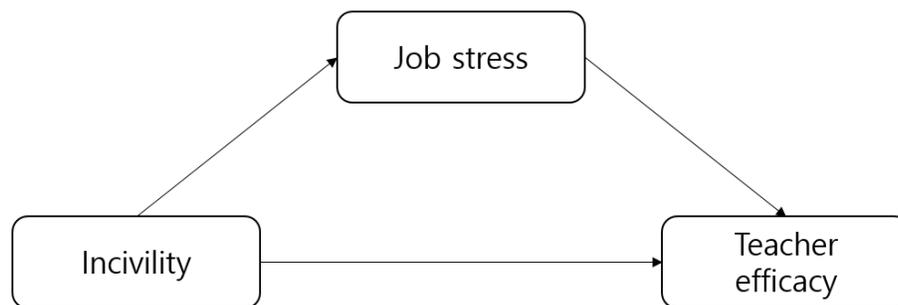


Figure 1. Conceptual Framework

### Participants

The subjects of this study were 196 kindergarten teachers working in kindergarten in Seoul and Gyeonggi-do, South Korea. Among the subjects, 33.8% were college graduates, while 70.9% were kindergarten teachers who work in private kindergarten. Work experience in the field of education with less than 3-5 years were 32.7%.

## Instrument

*Incivility Working.* The workplace incivility scale of Cortina et al. (2013) was used in the study. A total of 12 questions were plotted on a 5-point Likert scale. The overall reliability coefficient was 0.91.

*Teacher efficacy.* In order to measure teacher efficacy, Enochs and Riggs' (1990) Science Teaching Efficacy Belief Instrument (STEBI), modified by Shin (2004), was used. The subfactors are composed of 13 items on personal efficacy and 9 items on general efficacy. The measurement was performed using a 5-point Likert scale. The overall reliability coefficient was 0.95, while the subfactors' were 0.90 and 0.92.

*Job Stress.* To quantify job stress, this study employed the job stress measurement developed by Clark (1980), modified by D'Arienzo, Krajewski, & Maracco (1982), translated by Kwon (1990), and revised by Yoon (2009). The subfactors included activities for the children (5 items), work-related stress (10 items), lack of administrative support (11 items), and interpersonal relationship (12 items). These items were measured using a 5-point Likert scale. The overall reliability coefficient was 0.96, while the subfactors' were 0.81, 0.89, 0.92, and 0.90.

## Data Analysis

The data were analyzed using SPSS 23.0. The data analysis process are fourfold. First, the reliability coefficient of the measurement variable was calculated. Second, frequency analysis was conducted to identify the demographic characteristics of the subjects. Third, correlation was conducted to find out the relationship of incivility, teacher efficacy, and job stress. Fourth, multiple regression analysis was conducted to identify the effect of incivility and job stress on teacher efficacy. Lastly, in order to confirm the mediating effect of job stress in the relationship between incivility and teacher efficacy, a 3-step mediating regression analysis was performed (Baron & Kenny, 1986).

## III. Result

### Relationship between incivility, job stress, and teacher efficacy

Significant negative correlation ( $r = -.328$ ,  $p < .001$ ) was found between incivility and teacher efficacy. In other words, the higher incivility is, the lower teacher efficacy is. A significant positive correlation ( $r = .172$ ,  $p < .05$ ) was found between

incivility and job stress. This means the higher incivility, the higher the job stress. Table 1 shows the correlation between the subfactors.

Table 1. Correlation analysis result

	1	2	3	4	5	6	7	8	9
1	-								
2	-.280***	-							
3	-.318***	.363***	-						
4	-.328***	.417***	.407***	-					
5	.254***	-.278***	-.351***	-.344***	-				
6	.174*	-.326***	-.397***	-.395***	.429***	-			
7	.111	-.231**	-.245**	-.261***	.428***	.357***	-		
8	.018	-.162*	-.156*	.174*	.301***	.316***	.364***	-	
9	.172*	-.304***	-.351***	-.358***	.324***	.295***	.391***	.287***	-
<i>M</i>	1.24	3.74	3.80	3.77	2.98	2.56	2.26	2.30	2.53
<i>SD</i>	.38	.55	.53	.49	.78	.75	.76	.71	.62

\*\*\*p<.001, \*\*p<.01

Note: 1. Incivility, 2. Personal efficacy, 3. General efficacy, 4. Teacher efficacy, 5. Activities for the children, 6. Work-related stress, 7. Lack of administrative support, 8. Interpersonal relationship, 9. Job stress.

### Effect of incivility and job stress on teacher efficacy

In step 1, the regression equation for incivility on the teacher efficacy was significant ( $F = 23.329, p < .001$ ), and the explanatory power for incivility on teacher efficacy was 10.7%. Incivility ( $\beta = -.328, p < .001$ ) was found to have significant negative effects on teacher efficacy. In step 2, the regression equation for incivility and job stress on the teacher effi-

efficacy appeared significant ( $F=11.534, p<.001$ ), and the explanatory power for job stress was 12.5%. Work-related stress ( $\beta =-.346, p <.01$ ) and interpersonal relationship ( $\beta =-.321, p <.01$ ) were found to have significant negative effects on teacher efficacy.

Table 2. Results of multiple regression analysis on incivility, teacher efficacy, and job stress

	Step 1					Step 2				
	<i>B</i>	<i>S.E.</i>	$\beta$	<i>t</i>	<i>p</i>	<i>B</i>	<i>S.E.</i>	$\beta$	<i>t</i>	<i>p</i>
IN	-.422	.087	-.328	-4.830	.000	-.325	.085	-.252	-3.819	.000
AC						-.057	.053	.091	-1.093	.276
WS						-.227	.075	-.346	-3.044	.003
LA						.045	.081	.069	.555	.580
IR						-.215	.065	-.321	-2.954	.008
<i>R</i> <sup>2</sup>	.107					.233				
$\Delta R^2$	.107					.125				
<i>F(p)</i>	23.329(.000)					11.534(.000)				

IN: incivility, AC: activities for the children, WS: work-related stress, LA: lack of administrative support, IR: Interpersonal relationship

Table 3 shows the results of conducting a mediating regression analysis to confirm the process in which incivility affects teacher efficacy through job stress. In step 1, incivility ( $\beta=.172, p<.05$ ) had a positive effect on job stress, which was statistically significant ( $F=5.921, p<.05$ ). That is, it can be seen that incivility exacerbates job stress. The explanatory power of incivility on job stress is 3.0% ( $R^2=.030$ ). In step 2, incivility ( $\beta=-.328, p<.001$ ) had a negative effect on teacher effi-

cacy, which was statistically significant ( $F=23.329$ ,  $p<.001$ ). The explanatory power of incivility on teacher efficacy was 10.7% ( $R^2=.107$ ). In step 3, incivility ( $\beta =-.274$ ,  $p<.001$ ) and job stress ( $\beta =-.311$ ,  $p<.001$ ) had a negative effect on teacher efficacy, which was statistically significant ( $F=24.318$ ,  $p <.001$ ). Therefore, this confirms that incivility increases job stress, clearly acting as a factor that lowers teacher efficacy.

Table3. Results of the mediating effect of job stress in the relationship between incivility and teacher efficacy

Step				B	SE	$\beta$	$t$	$p$	$R^2$	$F(p)$
1	IN	→	JS	.279	.115	.172	2.433	.016	.030	5.921(.016)
2	IN	→	TE	-.422	.087	-.328	-4.830	.000	.107	23.329(.000)
3	IN	→	TE	-.353	.084	-.274	-4.197	.000	.201	24.318(.000)
	JS			-.247	.052	-.311	-4.764	.000		

IN: incivility, TE: teacher efficacy, JS: job stress

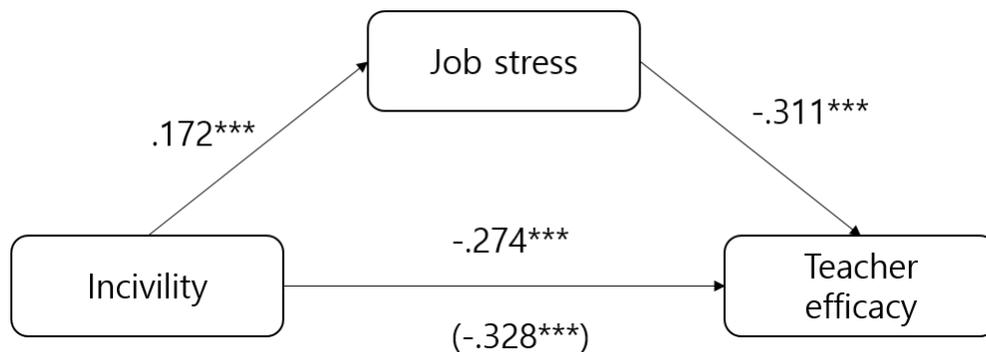


Figure 2. Mediating effects of job stress between incivility and teacher efficacy

The Sobel test (Sobel, 1982) presented by Preacher & Hayes (2004) was conducted to confirm the significance of the mediating effect of job stress on the relationship between incivility and teacher efficacy. Based on the result, the mediating effect of job stress was significant on the relationship between incivility and teacher efficacy ( $z=-2.210$ ,  $p<.05$ ).

Table 4. Result of the Sobel test

			B	SE	z	p
IN	→	JS	.279	.115	-2.210	0.027
JS	→	TE	-.284	.053		

#### IV. Conclusion

This study was conducted to verify the mediating effect of job stress on the relationship of incivility and teacher efficacy of kindergarten teachers. The results of this study are summarized in this section.

First, there was a significant positive correlation between incivility and job stress. In addition, incivility and job stress were found to have a significant negative correlation with teacher efficacy. This is a result similar to previous studies (Penny, & Spector, 2005; Reio, & Reio, 2011; Roberts, Scherer, & Bowter, 2011) that showed a positive correlation with incivility and job stress or exhaustion. Previous studies (Ali, Ashraf, & Shuai, 2019; Shin, 2016) also reported that teacher incivility has a negative correlation with educational outcome or teacher efficacy, i.e., the higher the incivility of the kindergarten teacher, the higher the job stress. Also, results illustrate that the higher the incivility and job stress of a kindergarten teacher, the lower the teacher efficacy.

Second, incivility and job stress were found to have a significant negative effect on teacher efficacy. This is similar to the results of previous studies (Boysen, 2012; Shin, 2016) that showed that incivility and job stress had a significant negative effect on teacher efficacy. Therefore, this study suggests that it is necessary to regulate incivility and relieve job stress to increase the teaching efficacy of kindergarten teachers.

Third, the mediating effect of job stress was verified on the relationship between incivility and teacher efficacy. This is similar to the result that supervisor incivility significantly affects employee job performance through job insecurity (Shin

&Hur, 2020). This implies that in order to relieve the job stress of kindergarten teachers, lowering the level of incivility experienced by early childhood educators will prove helpful.

## V. Limitations and Future Directions

The limitations of this study and recommendations for further studies are as follows. First, this study is delimited by its scope as only targeted kindergarten teachers working in kindergarten in Seoul and Gyeonggi-dowere studied. Future studies with a broader locale and larger number of subjects are recommended in order to increase the generalizing aspect of this study. Second, the focus of this study is incivility, job stress, and teacher efficacy, but in future studies, it is beneficial to examine other factors as well, e.g., the structural model of incivility correlated with other variables.

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