



Preservice Teachers' Self-Efficacy through Hybrid Field Practicum in a Korean Teacher Education Program

Yong-Jik Lee

Chonnam National University, South Korea, fhlyongko@naver.com

Robert Davis

Corresponding author, Chonnam National University, South Korea, rdavis@jnu.ac.kr

A practice-based approach to teacher education programs is fundamental to preparing preservice teachers (PSTs) for in-service teacher roles. Although many studies have explored the impact of field experience on PSTs' perceptions and attitudes toward diverse students, few have examined PSTs' self-efficacy in hybrid environments that require both F2F (face-to-face) and synchronous online field practicum. This study explored Korean PSTs' self-efficacy changes regarding instructional strategies, classroom management, and student engagement through hybrid field experiences. The data was collected from a teacher education program in Korea in the 2021 spring semester from April to July. This study used the Ohio State teacher efficacy scale (Tschannen-Moran & Hoy, 2001) to measure teacher self-efficacy. As a result, 133 pre-survey and post-survey comparisons were used. After the survey, seven volunteered preservice teachers were interviewed individually. By using a mixed-method design, study results showed that field experience in hybrid environments significantly increases PSTs' instructional strategies ($d = 0.58$), classroom management ($d = 0.47$), and student engagement ($d = 0.48$). This study suggests PSTs' self-efficacy changes through a hybrid field experience in a teacher education program.

Keywords: field experience, hybrid field experience, teacher self-efficacy, teacher education, preservice teachers

INTRODUCTION

Including field-based experiences in teacher education programs has effectively prepared preservice teachers (PSTs) and undergraduate students enrolled in teacher education courses for post-academic positions. Previous studies have shown that school-based practicums can promote PSTs to align coursework with the field, link theory to actual practice, and allow PSTs to apply techniques for experiences with diverse students (Cohen et al., 2013; Flores, 2015; Malinen et al., 2013). In addition, these field experiences provide PSTs the opportunity to impact student learning and critically

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reflect on their teaching practices (Cohen et al., 2013; McDonnough & Matkins, 2010; Malinen et al., 2013).

The structured environment allows PSTs to engage in field experiences that support the development of self-efficacy. Increased self-efficacy allows PSTs to be more open to diverse teaching methods, provides more certainty in planning and organization, and provides PSTs the ability to manage random difficulties that manifest in the classroom (Tschannen-Moran Hoy, 2007; Tschannen-Moran & McMaster, 2009). Likewise, field experience allows PSTs to develop self-confidence in specific subjects such as math, science, history, and other disciplines that require nuanced approaches to a specific learning environment (Brush et al., 2003; Colby & Stapleton, 2006; Gurvitch & Metzler, 2009).

Although many studies have explored the impact of field experience on PSTs' perceptions and attitudes, few have examined PSTs' self-efficacy changes in both F2F (face-to-face) and online field practicum. This study examined Korean PSTs' self-efficacy changes regarding instructional strategies, classroom management, and student engagement through hybrid field experiences in a teacher education program.

Literature Review

Teacher self-efficacy and field experience

Bandura (1997) defined self-efficacy as people's beliefs in their capabilities to control their functioning and events that affect their lives. In other words, one's sense of self-efficacy can provide the foundation for motivation, well-being, and personal accomplishment (Bandura, 1997). For instance, an individual's perception of self-efficacy can affect the person's thoughts, feelings, motivation, and actions (Bandura, 1986, 1997). Therefore, Bandura's theory suggests that people with high efficacy will have higher coping behaviors toward their surroundings (Bandura, 1986, 1997).

Researchers have found various factors that influence teacher effectiveness, focusing on teacher self-efficacy, defined as the teachers' beliefs about their capability to carry out professional teaching tasks (Santos et al., 2023; Tschannen-Moran and Hoy, 2007). Previous studies have shown that teachers' self-efficacy beliefs positively influence teachers' quality of instruction, student achievement, and student motivation (Klassen et al., 2009; Zee and Kooman, 2016). For example, in their meta-analysis study teaching self-efficacy, Zee and Kooman (2016) found positive relationships between teaching self-efficacy and students' academic outcomes. Moreover, teachers with high self-efficacy believe their capabilities; thus, indicating that they can be more satisfied and committed to their teaching profession (Zee and Kooman, 2016). Thus, understanding teacher self-efficacy in preservice teacher education helps researchers and practitioners gain insight into individual teacher levels (Santos et al., 2023).

When applying Bandura's self-efficacy theory in teacher education, teachers can provide a more conducive classroom environment, academic achievement, and higher expectations when they possess high confidence in their teaching abilities (Kim & Seo, 2018; Zee & Kooman, 2016). Furthermore, teachers' self-efficacy can influence how

they act in the classroom, influencing their instructional choices, perseverance, and effort when interacting with students (Klassen et al., 2009). In addition, many researchers have found that teachers' self-efficacy in the classroom is closely related to managing students' behavior, motivating students, and classroom relationships (Chesnut & Burley, 2015; Dellinger et al., 2008).

Concerning the relationship between PSTs' field experience and self-efficacy, many studies indicate that enhancing teacher self-efficacy regarding field experiences can influence PSTs' self-efficacy in various ways. Specifically, the PSTs' field experience can improve academic learning with opportunities to link educational theories to practice while engaging in various activities that address diverse students' learning needs (Flores, 2015; McDonnough & Matkins, 2010; Peebles & Mendaglio, 2014; Wagler, 2011; Yilmaz & Koca, 2017). For instance, Wagler (2011) investigated the impact of field experience on PSTs' science teaching efficacy. The results showed that field experience could encourage PSTs to equip themselves with knowledge better using the techniques needed to meet the diverse needs of their students. In addition, Peebles and Mendaglio (2014) examined the impact of an inclusion course and a field experience on PSTs' self-efficacy for teaching in inclusive classrooms. The results indicated that the inclusion course and the field experience significantly improved PSTs' self-efficacy. In addition, participants with field experience had substantially higher levels of self-efficacy than those without field experience. To sum up, previous studies have shown that PSTs' field experience played an essential role in promoting their self-efficacy (Flores, 2015; McDonnough & Matkins, 2010; Peebles & Mendaglio, 2014; Wagler, 2011; Yilmaz & Koca, 2017). These findings indicated that PSTs showed higher self-efficacy after participating in the field experience.

Field experience with PSTs' instructional strategies

Various scholars argued that field experience could positively influence the PSTs' instructional practices, such as integrating particular instructional approaches (Anderson & Puckett, 2005; Bhattacharyya et al., 2009; Hixon & So, 2009; Holtz & Gnams, 2017; Varma et al., 2009). For instance, Bhattacharyya et al. (2009) examined the effects of an extensive inquiry-based field experience on PSTs' personal beliefs and capability beliefs related to teaching science. The study findings suggested that field experience promotes PSTs to implement multiple instructional strategies. Similarly, Varma et al. (2009) indicated that inquiry-based experiences understand PSTs' science instruction and develop an appreciation for the benefits of teaching and learning science in a constructivist environment.

Hixon and So (2009) explored how educational technology field experience can enhance PSTs' self-efficacy in teacher preparation programs. Several specific benefits of field experiences on PSTs are identified, namely 1) exposure to various teaching and learning environments, 2) promoting reflectivity, and 3) learning about technology integration. In another study, Holtz and Gnams (2017) analyzed the improvement in the instructional quality of PSTs from a German university during a 15-week internship at a local secondary school. The results identified a significant increase in instructional quality during the practicum semester. Previous studies have shown that field experience

can positively influence PSTs' implementation of new instructional strategies (Anderson & Puckett, 2005; Bhattacharyya et al., 2009; Hixon & So, 2009; Holtz & Gnambs, 2017; Varma et al., 2009). These studies have shown that field experience enhances PSTs in implementing new instructional strategies in various disciplines, such as integrating inquiry-based learning and educational technology.

Field experience in PSTs' classroom management

Previous studies have shown that field experience could positively influence teachers' classroom management (Jackson & Miller, 2020; Patterson & Blackmore, 2017; Thomas et al., 2018). For instance, Patterson and Blackmore (2017) analyzed the effects of classroom management on PSTs' self-efficacy. The results revealed that the field experience focused on classroom management and self-reflections significantly influenced the PSTs' levels of teacher self-efficacy. For instance, Thomas et al. (2018) explored PSTs for classroom management through field experience. After completing a semester of course on classroom management and building community, the results showed that PSTs benefited from engaging in sense-making regarding classroom communities and classroom management through field experiences. In another study, Jackson and Miller (2020) examined differences in self-efficacy regarding classroom management practices on PSTs at one university. The Teachers' Sense of Efficacy Scale was used as the pre-/post-instrument in a course on classroom management. Study results suggested that field experience involves PSTs in understanding and implementing classroom management to enhance a sense of self-efficacy of PSTs in teacher preparation programs. Concerning PSTs' field experience with classroom management, these studies have shown that field experience could positively impact PSTs' self-efficacy regarding classroom management (Jackson & Miller, 2020; Patterson & Blackmore, 2017; Thomas et al., 2018).

Field experience in student engagement

Previous studies showed that field experience could positively influence PSTs' self-efficacy in student engagement (Cohen et al., 2013; Finlay et al., 2019; Kraft & Dougherty, 2013; Osborne et al., 2019). For instance, Osborne et al. (2019) report an investigation of a field experience to enhance PSTs' ability to engage their students in science. The results showed field experience could boost PSTs' facilitation of classroom discourse, facilitating students' classroom engagement. In another study, Kraft and Dougherty (2013) evaluate the field experience that focuses on teacher communication with parents and students to increase student engagement. The study result showed that frequent teacher–family communication through field experience immediately increased student engagement as measured by homework completion rates, on-task behavior, and class participation. Concerning field experience in students' classroom management, previous studies have shown that field experience can positively influence student engagement for PSTs (Cohen et al., 2013; Finlay et al., 2019; Kraft & Dougherty, 2013; Osborne et al., 2019).

Research Questions

Q1: How has Korean preservice teachers' self-efficacy changed before and after participating in a hybrid field experience regarding instructional strategies?

Q2: How has Korean preservice teachers' self-efficacy changed before and after participating in a hybrid field experience regarding classroom management?

Q3: How has Korean preservice teachers' self-efficacy changed before and after participating in hybrid field experiences regarding student engagement?

METHOD

Research context

The current study was conducted in the teacher education program at a private university located in the southwest region of South Korea. The university has a teacher education program that shares courses with various departments, including Korean education, math education, special education, early childhood education, and other departments. The course School-based Teaching Practicum is offered for PSTs every academic spring semester. It was one of the mandatory courses for PSTs to receive a teaching certificate after graduation. Therefore, PSTs must take this course during their senior years as a graduation requirement.

Due to COVID-19, the Ministry of Education in Korea announced that PSTs' field experience should combine F2F settings with online synchronous practicums because K-12 students rotate their grades attending schools through a hybrid learning format. Thus, when PSTs were assigned to a specific grade, PSTs were able to participate in two weeks of F2F field practicum and two weeks of online synchronized practicum via zoom. In addition, PSTs in their senior year have already completed various general educational courses (e.g., teaching methods and educational technology, educational psychology, educational philosophy, and educational curriculum) before entering a School-based Teaching Practicum.

In the School-based Teaching Practicum course, the instructor invited several guest speakers via Zoom to discuss how to make lesson plans for diverse students. These guest speakers are in-service teachers currently teaching and working with students. During the field practicum, several university faculty visited several school sites and had a seminar with mentor teachers and school principals to guide PSTs for their field practicums. These seminars and workshops, including stakeholders, helped PSTs work effectively with mentor teachers and students in the school. After the Spring semester, all PSTs had to write personal reflections and submit them to the university's teacher college. Table 1 shows an overview of PSTs' field practicum in the teacher education program.

Table 1
Overview of PSTs' field practicum

1. Field practicum objectives	A. Understanding the school environment and enhancing teaching ability B. Understanding diverse students' characteristics and classroom management C. Understanding the school's curriculum D. Creating lesson plans and assessment E. Preparing oneself as a future teacher-
2. Requirements	A. Three hours of course credits B. Minimum 60 hours of school-based field practicum C. After field practicum, PSTs were required to submit field reflections to the teacher's college D. Submit an attendance sheet signed by mentor teachers and school principles

Study participants

160 Korean PSTs in senior years enrolled in the School-based Teaching Practicum during the 2021 spring semester. Due to attrition, opting out, and incomplete post-surveys, a total of 133 pre-survey and post-survey comparisons were used. PSTs used a unique identifier (birth month and year) during both surveys to keep track of student assessments before and after the field experience, which was then matched and compared with all completed surveys. Of the final participants, 50 identified as male and 83 as female. PSTs' majors varied, including special education, physical education, early childhood education, Korean language teaching, English language teaching, math education, physical education, and other majors. Among survey participants, seven PSTs voluntarily agreed to participate in two individual interviews after completing the surveys. See Table 2 for a brief description of the interview participants.

Table 2
Interview participants

Interview participants	Major	Gender	Previous volunteer teaching experience	Previous micro-teaching experience
Participant 1	Early childhood education	Female	O	O
Participant 2	Food management and education	Male	O	X
Participant 3	Child welfare education	Female	O	X
Participant 4	Physical education	Female	O	O
Participant 5	Physical education	Female	O	O
Participant 6	Korean language education	Female	O	X
Participant 7	Special education	Female	O	O

Data collection and data analysis

The data was collected in the 2021 spring semester from April to July. This study implemented the Ohio State teacher efficacy scale (Tschannen-Moran & Hoy, 2001).

This survey instrument is widely used to examine PSTs' teacher self-efficacy regarding instructional strategies, classroom management, and student engagement (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & McMaster, 2009). The survey was provided in English and Korean for the PSTs. The data collection for this study consisted of two surveys: pre-survey before field experience and post-survey after the field experience, and two individual interviews with seven PSTs after completing pre-and post-surveys. SPSS 26.0 was used for quantitative data analysis to carry out descriptive statistics.

Informed consent forms were collected before the pre-surveys. After the pre-survey was completed, seven volunteered PSTs participated in a pre-interview. After the post-survey was completed, the same participants engaged in a post-interview. In addition, a research assistant in the education department conducted a 30–40-minute interview in Korean with the interview participants. All interviews were video-recorded via Zoom.

Thematic analysis (Clarke & Braun, 2006) was used to analyze the interview data. First, video recordings for interviews were listened to, re-listened for accurate transcription, and saved to Google Drive. Second, the research team developed initial codes and sub-codes while conducting the interview transcription. Third, the research team developed several themes to identify significant patterns of meaning. Fourth, several themes, including similarities and differences among participants, were aggravated into small numbers and reduced to the most frequently referred categories. In addition, the research team defined and renamed themes for abstraction and data reduction. Finally, the interview data analysis was compared and contrasted with quantitative data analysis to create a final report in the last step.

FINDINGS

Survey results

Before assessing self-efficacy for instructional strategies, classroom management, and student engagement from the beginning to the end of the semester, a Shapiro-Wilk test was conducted to determine the normality of the data. The results indicated that instructional strategies ($W(132) = 0.981$, $p = 0.058$), classroom management ($W(132) = 0.981$, $p = 0.062$), and student engagement ($W(132) = 0.981$, $p = 0.058$) did not violate normality; thus, inferential statistics could be used to compare pre-test and post-test data.

Pair-sample t-tests were conducted on pre-survey and post-survey data to assess if changes could be detected with self-efficacy in instructional strategies, classroom management, and student engagement. The results indicated that the hybrid practicum design of F2F and synchronous online significantly increased preservice teachers' instructional strategies ($t(132) = -6.658$, $p < 0.001$, $d = 0.58$), classroom management ($t(132) = -5.366$, $p < 0.001$, $d = 0.47$), and student engagement ($t(132) = -5.532$, $p < 0.001$, $d = 0.48$). Means and standard deviations for all self-efficacy measures can be viewed in Table 3.

Table 3
Preservice teachers' self-efficacy before and after field experience

	Pre-test		Post-test	
	M	SD	M	SD
Instructional Strategies	27.98	4.85	32.05	5.40
Classroom Management	28.07	5.41	31.62	5.47
Student Engagement	28.41	5.13	31.87	5.44

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Findings from interviews

PSTs' self-efficacy changes on instructional strategies

The first theme that PSTs responded to was their self-efficacy changes regarding instructional strategies. Specifically, they mentioned that their self-efficacy could be enhanced by providing alternative explanations or examples when students were confused, implementing alternative teaching strategies in the classroom, responding to difficult questions, and adjusting lessons to the proper level for individual students. During the field experience, PSTs explained that their school mentor teachers provided various suggestions and recommendations. PSTs also mentioned that their previous teaching experience before this practicum was helpful, such as volunteering experience in the local community center and working with a student in a one-on-one tutoring setting. Here are interview transcripts to support this theme.

Before the field practicum, I was nervous about a question I had never considered. However, working with mentor teachers, I realized that teachers might not know everything the child asks. So, we worked together to explore the child's question, which was a significant experience for all of us (Interview participant 3, post-interview).

Throughout the field practicum, I learned many critical key strategies about accommodating lesson plans based on students' capabilities. My students are special education, so accommodating is the key to my instruction. In addition, it was beneficial for me to work with students directly to see if what I had learned from the teacher education courses about instructional strategies could apply to the real field (Interview participant 7, post-interview).

However, a few PSTs mentioned that they still felt some challenges after the field practicum. For example, during COVID, it wasn't easy to communicate and work directly with students and teachers via online zoom. Although it was a synchronous Zoom field experience, PSTs still prefer interacting with students in a F2F setting with hands-on activities. A few PSTs also mentioned the difficulties of measuring students with different assessment strategies. Thus, few PSTs said they needed more practice implementing various assessment strategies. Here are interview transcripts to support this theme.

My major was physical education, so I showed many movement demonstrations to my students. However, when I taught the Zoom synchronous course to students, I was

unsure what kind of questions would be the higher-order thinking questions because it was challenging to check students' comprehension through computer monitors (Interview participant 4, post-interview).

Although I made several lesson plans, I was challenged to implement various assessment strategies aligned with the national educational standard and curriculum. I hope to be a future teacher who can easily do this (Interview participant 6, post-interview).

PSTs' self-efficacy changes in classroom management

The second theme that PSTs responded to was their self-efficacy changes regarding classroom management. PSTs mentioned that their self-efficacy was enhanced in managing students' disruptive behaviors, making children follow classroom rules, maintaining routine classroom management, and dealing with resistant students. When PSTs observed the F2F classroom, the mentor teachers provided classroom management examples, such as using a daily checklist on the bulletin board. This finding indicated that the mentor teachers shared their expertise in maintaining day-to-day routine classroom management. Many PSTs would like to create daily checklists to keep activities running smoothly. Here are interview transcripts to support this theme.

I liked the teacher's daily routine checklist. It was well-organized to implement the checklist in the future when I become a teacher. That checklist keeps classroom activities running smoothly (Interview participant 2, post-interview).

It was a kindergarten classroom. One student's behavior was out of control when I observed the class. The mentor teacher approached her, explained why they were doing this activity, and tried to calm the student with a friendly voice and words. That was when I realized how I manage students' disruptive behavior when facing resistant students (Interview participant 1, post-interview).

However, some PSTs mentioned no disruptive students in the classroom during their field practicum. Thus, during the interview, they said that if deviant students are present in the classroom, they may not be confident to work with those students in the actual classroom. In addition, due to the limited time with only one month of field practicum, they want to have more opportunities to explore many possible situations and meet diverse students. Here is one example of PSTs' interview transcript.

I did not meet any troublesome students. It seemed that the mentor teacher handled the class pretty effectively. But if I meet deviant students, I cannot imagine how I can work with that student. It will be challenging. I wish this field practicum could be longer to experience more (Interview participant 5, post-interview).

PSTs' self-efficacy changes in student engagement

The third theme that PSTs responded to was their self-efficacy changes regarding student engagement. PSTs mentioned that their self-efficacy could be enhanced by making students believe they can do well in schoolwork, motivating students who show low interest in schoolwork, and improving their understanding of the student. PSTs also

mentioned that their previous university coursework from the teacher education program focused on promoting students' classroom engagement with various group activities. Thus, the teacher education coursework also helped them prepare to tap into student engagement. Here are interview transcripts to support this theme.

We had some students who had not much interest in the subjects. So, the mentor teacher and I made several hands-on group activities to mingle with other students with fun activities. After several minutes, these students started engaging in activities with their peers. It was a wonderful experience to see what I had learned could be applied in a real context (Interview participant 6, post-interview).

To improve students' motivation, the mentor teacher and I provided positive reinforcement, such as compliments. Also, the mentor teacher used various supplementary media and materials to enhance students' understanding. Although it could be challenging to work with low-achieving students, I learned important lessons through this field practicum (Interview participant 5, post-interview).

However, a few PSTs mentioned that they experienced some challenges after the field practicum. For example, when promoting students' creativity, they were unsure what kind of teacher questions or activities to increase their creative thinking. Also, assisting families in helping their children study effectively in schoolwork, PSTs had no observation or opportunity to work with students' families during the field practicum. Here is one transcript from the interview.

When I taught students, it was difficult for me to work with students' families to assist in student engagement. However, we had a counseling teacher in the school, so that teacher interacted with the students' families closely. I wish I had more contact with the counseling teacher to receive their expertise (Interview participant 2, post-interview).

PSTs' self-efficacy as a beginning practitioner

The last theme from PSTs' interviews was that PSTs value their field practicum. In addition, all PSTs mentioned that they would like to pass the teacher bar exam shortly to work in the field as an actual teacher. PSTs also said their conviction and commitment to becoming teachers were stronger after field practicum. These findings indicated that the field experience could increase their self-efficacy as beginning practitioners. Here are some interview transcripts to support this theme.

Before the field practicum, I was not confident about becoming a teacher. But after the field practicum, my conviction to become a teacher is much stronger. Working with students and the mentor teacher in the school, I now feel more confident, and I think I can do a better job in the field (Interview participant 1, post-interview).

Before the field experience, I thought, let's try it. If this experience does not work, I should find another profession. But after field experience, I realized that I like working with children, and I like children more than ever before. In addition, I now felt more confident and wanted to implement what I had learned in the field (Interview participant 7, post-interview).

DISCUSSIONS

This study explores Korean preservice teachers' self-efficacy changes through a hybrid field experience in the teacher education program. Specifically, this study examines if the hybrid field experience impacted Korean preservice teachers' self-efficacy. The results indicated that PSTs significantly increased instructional strategies, classroom management, and student engagement after participating in a hybrid field experience course.

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Q1: How did Korean preservice teachers' self-efficacy change before and after participating in hybrid field experiences regarding instructional strategies?

Survey results indicated that self-efficacy regarding instructional strategies significantly increased ($t(132) = -6.658, p < 0.001, d = 0.58$) after participating in a hybrid field experience. These results match the findings of previous empirical studies that indicated instructional strategies significantly increased after participating in field experiences (Anderson & Puckett, 2005; Bhattacharyya et al., 2009; Hixon & So, 2009; Holtz & Gnambs, 2017; Varma et al., 2009). In particular, these results expand Hixon and So's (2009) suggestion that educational technology is beneficial in allowing PSTs to experience different environments. Although the authors suggested technology be implemented to allow preservice teachers to observe different grade levels and subject areas, the results indicate that technology can provide PSTs with more opportunities to explore and implement instructional strategies in multiple environments.

Qualitative data analysis showed that PSTs' self-efficacy could be enhanced in responding to unexpected questions, tapping into low-achieving students, and accommodating lesson plans based on students' academic levels. These findings align with previous studies that field experience could positively impact PSTs' self-efficacy regarding instructional strategies (Anderson & Puckett, 2005; Bhattacharyya et al., 2009; Holtz & Gnambs, 2017; Varma et al., 2009).

However, a few PSTs mentioned that they still felt some challenges due to the setting of the online field practicum. For instance, physical education PSTs struggled to demonstrate body movements and check students' understanding via Zoom. This finding indicated that more research needs to be conducted to promote online field practicum during COVID-19 because it could be a limited experience for PSTs not to have direct contact with students instead of the F2F setting. For instance, Santagata et al. (2017) highlighted that a video-based field practicum on lesson analysis showed that it could enhance PSTs' instruction significantly. Similarly, Ersin et al. (2020) stated the importance of online practicum during COVID-19 because it helped reduce PSTs' fear of online teaching and learning.

PSTs also responded that it was challenging to implement various assessment strategies based on students' achievement levels. This finding indicated that although field experience could enhance PSTs' self-efficacy concerning instructional strategy, it is necessary to closely examine the PSTs' self-efficacy through context-specific and task-

specific perspectives. Recent scholars focus more on the role of specific teaching contexts, teaching tasks, and the complex processes of PSTs' self-efficacy development (Wyatt, 2013). For instance, Wheatley (2002; 2005) argued that doubting one's self-efficacy beliefs can be beneficial because these doubts are central to teacher reflection, learning, and professional growth. Thus, PSTs' low self-efficacy should be further investigated through PSTs' critical reflections through field experiences (Wyatt, 2013).

Q2: How has Korean preservice teachers' self-efficacy changed before and after participating in field experience regarding classroom management?

Study results indicated that PSTs' self-efficacy with classroom management was significantly higher after the hybrid field experience ($t(132) = -5.366, p < 0.001, d = 0.47$). Similar to recent studies that have measured self-efficacy regarding classroom management (Jackson & Miller, 2020; Patterson & Blackmore, 2017; Thomas et al., 2018), these results suggest that the hybrid experience could positively influence the PSTs' ability to manage the class setting. For instance, Jackson and Miller (2020) showed the differences in pre-/post-instrument on PSTs' self-efficacy, suggesting that field experience could enhance PSTs' sense of self-efficacy in understanding and implementing classroom management.

Qualitative data analysis also showed that PSTs' self-efficacy could be increased regarding classroom management. Specifically, PSTs mentioned that they become more confident in making children follow classroom rules, proceeding with routine classroom management, and dealing with resistant students. These findings align with previous studies that field experience could positively influence PSTs' self-efficacy concerning classroom management (Jackson & Miller, 2020; Patterson & Blackmore, 2017; Thomas et al., 2018).

However, a few PSTs mentioned that they still need more practice to deal with several issues in classroom management effectively. For example, some PSTs said that there were no disruptive students in the classroom during their field practicum. Thus, if deviant students are present in the classroom, PSTs might not be confident to work with those students in the actual classroom. This finding indicated that field experience should be extended for a longer period for PSTs to explore possible situations and meet diverse students. Previous studies showed that extensive field experiences could relieve PSTs' anxiety and increase their self-efficacy concerning student management in the classroom (Bhattacharyya et al., 2009). Many scholars also argued that the field experience should be transformed through a community of practice that could increase PSTs' self-efficacy regarding classroom management (Thomas et al., 2018).

Q3: How has Korean preservice teachers' self-efficacy changed before and after participating in field experience regarding student engagement?

The before and after field experience survey results suggested that PSTs' self-efficacy regarding student engagement significantly increased after the hybrid field experience ($t(132) = -5.532, p < 0.001, d = 0.48$). These results support previous findings (Cohen et al., 2013; Finlay et al., 2019; Kraft & Dougherty, 2013; Osborne et al., 2019) that field experience is needed to cultivate student engagement. Specifically, Osborne et al.

(2019) showed that the field experience could enhance PSTs' ability to facilitate classroom discourses and students' classroom engagement.

Qualitative data analysis also showed that field experience could increase PSTs' self-efficacy in facilitating students' motivations, providing positive reinforcement with compliments, and encouraging students to recognize the value of learning. These findings align with previous studies that field experience could positively impact their self-efficacy concerning student engagement (Cohen et al., 2013; Finlay et al., 2019; Kraft & Dougherty, 2013; Osborne et al., 2019).

However, a few PSTs mentioned that they still experienced some challenges in assisting families in helping their children study effectively in school. Unfortunately, during the field practicum, most PSTs had no observation or opportunity to work with students' families. Previous studies highlighted the importance of working with families and the community to support students' classroom engagement and school life. For instance, Kraft and Dougherty (2013) argued the importance of teacher communication with parents to increase student classroom engagement. The result showed that frequent teacher–family communication immediately increased student engagement. In this regard, Veiga et al. (2016) concluded that the role of the family played a significant role in promoting students' classroom engagement in schools.

CONCLUSIONS

The findings from this study showed that hybrid field experience could positively influence preservice teacher self-efficacy in instructional strategies, classroom management, and student engagement. However, in terms of the online field practicum perspective, PSTs showed limitations in improving their field experience. Thus, it is suggested that future research should collect data on the different experiences to understand if self-efficacy is impacted more by the environment of experience (F2F vs. synchronous Zoom setting). In addition, larger scale studies with a longitudinal research design can provide additional data and insights related to this field experience research. When future researchers include questions about PSTs' level of academic achievement and personal efforts during teacher education courses, studies could show additional findings and suggestions associated with PSTs' sense of preparedness and self-confidence in future teaching.

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