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PEDAGOGICAL TRAINING DURING THE COVID-19 EPIDEMIC AND ITS TWO TRACKS: REMOTE AND FACE-TO-FACE

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ABSTRACT

Aim/Purpose	The study aimed to examine the remote and face-to-face experience of pedagogical training in kindergarten after the third COVID-19 closure in Israel.
Background	The outbreak of the COVID-19 epidemic in 2020 changed the training system, and preservice teachers were required to have their practical experience in the kindergartens both remotely and face-to-face. They had to adapt to the new requirements of teacher training programs and receive professional coaching and support from the pedagogical instructor remotely.
Methodology	The sample comprised 26 early childhood preservice teachers, who received academic training that includes proficiency in digital technology. The data were collected through feedback that they wrote themselves during the training period and analyzed in the interpretive approach.
Contribution	The contribution of the present study is that it examines the pedagogical coaching from the perspective of preservice teachers in a kindergarten during the COVID-19 epidemic, which forced a transition from face-to-face to remote pedagogical training, then back to face-to-face pedagogical instruction. To the best of my knowledge, no such study has been carried out to date, which makes it unique.
Findings	The main findings indicate the dissatisfaction of most preservice kindergarten teachers with the remote pedagogical training (about 85%) at the physical, emotional, technological, and pedagogical levels, and the satisfaction of most preservice kindergarten teachers with face-to-face pedagogical training (about 92%) at the physical, emotional, and pedagogical levels. The main conclusion is that technology is a potential barrier in training, and that preservice kindergarten teachers need a pedagogical instructor present at a professional face-to-face meeting.

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Recommendations for Practitioners	The findings of the study show how important in-person learning and engagement is for everyone especially for Preservice teachers' and may be helpful for pedagogical coaching teams.
Recommendations for Researchers	Preservice teachers' awareness of the pedagogical coaching experiences could persuade the coaching teams to avoid potential difficulties, increase emotional support, and refine the use of technology to make it a closer substitute for frontal communication.
Impact on Society	Face-to-face training based on interpersonal relationship, allows to develop better during the training period.
Keywords	remote pedagogical training, face-to-face pedagogical training, preservice kindergarten teachers, kindergartens, COVID-19

INTRODUCTION

The practicum is part of the teacher training program, which includes general studies, studies in specific specialized subjects, and professional training, that also includes experiential learning (Aram & Ziv, 2018). Practical experience is the link between theory and educational practice (Caires et al., 2012), and it includes observations and experiences of teaching that take place within a framework where future teachers and kindergarten teachers meet the “real world” of teaching and can appreciate the practical wisdom of experienced professionals (Shulman, 2005).

The outbreak of the COVID-19 epidemic in 2020 changed the training system, and preservice teachers were required to have their practical experience in the kindergartens both remotely and face-to-face (Nasri et al., 2020). They had to adapt to the new requirements of teacher training programs and receive professional coaching and support from the pedagogical instructor remotely (Carrillo & Flores, 2020). The research assumption was that the teaching profession is inherently transformative (Feiman-Nemser, 2012), therefore, to cope successfully with kindergarten practicum while receiving pedagogical coaching remotely because of the COVID-19 epidemic, preservice teachers would have to change.

The present study aimed to examine the experience of remote and face-to-face pedagogical training in kindergarten during the COVID-19 epidemic, from the perspective of preservice teachers' practical experience in kindergarten after the third closure. The study sought to answer the question of how preservice teachers in early childhood education perceived the differences between the remote pedagogical training experience and face-to-face pedagogical training experience during the COVID-19 epidemic. Research on the perception of pedagogical coaches is likely to expand our knowledge about aspects of pedagogical guidance in general, teach us about the advantages and disadvantages of remote and face-to-face pedagogical training for professional training of preservice teachers, and equip early childhood professionals with the understanding of the dynamics of the pedagogical counselor's role and with the ability to function effectively even during times of epidemic or change.

The theoretical framework addresses the practicum experience in kindergarten and aspects of pedagogical coaching during the COVID-19 epidemic. The theoretical starting point of the study is that the COVID-19 epidemic had implications for the pedagogical training experience of preservice teachers during their practicum. The contribution of the present study is that it examines the pedagogical coaching from the perspective of preservice teachers in a kindergarten during the COVID-19 epidemic, which forced a transition from face-to-face to remote pedagogical training, then back to face-to-face pedagogical instruction. To the best of my knowledge, no such study has been carried out to date, which makes it unique.

REVIEW OF THE LITERATURE

PRACTICUM EXPERIENCE IN THE SHADOW OF THE COVID-19 EPIDEMIC

Practical experience is perceived as a “clinical experience,” during which preservice teachers take increasing responsibility for a given group of learners over a given period, apply the educational knowledge they have accumulated, and engage in reflective thinking (McLean Davies et al., 2015). It is perceived as a practical experience of great importance both at the personal and the professional level (Delorey et al., 2020). Practicum involves teaching content, teaching methods, problem solving, entrepreneurship, teamwork, evidence gathering and analysis. It is of great importance, and it is concentrated over brief, intensive time units (Douglas, 2014). The two main skills that preservice teachers need to develop during practicum are belief in people’s ability to change (Dweck, 2012) and self-efficacy manifested in their ability to cope with teaching, organizational, and relationship tasks (Friedman & Kass, 2002). Studies show that practical experience involves cognitive, emotional, and motivational dimensions, which influence preservice teachers’ behavior, and therefore the relationship with the coaching teacher or kindergarten teacher is important (Korthagen, 2017).

In early childhood education, practicum experience is defined as an interaction between the kindergarten teacher, preservice teacher, and the child, and it is regarded as an important intervention for improving the quality of early childhood education (Egert et al., 2018; Tangwarasittichai et al., 2021) and reducing the gap between theory and practice (Allen & Wright, 2014). As part of this conception, the professional development centers for preservice teachers in early childhood education address the aspects of organizational conduct, teamwork, familiarity with curricula, adherence to Ministry of Education policy, initiative, and teaching and learning tailored to 21st century standards (Ronfeldt & Reining, 2012), as well as professional values, willingness, efficiency, and drive (Zhang & Wang, 2018). These emphasize the “new standards in teaching” and ensure the quality of education through authentic experiences (Winterbottom & Mazzocco, 2016), documented as evidence in a pedagogical diary (Lucander & Christersson, 2020). A study examining preservice teachers’ satisfaction with practicum training before the COVID-19 outbreak found that they typically reported feelings of energy and comfort, whereas a small proportion of preservice teachers reported feelings of frustration (Van Schagen Johnson et al., 2017). Another study reinforced the sense of frustration with the pedagogical coaches for not knowing the actual situation, because “they were not there themselves” (Veal & Rikard, 1998).

Because of the outbreak of the COVID-19 epidemic, profound changes were required in teaching and learning in various educational settings worldwide, as well as in the academic frameworks for teacher training (Donitsa-Schmidt & Ramot, 2020; Lancker & Parolin, 2020). Preservice teachers were required to adopt diverse learning technologies such as WhatsApp, through which they could communicate with the pedagogical coach and share PowerPoint, Microsoft Word, and JPG files, voice notes, videos, and more (Carrillo & Flores, 2020; Kreis et al., 2020; Wargadinata et al., 2020). Preservice teachers were required to find online teaching theories, teaching tools, and resources for children, as well as information on virtual platforms (Gomes, 2021). Preservice teachers who incorporated technology into their practicum teaching in kindergartens used YouTube most commonly (Szeto et al., 2016). Despite all of the above, there are still differences between preservice teachers in their degree of e-Readiness for teaching in a digital environment (Aizenberg & Zilka, 2022).

Studies show that preservice teachers cooperated with teachers, assisted in lesson planning, and teaching had a significant effect on their professional learning (Donitsa-Schmidt & Ramot, 2020). They have shown increased empathy for their students and emphasized ensuring a successful learning process (Nasri et al., 2020). Some showed resilience and dealt effectively with the epidemic (Donitsa-Schmidt & Ramot, 2020; Fullan et al., 2020). Another study examining the relationship between preservice teachers’ beliefs and practices found that their beliefs in early childhood education predicted their practices (Sakellariou & Rentzou, 2011), and the adoption of new technology significantly

contributed to preservice teachers' self-efficacy and prevented anxiety (Eutsler et al., 2021). At the same time, studies indicated feelings of stress and strain (Davidovich & Cohen, 2020; Kreis et al., 2020; Nurfadillah & Suharto, 2021), which were stronger in preservice teachers in practicum training than in kindergarten and schoolteachers (Zilka, 2021).

REMOTE AND FACE-TO-FACE PEDAGOGICAL GUIDANCE

Pedagogical guidance is considered an interpersonal communication activity that includes assisting preservice teachers in consolidating basic knowledge, learning educational theories, acquiring teaching skills, developing independent thinking and reflective skills, providing social and psychological support in personal development and self-awareness, listening, and providing solutions as events occur (Loughran, 1997). Moreover, pedagogical guidance helps students examine the meaning inherent in choosing the profession from an ethical point of view and understand the range of roles and expectations inherent in an occupation with a social mission (Wang & Odell, 2002). In early childhood education, emphasis is also placed on multi-disciplinary education necessitated by the expanded role of the kindergarten teacher (Gomes, 2021).

The outbreak of the COVID-19 epidemic found the educational staff, including pedagogical guidance teams, unprepared to face the challenging reality, and they were required to provide in-person pedagogy and maintain in-person pedagogical contact with the preservice teachers in the kindergarten (Gomes, 2021). They were also required to train the preservice teachers for responsibility in the practical training, which was intensive and stressful. As part of the pedagogical array in the kindergarten, the preservice teachers were required to be more involved, focus on the children, respond and pay more attention to what was happening, be involved and build knowledge that would allow them to position themselves (Gomes, 2021).

Apart from this, the pedagogical guidance teams were required to undergo a transformation to adapt to digital pedagogical training (Nguyen, 2020), that is, to make profound changes in student mentoring (Donitsa-Schmidt & Ramot, 2020; Lancker & Parolin, 2020). They were required to rethink teaching methodologies and modes of integrating teaching technology (Kreis et al., 2020; Nasri et al., 2020). They adopted various learning technologies to communicate with and receive materials from preservice teachers, with mobile technology being prevalent in educational applications, significantly facilitating their use. Preservice teachers expressed willingness to use smart mobile devices for effective teaching in kindergarten during their practicum in early childhood education (Kalogiannakis & Papadakis, 2019). WhatsApp was one of the main ways of communication between preservice teachers and pedagogical coaches, which was conducted through PowerPoint files, Word files, voice messages, videos and more (Carrillo & Flores, 2020; Kreis et al., 2020).

In light of the above, to ensure the effectiveness of the training, the pedagogical coaches were required to work with the preservice teachers along two lines: developing new teaching and learning routines and adopting one reliable technological platform that offers the most useful options for the training process and accommodates the previous needs and experience of students (Eutsler et al., 2021).

The study found that the support of a frontal pedagogical coach affects the quality of teaching of preservice teachers in the areas of professional wellbeing, increased personal achievements and motivation, whereas technology raises a barrier to training (Wolf, 2018). In addition, pedagogical coaches have a great responsibility in developing the across-the-board expertise of early childhood preservice teachers and providing them with supportive and challenging learning conditions, enabling preservice teachers to explore by themselves which conditions are productive for them and which are not (Han & Damjanovic, 2014). The pedagogical coach is viewed in another study as a technological mentor and as the key figure for achieving the participation and perseverance of preservice teachers. Pedagogical coaches achieve this goal through reflective processes aimed at identifying specific needs that

have a different pedagogical character for each preservice teacher (Aizenberg & Zilka, 2022; Quintana & Zambrano, 2014).

The present study aimed to examine the experience of remote and face-to-face pedagogical training in kindergarten during the COVID-19 epidemic, from the perspective of preservice teachers' practical experience in kindergarten after the third COVID-19 closure in Israel. Our research question was: How did preservice teachers in early childhood education perceive the differences between the remote and the face-to-face pedagogical training experience during the COVID-19 epidemic?

MATERIALS AND METHODS

RESEARCH METHOD

Studies based on the qualitative paradigm enable researchers to listen to the personal voice of the respondents, reflecting their personal and professional experiences, and helping us understand what is important to them. These studies purport to allow respondents to offer their interpretation and subjective meaning to their experiences and processes (Silverman, 2020, pp. 3-16). The present study was based on the interpretive approach (Cohen et al., 2011), used to examine the remote and the face-to-face pedagogical training experience during the practicum in the kindergarten in the circumstances of the COVID-19 epidemic.

STUDY POPULATION

The study involved 26 early childhood preservice teachers, in their second year of studies and in the first year of practical experience in kindergartens in the central and southern districts of Israel. In the outbreak of the COVID-19 epidemic, they received in the academic year 2019 an academic training in the use of zoom and the acquisition of basic digital tools and skills with the pedagogical coach in addition to the digital skills they were previously aware of through the mobile phone and email. In the academic year 2020-2021, the students were integrated in their practicum kindergartens during the COVID-19 epidemic, were guided by experienced kindergarten teachers, mentored remotely by the pedagogical coaches until March, and only in the last quarter of that year did they first meet their pedagogical coach face to face. At the end of the year, the preservice teachers were asked to complete a feedback questionnaire that served as the input in this study, and they expressed their agreement to use the feedback for research purposes. The feedback and the adjustments reflected in them can contribute to the understanding of the differences between the remote and the face-to-face pedagogical guidance experience during the COVID-19 epidemic.

METHOD OF ANALYSIS

The analysis was primarily a systematic thematic analysis based on passages of text rather than individual words and phrases as units of analysis (Galletta, 2013). The excerpts of feedback were analyzed using axial coding (Corbin & Strauss, 2007), while identifying super categories such as technological level and subcategories such as technology-dependent communication and then the differences between advantages and disadvantages were distinguished according to the perception of the participants in the study. This is a spiral process, in which the nuclear elements found at the beginning of the study become increasingly complex and colorful as the study progresses and form a picture that reflects the differences between remote and face-to-face pedagogical guidance in the shadow of the COVID-19 epidemic, relying on the appropriate theoretical anchors that explain it (Glaser & Strauss, 2012). The data were collected during the academic year 2020-2021.

RESULTS

Training early childhood preservice teachers during the COVID-19 epidemic revealed their perception of the differences in distance vs. face-to-face pedagogical coaching in their first year of

kindergarten practicum. The findings concern two main themes relating to the advantages and disadvantages of distance pedagogical coaching compared to the advantages and disadvantages of face-to-face pedagogical coaching.

Table 1. Remote pedagogical coaching: Advantages and disadvantages

() = No. of early childhood preservice teachers to whom this applies

Advantages n = 4 (26) 15%	Disadvantages n = 22 (26) 85%
<p>Emphasis was on preservice teachers' satisfaction with remote pedagogical coaching during the practicum in the kindergarten and the remote observation in the kindergarten and the ensuing feedback (4).</p> <p>The focus of the preservice teachers was on the benefits of remote pedagogical coaching at the techno-pedagogical level and the emotional level (4).</p> <p>At the techno-pedagogical level, the COVID-19 epidemic provided an opportunity to learn another way of teaching adapted to the skills of 21st-century learners and to means-dependent communication with the pedagogical instructor (2). The preservice teachers indicated that they learned a great deal (1); that they used a variety of technologies, applications, video editing software, conversion of presentations into videos, compression of videos and more (2); that they developed the ability to think out of the box (2); and that remote pedagogical coaching was more available and convenient owing to various means of connecting, such as phones, WhatsApp messages, Zoom, videos, and more (1).</p> <p>At the emotional level, preservice teachers experienced a high sense of competence (2), and a sense of calm without the physical presence of the pedagogical coach (1).</p>	<p>Emphasis was on dissatisfaction with the remote pedagogical coaching during the practicum in the kindergarten and the remote observation in the kindergarten and the ensuing feedback (22).</p> <p>The focus of the preservice teachers was on the shortcomings of the remote pedagogical coaching in general, at the physical, emotional, technological, and pedagogical levels (22).</p> <p>At the physical level, preservice teachers reported that physical distance from the pedagogical coach made it very difficult for them (1); the pedagogical coach is a virtual character (1); and absence of face-to-face physical feedback (1).</p> <p>At the emotional level, most preservice teachers reported that the instructor did not know them personally (22); and they had difficulty accepting criticism based on remote viewing (1).</p> <p>At the technological level, preservice teachers had difficulty maintaining technology-dependent communication with the pedagogical coach (4); they felt that the pedagogical coach's feedback was means-dependent and disproportionate (2); and they had difficulty integrating in the practicum kindergarten with remote observation (2).</p> <p>At the pedagogical level, preservice teachers felt that the pedagogical coach failed to see the whole picture of her practical experience in the kindergarten and did not have the ability to notice small details (6); preservice teachers felt that the feedback given to them after an observation was not in-depth feedback (3); they felt that they did not develop a deep understanding of what the pedagogical coach had to say (3), and that the feedback was delivered without prior preparation (1).</p>

***EXCERPTS FROM THE PRESERVICE TEACHERS' COMMENTS:
THE ADVANTAGES OF REMOTE PEDAGOGICAL COACHING***

(The letter in front of each comment represents the person responding.)

A. - Despite all the difficulty, one can succeed. This strengthened me not only academically but also personally. Even if at first things seem terrible and impossible, in the end, everything is possible, and it is possible to succeed.

M. - Because of the COVID-19 crisis I was exposed to a new, diverse, creative, and unconventional way of learning, and therefore I'm ready for the next challenge, where I'd like to adopt by choice the advantages of the online method [...] I think the transition to online learning presented us with a great opportunity to develop teaching skills.

D. - The online pedagogical coaching was more accessible and in a certain way, convenient.

***EXCERPTS FROM THE PRESERVICE TEACHERS' COMMENTS:
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(The letter in front of each comment represents the person responding.)

C - It was more difficult to conduct the activity by means of a video because of bad reception in the kindergarten. The feedback was not delivered physically [...] The online pedagogical coaching was more difficult.

R. - Online observation is not always understandable. One has to try to understand what the pedagogical coach means. The feedback amounts to what we were able to glean, and it is not necessarily exactly what happened there.

S. - In the online observation experience it is difficult to see the full picture... Online observation does not reflect our abilities and does not show our intentions during the activity. The online learning method has been forced on all of us, and it is less convenient.

Table 2. Face-to-face pedagogical coaching: Advantages and disadvantages

() = No. of early childhood preservice teachers

Advantages n=24 (26) 92%	Disadvantages n=2 (26) 8%
<p>Emphasis was on preservice teachers' satisfaction with face-to-face pedagogical coaching during the kindergarten practicum and the remote observation, and with the ensuing feedback (24).</p> <p>The focus of the preservice teachers was on the advantages at the physical, emotional, and pedagogical levels.</p> <p>At the physical level, preservice teachers expressed a positive attitude toward direct communication with the pedagogical coach (7), communication based on personal acquaintance with the actual pedagogical coach (7). The physical presence of the coach in the kindergarten allowed for physical contact and physical closeness (7). Observation and feedback were in real time.</p>	<p>Emphasis was on dissatisfaction with the face-to-face pedagogical coaching during the experience in the kindergarten and during remote viewing in the kindergarten, and with the feedback that followed (2).</p> <p>The focus of the preservice teachers was on shortcomings at the emotional level, most of which have dissipated over time, and at the pedagogical level, related to observation in real time.</p> <p>At the emotional level, preservice teachers reported that they felt pressured by the pedagogical coach's presence in the kindergarten for face-to-face observation. Note, however, that most preservice teachers</p>

<p style="text-align: center;">Advantages n=24 (26) 92%</p>	<p style="text-align: center;">Disadvantages n=2 (26) 8%</p>
<p>At the emotional level, preservice teachers reported enjoying the face-to-face pedagogical coaching experience (3), enjoying the human warmth of the pedagogical coach (3) and the intimacy (3). Preservice teachers reported being excited by the encounter with the pedagogical coach (3). They reported that the pedagogical coach saw them (physically and figuratively) (5), and that her presence was inclusive and calming (7).</p> <p>At the pedagogical level, satisfaction was expressed about the observation, feedback, and the conduct of the pedagogical coach. Regarding observation, preservice teachers felt that the presence of the pedagogical coach for observation in the practicum kindergarten was significant for their training (8). Their improvisational ability in real time was higher (1), and they believed that frontal observation in the practicum reflected better their professional abilities (4).</p> <p>Frontal feedback was perceived as being more in-depth (5), the pedagogical coach was perceived as believing in her, and as strengthening her performance and abilities (7). The feedback was providing a sense of professional security (7), and it was clear to the preservice teacher what she needed to improve next (12).</p> <p>Regarding the conduct of the pedagogical coach, preservice teachers described the coach's readiness to accept various teaching methods (1), her ability to see all the aspects and the entire picture (12), and reported the coach to be interested in the preservice teachers' success (3).</p>	<p>knew how to channel it and calmed down over time (13), but some still experienced it (2).</p> <p>Preservice teachers also reported experiencing frustration during the pedagogical coach's observation in the kindergarten because of their own inability to meet her professional expectations (1) and their difficulty accepting instructions for improvement from the pedagogical coach (1).</p> <p>At the pedagogical level, preservice teachers reported disadvantages such as not being able to watch the activity in an online video and having to deal with discipline issues (1), and additional aspects requiring improvement in real-time observation (1).</p>

***EXCERPTS FROM THE PRESERVICE TEACHERS' COMMENTS:
THE ADVANTAGES OF FACE-TO-FACE PEDAGOGICAL COACHING***

(The letter in front of each comment represents the person responding.)

K. - Frontal observation reflects my ability more clearly than online observation. The coach watches you and sees the entire picture, body language, sitting, continuous communication with the learners, conduct before and after the meeting. In addition, the presence of the coach promoted an inclusive and open atmosphere, and the face-to-face meeting, as well as the continuous eye contact during the feedback, gave me a sense of security.

S. - My personal feedback and observation included references to my strengths, together with an understanding of the challenging situation, encouragement, and positive reinforcement, which contributed to me also in considering my strengths, and on this basis allowed me to continue to act and conduct myself in the kindergarten space in an optimal, challenging, and instructive way.

B. - During the observation, I felt that the pedagogical coach believed in me, trusted me, and was confident that I would succeed. She promoted a relaxed and calm atmosphere and supported me all the way. [In feedback] we talked in depth about my conduct, I felt appreciated and relieved, and realized how much she cared about my experience in the kindergarten, and how much she was interested in my success.

***EXCERPTS FROM THE PRESERVICE TEACHERS' COMMENTS:
THE DISADVANTAGES OF FACE-TO-FACE PEDAGOGICAL COACHING***

(The letter in front of each comment represents the person responding.)

M. - I was apprehensive and felt pressured, and worried about what would happen. Because it's face-to-face, it suddenly felt stressful and realistic, just the fact that you know there's a person in front of you scrutinizing your work causes you to have thoughts that can confuse our minds and cause us to make mistakes.

A. - During the observation I was very excited, and the level of stress and anxiety rose without me planning or seeing these feelings come [...] Unfortunately, the meeting didn't go as I had planned and not according to my routine performance during the meetings, and I left the observation with a sense of frustration.

D. - Sometimes in the videos we send to the pedagogical coach they don't pay attention to the small details and the conditions in which we conduct the activity, and therefore the frontal feedback received after non-virtual observation in the kindergarten, is feedback that addresses all aspects. The coach sees everything, and you should absorb it.

DISCUSSION

This study examined the differences in the attitudes of preservice kindergarten teachers toward the remote and face-to-face experience of pedagogical training in kindergarten in the course of the third closure during the COVID-19 epidemic in Israel. The findings indicate the dissatisfaction of most preservice teachers with remote pedagogical coaching (about 85%) at the physical, emotional, technological, and pedagogical levels (although they received academic training in digital technology) (see Table 1), and the satisfaction of most preservice teachers with face-to-face pedagogical coaching (about 92%) at the physical, emotional, and pedagogical levels (see Table 2). At the same time, when the preservice teachers experienced face-to-face pedagogical coaching in the last quarter of the year, most of them (about 92%) were satisfied. They addressed its many benefits at the physical, emotional, and pedagogical levels (see Table 2). Moreover, it is evident from the findings that the emotional component was prominent, with emphasis on its deficiency in remote (see Table 1) and its benefits in face-to-face pedagogical coaching (see Table 2).

CONCLUSIONS

The conclusions that emerge from the study are the following.

Technological barriers alongside the need for a supportive physical and emotional presence.

The findings show that most preservice teachers were not satisfied with remote pedagogical coaching. The main reason for their dissatisfaction was that technology presented a potential barrier to their training Wolf (2018). Although the pedagogical coaches underwent a digital/technological adjustment in the distance pedagogical training (Nguyen, 2020), and adopted effective study technologies for optimal communication with the preservice teachers based on a transition to the use of smart mobile devices (Kalogiannakis & Papadakis, 2019), the new pedagogical coaching routines (Eutslar et al., 2021) were not sufficient for preservice teachers who needed the pedagogical coach to be

present in face-to-face meetings with them in the practicum settings. Studies show that frontal support by a pedagogical coach affects the quality of teaching and professional wellbeing of preservice teachers, increases personal achievement, and raises motivation (Wolf, 2018). In practical frontal coaching, pedagogical coaches provide preservice teachers with learning conditions that are supportive on one hand and challenging on the other (Han & Damjanovic, 2014). Another study examining the satisfaction of preservice teachers in practical training, not during an epidemic, found that they generally reported feelings of energy and relaxation, and only a small proportion reported feelings of frustration (Van Schagen Johnson et al., 2017). The present study examined preservice teachers' attitudes toward remote pedagogical coaching during an epidemic. It emphasized the importance of the pedagogical coach's frontal presence at the practicum site and her contribution to the preservice teachers' professional development and their mental wellbeing in training.

What is needed now is transformation.

The findings show that few of the preservice teachers were satisfied with remote pedagogical coaching. The study demonstrated that preservice teachers realized that the teaching profession is by nature a transformative one (Dweck, 2012; Feiman-Nemser, 2012), and that to successfully cope with kindergarten practicum under remote pedagogical coaching during the COVID-19 epidemic, they would need to change. The study also shows that the adoption of new technology, which has been part of teaching, organizational, and relationship assignments during training (Friedman & Kass, 2002), is a key contributor to their self-efficacy, and it also prevents anxiety (Eutsler et al., 2021). Previous studies have reported that preservice teachers experienced heightened stress and strain during COVID-19 (Zilka, 2021), and only a small proportion in the present study showed a good ability in coping with stress and crisis. An insight contrary to the insights presented above suggests that most of the preservice teachers in the practical training who were dissatisfied with the remote pedagogical coaching lacked the capacity to change and face the new reality, neither in its techno-pedagogical nor its emotional aspects, despite their considerable efforts invested during the practicum experience. This finding reinforces those of the study by Aizenberg and Zilka (2022), in which differences were found between preservice teachers in their stability and self-efficacy, including creativity, resilience, independence, and flexibility, and the degree of e-Readiness for teaching in a digital environment.

LIMITATIONS OF THE STUDY

The sample included 26 preservice teachers in early childhood education and examined their position regarding the experience of remote pedagogical coaching vs. face-to-face pedagogical coaching in kindergarten during the COVID-19 epidemic in Israel. The remote pedagogical coaching experience preceded the "normal" experience of face-to-face pedagogical coaching, and therefore it is likely that the latter was perceived as better and more successful in the extreme, whereas the remote pedagogical coaching was perceived as a short-lived and transient experience. Moreover, the perception of the differences between the two types of pedagogical coaching was dichotomous from the point of view of the preservice teachers. It is possible that the choice of other research tools, such as in-depth interviews, would have produced a less dichotomous picture.

PRACTICAL IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of the study show how important in-person learning and engagement is for everyone, especially for Preservice teachers, and may be helpful for pedagogical coaching teams. Preservice teachers' awareness of the pedagogical coaching experiences could persuade the coaching teams to avoid potential difficulties, increase emotional support, and refine the use of technology to make it a closer substitute for frontal communication, for example, by using personal Zoom sessions, and individual and group WhatsApp video calls. As part of a comprehensive change process, kindergartens will also need to be prepared, among others, to allow appropriate conditions for technological

communication, such as connection to the Internet, and display screens that eliminate as much as possible the distortion of proportions in the interpersonal encounter of pedagogical coaches with preservice teachers in the kindergarten.

SUMMARY

The paper provides insight into the experiences of early childhood preservice teachers in Israel during the third wave of the COVID-19 epidemic. Specifically, the study indicates that remote pedagogical training has many disadvantages that outweigh the advantages. Also, early childhood preservice teachers prefer to experience face-to-face pedagogical training based on interpersonal relationships that allow them to develop better during the training period.

COMPLIANCE WITH ETHICAL STANDARDS:

Informed consent was obtained from all individual participants included in the study.

The study received approval from the institutional review board (IRB) of Achva Academic College.

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REFERENCES

- Aizenberg, M., & Zilka, G. C. (2022). Preservice kindergarten teachers' distance teaching practices during the COVID-19 lockdown period. *Journal of Early Childhood Teacher Education*, 1-17.
<https://doi.org/10.1080/10901027.2022.2075813>
- Allen, J., & Wright, S. (2014). Integrating theory and practice in the pre-service teacher education practicum. *Teachers and Teaching Theory and Practice*, 20(2). <https://doi.org/10.1080/13540602.2013.848568>
- Aram, D., & Ziv, M. (2018). Early childhood education in Israel. In J. L. Roopnarine, J. E. Johnson, S. Flannery Quinn, & M. M. Patte (Eds.), *International handbook of early childhood education* (pp. 101-116).
<https://doi.org/10.4324/9781315562193-8>
- Caires, S., Almeida, L., & Vieira, D. (2012). Becoming a teacher: Student teachers' experiences and perceptions about teaching practice, *European Journal of Teacher Education*, 35(2), 163-17.
<https://doi.org/10.1080/02619768.2011.643395>
- Carrillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4), 466-487.
<https://doi.org/10.1080/02619768.2020.1821184>
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education*, (7th ed.). Routledge.
- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage.
- Davidovich, N., & Cohen, A. (2020). The development of online teaching in higher education in Israel in response to the pressures of the free market forces and its implications for the quality of teaching and learning. *Hal'aa*, 1, 15-35. (Hebrew). <https://www.nationalteachingforum.com/blank-8>
- Delorey, J., Specht, J., Fairbrother, M., Ismailos, L., Vilella, M., Charles, E., Vanderloon, M., Gallagher, T., Grace Howell, G., & Whitley, J. (2020). Experiences that shape pre-service teachers' inclusive practice beliefs: A group concept mapping study. *International Journal of Inclusive Education*.
<https://doi.org/10.1080/13603116.2020.1862403>
- Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: Teacher education in Israel in the Covid-19 pandemic. *Journal of Education for Teaching*, 46(4), 586-595.
<https://doi.org/10.1080/02607476.2020.1799708>
- Douglas, A. S. (2014). *Student teachers in school practice: An analysis of learning opportunities*. Palgrave Macmillan.

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- Dweck, C. D. (2012). Mindsets and human nature. Promoting change in the Middle East, the school yard, the racial divide and will power. *American Psychologist*, 67(8), 614-622. <https://psycnet.apa.org/doi/10.1037/a0029783>
- Egert, F. M., Fukkink, R. G., & Eckhardt, A. G. (2018). Impact of in-service professional development programs for early childhood teachers on quality ratings and child outcomes: a meta-analysis. *Review of Educational Research*, 88(3), 401-433. <https://doi.org/10.3102%2F0034654317751918>
- Eutsler, L., Antonenko, P. D., & Mitchell, C. (2021). Initial response to COVID-19: A mixed-methods analysis of media and school communications to identify pedagogical implications for remote teaching. *Interactive Technology and Smart Education*, 18(2), 227-245. <https://doi.org/10.1108/ITSE-08-2020-0159>
- Feiman-Nemser, S. (2012). *Teachers as learners*. Harvard University Press.
- Friedman, I. A., & Kass, E. (2002). Teacher self-efficacy: A classroom-organization conceptualization. *Teaching and Teacher Education*, 18(6), 675-686. [https://doi.org/10.1016/S0742-051X\(02\)00027-6](https://doi.org/10.1016/S0742-051X(02)00027-6)
- Fullan, M., Quinn, J., Drummy, M., & Gardner, M. (2020). Education reimagined: The future of learning. A collaborative position paper between new pedagogies for deep learning and Microsoft Education. *Microsoft Education*.
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication* (pp. 45-74). New York University Press.
- Glaser, B., & Strauss, A. (2012). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction.
- Gomes, E. X. (2021). Pedagogy of presence in kindergarten teachers' initial training: Perspectives about its (im)potencies within a pandemic framework. *Zero-a-seis*, 23, 269-290. <https://dialnet.unirioja.es/servlet/articulo?codigo=8121803>
- Han, H. S., & Damjanovic, V. (2014). Preservice teacher learning within a kindergarten internship: Insights for early childhood teacher educators. *The Teacher Educator*, 49(4), 284-304. <https://doi.org/10.1080/08878730.2014.943622>
- Kalogiannakis, M., & Papadakis, S. (2019). Evaluating pre-service kindergarten teachers' intention to adopt and use tablets into teaching practice for natural sciences. *International Journal of Mobile Learning and Organization*, 13(1), 113-127. <https://www.inderscienceonline.com/doi/abs/10.1504/IJMLO.2019.096479>
- Korthagen, F. A. J. (2017). A foundation for effective teacher education: Teacher education pedagogy based on theories of situated learning. In D. J. Clandinin & J. Husu (Eds.), *The SAGE handbook of research on teacher education* (pp. 528-544). Sage.
- Kreis, Y., Haas, B., Reuter, R., & Meyers, C. (2020). Reflections on our teaching activities in the initial teacher training during the COVID-19 crisis: From “onsite classes” to “schooling at home.” In G. Mein & J. Pause (Eds.), *Self and society in the Corona crisis: Perspectives from the humanities and social sciences* (pp. 611-632). Melusina Press.
- Lancker, W., & Parolin, Z. (2020). COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet: Public Health* 5(5), 243-244. [https://doi.org/10.1016/S2468-2667\(20\)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0)
- Loughran, J. (1997). Teaching about teaching: Principles and practice. In J. Loughran & T. Russel (Eds.), *Teaching about teaching: Purpose, passion and pedagogy in teacher education* (pp. 57-70). Palmer Press.
- Lucander, H., & Christersson, C. (2020). Engagement for quality development in higher education: A process for quality assurance of assessment. *Quality in Higher Education*, 26(2), 135-155. <https://doi.org/10.1080/13538322.2020.1761008>
- Mclean, D. L., Dickson, B., Rickards, F., Dinham, S., Cornoy, J., & Davis, R. (2015). Teaching as a clinical profession: Translation practices in initial teacher education – An international perspective. *Journal of Education for Teaching*, 41(5), 514- 528. <https://doi.org/10.1080/02607476.2015.1105537>
- Nasri, N. M., Husnin, H., Mahmud, S. N. D., & Halim, L. (2020). Mitigating the COVID-19 pandemic: A snapshot from Malaysia into the coping strategies for pre-service teachers' education. *Journal of Education for Teaching*, 46(4), 546-553. <https://doi.org/10.1080/02607476.2020.1802582>

- Nguyen, S. D. (2020). Digital transformation in art pedagogical training in Vietnam today. *Vietnam Journal of Education*, 4(4), 69-75. <https://doi.org/10.52296/vje.2020.82>
- Nurfadillah, I. E., & Suharto, N. (2021). Quality assurance in private school reviewed from the effectiveness of supervision. *Proceedings of the 4th International Conference on Research of Educational Administration and Management (ICREAM 2020)*. <https://download.atlantis-press.com/proceedings/icream-20/125952674>
- Quintana, M. G. B., & Zambrano, E. P. (2014). E-mentoring: The effects on pedagogical training of rural teachers with complex geographical accesses. *Computers in Human Behavior*, 30, 629-636. <https://doi.org/10.1016/j.chb.2013.07.042>
- Ronfeldt, M., & Reining, M. (2012). More or better student teaching? *Teaching and Teacher Education*, 28(8), 1091-1106. <https://doi.org/10.1016/j.tate.2012.06.003>
- Sakellariou, M., & Rentzou, K. (2011). Cypriot pre-service kindergarten teachers' beliefs about and practices of developmentally appropriate practices in early childhood education. *Early Child Development and Care*, 181(10), 1381-1396. <https://doi.org/10.1080/03004430.2010.531132>
- Shulman, L. S. (2005). *The signature pedagogies in the professions of law, medicine, engineering and the clergy: Lessons from the education of teacher*. Paper presented at the Teacher Education for Effective Teaching and Learning, NRC Center of Education.
- Silverman, D. (2020). *Interpreting qualitative data* (pp. 3-16). SAGE Publications Ltd.
- Szeto, E., Cheng, A. Y. N., & Hong, J. C. (2016). Learning with social media: How do preservice teachers integrate YouTube and social media in teaching?. *The Asia-Pacific Education Researcher*, 25(1), 35-44. <https://link.springer.com/article/10.1007/s40299-015-0230-9>
- Tangwarasittichai, K., Leekitchwatana, P., & Pimdee, P. (2021). Thai early childhood education quality assurance assessor competency development analysis. *Elementary Education Online*, 20(1), 757-767. <https://doi.org/10.17051/ilkonline.2021.01.69>
- Van Schagen Johnson, A., La Paro, K. M., & Crosby, D. A. (2017). Early practicum experiences: Preservice early childhood students' perceptions and sense of efficacy. *Early Childhood Education Journal*, 45(2), 229-236. <https://link.springer.com/article/10.1007/s10643-016-0771-4>
- Veal, M. L., & Rikard, L. (1998). Cooperating teachers' perspectives on the student teaching triad. *Journal of Teacher Education*, 49(2), 108-119. <https://doi.org/10.1177%2F0022487198049002004>
- Wang, J., & Odell, S. J. (2002). Mentored learning to teach according to standards-based reform: A critical review. *Review of Educational Research*, 72(3), 481-546. <https://doi.org/10.3102%2F00346543072003481>
- Wargadinata, W., Maimunah, I., Dewi, E., & Rofiq, Z. (2020). Student's responses on learning in the early COVID-19 pandemic. *Tadris: Journal of Education and Teacher Training*, 5(1), 141-153. <http://ejournal.rad-enintan.ac.id/index.php/tadris/article/view/6153>
- Winterbottom, C., & Mazzocco, P. J. (2016). Reconstructing teacher education: A praxeological approach to pre-service teacher education. *European Early Childhood Education Research Journal*, 24(4), 495-507. <https://doi.org/10.1080/1350293X.2014.975940>
- Wolf, S. (2018). Impacts of pre-service training and coaching on kindergarten quality and student learning outcomes in Ghana. *Studies in Educational Evaluation*, 59, 112-123. <https://doi.org/10.1016/j.stueduc.2018.05.001>
- Zhang, L. Y., & Wang, X. Q. (2018). Reliability and validity of the student teacher professional identity scale in pre-service kindergarten teachers. *Open Journal of Social Sciences*, 6(8), 252. <http://creativecommons.org/licenses/by/4.0/>
- Zilka, G. C. (2021). Attitudes of preservice kindergarten teachers toward the integration of computers and the reduction of the digital divide in kindergartens. *Educational Technology Research and Development*, 69(2), 711-731. <https://link.springer.com/article/10.1007/s11423-021-09982-7>

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