L-Università ta' Malta
Faculty of Education

Early Childhood &
Primary Education
RESEARCH GROUP

THE COVID-19 AND EDUCATION IN MALTA (Cov-EM) STUDY

Perspectives of Early Childhood Educators

RESEARCH REPORT 2

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Foreword

It is an honour for me to accept my departmental colleagues' invitation to write the foreword to this publication. I suspect this is their way of acknowledging my long career and unstinting contributions to early childhood education and care in Malta. Through my academic research, contributions towards and writing of national policy documents, teaching students at undergraduate and post-graduate levels, and participation in initial teacher-education and continuous professional development courses, early childhood education and care matters have been firmly placed on the national agenda. Although there is still a long way to go in ensuring that consistently high quality services for all young children and their families are available and accessible nation-wide, I am filled with a sense of pride in noting that pioneering work is paying off: work and efforts which started as personal initiatives have now been strengthened and extended through ventures by a collective of colleagues and friends, amongst whom are some past students.

To Charmaine, Rosienne, both Josephines and Tania: may your passion, enthusiasm and dedication for your work continue to be an inspiration for your students, practitioners, educators and colleagues whom you meet daily. Thank you for undertaking this work with children, parents and educators during the stressful unpredictability caused by the pandemic and all the spanners in the works which consequently arose. You negotiated challenges and secured the opportunity to invite various stakeholders to share with you their trials and tribulations in reacting to new realities.

This report showcases the experiences of educators who unexpectedly had to get to grips with learning opportunities available through technology, online teaching and instruction, and adapt to teaching and learning at a distance. COVID caused disruption to regular life and work patterns, schedules and routines for all societies and communities. It presented opportunities as well as challenges and dilemmas which educators working with children and students of all ages had to face. On the one hand, technology was the lifeline: it became the means of communication and socialisation. Yet this was not without its share of problems, difficulties and ethical issues. Resorting to technology for teaching and learning challenged educators to keep up with the times and everyone scrambled to work with the pedagogical tools they may have avoided earlier. But having to rely on technology and applications which became imperative to ensure that young children continued to enjoy some learning opportunities, served to highlight or indeed exacerbate issues. To what extent can online teaching and learning, especially in early years, replace the warm, caring, personal relationships which are key to young children's socialisation, learning and development? How can early years educators strike a balance between supporting young children's learning and development through appropriate access to and use of technology whilst being cognizant of characteristics of young children which impact learning and their learning processes? How do

early years practitioners embrace their dual role of educators/leaders whom young children look up to and concurrently realise they too need to learn and apply new skills? How did or could educators reach out to young children growing up in homes with limited access to technology and/or in the absence of supportive parents and primary caregivers who were facing their own challenges? What was the psychological impact on educators who were expected to plan, present, follow, adapt, adjust, participate in and complete activities in solitary spaces and places? These were some of the issues which surfaced with the advent of COVID and which have been reported in various publications locally and internationally. The findings published in this report present the difficulties associated to three crucial dimensions in the lives of early years educators, namely pedagogy and curriculum; learning spaces and places and well-being and relationships. It is now time to move beyond the rhetoric and stop considering, discussing or debating 'lessons learnt'. Ensuring that any 'lessons learnt' will not just be clichés requires action be taken on recommendations, translated into practice to strengthen and enrich the teaching and learning experiences of children, families and educators.

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List of Abbreviations

Cov-EM	COVID-19 and Education in Malta
COVID-19	SARS-CoV-2 (2019-nCoV) coronavirus and Coronavirus Disease 2019
ECPE	Early Childhood and Primary Education
ERT	Emergency Remote Teaching
DECPE	Department of Early Childhood and Primary Education
ECE	Early Childhood Educator
ECEC	Early Childhood Education and Care
ECPE	Early Childhood and Primary Education
FoE	Faculty of Education
FREC	Faculty of Education Research Ethics Committee
HE	Higher Education
HEI	Higher Education Institution
ITE	Initial Teaching Education
UM	University of Malta
VLE	Virtual Learning Environment

About the Authors

The Early Childhood and Primary Education (ECPE) research group comprises five female academics. All members form part of the Department of Early Childhood and Primary Education (DECPE) within the Faculty of Education at the University of Malta.

CHARMAINE BONELLO is a Lecturer in Early Childhood and Primary Education. Her areas of research interest in Early Childhood Education and Care are Early Literacy, Children's Rights, Postcolonialism, Quality Interactions, and the Emergent Curriculum. She is co-founder and Vice President of the Early Childhood Development Association of Malta (ECDAM), a member of the Board of Administrators of the Malta Foundation for the Wellbeing of Society and the author of the Routledge book *'Boys, Early Literacy and Children's Rights in a Postcolonial Context'* (Bonello, 2022). She was recently appointed as the co-editor of Postcolonial Directions in Education.

ROSIENNE CAMILLERI is a Lecturer in Early Childhood and Primary Education. Prior to this engagement, she worked in several schools, both as a teacher as well as occupying various managerial positions. Her areas of special interest in lecturing and research include high ability and giftedness, transitions in education, the Emergent Curriculum, as well as teacher and learner identities. She was a member of the working committee for the recently published Early Childhood Education and Care: National Policy Framework for Malta and Gozo (2021).

JOSEPHINE DEGUARA is Senior Lecturer in Early Childhood and Primary Education. She has occupied different roles in researching and working with young children and educators in Early Childhood and Primary Education. She is a member of the European Early Childhood Education Research Association (EECRA) and the Editorial Board of the International Journal of Early Years Education. Her research interests focus on curriculum philosophy, children's rights, play and learning, the environment as a pedagogical tool and multimodal meaning-making in early childhood education and care.

JOSEPHINE MILTON is the Head of Department and Senior Lecturer in Early Childhood and Primary Education. She has worked in Early and Primary Education for over twenty years and has occupied various roles in working with educators and young learners in formal and non-formal organisations. Her research interests focus on teacher education within early childhood and primary education, the use of language in teaching and learning, children's literature, English language learning, and literacy.

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First and foremost, we are thankful to the early childhood educators who participated in this study. This study would not have been possible without their input during the COVID-19 pandemic.

We also wish to express our appreciation to:

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We are also grateful to our families and loved ones for their patience, constant support, and encouragement to persevere in our academic and research endeavours.

The present members of the Early Childhood and Primary Education (ECPE) Research Group for all the reciprocal support and encouragement in this journey to grow together professionally as teacher educators, researchers, and colleagues.

Executive Summary

The COVID-19 and Education Malta (Cov-EM) research project has been carried out by the Early Childhood and Primary Education Research Group within the Faculty of Education, University of Malta. A group of female academics sought to explore what can be learned from the insights of different stakeholders in Early and Primary education during the COVID-19 pandemic in Malta. The study was conducted over two phases. During each phase (Phase 1 – September 2020; Phase 2 – September 2021), an online questionnaire examining three main concepts over time – teaching and learning, learning spaces and relationships and well-being – was sent to initial teacher education University students, early childhood educators (ECEs) (working with 0- to 5-year-olds), Primary Educators (working with 5- to 11-year-olds), education leaders and parents via social media. The third phase of this project (May-June 2022), which is currently in progress, will focus on children in early and primary education during post-COVID times.

Perspectives of Early Childhood Educators

This research report focused on how COVID-19 impacted the personal and professional lives of Early Childhood Educators (ECEs) during the first (the scholastic year 2019/2020) and second waves (the scholastic year 2020/2021) of the pandemic. The final samples in both surveys comprised 263 educators (Survey 1) and 79 educators (Survey 2). Survey 1 shows that ECEs had no immediate protocols to follow when COVID-19 hit the Maltese islands. This led to diverse reactions from leadership teams in early childhood settings for the under-fives. Half of the ECEs in Survey 1 claimed that they had to react to the situation without guidance. In Survey 2, 6.7% of ECEs indicated that they received support in 2020-2021. Survey 2 also shows that a minority of ECEs (11.1%) felt empowered in their profession.

Teaching and Learning

In terms of 'teaching and learning', this report unveils how early years pedagogies for the under-fives were reshaped within online and offline environments during COVID-19. An uneven start to online learning was evident. For example, the first survey shows how, initially, most ECEs did not use daily online interactive live sessions. This created a sense of detachment among parents and young children. Yet, in Survey 1 and then in Survey 2, we evidence a gradual increase in live and recorded online sessions. These pedagogical decisions started to rebuild bridges between children, families, and educators. Half of the respondents in Survey 1 reported an increase in parents' level of engagement in their children's learning through online sessions. Also, most educators declared that they enjoyed interacting with children online.

Interestingly, almost half of the educators in Survey 1 and the majority of educators in Survey 2 noted that the children's level of participation increased when their parents supported them in comparison to when the children were left on their own to engage independently during online learning opportunities. A minority of educators shared their concerns about their lack of competence in shifting teaching to online modes; difficulty in implementing the emergent curriculum online; lack of pedagogical support; some parents disrupting online sessions; lack of feedback from parents; working parents; prioritising elder siblings' online sessions; absence; and the online environment as unsuccessful learning spaces for young children. This situation led the majority of ECEs respondents to adopt a more formal/traditional curriculum and assessment forms, impoverishing the quality of learning during school closures. Conversely, findings show the efforts of some ECEs who claimed how they managed to explore and implement a child-centred emergent curriculum using the project approach in online spaces.

In Survey 2, most ECEs reported that the increase in live online sessions engendered a sense of willingness to participate from the children's end. Children's attendance was becoming more regular. Some educators highlighted the challenges faced when conducting online live sessions with young children, particularly in play-based and child-led learning experiences. Surprisingly, efforts to promote the emergent curriculum through project-based learning in online spaces were noted (from 0% in Survey 1 to 40% Survey 2). Yet, in both surveys, a significant percentage of educators claimed to use traditional pedagogies, including worksheets, to teach letters. Both surveys contrasted playful and more formal early years pedagogies in online and offline spaces during the pandemic.

Similarly, ECEs used a mix and match of authentic and traditional ways of assessing young children. Further, most ECEs reported a decrease in the time dedicated to assessment practices in both phases of the project. An interesting find is how some ECEs used the opportunity of meeting parents online to ask them for feedback about their children's learning - for assessment purposes.

In Survey 1, most ECEs reported that they would like to keep face-to-face in settings/schools post-COVID times; however, they still declared that they would like to keep a blended learning approach to extend the learning spaces. The majority of ECEs in Survey 2 reported that live sessions were the most effective teaching mode for young children online, yet less than half of the ECEs favoured a future blended approach in ECEC. Half of the respondents in Survey 2 indicated that children benefitted from online learning and that learning, and development were negatively influenced due to learning losses.

Learning Spaces

Several challenges were reported regarding the new offline and online 'learning spaces' for ECEs during the pandemic. These obstacles included lack of space (small homes) and access to digital devices (30%), broadband access (50% during wave 1, increasing to 70% in wave 2), and having the required digital literacy skills to navigate online learning. Half of the respondents in Survey 1 did not feel confident using online technology. Some ECEs reported that they had to upgrade their home internet connection and purchase digital devices at their own expense. Both questionnaires showed a lack of training and support related to digital literacy for ECEs. Colleagues were the main channel of support for many. In Survey 1, 30% of the ECEs reported that they could not conduct an online session. Half of the ECEs in Survey 2 indicated they had the required space and resources when schools were physically open. A low percentage stated that they had access to online learning spaces and the opportunity to connect with vulnerable children at home.

Overall, ECEs highlighted the benefits and challenges that the new offline and online learning spaces created. ECEs pointed out the following as benefits of online learning spaces: parents' increased awareness of their children's capabilities; parents' engagement in children's learning; the increased quality time between children, educators and parents; children adapting quickly to new circumstances; children's independence and resilience; and getting to know colleagues while working online. Conversely, the challenges highlighted were the absence of the physical environment at school/centres, children's absence, lack of parental participation during online sessions, and managing an online session with young children and parents. In Survey 2, ECEs pointed out some benefits and challenges of new physical learning spaces at schools/centres in 2020-2021. These included smaller groups of children and the bonding between educator and the child, learning how quickly children can adapt to follow hygiene procedures, and having more space in class. The challenges revolved around abiding by new protocols, sharing classes while following COVID-19 restrictions, lacking resources, limited use of the outdoor areas (due to timetables and bubbles), and lacking social interaction and hands-on play in early years settings.

Relationships and Well-being

As reported above, the changing learning arenas influenced the 'relationships and overall well-being' of ECEs. In Survey 1, ECEs said they spent more time with their families and less time with colleagues and leaders. In Survey 2, half of the ECEs stated that their leaders supported them, while the other half felt more supported by their family, friends and colleagues. Some ECEs indicated new bridges of relationships between several stakeholders over time. An interesting finding in Survey 1 is that half of the ECEs pointed out that their relationships with parents improved. This was sustained by 30% of the respondents in Survey 2 and other open-ended comments. In this light, Survey 2 reveals a tie when educators reported on whether parents supported their first attempts to use online modes. While success in strengthening relationships between ECEs and parents was reported, some surfaced challenges included complaints, lack of appreciation, and response from parents.

In both surveys, ECEs expressed their positive and negative subjective evaluations of their lives during the pandemic - their life and work satisfaction and their general physical, social, emotional and psychological well-being. In Survey 1, half of the ECEs felt less happy and satisfied with their life compared to pre-COVID times. Lack of leadership support was also reported. 25% of the ECEs felt pessimistic about their work in Survey 1. The majority did not enjoy working independently, and half of the respondents reported increased stress. Planning time increased for many, and they experienced a lack of physical movement. In Survey 2, half of the respondents felt happier and more satisfied with their lives. The evident increase in happiness did not eliminate the fears and anxieties reported in Survey 1. Unsafe working conditions, the strain related to the new family life, the use of masks, and maintaining physical distance led to some ECEs declaring that they considered resigning from their roles during the second wave. In Survey 2, 20% to 30% of the ECEs felt exhausted and suffered from mental health. Yet, the majority indicated they were resilient in facing unforeseen challenges, and half felt they did a good job.

Overview of recommendations

This report concludes with a list of recommendations for a sustainable
ECEC sector in post-COVID Malta explicitly highlighting the need:

- for educators to tap on the discovered benefits of online and offline affordances for early learning in 21st century play arenas;
- to generate capacity building to strengthen ECE's technological preparedness in online learning spaces to maximise children's learning;
- to create ongoing opportunities for dialogue amongst stakeholders in ECEC where they can develop a shared understanding through a community of practice;
- to increase curriculum time for ECEs working with under-fives to empower collaborative critical reflective practices and professional growth;
- to increase monitoring and support for ECEs;
- to increase capacity building of early years leaders;
- to address digital divides in ECEC service provision and young children's homes;
- to create a sustainable system that provides a range of well-being support programmes for all ECEs;
- for a workforce plan to ensure career development and achieve a graduate-led workforce in Maltese ECEC, also while educators continue to work in the sector;
- for urgent political priority to higher investment in Maltese ECEC that paves the way to a long-awaited systemic approach.

CHAPTER 1

Background to the study

Following the interruptions brought on by the unforeseen periods of school and university closure in Malta due to the onset of the COVID-19 pandemic, in March 2020, two academics from the Department of Early Childhood and Primary Education (DECPE) at the University of Malta felt the need to do something to react to the challenges being faced. This led to the inception of the Early Childhood and Primary Education (ECPE) research group. Eight female academics from the DECPE started to work together through online collaborative research work as they (i) felt the need to interact and support each other while maintaining physical distance and (ii) identified an urgent need to fill in a gap in local research on COVID-19 and early and primary education in Malta. In 2020, the eight members published their first research paper that tracks the birth and growth of the ECPE research group (Bonello et al., 2020) and another two related to COVID-19 and education (Bonello et al., 2021; Spiteri et al., 2021).

In 2021, five members continued to develop and extend the group's initial research work on the impact of *COV*ID-19 on *E*ducation in *M*alta with the **Cov-EM** cluster of studies.

The cluster of studies includes five research reports based on surveys presented in this research report and another four reports (Camilleri et al., 2022; Deguara et al., 2022; Milton et al., 2022; Muscat et al., 2022). The key stakeholders in each research report are presented in Figure 1.1 below:
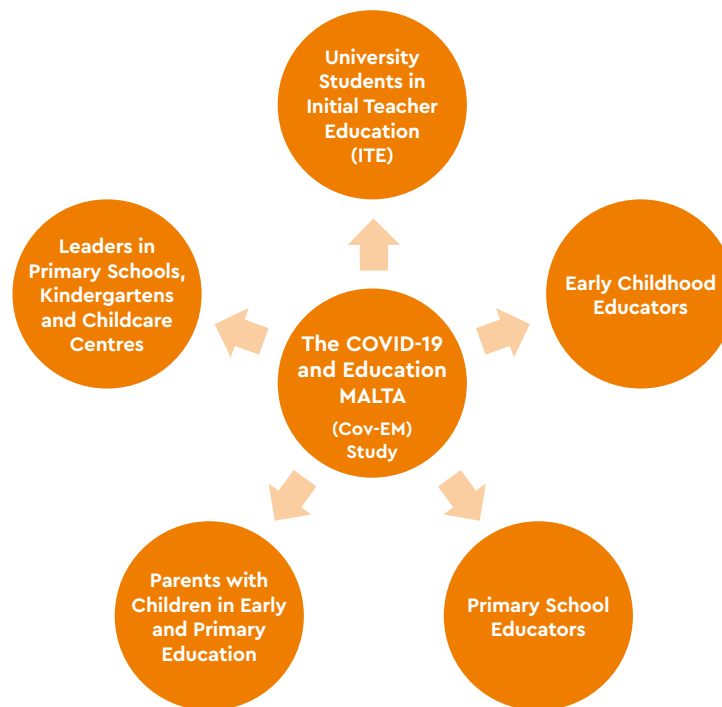
Figure 1.1: The key stakeholders in the cluster of five studies within the overarching Cov-EM study

Each research study offers perspectives from stakeholders in Maltese early and primary education with a focus on three main concepts (see Figure 1.2 below): teaching and learning, learning spaces, and well-being and relationships. The following are how these three concepts - that thread through the five clusters of studies - are understood by the research group for this study:
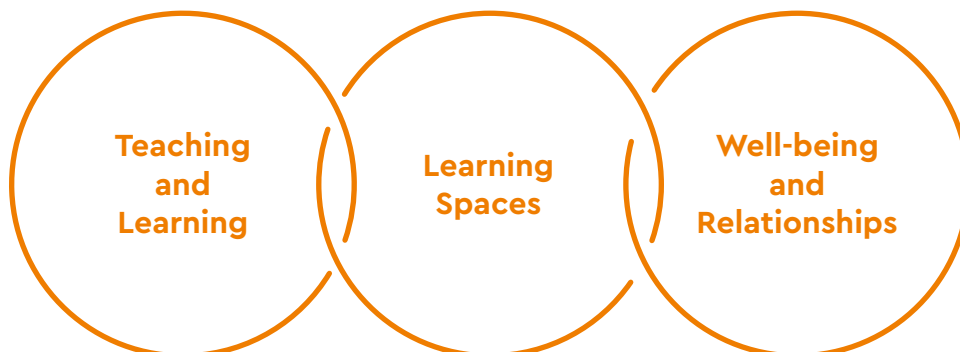
Figure 1.2: **The three concepts that thread through the five clusters of studies**

Teaching and Learning: The term 'teaching and learning' focuses more on the sudden pedagogical shifts - from physical to remote online teaching and learning - brought about by the pandemic. This implies that terms such as hybrid, synchronous and asynchronous teaching and learning, and other new pedagogical discourse are prominent in the way the concept of 'teaching and learning' is unpacked throughout the presented study.

For this research report - contextualised in an early years scenario - the concept of 'teaching and learning' will refer to

Early years curricula – the environments, interactions, relationships, planned and spontaneous learning opportunities and experiences

Early years pedagogies – purposeful pedagogical approaches that make up a meaningful curriculum for young children

Learning Spaces: The term 'learning spaces' refers to those spaces where different stakeholders in early and primary education are experiencing online and/or offline teaching and learning during the pandemic. These include new learning spaces experienced by the various stakeholders: the home environment, online platforms, and childcare centre/school/university learning spaces functioning within both online and offline zones (e.g. children in class and children at home at the same time).

Well-being and Relationships: The term 'relationships and well-being' taps on the following aspects of these concepts as experienced by the different stakeholders during the pandemic:

- **Well-being** - a focus on subjective well-being, i.e. including the different stakeholders' positive and negative subjective evaluations of their lives during COVID-19 times. These include life and work satisfaction and their general physical, social, emotional and psychological well-being as a reaction to the pandemic.

- **Relationships** - the quality and opportunity of spending time with others in their personal (life relationships) and professional lives (working relationships).

The Cov-EM study set off with the intent to include children's voices. Consequently, these five research reports will be followed by a post-Covid research study that includes child participation to ensure that children's voices on this matter are heard (Article 12, United Nations, 1989). The 'Early Years' sector in the Maltese education system refers to the ages of 0-7 (MEDE, 2012). From the age of five, children start compulsory subject-based schooling in primary school settings. Five- to eleven-year-old children attend primary schools (Year 1 to Year 6), followed by another five years in secondary school (Forms 1 to 5).

1.1 The development of the research questions, aims, objectives, and the conceptual framework of the Cov-EM study

While initially it was thought that the COVID-19 emergency was mainly an issue of a few weeks, as things unfolded, stakeholders in education realised that COVID-19 might influence our life for longer than we thought (see Figure 1.3 below). Following two years of COVID times in Malta, newspapers reported that on the 10th of January 2022, as children returned to school, "several classrooms had to resort to online schooling because many students and teachers are stuck in quarantine" (Times of Malta, 2022, p. 1).
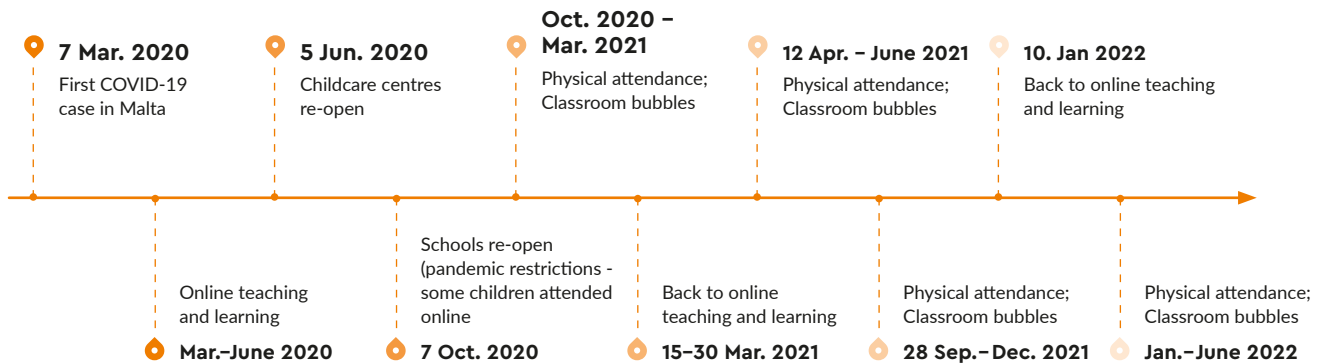
Figure 1.3: Timeline indicating physical attendance and online teaching and learning during the COVID-19 pandemic in Maltese Early and Primary Education (2020–2022).

We continue to evidence how education at all levels is forced to shape and reshape to meet the emerging needs of all learners and rely on several remote methods for a significant part of the learning process. As a research group, we are continuously concerned with how this new reality and changing educational scenarios undoubtedly impact early and primary education stakeholders. When the research group was formed in 2020, we felt it was apt to ask: How is this pandemic impacting the personal and professional lives of stakeholders in early and primary education in Malta over time? Ongoing dialogue, permeated through online meetings (during the first lockdown period), assisted us in identifying the key concepts we wanted to unpack to create new understandings about the impact of COVID-19 on the different stakeholders. We were then able to identify the research questions that also contributed to determining the boundaries of the Cov-EM study - grounded in three main pillars of teaching and learning, learning spaces and well-being and relationships.

The Cov-EM study was conducted over two phases. The first phase, which consisted of sending online questionnaires to stakeholders (university students, early childhood educators, primary educators, education leaders and parents) via social media platforms, was conducted in September 2020. The second run, which likewise consisted of sending adapted online questionnaires to the different stakeholders, was conducted in September 2021.

The overarching research question posed for the five studies, followed by another two subsidiary questions, are:

What lessons can we learn from the perspectives of different stakeholders in early, primary and higher education during the COVID-19 pandemic in Malta?

Subsidiary research question Phase 1:
· *What was the overall impact of COVID-19 on the experiences of different stakeholders (in terms of - teaching and learning; learning spaces; well-being, and relationships) in early, primary and higher education in Malta (between March and June 2020 - the first school closure)?*

Subsidiary research questions Phase 2:
· *What was the overall impact of COVID-19 on the experiences of different stakeholders (in terms of - teaching and learning; learning spaces; well-being, and relationships;) in early, primary, and higher education in Malta (between September 2020 and June 2021 - the second school closure)?*

The ongoing collaborative research process and the identified questions listed above assisted the ECPE research group in

(i) setting the overall aims and objectives (see Figure 1.4) of the Cov-EM study grounded in the three concepts that frame this work;

Teaching and Learning

To understand the successes and challenges of teaching and learning as experienced by different stakeholders during the COVID-19 pandemic over time.

Learning Spaces

To gauge the extent to which the 'new' learning spaces were available, accessible and affordable for different stakeholders during the COVID-19 pandemic over time.

Relationships & Well-being

To gain an insight into the status of well-being and the dynamics of relationships among the different stakeholders during the COVID-19 pandemic over time.

Figure 1.4: The three main aims and objectives of the Cov-EM cluster of research studies.

(ii) generating the conceptual framework (see Figure 1.5) - grounded in three main pillars - most suitable to answer the overarching research question and guide the development of the research design.
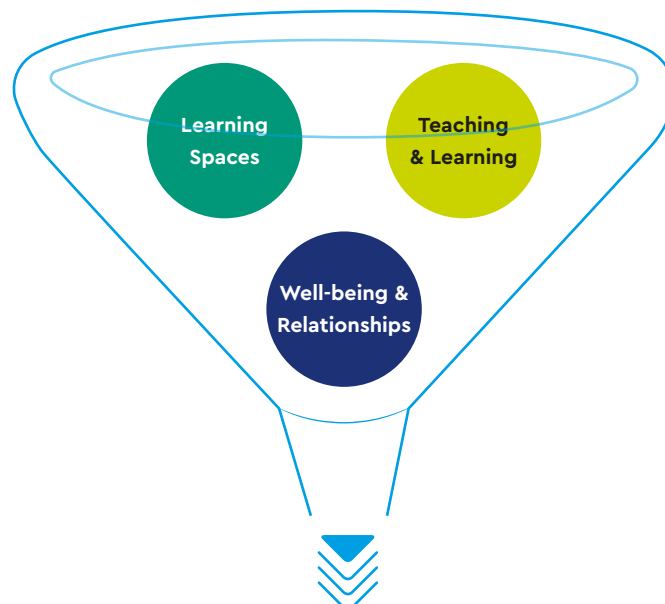
Learning Spaces

Teaching & Learning

Well-being & Relationships

What lessons can we learn from the perspectives of different stakeholders in early, primary and higher education during the COVID-19 pandemic in Malta?

Figure 1.5: The conceptual framework of the Cov-EM study

1.2   Theoretical framework

Pandemic-related disruptions influenced the three concepts that frame the Cov-EM study (see Figure 1.5 above). Thus, relevant literature brought to the fore several classic and emerging theories that assisted in meeting the demands of:

1. new modes of teaching and learning;
2. novel learning environments; and
3. diverse physical and psychological aspects and relationships.

This study is framed in four main theories that apply to the needs mentioned above. As it taps into the concepts of new pedagogical approaches and learning spaces, this research study mirrors **Vygotsky's sociocultural theory (1978)**. His theory is grounded in the belief that knowledge and thought are constructed through social interaction with teachers, peers, family, and friends; the people we learn from, the more knowledgeable others. Vygotsky's theory assists this study in two ways:

(i) The Cov-EM study was designed, developed, and analysed by a group of researchers to co-construct new knowledge through an exploration of how COVID-19 impacted diverse stakeholders in Maltese education; and

(ii) The study discovers how the use of new modes and means facilitated the process of learning from others during a pandemic.

Given the sudden popularity of online learning in the new reality, this study's theoretical frame extends to **Siemens' (2004) contemporary learning theory**. This theory sees the integration of technology and social interactions as a space for the co-construction of knowledge.

Maslow's (1987) popular work, the 'hierarchy of needs', underpins the concept of 'well-being and relationships' in this study. The pandemic brought about new needs in the personal and professional lives of stakeholders in education. Maslow talks about the importance of feeling safe from physical and psychological harm, feeling respected, valued and accepted by others through interactions to realise one's potential. The Cov-EM study uncovers the needs of different stakeholders in education during COVID-19, taking us back to the foundations of Maslow's hierarchy.

The fourth theory that frames this work is **Bronfenbrenner's (1979) ecological systems theory**. In line with his view, the Cov-EM study sees the interaction of different stakeholders and environmental factors (for example, the unprecedented pandemic) as having a major influence on the learners' development, well-being, and learning. With such a theoretical frame of mind, we opted to investigate the impact of COVID-19 on diverse stakeholders in Maltese education.

1.3   The Cov-EM study, Research Report 2: Early Childhood Educators in Maltese Childcare and Kindergarten Settings

The study presented in this research report is framed within a triad conceptual framework (see Figure 1.5 above) to obtain a clearer understanding of the effect that the COVID-19 pandemic had on the pedagogies, learning spaces, well-being, and relationships of Early Childhood Educators in Malta. Participants in this study worked in Childcare centres (service provision for 0-3-year-olds) and Kindergarten settings (service provision for 3-5-year-olds). Most importantly, this study focused on giving early childhood educators a voice following their experience of educating young children during COVID-19. The specific objectives of the research study presented in this research report were:

1. to explore early childhood educators' views and gain insight into the practices adopted following the impact of COVID-19 within childcare centres and Kindergarten settings in Malta;
2. to examine how the rapid shift to online learning and adhering to ongoing updated COVID-19 mitigation measures have affected their lives, practice, relationships with other key stakeholders and their well-being;
3. to learn more about the availability, accessibility and affordability related to new learning spaces used, both online and offline, and how these influenced their practice in early childhood education and care over time; and
4. to uncover what can be learned from the perspectives of early childhood educators in Malta during the first (the scholastic year 2019/2020) and second waves (the scholastic year 2020/2021) of the COVID-19 pandemic.

The main research question selected for this particular study:

What lessons can we learn from the perspectives of Early Childhood Educators working with 0–5-year-olds during the first and second wave of the COVID-19 pandemic in Malta?

Subsequently, the following sub-questions were developed:

(1) How did Early Childhood Educators perceive and implement early years pedagogies during the first and second waves of the pandemic?

(2) To what extent were new learning spaces available, accessible, and affordable to Early Childhood Educators during the first and second waves of the COVID-19 pandemic?

(3) How did the pandemic's first and second waves influence Early Childhood Educators' relationships and overall well-being?

CHAPTER 2

Review of the literature

2.1 The Importance of ECEC against the backdrop of COVID-19

The early years are essential for future success in education and life. It is the most active period for establishing neural connections in the brain (Centre on the Developing Child, Harvard, 2016). During this stage, children are highly influenced by the environment and the people that surround them (UNESCO, 2015). Quality ECEC services are essential for the development of social and cognitive skills of all children in order to build the foundations of learning and help them succeed in school and beyond (Britto & UNICEF, 2017). Having early childhood settings closed during this period in a child's life might impact, at different levels, their social, emotional, physical, and cognitive development and increases the risk of missing out on the early detection of special needs. Providing continuous support for early childhood educators and families during COVID-19 times is a great challenge; however, it is vital to avoid the risk of a long-term impact on the children's overall learning and development.

Following the World Health Organization`s declaration of the COVID-19 pandemic in early 2020, most schools in Europe, including Malta, temporarily closed their doors. In many cases, early childhood education and care (ECEC) services were also closed, although some of them remained open to provide childcare for "essential workers" (European Commission, 2021). There is criticism among the stakeholders in Europe that during lock-downs/emergencies, ECEC was mostly framed as childcare facilities that needed to remain available for parents to work. The sector's key role in children's well-being, inclusion and right to education was undermined (European Commission, 2021).

The importance of ECEC services is well-established by research, and the need to invest in quality ECEC is largely agreed on. Research indicates that investing in the early years is one of the most cost-effective interventions a country can make to yield the highest economic return in human capital compared with investments made at later stages in life (Directorate for Quality and Standards in Education, 2021). A recent analysis shows that an estimate of every US dollar spent on pre-primary education results in US$9 benefits to society (Nugroho et al., 2020). Yet, during the COVID-19 Pandemic, stakeholders in Europe argue that in many countries, the ECEC sector has been insufficiently supported in terms of policy responses and measures, especially when compared to other levels of teaching/learning (OECD, 2021a, 2021c). Also, according to UNICEF Report published in 2020, almost all countries introduced remote learning support during COVID-19 school closures, but only 60 per cent did so for pre-primary education (Nugroho et al., 2020).

2.2 The Impact of COVID-19 on ECEC Pedagogy and Curriculum

The COVID-19 pandemic closed the doors of Maltese ECEC settings in March 2020. As per the set mitigation measures, educators in Malta used various digital learning platforms to facilitate opportunities for online teaching and learning in ECEC (Spiteri, 2020). Although Malta's Ministry for Education has been investing in digital infrastructure, including a virtual learning environment, since 2012, the system was aimed at supporting traditional learning and was not designed as a fully-fledged e-learning platform. Research indicates that the swift shift to e-learning as an emergency response - emergency remote teaching (ERT) - introduced an unprecedented educational context (Hodges et al., 2020; Vassallo et al., 2021).

Since the beginning of the pandemic outbreak in early 2020, national and international institutions created various resources and support systems to assist educators, families and learners in digital literacy and online teaching and learning toolkits for all levels, including pre-schools (UNESCO, 2020). However, surveys also show a great discrepancy in the support provided to pre-school teachers when compared to primary school teachers; the findings indicate that the latter received greater guidance in adaptive lesson plans and ICT training (Alban Conto et al., 2020; OECD, 2021c).

During the school/centre closures, ECEs used a variety of synchronous and asynchronous distance learning methods to be able to continue supporting children and their parents, such as sending instructions/learning materials to families through email, phone calls, and messaging applications; using web-based learning environments with games and recorded audio/visual content; and live video conferences with pupils and their parents (European Commission, 2021). Although there is limited research available on the most frequently used mode of distance education by ECEs during school/centre closures, various surveys indicate that asynchronous modes of distance education were opted for more frequently in comparison to synchronous modes, especially during the initial stages of the lockdowns (Foti, 2020; Steed & Leech, 2021).

It is also important to point out the mismatch between the majority of digital solutions (not initially designed as educational tools) used during school/centre closures and young children's learning and development needs. According to a survey conducted among kindergarten teachers in Italy, online teaching/learning helped to maintain the bond between the pupils and educators. Yet, some educational activities seemed impoverished because of the absence of physical contact (Panesi et al., 2021). Also, during the COVID-19 pandemic in Poland, Kindergarten teachers reported that they did not prioritise assessment of the social and emotional development of the child (Jankowiak et al., 2020).

ECEs are trained to work with children in settings that promote respectful and reciprocal interactions, relationships, and playful learning opportunities within a shared physical environment (Shorty & Jikpamu, 2021). A shift in focus from hands-on learning experiences in ECEC settings to online early learning is not only going to affect young children's learning and development but also redefine and reshape the terms 'pedagogy' and 'curriculum' in the context of ECEC and in the initial teacher education (ITE). Shorty and Jikpamu (2021) argue that ECEC and teacher training for early childhood educators should be re-imagined to include online early learning strategies. Early childhood educators need pre-service and ongoing in-service training in digital literacy skills to maximise young children's learning in offline and online spaces over time. According to OECD (2020) survey on Distance Education for Young Children, 50% of the participating countries have measures planned to include remote and/or hybrid teaching and related ICT skills as part of early years pre-service teacher training programs.

Hodges et al., (2020) argue that carefully planned remote teaching/learning content conveys a research and development process of instructional tools, methods, and resources appropriate for acquiring desired outcomes. Educators need to possess adequate online teaching and learning skills. They need to be able to juggle seamlessly between their use of online and offline pedagogical and communication skills and offer a meaningful curriculum for young learners to develop holistically. Educators' ability to tap on multiple layers of knowledge is of the essence for optimal learning results in ECEC and beyond (Shorty & Jikpamu, 2021).

2.3 The Impact of COVID-19 on ECEC Learning Spaces

The inception of COVID-19 has brought about major changes in the learning spaces educators and learners experience daily (Bennett & Jowallah, 2022). UNESCO calculates that school closures impacted around 1.6 billion learners across 169 countries (The Alliance for Child Protection in Humanitarian Action, 2022). This implies that most young children experienced significant changes in their daily lives with the inaccessibility to ECEC services (Squires et al., 2021). The sudden shift, and ongoing changes in their environment, influenced their interactions, learning, development, well-being, relationships, and the spaces in which these are nurtured. Many children experience physical isolation (Araújo et al., 2021).

It is essential that ECEC members of staff partner with families and interact with the microsystem of the home environment to support children's overall learning and development (Egan, 2021). Given the importance of the home-learning environment, ECEC curricula must strive to build links between these two settings and identify ways to support families as a key mechanism to support children's learning, development and well-being (OECD, 2021a). It was important for all children attending ECEC services to maintain links with the adults who acted as their caregivers in their settings as they had experienced several sudden transitions between home and ECEC settings during the pandemic. Research shows that sudden transitions and attachment loss with primary caregivers in the home and early years impact the developing brain (Centre on the Developing Child, Harvard, 2016). During the closure of ECEC settings, many children shifted from hands-on learning to meeting their ECEs and peers in an online space with their parents/guardians at home.

Various international and country-specific research indicates that countries faced challenges while providing online/virtual learning spaces within the ECEC setting in at least three main areas:

i. *Digital infrastructure* - Lack of access to sufficient internet connection and lack of equipment (e,g, tablets, computers) in children's homes were reported as a "major" to "moderate" challenge, which highlighted the inequalities in the access to online learning spaces in 70% of the G20, OECD and its partner countries (OECD, 2021). It is also important to note that in Malta, schools and pupils are comparatively well equipped with ICT tools, particularly at the primary level (82% vs 35% at the EU level) (European Commission, 2020a). Yet, Malta`s 2014-2020 Digital Education Agenda and its metrics focused on children in grades 4 and above. The digital infrastructure within the ECEC setting was not touched upon in these platforms (Government of Malta, 2019; Ministry for Education and Employment, 2016).

ii. *Families' engagement in remote learning* - Parents' availability, motivation and skills and the challenge of using new technologies efficiently with young children were also important factors in ECEC settings during the pandemic. (European Commission, 2021). According to a survey, most parents (of kindergarten and primary school children in Malta) claimed that having to share devices between multiple family members and experiencing difficulties coping with multiple responsibilities had a negative impact on their children`s attendance at e-learning sessions (Vassallo et al., 2021).

iii. *Appropriate digital learning tools for young children* - ECEs reported the lack of training and pedagogical redirection provided to them, especially in the developmentally appropriate use of learning technology with young children (Ford et al., 2021; OECD, 2021b; Steed & Leech, 2021). Furthermore, surveys also indicate concerns about young children`s possible overexposure to screens and their vulnerability to inappropriate online materials (European Commission, 2021; Pramling Samuelsson et al., 2020). Although the COVID-19 pandemic highlighted the challenges of adapting ECEC curriculum to developmentally appropriate online learning spaces, European Commission's 2021-2027 Digital Education Action Plan does not include any specific action for ECEC settings; it has various action plans for primary and secondary schools (European Commission, 2020b).

Nevertheless, a great portion of the literature stipulates a higher learning loss during the COVID-19 pandemic in young children with special needs who come from households with socioeconomic difficulties (Chen et al., 2021; Nugroho et al., 2020; Picken et al., 2021). These concerns once again highlight a need for the provisioning of resources which may be lacking in the home environment (Davies et al., 2021).

After reopening schools/centres, surveys indicate that ECEs felt challenged while sustaining the new hygiene and social distancing protocols with young children (Pramling Samuelsson et al., 2020; Sheasley, 2020). To overcome these challenges, educators were advised to rethink children's daily routines, including adopting whole class activities and games into the new setting and utilising outdoor time (United Nations Children's Fund, World Bank and United Nations Educational, Scientific and Cultural Organization, 2020). Educators have made adaptations to traditional classroom activities like circle time, recess, and meals to reduce large groupings while still giving the opportunity to the children to play with their peers (Sheasley, 2020)

Spiteri (2021) argued that there are protocols and mechanisms in place for the safe reopening of schools in Malta; yet, none of these has considered outdoor learning as an effective measure to minimise the transmission of the virus among young children. In the same vein, according to the European Commission on ECEC (2021) report, the promotion of outdoor learning in the early years should be prioritised and take any necessary changes into account in a post-pandemic agenda.

2.4 The Impact of COVID-19 on ECEs Well-being and Relationships

Working in early childhood education is viewed as psychologically and physically demanding, which places ECEs at risk for high job-related stress (Kelly & Berthelsen, 1995). Before the pandemic, the ECEC sector experienced difficulties, such as lack of recognition, staff shortages, and low salaries; synonymous with early childhood education in several countries (Eadie et al., 2021; McMullen et al., 2020; Seo & Yuh, 2021). Seo and Yuh (2021) associate teachers` well-being with their capacity for resilience which can be defined as a teacher's positive adaptation to an adverse situation. In times of crises, the concept of resilience is particularly beneficial in understanding what educators need to adapt to changes in their work environment while maintaining their physical, emotional, and psychological well-being. In this light, policy frameworks and surveys indicate the importance of recognition and support provided by the leaders and managers in ECEC services to ECEs concerning their professional and psychosocial needs (Eadie et al., 2021; United Nations Children's Fund, World Bank and United Nations Educational, Scientific and Cultural Organisation, 2020).

According to recent research, the main issues threatening ECEs' well-being during the COVID-19 pandemic were health and safety issues at the workplace, employment and financial issues, increased workload, and stress. In surveys, ECEC educators highlighted the impossibility of maintaining physical distance and the difficulty of wearing masks when working with very young children; as well as their concerns about contracting the virus while communicating with children, their parents or colleagues (Hemmerich et al., 2021; Pramling Samuelsson et al., 2020).

In some European countries, ECEs are faced with the risks of pay deductions, unemployment, or redundancy during the physical closure of centres/schools (Van der Graaf et al., 2021). In Malta, the independent schools` parents were reluctant to pay school fees if the schools were closed. To maintain these schools and support remote learning, the Maltese Government agreed to a 35% fee reduction during the last term of the 2019/2020 school year (Agius, 2020). EURYDICE (2021) reports that educators working in private schools would receive subsidy wages as they continued to provide online learning. ECEs reported extra duties due to absent colleagues or having too many children in their classrooms (OECD, 2021a). Increased workload and stress due to efforts required for creating materials and adopting online learning spaces were also reported. Monitoring and supporting children living in households with socioeconomic difficulties or children with individual educational needs were among the main concerns of ECEs - this reality led to added workload and stress for ECEs during the COVID-19 pandemic (Jones, 2020; Panesi et al., 2021).

The literature above identifies the need to research how the COVID-19 pandemic is impacting educators working with young children over time. Research is urgently needed to inform policy, future research and early years practice in days, months and years. The Cov-EM study presented in this report sought to fill in this research gap by unfolding the concepts of 'teaching and learning', 'learning spaces' and 'well-being and relationships' through the voices of educators working with 0-5-year-olds in Malta. The quicker we gain a deeper understanding and learn how to cope within the 'new normality' in the early years sector, the more equipped policymakers, professionals, leaders, early childhood educators and families become to help young learners meet their needs as well as progress successfully. Young children's needs cannot wait (Bonello, 2020).

CHAPTER 3

Research Design and Methodology

Given the urgency for valid, reliable, and representative data during unexpected circumstances, the study aimed at objectively capturing, in a broad sweep, the reality experienced by diverse stakeholders in education. Consequently, this study adopts a positivist epistemological stance to remain detached from the participants and employ largely quantitative research methods. The reported study explored the impact of COVID-19 on the personal and professional lives of ECEs through two online surveys. The initial intention was for the quantitative study to be carried out once in September 2020. However, given that the pandemic was still with us a year later, the ECPE research group decided to launch a second run of the study in September 2021 using a modified version of the questionnaire. The online questionnaires included open-ended questions to provide the opportunity for participants to elaborate on their responses.

3.1   The Participants

The participants of the study were educators working in the kindergarten and childcare sector (0 - 5 years) in Malta. Recruitment of participants took place through the dissemination of the online survey via social media platforms. Table 3.1 below presents the participants according to their role in education (further detail in Appendix section):

Participants' Role	Scholastic Year 2019/2020 1st Run		Scholastic Year 2020/2021 2nd Run	
	N	%	N	%
Kindergarten Educator	201	76.4	58	73.4
Childcare Educator	30	11.4	0	0
Learning Support Educator	29	11.1	11	13.9
Other	3	1.1	10	12.7
Missing system	*0*	*0*	*0*	*0*
Total	**263**	**100**	**79**	**100**

Figure 3.1: Participants' roles and the academic year they participated in this study

During the first survey a total of 263 participants completed the online questionnaire. Of these, 99.2% (n=261) were Maltese nationals. The sample was composed of females, and only one respondent identified as male. The participants ranged from 18 to 64 years, with the average age group being 36.1 years.

For the second run of the survey in September 2021, a total of 79 responses were registered. Of these, 97.5% (n=77) were females and 2.5% (n=2) were males. The average age group was 40.2 years however, the ages of the total participants ranged from 18 to 64 years. 89.9% (n=71) of the respondents were Maltese nationals.

The participants of the first and second surveys were similar in terms of the distribution of gender and nationality, as the great majority of the participants were female, Maltese nationals. However, the average age group of the participants were different between the first and second survey.

The first survey yielded a higher response rate, which can be seen as a result of higher social media usage rates when the pandemic was declared for the first time. Educators used social media channels frequently during school closures to share and collect information and reach out to students, parents and to their communities in general (Pace, 2020; Rehm et al., 2020).

3.2 The Survey

3.2.1 Online Survey

Using an online survey was particularly advantageous due to limitations imposed during the COVID-19 pandemic such as lockdowns and personal distancing rules. We managed to collect data regardless of the pandemic limitations and were able to process it in an effective and efficient manner as data was immediately available (Sumi, 2019). Despite the advantages of an online survey, according to Wright (2005), the main disadvantage may be encountered in relation to sampling issues due to respondents being those who regularly use the internet and social media. However, the results of Survey 1 and Survey 2 indicate that there was a fair distribution in terms of the participants` age groups. Moreover, recent studies show that educators used social media channels frequently during the pandemic to communicate with their communities (Rehm et al., 2020).

3.2.2 The Questionnaires

The questionnaires focused on the participants' experiences during COVID-19 times. The questionnaires were designed by the research team and were available in English. This first questionnaire consisted of 46 items, of which 2 were open-ended questions. The closed-ended questions were mainly close-ended multiple-choice and 5-point Likert scales. An open-ended question was included at the end of both questionnaires to elicit any additional comments from the participants.

The second questionnaire was planned to draw on experiences, perceptions and practices between September 2020 and June 2021. A number of items were retained from the first questionnaire, some were adapted to reflect the changes in the situation since the previous year, and others were new. The second questionnaire included 30 items, of which 4 were open-ended. Some items pertaining to the previous version were reduced to encourage more participants to complete the questionnaire and reduce the incidence of partial or missing data. The questionnaires were designed in sections as indicated in Table 3.2 on the following page:

	Questionnaire Sections	Q1	Focus and number of items in the first questionnaire	Q2	Focus and number of items in the second questionnaire
1	Demographics & Background	9	age, gender, nationality, region, type of residence, role in education	7	same items were asked except the number of household members by age group' and 'type of residence'
2	Pedagogy & Curriculum	22	The pedagogy, curriculum, and schedules during and after school/centre closures, the type and usage frequency of remote/online teaching tools. ECEs level of satisfaction with the support of the management teams and parents and with the overall outcomes of remote teaching/learning	12	In addition to the questions related to pedagogy, curriculum, and schedules; educators were also asked to compare their level of satisfaction and skills on the online/offline mode of teaching & tools when compared to last year.
3	Learning Spaces	5	Physical Working Environments during school/centre closures, virtual learning spaces and educators` overall experiences and perceptions of the online and physical teaching spaces during and after school/centre closures.	4	Similar items were used within a broader time interval (2020-2021).
4	Well-being & Relationships	11	Educators' well-being, adaptation strategies and resilience during COVID-19 pandemic; advantages and disadvantages of working from home; the level of support received from inside and outside school networks.	7	Similar items were used within a broader time interval (2020-2021).
	Number of items	46		30	

Figure 3.2: Sections and number of items for first and second online surveys

Both versions of the questionnaire were field-tested with a number of volunteers before being disseminated amongst a small pool of educators. The feedback obtained was valuable in ensuring the questions were clear, and answerable and that potential technical difficulties with the online format were resolved.

3.3   Data Collection and Analysis

The surveys were launched online using SurveyMonkey and were disseminated on social media through various Facebook groups and pages between August and September 2020 and then again in September 2021. The data were later extracted and imported into SPSS for analysis.

3.4 Ethical Procedures

The study was approved by the research ethics committee at the Ministry of Education and the University of Malta Research Ethics Committee. The online questionnaires included an introductory page detailing the purpose of the study and a data protection statement to explain the procedures set up to ensure data would be collected, stored, and used in an ethical manner. Participants were assured responses would remain anonymous, IP addresses would not be collected, and the data would be used solely for the purposes of the research study. They were also informed that participation was voluntary and that submitting the questionnaire would be considered as granting informed consent (Allen & Roberts, 2015). No gifts or other incentives were offered to prospective participants. Contact details of the research group were available should additional information be requested.

3.5 Limitations

The technical design of the first survey allowed respondents to skip as many questions as they wished and this led to missing data for a number of question items, resulting in a substantial amount of missing data and fewer complete data sets per participant. In the second questionnaire, this was countered by the design of the survey, and participants only proceeded to the 'next question' (excluding the open-ended items) once the previous one was complete. The second survey was planned quite unexpectedly due to the ongoing nature of the pandemic. Hence, if we had known at the outset that the survey would take place twice, the items in the first questionnaire may have been planned differently to enable better comparisons between the first and second runs. Also, the same participants could have potentially been followed up in the second survey allowing for a longitudinal study.

CHAPTER 4

Findings

The findings from both surveys are included in this section. The demographics of the participants of both surveys are presented concurrently. The data for both surveys will be presented and discussed sequentially, starting with the 2020 data, followed by the 2021 data. A concluding discussion highlights the similarities and differences in the findings of both surveys. The main findings will be discussed in light of the relevant literature, underpinning theories, and within the three concepts that frame this work - Teaching and Learning, Learning Spaces and Well-being and Relationships.

4.1   Respondent demographics

The first questionnaire (2020) was completed by 263 educators working with 0- to 5-year-olds. Data from the introductory Demographics and Background section reveals that the majority of the respondents were female (only one was identified as male) and their ages ranged between 18 to 64 years while the average age group was 36.1 years. The second questionnaire (2021) yielded 79 respondents with the majority (97.5%, n=77) being female and the average age group was 40.2 years. The majority of the respondents of the first survey were kindergarten educators (76.4%, n=201). Likewise, the second survey also received the majority of responses from kindergarten educators (73.4%, n=58) in comparison to other educational roles within the early childhood education sector for the under-fives in Malta. More information pertaining to the participants of both surveys is available in Table 3.1 above, as well as in a detailed table in the appendices (see Appendix).

4.2 Results of the First Survey

The results of the first survey, held in September 2020, are presented through a selection of figures that capture the frequencies of responses to each questionnaire item. These are clustered into the three sections as indicated in the triad conceptual framework model (see Figure 1.5) and are presented in the following order: teaching and learning, learning spaces, and well-being and relationships.

4.2.1   Teaching and Learning

Figure 4.1 indicates how ECEs were directed/encouraged by their school/childcare management team at the beginning of the physical closure of schools/childcare centres. The respondents stated that 49.2% of the leaders recommended to their educators to use the school/centre online platform and/or social media pages to communicate with parents. On the other hand, 47.2% encouraged their educators to choose whichever approach they prefer. Moreover, 37.9% recommended using emails to communicate with parents while only 13.8% encouraged their educators towards a school-wide / childcare policy to do real-time online sessions every day.

At the beginning of the physical closure of schools/childcare centres the School/Childcare Management Team recommended/encouraged/directed staff to proceed with:
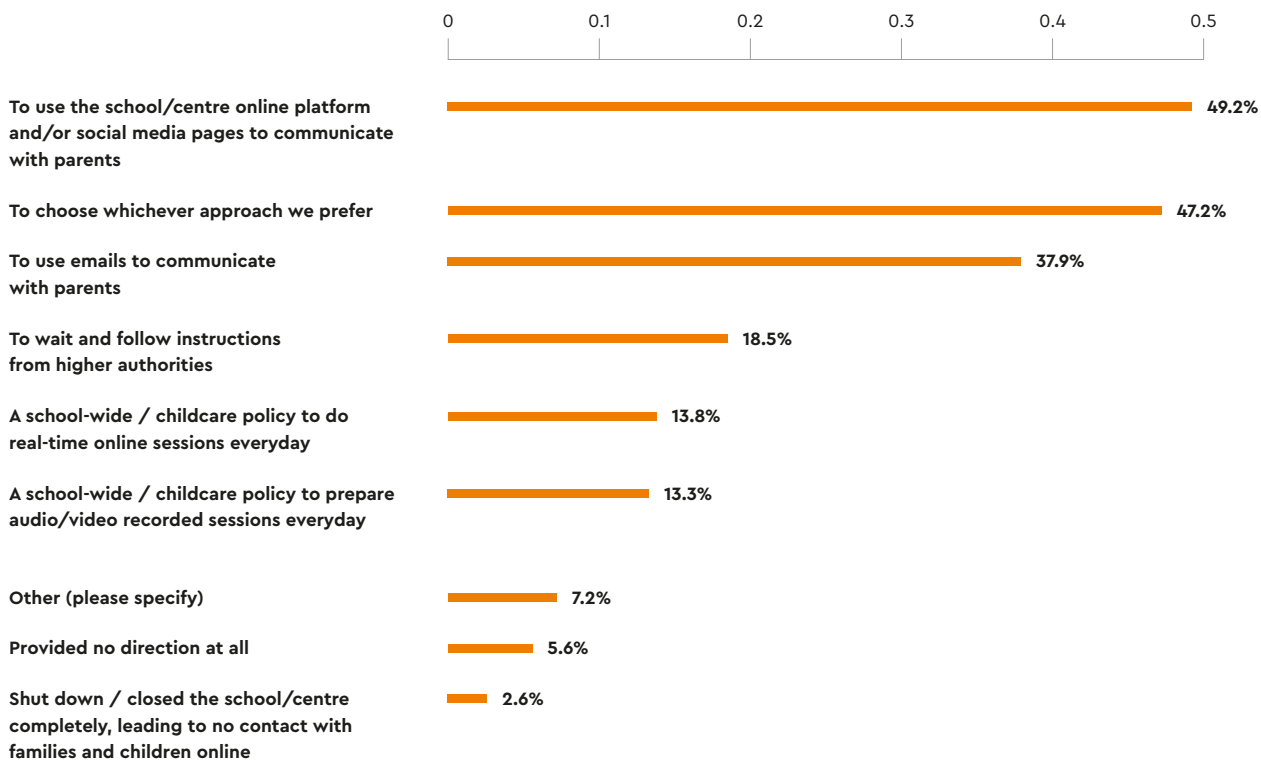
Figure 4.1: How Management Teams recommended/encouraged/directed staff working with the under-fives at the beginning of the physical closure of schools/childcare centres

Surprisingly, between April and June 2020 (Figure 4.2), almost half of the school/centre managers did not recommend any revision or improvement and encouraged retaining the same approach (the approaches referred to in Figure 4.1) from the beginning of school closure - March 2020 (46.1%). However, although not in the majority, a better schedule of regularly planned sessions (36.1%), more real-time online sessions (35.1%) and more recorded online sessions (19.9%) were also encouraged by some of the school/centre management.

During the third term the School/Centre Management Team recommended:
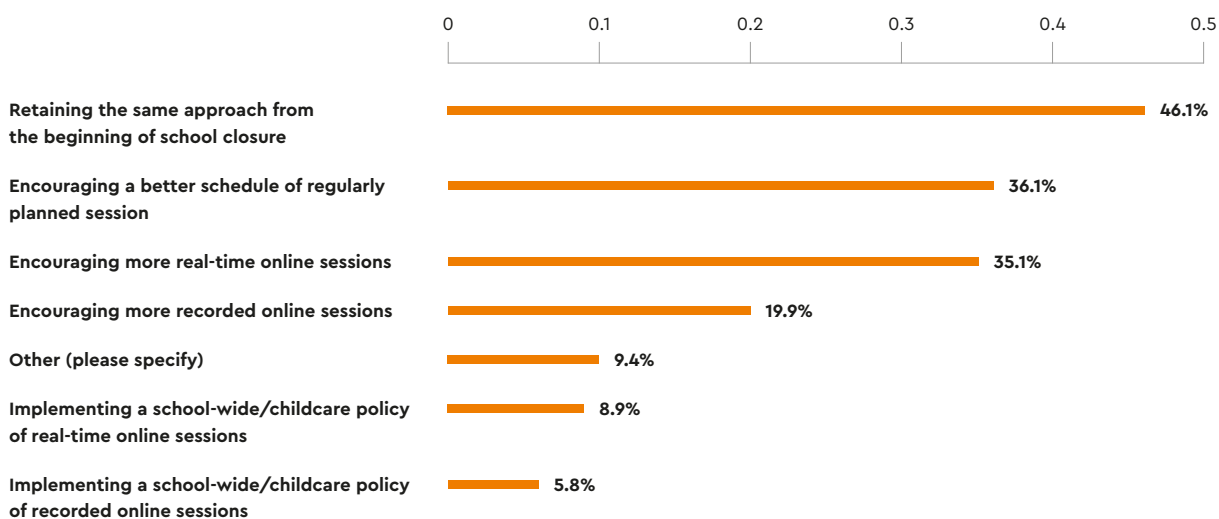
Figure 4.2: What school/centre Management Teams recommended during the third term of the scholastic year 2019–2020 (April – June 2020) – after the first school closure in Malta

The respondents working in childcare centres stated that after the reopening on the 5th of June 2020, the majority of the centre management teams (71.4%) recommended developing a new approach of how to use resources in the centre to offer learning opportunities while also keeping a well-state-of-mind. The findings also indicate that half of the childcare respondents experienced management teams who encouraged new procedures to communicate with parents and interactions that promote the well-being, safety, and security of the children.

Figure 4.3 demonstrates how ECEs supported families and children remotely during the first physical closure of schools/centres in Malta. A great majority of the respondents sent emails to parents with instructions and/or links to learning opportunities (89.1%) and with PowerPoints (75.1%) and worksheets (75%). Also, 59.6% of the ECEs stated that they provided support through sharing video-recorded learning opportunities. The majority of ECEs said that they "rarely or never" conducted live sessions with parents to support their children's learning and development at home (66.9%) or live sessions with small groups of children through video conferencing (59.9%). On the other hand, live whole-group sessions with children through video-conferencing were used by half of the respondents either often/very often (26.2%) or sometimes (22.7%). However, 38.4% of the respondents stated that they "never" conducted live whole-group sessions with their pupils.

Figure 4.3: How ECEs supported families and children during school/centre closures

Figure 4.4 shows the frequency (how many days per week) the ECEs used various remote teaching tools as mentioned in Figure 4.3. The majority of the respondents (55.6%) sent emails to parents with instructions and/or links to learning opportunities either every day or 3-4 times a week, making it the most common and frequently used approach by the ECEs during COVID-19 school closures during the first lockdown. The majority of the respondents "never" conducted real-time (live) sessions with parents to support their children's learning at home (70.2%), real-time (live) sessions with small groups of children through video conferencing (62.6%) or real-time (live) whole-group sessions with children through video-conferencing (54.2%). Video-recorded learning opportunities were conducted by 60.6% of the respondents at least once a week.

The frequency of using remote teaching tools during school/centre closures
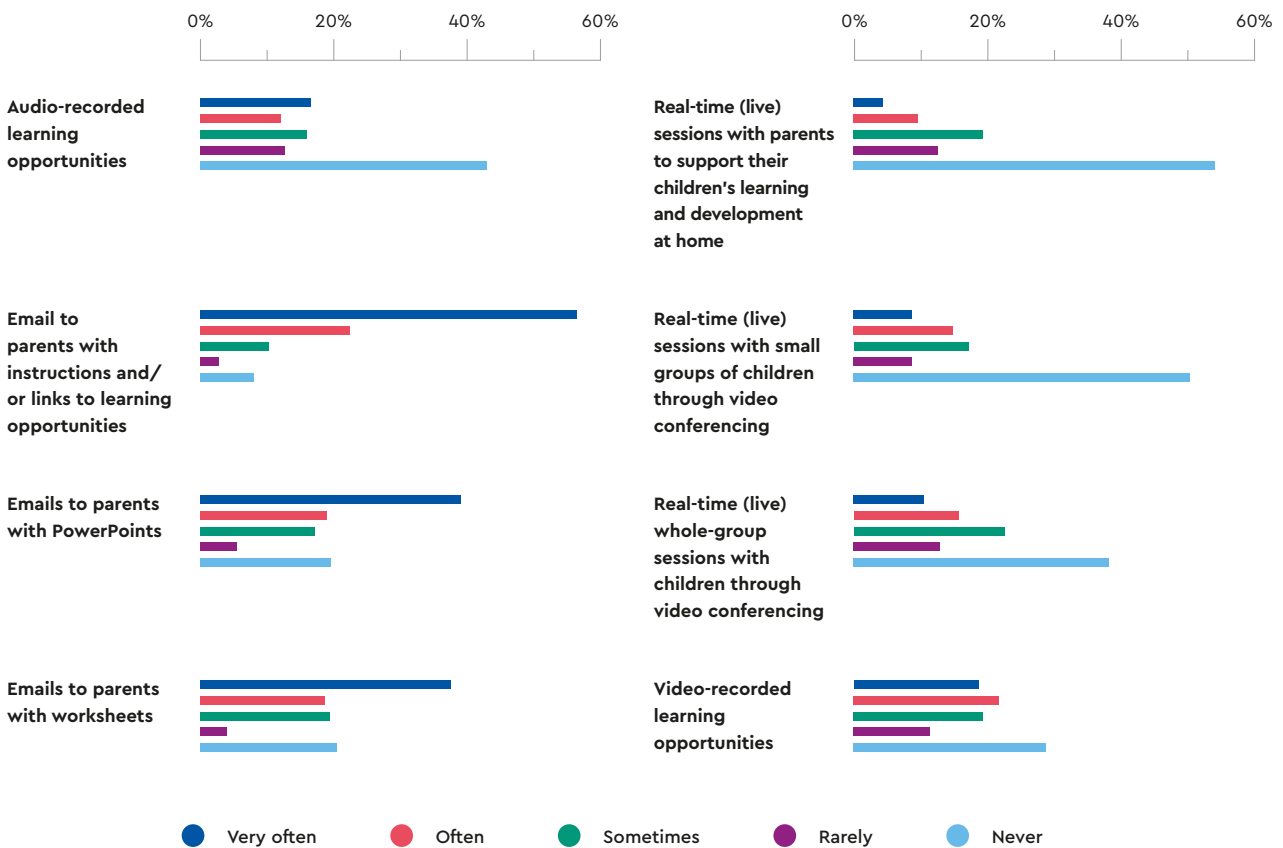
Figure 4.4: The frequency of using remote teaching tools by the ECEs during school/centre closures

When ECEs were asked why they used live real-time (synchronous) sessions (Figure 4.5), the majority stated that they were enjoying the interaction with the children (66.1%) and it felt as a more natural way of communication (51.8%); the children were interacting with their peers and participating actively (50%). Almost half of the educators declared that real-time (synchronous) sessions also gave the opportunity for parents to ask questions and follow up with their children (40.2%). A minority (16.1%) of the respondents conducted real-time (synchronous) sessions because they were directed by their school/centre to do so. In view of the introduction of the emergent curriculum in Maltese early years settings, 22.3% stated that synchronous sessions allowed them to implement an emergent approach to the curriculum offered within an online space. 34.8% stated that depending on the outcomes of the activities and the children's interaction and interests, they can inform future planning more effectively.

I use live real-time sessions because:

I enjoy interacting with the children — **66.1%**

I feel it is more natural for me to communicate with the children in real-time — **51.8%**

The children interact and participate more — **50%**

Children interact with their peers — **41.4%**

Parents can ask me questions and follow with their child — **40.2%**

I enjoy communicating and supporting parents — **34.8%**

Depending on the outcomes of the activities and the children's interaction and interest, I can plan the following action — **34.8%**

I re-do or modify a learning opportunity if I notice that the children are not following — **26.8%**

It is more like our regular sessions in class/setting (pre-COVID) — **25.9%**

Allows me to implement the emergent curriculum — **22.3%**

Other (please specify) — **20.5%**

It takes less time than recording a session — **18.8%**

My school/childcare setting directed me to do so — **16.1%**

I do not want to risk anyone keeping one of my recorded lessons — **7.1%**

Figure 4.5: The frequency of using remote teaching tools by the ECEs during school/centre closures

When ECEs were asked why they preferred recorded sessions (asynchronous) for/with young children (Figure 4.6), the majority (72.6%) of the respondents stated that this gave the opportunity to the families to view them at their convenience during the week. Half of the respondents also stated that through recorded sessions (asynchronous), families could have more flexibility to share devices and prepare quiet working spaces. Moreover, half of the respondents also said that the option to use the edit function and the flexibility to work around family commitments and their own schedule are other advantages of recorded sessions (asynchronous). 17.7% of the educators pointed out that they opted for asynchronous sessions because, during real-time online (synchronous) sessions, they experienced some disruptions from parents. On the other hand, respondents highlighted several challenges they faced during asynchronous sessions. For example, 23% felt that live sessions (synchronous) were not successful with this age group. Also, 15% of the respondents expressed a concern that they might have internet connectivity issues. Additionally, 11.5% of the respondents prepared recorded sessions because they were directed by their school/centre to do so.

I record and do sessions with/for young children because:

Families can view them at their convenience during the week	72.6%
Families can have more flexibility to share devices and quiet working spaces due to siblings and/or parent/s working from home	55.8%
I can prepare better sessions as I can edit before sending them	52.2%
I can work according to my schedule and family commitments	49.6%
I can record some sessions in advance and then send them daily	29.2%
It is more efficient since there are no interruptions during my sessions	27.4%
I feel too self-conscious with parents being 'present' during sessions	27.4%
I am using new digital skills, so I feel more confident recording	24.8%
When I tried a live session, it was not successful	23%
In live sessions parents sometimes disrupt the lesson	17.7%
I worry that my internet connection will not be reliable enough for a live session	15.9%
Other (please specify)	15%
My school/childcare directed me to do so	11.5%

Figure 4.6: The reasons why ECEs chose recorded sessions (asynchronous)

Similarly, the majority of ECEs used PowerPoints, preplanned work, and worksheets (Figure 4.7), as a tool for remote online teaching for convenience (60.7%) and flexibility purposes (43.6%) (educators and families) and due to several challenges faced during live sessions (synchronous). Only 5.1% of the respondents were directed by their school/centre management to do so. 18.8% claimed that parents expected them to send work/worksheets. 23.9% declared that worksheets are easy to find on the internet and easy to develop (35%). It is also interesting to point out that 31.6% of the respondents consider the use of worksheets with letters and numbers as an essential tool to prepare young learners for formal schooling, whilst 26.5% claim that these worksheets were pre-planned to form part of the learning programme they provide. Only 5.1% of the leaders expect ECEs to use worksheets. 13.7% feel too self-conscious about parents being 'present' during real-time sessions.

I send work/worksheets to the children's parents/guardians because:

Label	Value
Families can view them at their convenience during the week	60.7%
Families can have more flexibility to share devices and quiet working spaces due to siblings and/or parent/s working from home	43.6%
Easy to send to parents	40.2%
They are easy to develop	35%
Worksheets with letters and numbers are very important to prepare children for next year	31.6%
I can look for worksheets at my own pace and in my own time according to my schedule and family commitments	26.5%
Children need to complete the worksheets that were planned to be included in the learning programme within the school/centre	26.5%
They are easy to find on the internet	23.9%
I can develop or find several worksheets in advance and then send them daily	21.4%
Other (please specify)	18.8%
Parents expect me to	18.8%
It is more efficient since there are no interruptions during my sessions	15.4%
I feel too self-conscious with parents being 'present' during real-time sessions	13.7%
In live sessions parents sometimes disrupt the lesson	10.3%
When I tried a real-time online session or a video-recorded session, they were not successful	8.5%
My school/childcare directed me to do so	5.1%
Leaders in school or centre expect me to	5.1%
I worry that my internet connection will not be reliable enough for a live session	4.3%
They take me very little time to prepare	0.9%
Real-time sessions, recorded sessions and Powerpoint presentations with photos take a long time to make	0.9%

Figure 4.7: Sending work/worksheets during the first wave of the pandemic

Figure 4.8 below, shows how the majority of educators spent more time attending webinars to improve digital literacy skills and planning learning opportunities when compared to pre-closing of the schools. According to the responses, around 45% of the ECEs spent more/much more time preparing resources, sending feedback, and supporting families. On the other hand, 50% of the respondents stated that they spent the same amount of time prior to the pandemic on planning with the LSE/s to support children with special educational needs.

A great majority of respondents stated that during the pandemic lockdown, they spent less time observing children (81.5%), interacting with children (77.4%) and assessing children's learning and development (72.6%). Also, half of the respondents spent less time meeting with colleagues and school leadership/managers see (Figure 4.8).

Compared to pre-closing of schools, how much time did you spend on the following during lockdown?

	Much more	More	The same	Less	Much less
Supporting children with special educational needs	16%	14%	26%	23%	20%
Support families	25%	21%	33%	11%	10%
Sending feedback	18%	26%	26%	17%	13%
Preparing, planning and implementing an online learning programme emerging from the children's interests, ideas and questions	20%	16%	20%	24%	19%
Planning with the LSE/s to support children with special educational needs	6%	15%	50%	11%	18%
On preparing resources	28%	16%	25%	18%	13%
On planning learning opportunities	28%	26%	29%	10%	8%
Observing children	5%	7%	7%	38%	44%
Interacting with children	6%	5%	12%	40%	38%
In meetings with School Leadership/Centre Managers	14%	12%	24%	24%	26%
In meetings with colleagues	18%	9%	18%	28%	28%
Communicating with parents of children with special educational needs	14%	13%	39%	15%	18%
Attending webinars to improve digital literacy skills	26%	25%	21%	14%	14%
Assess children's learning and development	8%	5%	14%	34%	39%

Figure 4.8: How ECEs spent their time during the pandemic lockdown when compared to the pre-closing of schools.

Among the educators who were engaging in live sessions, 39.1% use the "mute all" function. This was a pedagogical decision by educators based on the following reasons (see Figure 4.9): It might get too noisy if all microphones are left open (74.2%), there could be too much background noise in the homes (72.7%) and allows the possibility for the educator to ask questions to specific children as necessary (60.6%). 43% confirmed that they did not deliver any live (synchronous) activities.

I use the 'mute' function to:

It gets too noisy if I leave all mics open	**74.2%**
There is too much background noise in the homes	**72.7%**
I can ask questions to specific children as necessary	**60.6%**
It helps me to gain the children's attention when I need to explain	**48.5%**
It helps focus their attention to listen when a peer talks	**45.5%**
It helps me include children who are a bit shy	**40.9%**
Some children get anxious/upset if there is too much noise	**37.9%**
I need to fit in as much as I can in the session	**9.1%**
I get distracted if the children interrupt when I talk	**9.1%**
I am the educator and they need to listen to me	**3%**

Figure 4.9: Why ECEs used the "Mute All" function during live sessions

During live sessions (synchronous) (Figure 4.10), child participation took place mostly when interacting orally with the educator (54.3%) and/or answering questions posed by the educator (53.2%); and when expressing their emotions and thoughts, through gestures and other modes of expression (50%). The data also indicates that young children's level of participation increases when they are supported by their parents (44%) as opposed to when they are engaging in independent learning opportunities (31%).

Children's participation during live sessions

Figure 4.10: Children's participation during live sessions

During the lockdown, the amount and frequency of learning opportunities per week were mostly decided by ECEs (72.7%). 38.3% of the respondents stated the school/childcare leadership teams were influential. On the other hand, 12% of the respondents state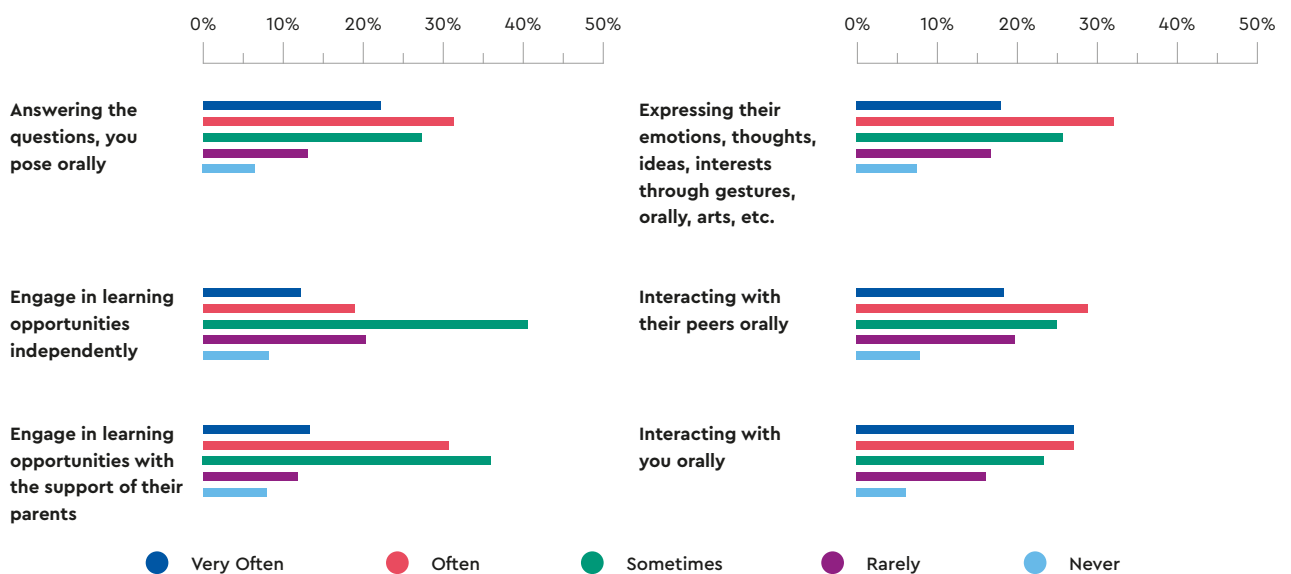d that they were decided by parents or children. Only 3.1% of the respondents claimed that the amount and frequency of learning were decided by the directorate/secretariat. This was similarly observed when it came to the learning programme - the educators/ practitioners had a relatively large degree of autonomy in making decisions about the kind of programme they delivered and the type of learning opportunities (80.8%) whereas only 29.6% of participants indicated they were guided by leaders. 14.4% also pointed out that parents had a say.

Several opportunities were offered to under-fives through online learning. The findings (Figure 4.11) indicate that during the lockdown, giving instructions to promote mathematical learning at home was the most frequently used teaching approach. 93.5 % of the ECEs gave instructions for mathematical learning at least once a week. Following that, sending online resources (90.5%); giving instructions for creative learning (88.9%), learning numbers (88,6%) physical education (86%) and sensory learning experiences (84%); storytelling in English (85.1%), singing nursery rhymes (78.4%), giving instructions to teach letters (77%) were among the most popular approaches used by the majority of ECEs at least once a week. On the other hand, the majority of the ECEs stated that they never used "eating lunch together" or "developing a children's web" as an approach during the lockdown (Figure 4.11).

Indicate how frequently you offered the following through online platforms during lockdown:
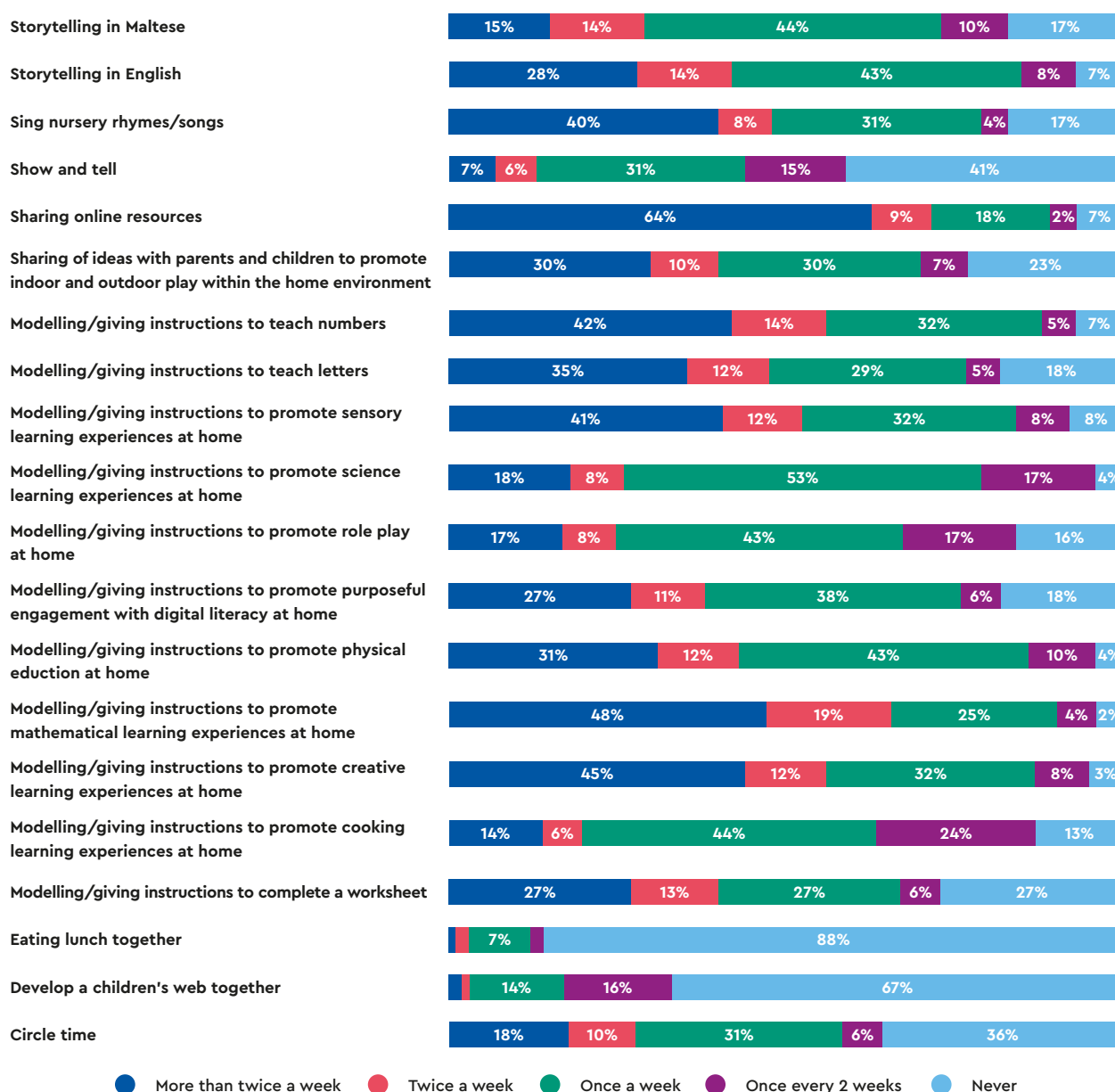

Figure 4.11: The learning opportunities ECEs offered through online platforms during COVID-19 lockdown (2020)

Eight educators responded to 'Other' for this question (see Figure 4.11). One of them shared her concerns when it comes to online learning:

I personally would have loved to do this more often but having 22 kindergarten students by myself was hard. It was unfair to me for having a double group on my own. 5 online lessons were done each week but each child participated once. I was lucky to have full participation but on the other hand, I could not do at least 2 lessons per child each week due to a large number of children. Moreover, whole class sessions were impossible. They would be possible only if they are muted and I just did the lesson which personally I thought would be less productive than having a small group of not more than 5. Small groups enabled the children to interact more and I believe this is vital in kindergarten. (Respondent, Survey 1)

According to the participants, during the 2020 school closure, families responded positively to the provision of online learning, with the majority of the respondents stating that children had the necessary device/s to follow real-time/video-recorded online sessions (64.4%) (see Figure 4.12). Although 66.7% of participants felt that families were satisfied with the frequency of their real-time / video-recorded online sessions, it is important to note that 18.1% experienced dissatisfaction. Almost half of the educators expressed the children/families' satisfaction with the quality of real-time/video-recorded online sessions (48%), whilst 46% stated that they regularly attended real-time/video-recorded online lessons and willingly followed real-time/video-recorded online sessions (43%). On the other hand, 12.3% of the children/families rarely attended the sessions whereas 18.5% never did. Similarly, reluctance to follow online sessions was evident with 18.8% and 10.6% respectively stating families rarely or never showed this willingness to follow any form of online sessions (see Figure 4.12).

During the closure of schools/centres, families/children:
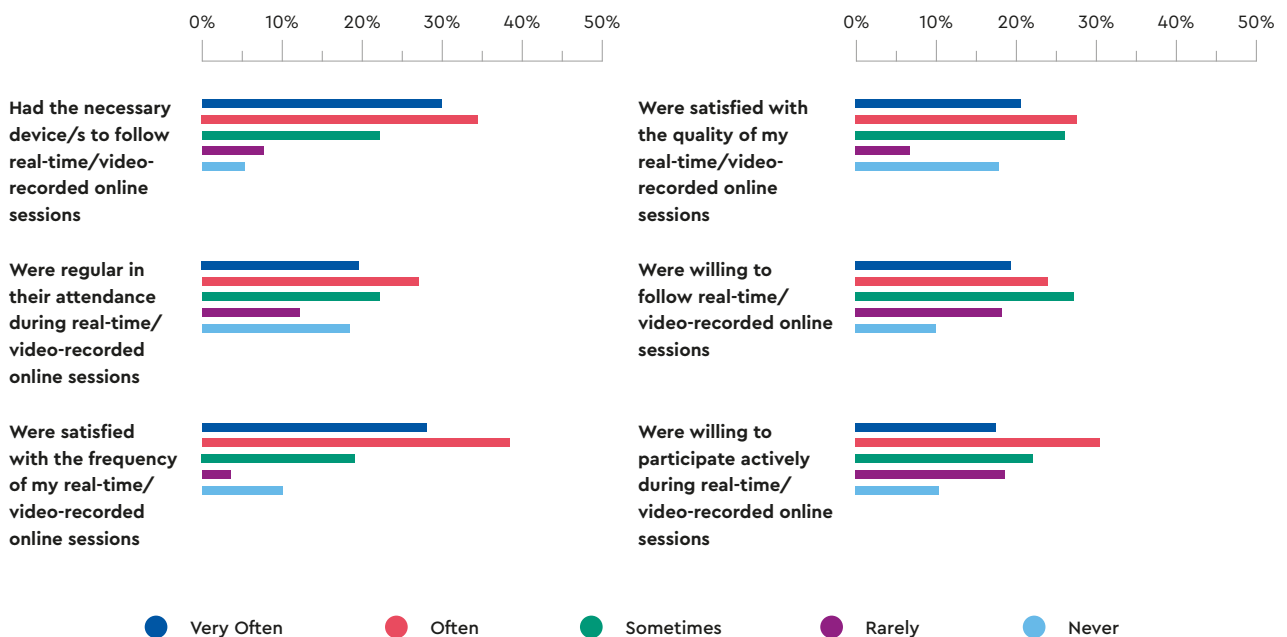
Figure 4.12: Children/Families' participation in real-time/video-recorded online sessions during the closure of schools/centres

While teaching remotely, the majority of ECEs assessed children's learning (see Figure 4.13) through their reflections and interpretations of the learning opportunities done at home through videos and photos sent by parents (74.4%), by asking questions to parents about their children (72.2%), and through the questions, they asked children during live interactive lessons (68.7%). Almost half of the respondents stated that they assessed children using observation and notes taken during real-time online sessions (51.9%) and by marking and commenting on individual worksheets (47.6%).

While teaching remotely I assess children through:
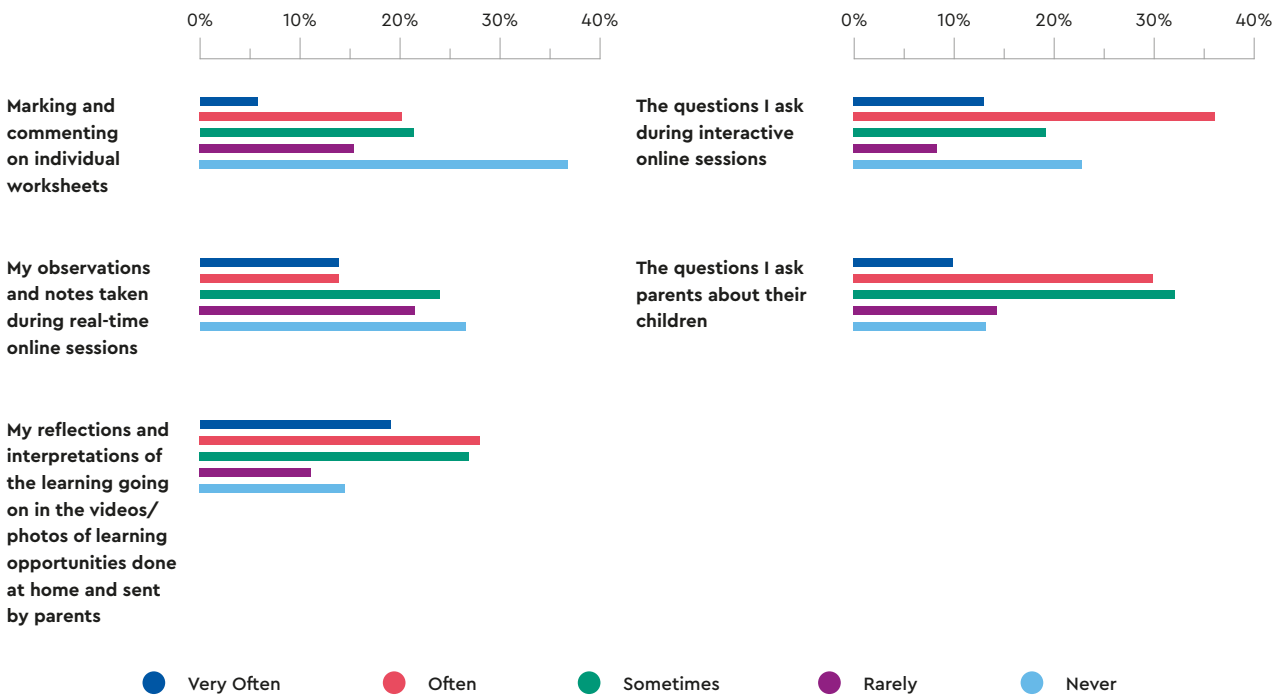
Figure 4.13: ECEs' assessment practices while teaching remotely

When ECEs were asked about their concerns of remote teaching/learning (see Figure 4.14), the main was lack of face-to-face interaction (79%) and lack of children's engagement (77.1%). These responses were followed by lack of support for children (56.2%), reduced contact time (44.8%) and lack of support for families (27.6%). There were also other responses as open-ended comments (17%, n=18). Among those 44% (n=8) were about concerns involving parents (related to digital literacy and lack of time) and their willingness to follow real-time/recorded online sessions. Educators mentioned the fear of not being well-prepared, and how some parents and children did not show up during online sessions. It seems that some families prioritised the online sessions of the older siblings: *"some were very overwhelmed with juggling siblings, and teleworking. Some issues resulted that because siblings are older their lessons were more "important" to be focused upon instead of finding a balance for both children in kindergarten and children in primary years".*

My main concern about remote teaching/learning is:
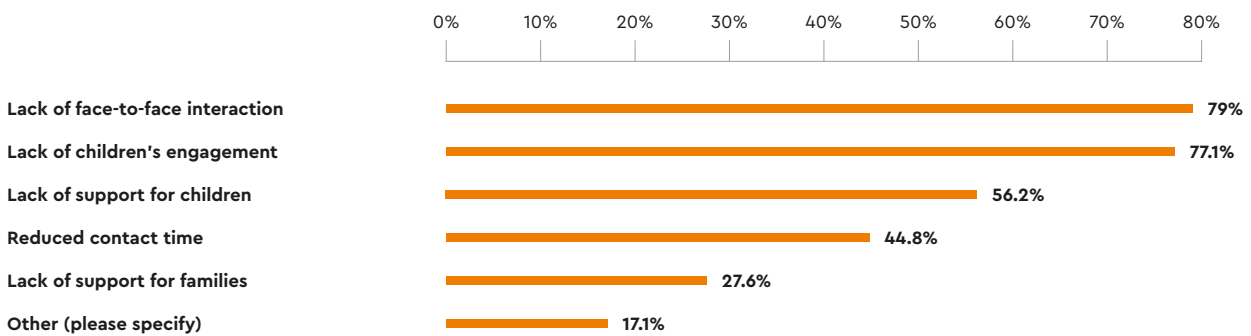
Figure 4.14: ECEs' concern about remote teaching/learning

When ECEs were asked an open-ended question (Q30) to mention one online experience when their children seemed more motivated and engaged than usual, a rich variety of responses were collected (n=71). The most common experiences shared by the educators were about doing hands-on activities involving experiments and crafts in which children actively participated (n=31). Some of these experiments included science experiments (n=7), cooking (n=12) and other fun activities in which children create/experiment with the readily available materials at home (n=12). Storytelling (n=14) was also highlighted among the most motivating/engaging online experiences with the children as evident in the word cloud below (see Figure 4.15).

Figure 4.15: ECEs mention one online experience where the children seemed more motivated and engaged than usual

4.2.2 Learning Spaces

With regards to the conditions of ECEs remote working spaces, 72.2% of the respondents had the necessary devices (e.g., laptop) to plan/teach online in all rooms in their house (see Figure 4.16). Also, more than half of the respondents had natural light in their working spaces (58.6%), an internet connection to plan/teach online in all the rooms/spaces in their house (57%) and enough space for the different activities for planning/online teaching (52.4%). 59.3% of the respondents rarely/never had the opportunity to plan/teach online outdoors whereas 23.3% of the respondents often had this opportunity. On the other hand, 48.9% of the respondents often had undisturbed planning/online teaching space in their homes.

Indicate the degree to which you had access to the following during COVID-19 lockdown:
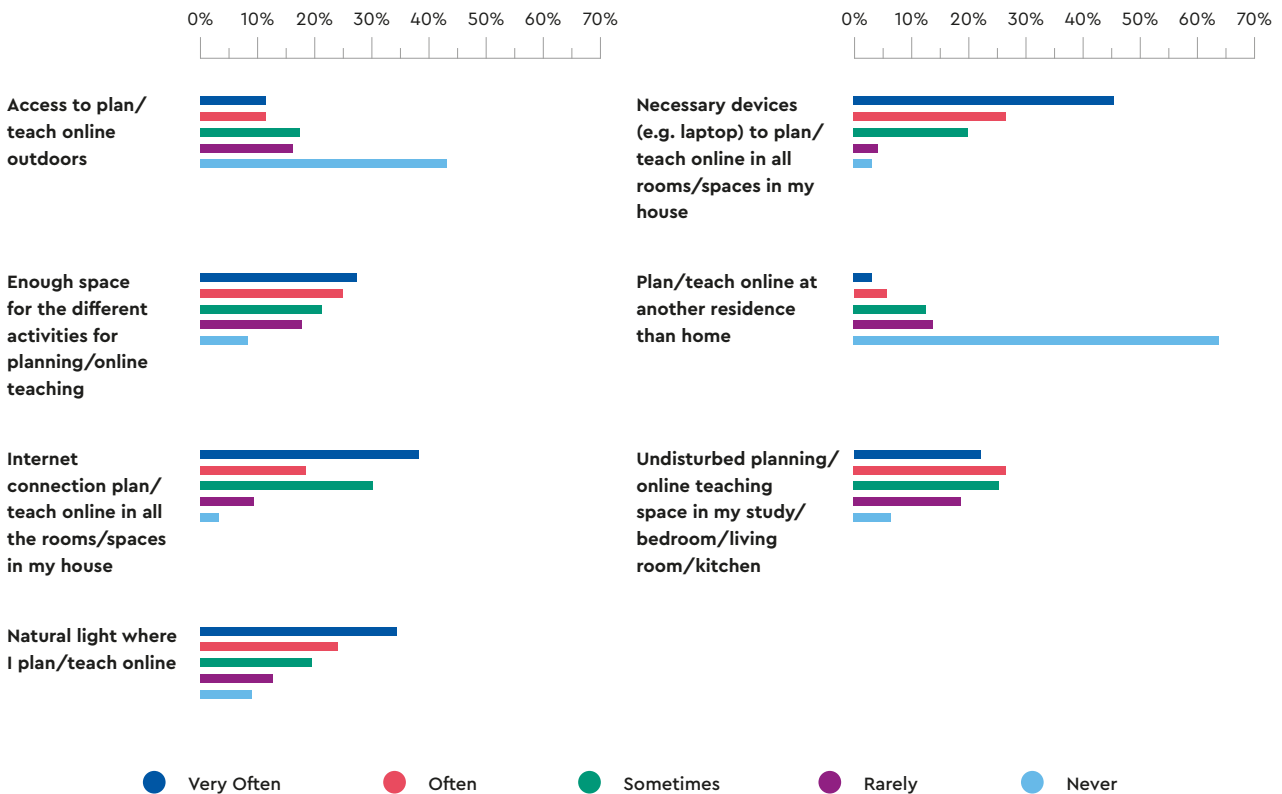
Figure 4.16: Conditions of ECEs remote working spaces

According to the survey, the Learning Platforms such as MS Teams, Zoom and VLE required the most skill development efforts among the EC educators (see Figure 4.17). 86.4% of the respondents stated that they had to learn "a lot/quite, a lot/some" new skills to be able to work with these platforms. On the contrary, Apps for quizzes required the least new skill development among the remote teaching tools. 74.4% of the respondents learnt "a little/no" new skills to be able to use these tools. For the use of PowerPoints with voice-over or with notes, around half of the respondents stated that they had to learn new skills whereas, the other half stated that they learnt "a little/no" new skills for the use of these tools. For the use of websites and for teaching such (i.e., Teleskola, Storytime) 43.7% of the respondents stated that they learnt "a little/no" new skills.

Indicate the degree to which you learnt new skills to work with the following virtual learning spaces
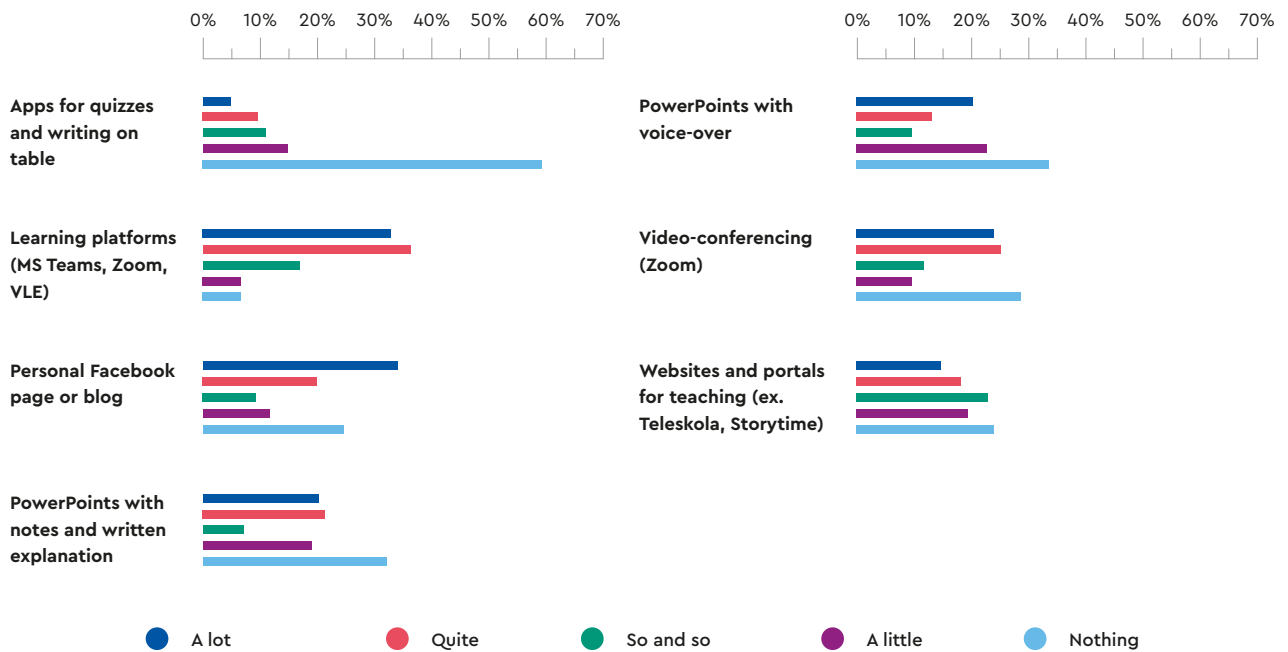
Figure 4.17: New skills learnt to work with the indicated virtual learning spaces – ECEs

Figure 4.18 shows the degree to which ECEs used various digital tools to learn/work during the COVID-19 lockdown. The great majority (85%) of the respondents rarely or never used blogs. Similarly, platforms and portals for teaching and learning were rarely or never used by 73.4%. Around half of the respondents used their personal Facebook page (56.7%) and video conferencing on Zoom (54.8%). This is slightly more frequent in comparison to other tools such as PowerPoint.

Indicate the degree to which you used any of the following to learn/work during COVID-19 lockdown
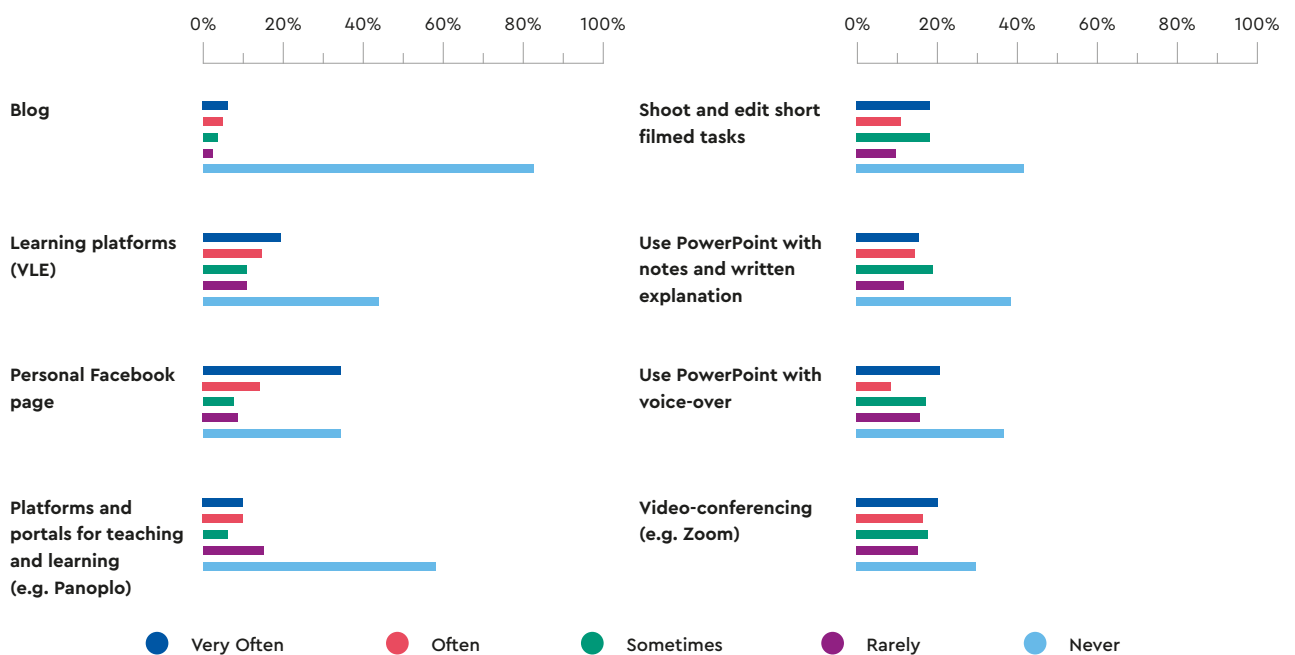
Figure 4.18: How frequently ECEs used various digital tools to learn/work during lockdown

The majority of ECEs indicated the degree to which being confined in learning spaces at home impacted negatively on their overall well-being (see Figure 4.19): having to stay indoors as much as possible (65.2%); less physical activity due to staying indoors (73.1%); Limited your outdoors to garden or walks (62.8%); not being able to go out with friends (76.5%), and not being able to meet with colleagues (75.5%).

Indicate the effect of the following learning spaces on your overall well-being
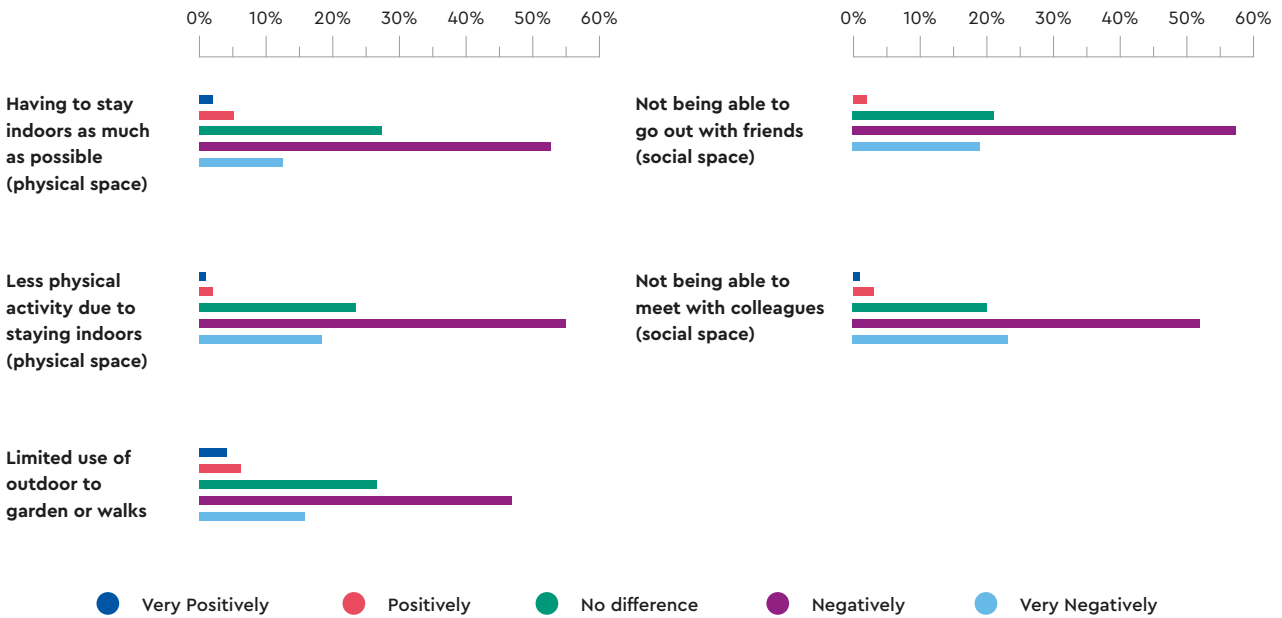
Figure 4.19: The degree to which confined learning spaces at home impacted on ECEs overall well-being during lockdown

Figure 4.20 shows ECEs perspective on learning spaces upon returning to normality. The majority of the respondents would like to keep exclusively face-to-face in class/settings (76.9%) or exclusively face-to-face both in class and outdoors beyond school premises (64%). More than half of the respondents stated that they would like to keep blended learning (63.2%) or online learning (58.2%) as a learning space.

Indicate the effect of the following learning spaces on your overall well-being
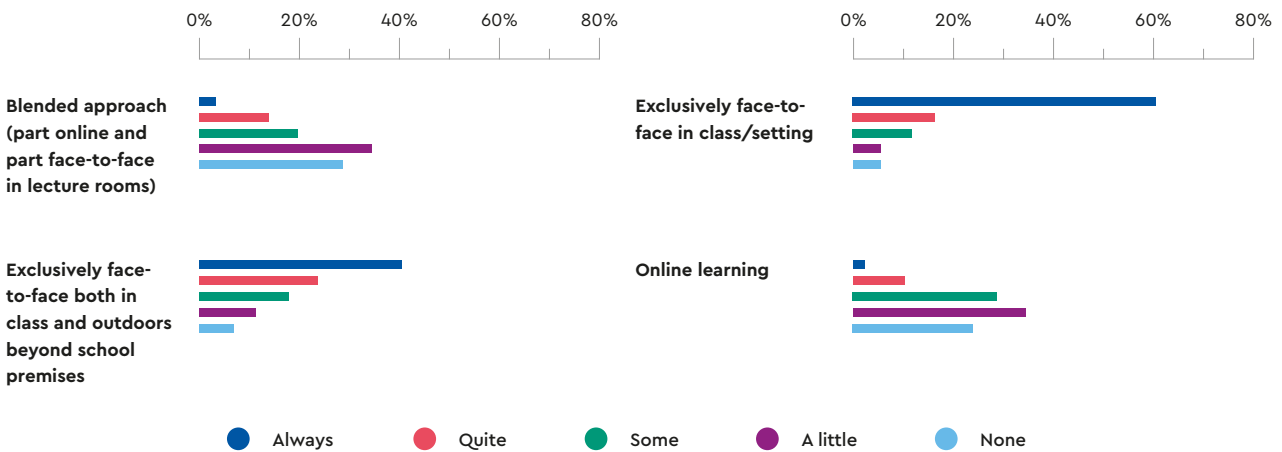
Figure 4.20: ECEs perspective on learning spaces upon returning to normal life

4.2.3 Well-being and Relationships

When respondents were asked how happy and satisfied, they are feeling in comparison to before COVID-19 (see Figure 4.21), 54.4% stated that they are less happy, while 41.9% stated that they were less satisfied with their lives. 35.6% and 49.5% rated themselves as neutral in terms of the happiness and satisfaction they felt with their lives when compared to pre-COVID-19 times. Only 10% of the ECEs declared that they were happier and 8.6% stated they were more satisfied.

Compared to before COVID-19 lockdown, indicate:
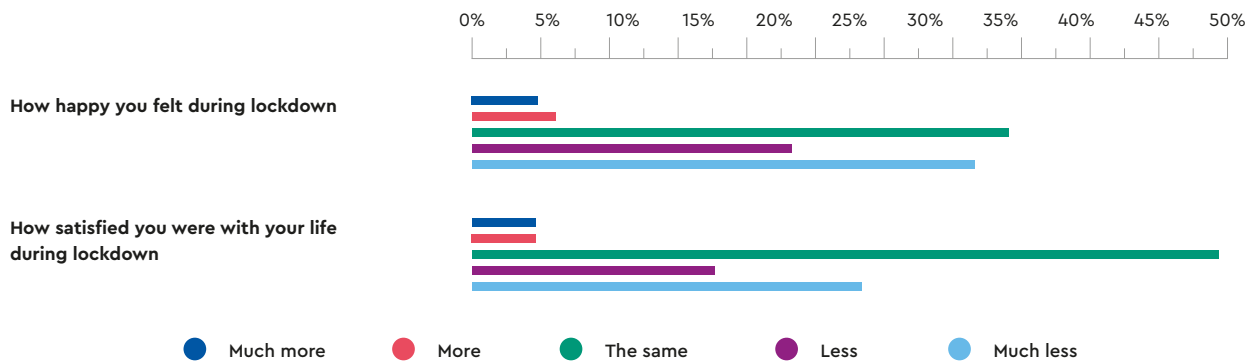
Figure 4.21: How happy and satisfied ECEs felt when compared to before the 2020 lockdown

When ECEs were asked how they spent their time per day during the lockdown (2020) in comparison to pre-COVID-19 times (see Figure 4.22), the majority of the respondents stated that they have spent more time on being with their families (70.3%), planning (68.5%), online sessions with families/children (56.6%), online with colleagues (52.2%) and socialising with friends online (52.2%). On the other hand, almost half of the respondents spent less/much less time on assessing children's learning and development and on doing leisure activities.

Compared to pre-COVID lockdown, how much time per day did you spend on the following during the COVID-19 lockdown?
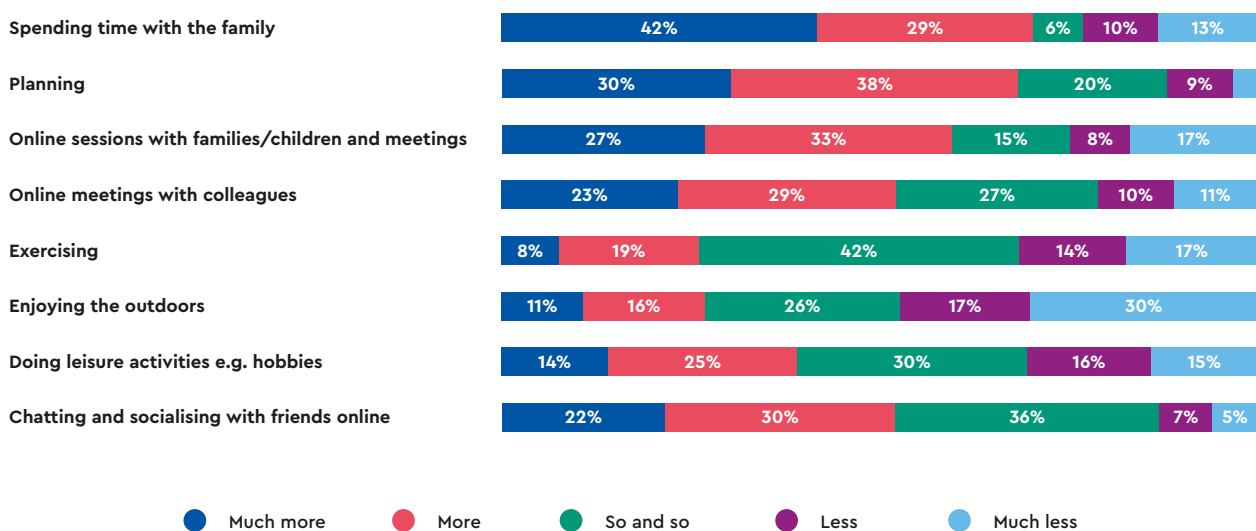
Figure 4.22: How ECEs spent their time during lockdown (2020)

During the lockdown, the majority of the respondents agreed that they found meaningful ways to stay connected with family and friends (68.8%) and found support from senior leadership teams at their school/centre with respect to their duties as an educator (65.6%) (see Figure 4.23). However, a lesser number of the respondents (40.9%) agreed that they found support from their senior leadership teams with regard to their mental well-being. 25.8% of the respondents agreed that they felt negative about their work. The data reveals an even distribution between the respondents who felt "confident" (38.7%) and "not confident" (39.8%) in teaching through the use of online technology.

Indicate the degree to which you agree with the following statements with respect to your COVID-19 lockdown experience:

| Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I was able to switch off from my work to make time for rest	11%	29%	17%	28%	15%
I was able to bounce back as quickly as I normally would	9%	23%	41%	24%	
I found support from senior leadership team at my school/centre with the impact on my mental well-being	11%	30%	31%	15%	13%
I found support from senior leadership team at my school/centre with respect to my duties as an educator	20%	45%	23%		8%
I found meaningful ways to stay connected with family and friends	23%	46%	23%		6%
I felt stressed and out of control	12%	27%	24%	27%	9%
I felt negative towards my work	9%	17%	26%	38%	11%
I felt more productive during this time	9%	25%	35%	20%	11%
I felt confident teaching through the use of online technology	13%	26%	22%	26%	14%

● Strongly agree   ● Agree   ● Neutral   ● Disagree   ● Strongly disagree

Figure 4.23: The degree to which ECEs agreed with the provided statements related to their experiences of the 2020 COVID-19 lockdown

Figure 4.24 provides information on childcare educators' (working with the under-threes) level of happiness, satisfaction and overall experiences after the re-opening of childcare centres in June 2020; in comparison to times before COVID-19 lockdown. The majority of the respondents were happier during the time they spent with the children (85.7%) and with colleagues (76.9%). Also, 57% were more satisfied with the way they were supported before re-opening. The respondents' relationship with the parents was either better (53.8%) or the same as before (46.2%). However, 66.7% felt less safe and secure going back to work and 60% felt less happy with the new situation. Also, half of the respondents were less happy with the new official guidelines. The majority (61.5%) stated that they were satisfied with the overall learning programme in the same way as in pre-COVID times. 46.2% stated that they were satisfied in the same way when it comes to the learning environment. 46.6% stated that they were more satisfied with the transition and 46.2% declared that they were more satisfied with the resources provided. The majority were more satisfied with how the parents were informed about the transition from the lockdown to the opening. Only 38.5% were satisfied with the new routine and 33.4% were more satisfied with the atmosphere in childcare centres in June 2022. 26.7% felt happier with the new situation.

To be answered by staff who worked in childcare centres after reopening (5th June, 2020). Compared to before COVID-19 lockdown, indicate:

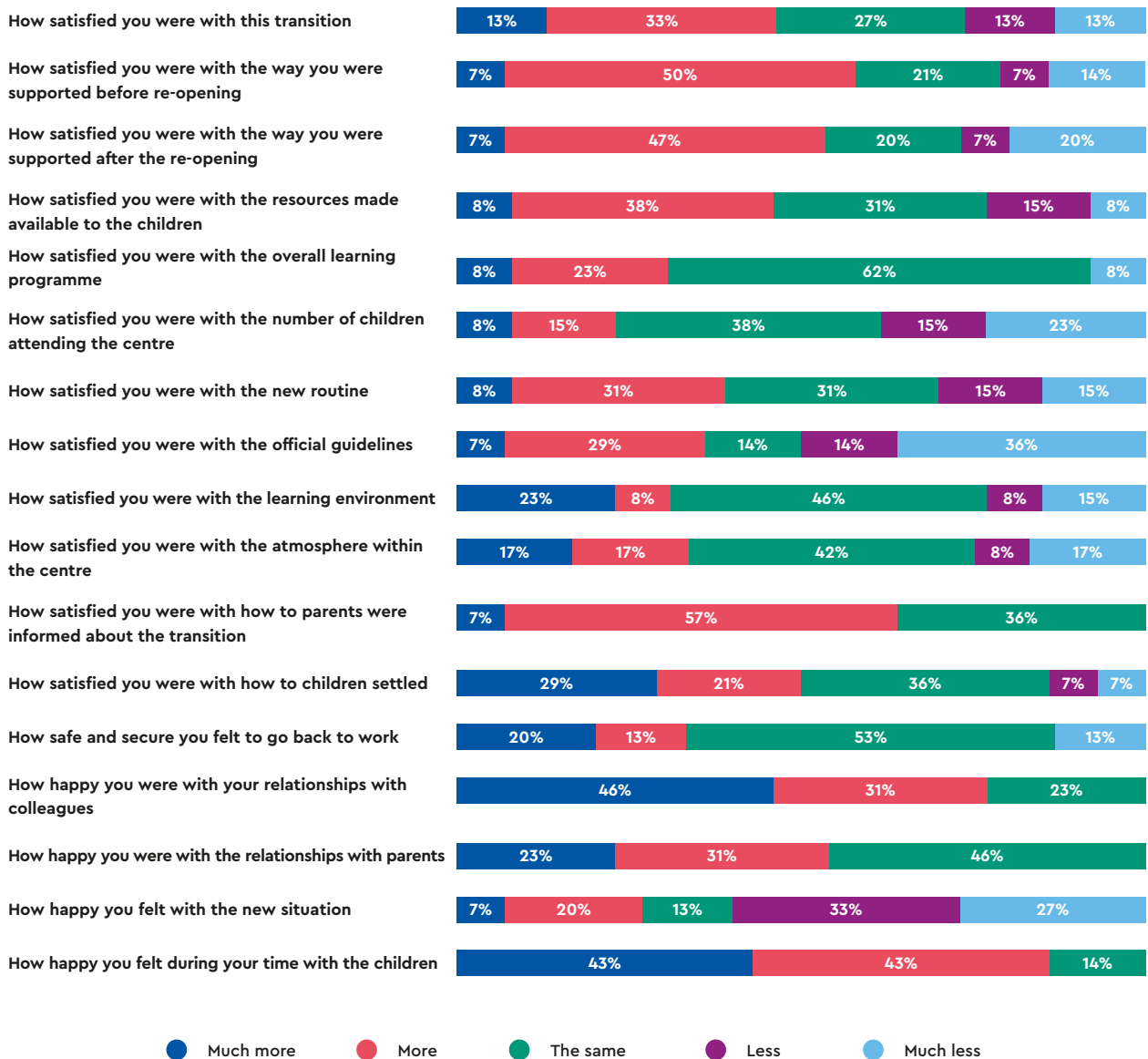|	Much more	More	The same	Less	Much less
How satisfied you were with this transition	13%	33%	27%	13%	13%
How satisfied you were with the way you were supported before re-opening	7%	50%	21%	7%	14%
How satisfied you were with the way you were supported after the re-opening	7%	47%	20%	7%	20%
How satisfied you were with the resources made available to the children	8%	38%	31%	15%	8%
How satisfied you were with the overall learning programme	8%	23%	62%		8%
How satisfied you were with the number of children attending the centre	8%	15%	38%	15%	23%
How satisfied you were with the new routine	8%	31%	31%	15%	15%
How satisfied you were with the official guidelines	7%	29%	14%	14%	36%
How satisfied you were with the learning environment	23%	8%	46%	8%	15%
How satisfied you were with the atmosphere within the centre	17%	17%	42%	8%	17%
How satisfied you were with how to parents were informed about the transition	7%	57%	36%		
How satisfied you were with how to children settled	29%	21%	36%	7%	7%
How safe and secure you felt to go back to work	20%	13%	53%		13%
How happy you were with your relationships with colleagues	46%	31%	23%		
How happy you were with the relationships with parents	23%	31%	46%		
How happy you felt with the new situation	7%	20%	13%	33%	27%
How happy you felt during your time with the children	43%	43%	14%		

Figure 4.24: Childcare Educators' (working with the under-threes) experiences after the reopening of childcare centres (following 2020 lockdown)

Survey findings indicate that (see Figure 4.25) despite all the rapid changes due to the physical closure of schools/centres, the majority of the ECEs managed to follow continuous professional development online (68%) and work well with their colleagues online (64%). Moreover, 54% of the respondents were capable of adapting to working remotely through the use of technology and were able to communicate with children and parents through remote modes. 47.9% were able to conduct sessions with children on online platforms whereas, 31.3% stated that they were not able to conduct any online sessions with the children.

Despite all the rapid changes due to the physical closure of centres and schools, I felt:
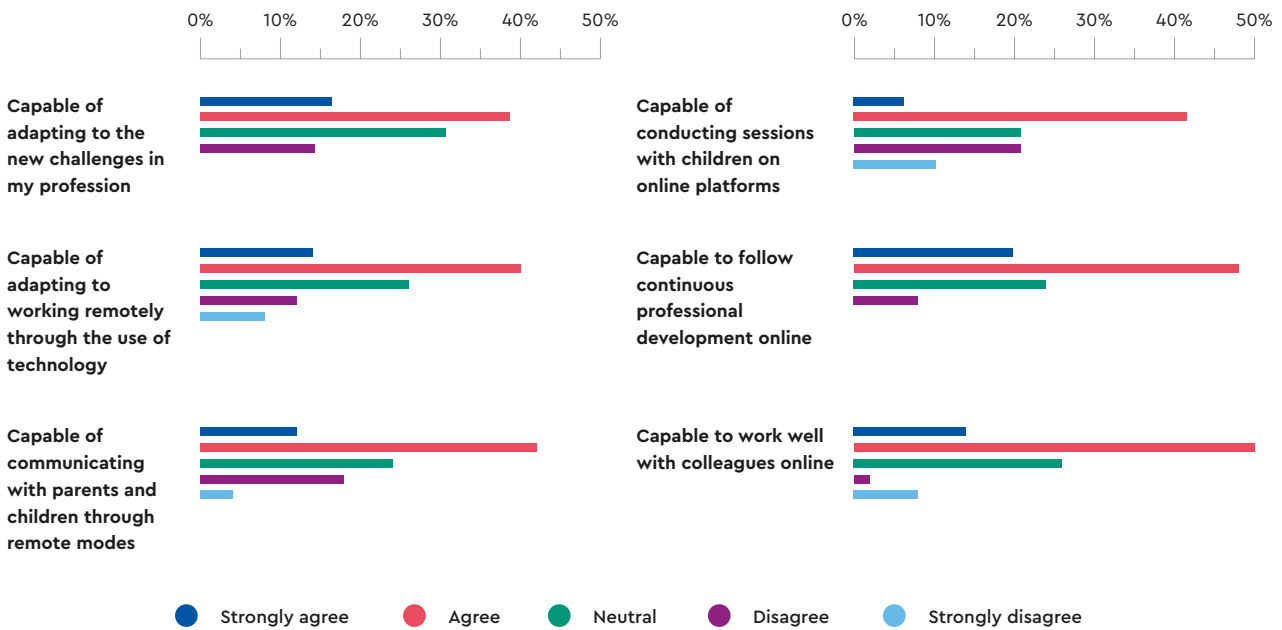

Figure 4.25: The extent to which ECEs felt capable to adapt to the rapid changes during the physical closure of schools/centres

Figure 4.26 shows ECEs' perspectives on the advantages of remote learning/teaching during the COVID-19 lockdown. A great majority of the respondents (77.9%) indicated that "having more family time" was the most advantageous aspect of remote teaching during the COVID-19 lockdown. It was followed by less stress to get ready very early, less time to commute to school and not having to worry about going to work if their child/ren is/are feeling unwell. 64.7% indicated that they did not enjoy working on their own at home.

From your experience during lockdown in 2020, how would you rate the following advantages of learning remotely from home?
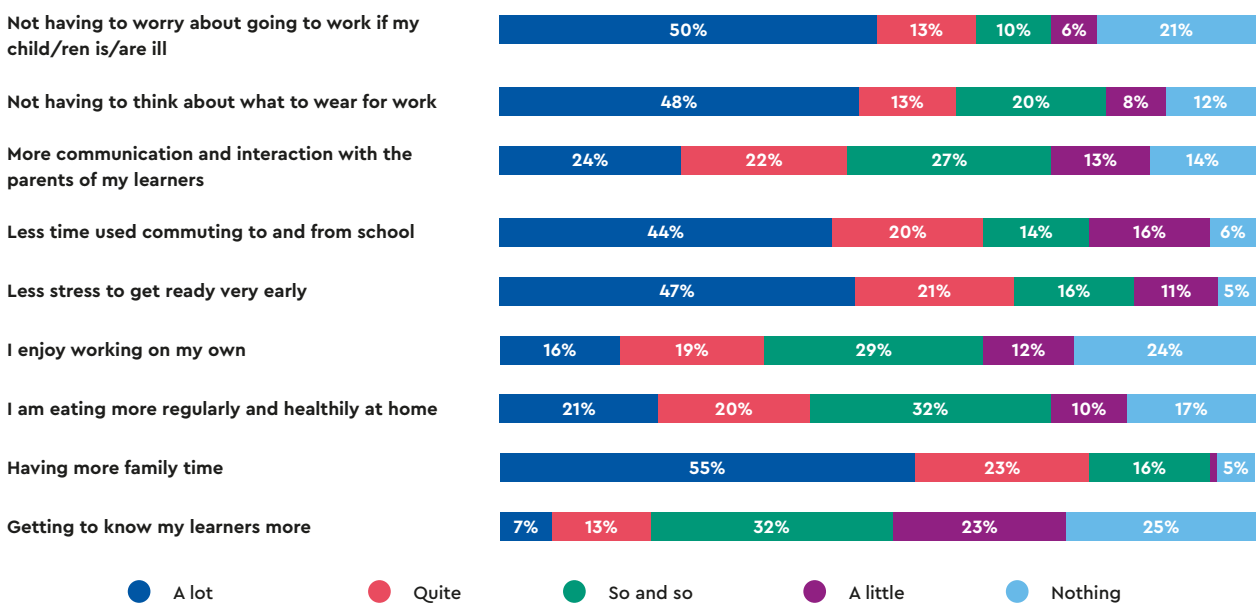

Figure 4.26: ECEs' perspectives on the advantages of remote teaching/learning during COVID-19 lockdown (2020)

Figure 4.27 shows ECEs' perspectives on the disadvantages of remote learning/teaching during the COVID-19 lockdown. Most ECEs missed interacting with their colleagues. This was highlighted as the most disadvantageous outcome of remote teaching by the great majority of respondents (76.5%). It was followed by missing the support and collaboration of colleagues (68.2%) and a lack of physical movement at home (67.1%). Educators experiencing more stress due to dealing with many changes at once were listed by half of the respondents among the disadvantages of remote teaching/learning during the COVID-19 lockdown. The majority of ECEs indicated that their home is small, and they don't have enough space for all the papers and resources.

From your experience during lockdown in 2020, how would you rate the following disadvantages of learning remotely from home?
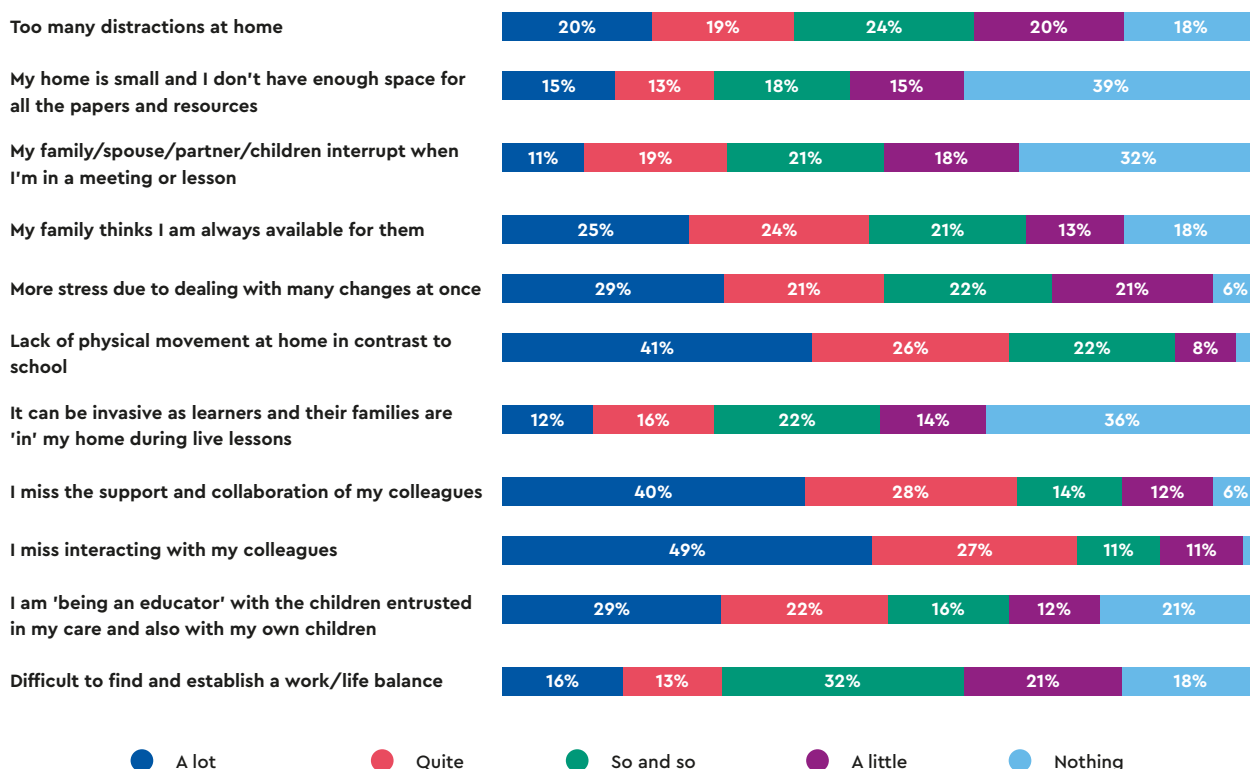

Figure 4.27: ECEs' perspectives on the disadvantages of remote teaching/learning during COVID-19 lockdown (2020)

When ECEs were asked about the degree to which parents were supportive of their efforts through the statements listed in Figure 4.28, the findings indicate that the ratio of the respondents who stated that parents showed "a lot/quite a lot" support was less than 50% in almost all areas. According to around half of the respondents, some of the main areas in which parents showed more support were, when sending photos and/or videos of learning opportunities carried out (50%), through acknowledgements of notes sent to them (48.8%), when helping young children with any learning opportunities (45.3%) and through emails with notes of appreciation (45.2%). Moreover, 42.6% of the respondents stated that parents were more supportive in making sure the learners attend any online sessions whereas, 36.8% stated that parents were less supportive in this aspect. Also, according to 40% of the respondents, parents were more supportive in the preparation of suitable places for learners and in their presence during online lessons or small group meetings. On the other hand, 40% of the respondents stated that parents were less supportive of their presence during online lessons or small group meetings.

Rate the degree to which parent/s were supportive of your efforts through:

	A lot	Quite	So and so	A little	Nothing
The timely completion of set tasks that require parental involvement (especially younger learners)	10%	27%	28%	19%	15%
Sending photos and/or videos of work/learning opportunities carried out	19%	31%	23%	17%	11%
Presence during online lessons or small group meetings	14%	26%	20%	19%	21%
Preparation of suitable places for the learners to interact with me and involve themselves in fun activities	12%	29%	27%	18%	14%
Making sure the learners attend any online sessions	16%	26%	21%	15%	22%
Helping young children with any learning opportunities I let them know about	21%	24%	35%	12%	8%
Giving helpful suggestions for learning opportunities or helping other parents understand your instructions/explanations	16%	28%	35%	11%	10%
Emails with notes of appreciation	18%	27%	21%	21%	12%
Acknowledgements of notes I send	23%	26%	23%	15%	13%

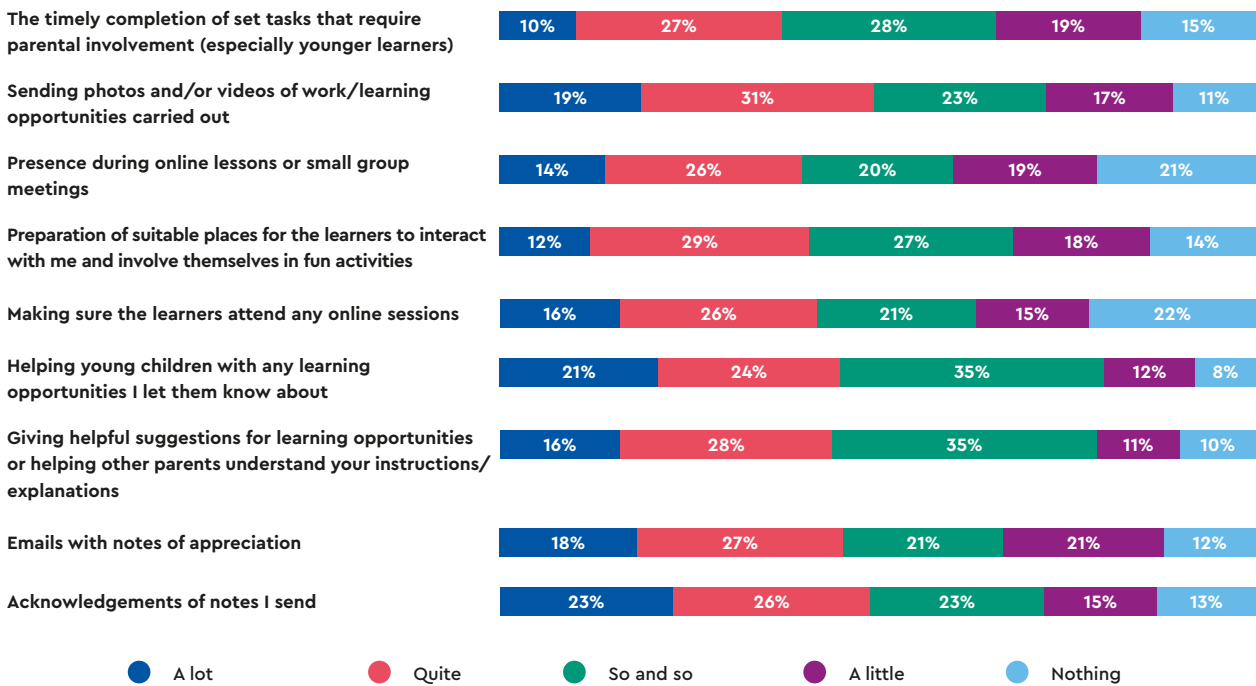● A lot   ● Quite   ● So and so   ● A little   ● Nothing

Figure 4.28: Parents' support on ECEs teaching efforts during lockdown

According to 53.8% of the respondents (see Figure 4.29), parents supported their children more when dedicating time with their children to work on the learning opportunities and providing all required resources (52.6%). On the other hand, 34.8% of the respondents stated that parents provided less support in dedicating time to their children during online lessons. 42.9% stated that parents provided less support in asking for clarification of concepts so they can explain better to their children and not 'overly-support' their children in learning by doing the tasks for them (42.6%).

Indicate the degree to which parents supported their children in learning at home through the following:
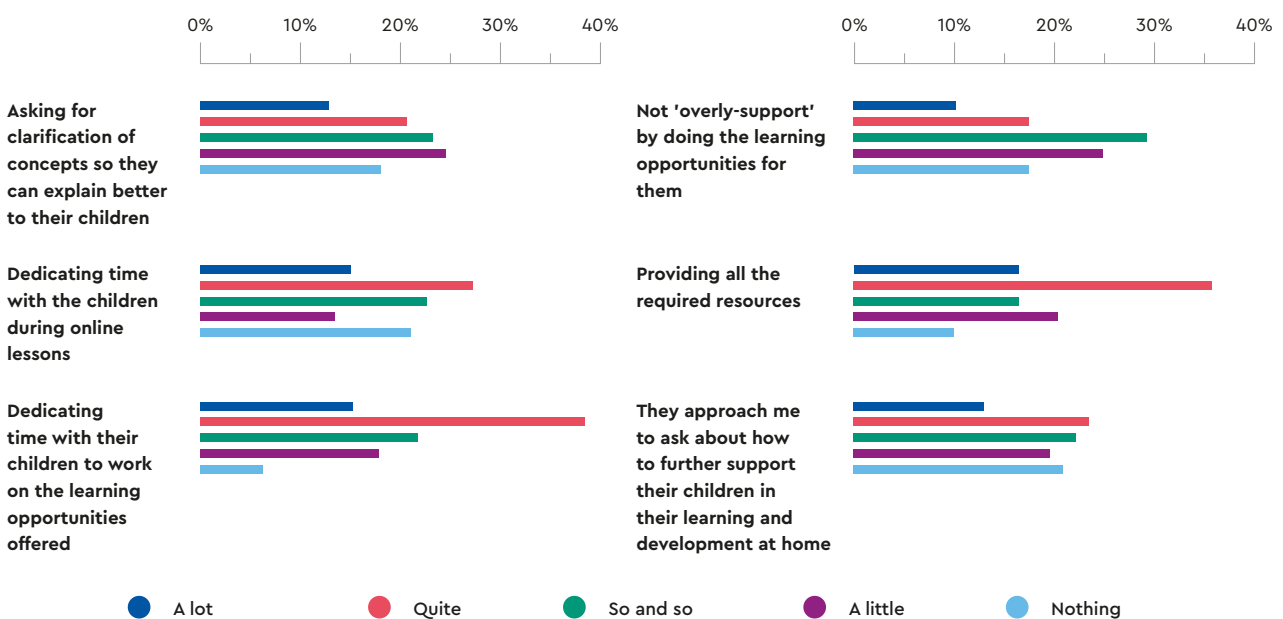

● A lot   ● Quite   ● So and so   ● A little   ● Nothing

Figure 4.29: The degree to which ECEs feel that parents' supported their children while learning at home

When ECEs were asked about the level of support they received from their school/centre management team (see Figure 4.30), the majority of respondents stated that the management team were most supportive by holding all staff accountable for their work (64.9%), providing clerical support to contact learners/parents (55.8%), keeping in-touch via online staff meetings (55.7%) and by organising whole-school/centre webinars and training sessions for remote/online teaching and learning (50.7%). However, 40% of the respondents declared that they received less support from their management in terms of webinars and training sessions for remote/online teaching and learning.

Indicate the degree to which the school management team was being supportive through the following:

	A lot	Quite	So and so	A little	Nothing
Technical support for staff to move to remote/online teaching	17%	27%	24%	20%	12%
Organised whole-school/centre webinars and training sessions for remote/online teaching and learning	16%	35%	9%	21%	19%
Meetings to discuss any difficulties you have	13%	36%	27%	14%	10%
Keeping in touch regularly through collegial online staff meetings	22%	34%	22%	17%	5%
Issuing clear guidelines about remote learning for parents	17%	30%	25%	19%	9%
Issuing clear directions about online platforms supported by the school	22%	27%	26%	18%	7%
Holding all staff accountable for their work	30%	35%	15%	14%	6%
Distributing workloads fairly and equitably amongst staff	17%	27%	30%	11%	15%
Providing clerical support in contacting families and learners	21%	35%	21%	13%	10%
By giving clear direction about the learning programme	15%	35%	28%	14%	8%

● A lot ● Quite ● So and so ● A little ● Nothing

Figure 4.30: The degree to which ECEs feel that the school/centre management was being supportive

The last item of the survey (item 46) was an open-ended question asking for any additional comments from the respondents (see Figure 4.31).

Figure 4.31: Word cloud representing ECEs further comments upon completion of the first survey

As a result, 34 unique responses (n=34) were received. As prominent in the word cloud above (see Figure 4.31), the majority (n=15) mentioned the participation and/or limitations of parents and how it affected the overall teaching/learning experience. One of the respondents highlighted the importance of educating parents clearly on how an "emergent curriculum" works. 3 of the respondents (n=3) indicated the challenges of social distancing in classrooms with young children. They mentioned that children are too young to understand the directives of social distance and classrooms are either too small or too crowded to maintain a healthy distance. 4 respondents (n=4) stated that despite the limitations of remote teaching/learning, they would opt again for online learning until the pandemic conditions get better. Several issues that pertain to the Maltese early years sector surfaced, and advantages and disadvantages of online teaching/learning were highlighted; including the benefit of creating stronger links with parents and maintaining communication with children in online arenas to counteract the sudden change through smoother transitions:

Although the on-line learning worked it had its limitations. It was beneficial for the children, especially when the time came for them to return to the centre. Through online sessions, we managed to maintain a healthy link with both children and parents. Having said that, I don't believe that it can or should replace real first-hand experience in the classroom. It may be an option to reach a balance and keep some level of real-time online communication. The reason being that as a centre we encourage parents to be full participants in their children's development. However, due to the current situation, their physical presence at the centre is very limited. (Respondent, Survey 1)

I felt that my online lessons were successful due to the work previously done before Covid, mainly the attachments formed beforehand. The children were eager to talk to me just because they had previously understood that I was their friend. My concerns are that had this been at the beginning of the scholastic year, the experience would not have had the same results. (Respondent, Survey 1)

I really hope that although we are going to get back to work, someone DOES stand up for us. Not because we are Kindergarten Educators, it seems like nobody cares (No plan, nothing). It's the most vulnerable period, I really can't understand why such a manner. We cannot really implement social distancing in Year 1, let alone in Kinder 2 and Kinder 1! It really hurts. I honestly feel like I'm useless, but unfortunately, it's always been this way. I thank God we have a very helpful Head of School. (Respondent, Survey 1)

The main problem was the time the parents had. I had very good feedback from a small percentage of the parents. The rest said their children would not work with them, others said it was very hard to find time to do the work with their children and felt that it was not as important as they are in kindergarten. (Respondent, Survey 1)

Being with our students in class is very important but online teaching was fun too. We all worked together, the management, my colleagues, the parents, and our little students. If need be, for safety I would opt again for online schooling until things are better. (Respondent, Survey 1)

4.3 Results of the Second Survey

The second questionnaire, which was also conducted with ECEs working in childcare centres and kindergartens, was planned to draw on ECEs experiences, perceptions and practices that took place between September 2020 and June 2021. The findings of the second survey will be presented in this section through figures that illustrate the responses collected. As with the results of the first survey, these too will be organised according to the three main themes of teaching and learning, learning spaces and well-being and relationships.

4.3.1 Teaching and Learning

Survey findings show that during the 2020-2021 scholastic year, 90.9% (see Figure 4.32) of the ECEs were physically present with the children when schools/centres were physically open. However, only 16.4% of respondents stated that they offered one-off online sessions for those at home. Also, 12.7% conducted online activities for vulnerable students. Some respondents provisioned hybrid teaching (7.2%, n=4) by being physically present with a group of children and then online live sessions with another group of children during the same day.

This scholastic year (2020–2021) when school/centre was physically open I offered the following provision in the setting:
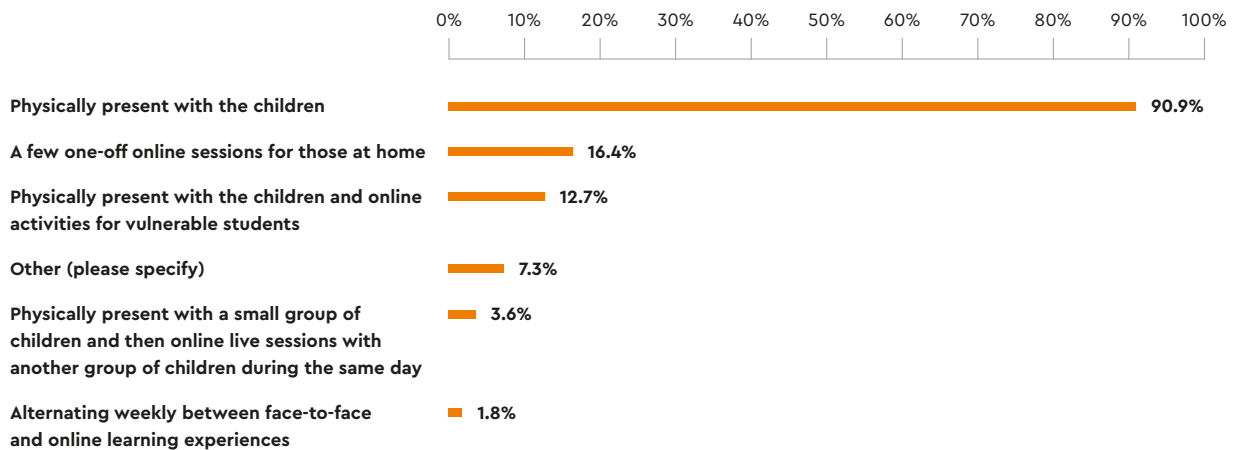
Figure 4.32: Type of ECEC provision during the scholastic year 2020–2021

Figure 4.33 shows the pedagogical methods used by ECEs when schools were physically closed in the scholastic year 2020-2021. 65.5% of the respondents conducted real-time (live) whole-group sessions with children through video-conferencing whereas 36.4% conducted video-recorded learning opportunities and real-time (live) sessions with parents to support their children's learning and development at home. Moreover, emails to parents with instructions and/or links to learning opportunities (34.5%), emails to parents with worksheets (27.3%) and PowerPoints (27.3%) were among the other methods used by the ECEs.

This scholastic year when school was physically closed I offered the following provision:
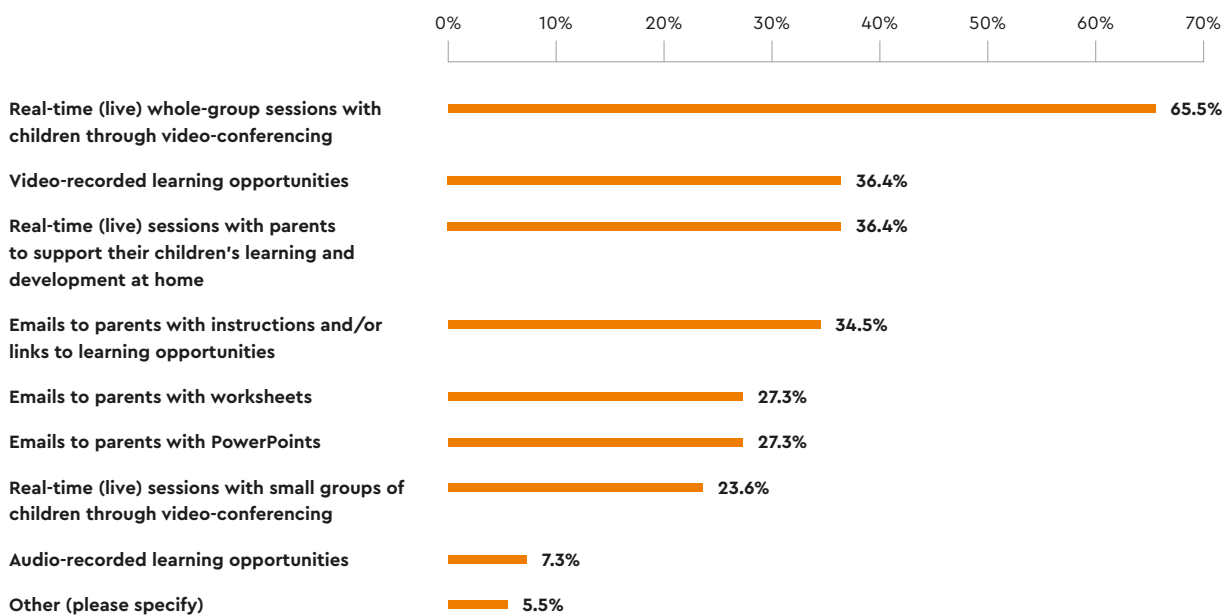
Provision	Percentage
Real-time (live) whole-group sessions with children through video-conferencing	65.5%
Video-recorded learning opportunities	36.4%
Real-time (live) sessions with parents to support their children's learning and development at home	36.4%
Emails to parents with instructions and/or links to learning opportunities	34.5%
Emails to parents with worksheets	27.3%
Emails to parents with PowerPoints	27.3%
Real-time (live) sessions with small groups of children through video-conferencing	23.6%
Audio-recorded learning opportunities	7.3%
Other (please specify)	5.5%

Figure 4.33: Teaching/learning methods offered by EC educators during the school/centre closures in the 2020–2021 scholastic year

In the 2020-2021 scholastic year, ECEs improved their skills in the use of remote/online tools mainly by collaborating and learning with colleagues (61.8%) (see Figure 4.34). Moreover, 43.6% joined PD sessions/webinars on their own initiative and asked for help from their colleagues and friends. On the other hand, 32.7% of the respondents improved their skills by attending PD sessions held by their school or school sector.

This year I improved my skills to use remote/online tools to promote meaningful learning experiences for young children and their families through:

Method	Percentage
By collaborating and learning with colleagues	61.8%
PD sessions/webinars on own initiative	43.6%
Help from my colleagues and/or friends	43.6%
PD sessions held by my school or school sector	32.7%
I read academic journal articles/books	16.4%
Other (please specify)	5.5%
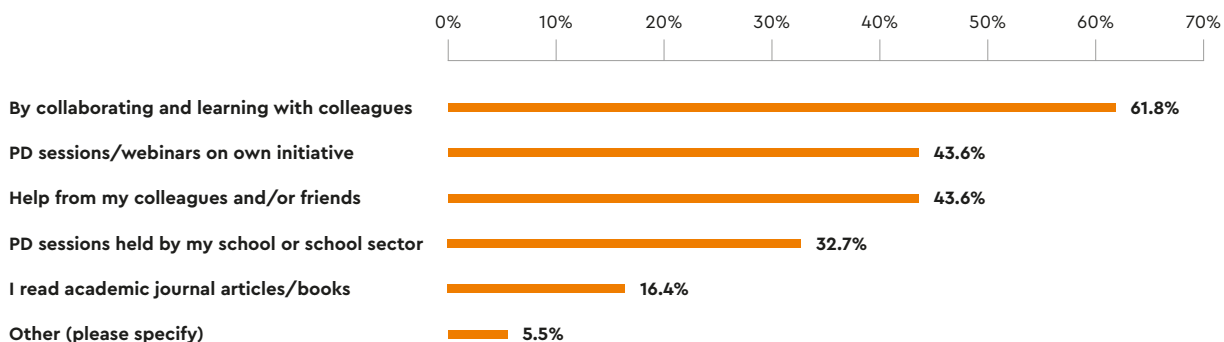
Figure 4.34: How ECEs improved their skills to use remote/online tools to promote meaningful learning experiences for young children and their families

In Figure 4.35 we see how the majority of the respondents stated that during the physical closure of schools/centres, the children were willing to participate actively during the real-time/video-recorded online sessions (65.5%). They were also satisfied with the frequency (63.6%) of the real-time/video-recorded online sessions, with the regularity in their attendance (61.8%), had the necessary device/s (61.8%), and were satisfied with the quality. Educators stated that under-fives were willing to follow real-time/video-recorded online sessions (52.7%). Only 16.2% stated that children found real-time/recorded online sessions difficult to follow. In the "other responses" section, ECEs (n=3) indicated that for some children learning hours and/or length of real-time sessions might be difficult to attend so they had to rearrange the timing, duration or the process of the learning opportunity offered.

During the physical closure of my school/centre the children:
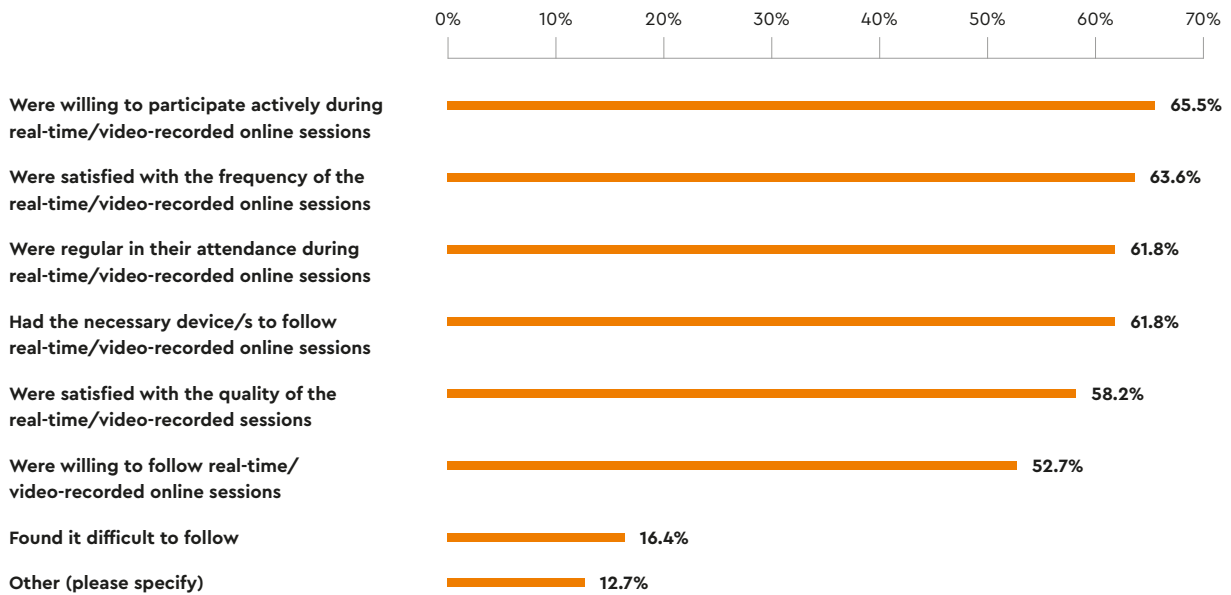
Figure 4.35: How children responded to online learning during the 2020–2021 physical school closure

Among the online teaching modes, the majority of the respondents (56.4%) found synchronous (live sessions) as the most effective mode of teaching with young children (see Figure 4.36). In this manner, 34.5% opted for a blended approach and 5.5% opted for asynchronous (recorded sessions) as the most effective mode of teaching young children. Two comments in the "others" section followed:

Live sessions but I also let them switch off cameras to do Free Play and get back online on x time. (Respondent, Survey 2)

Children from 0 – 3 years will surely not be able to follow long sessions but from time to time we set up video calls with them in order to foster attachment and bond. (Respondent, Survey 2)

Which modes of online learning did you find most effective with young children?
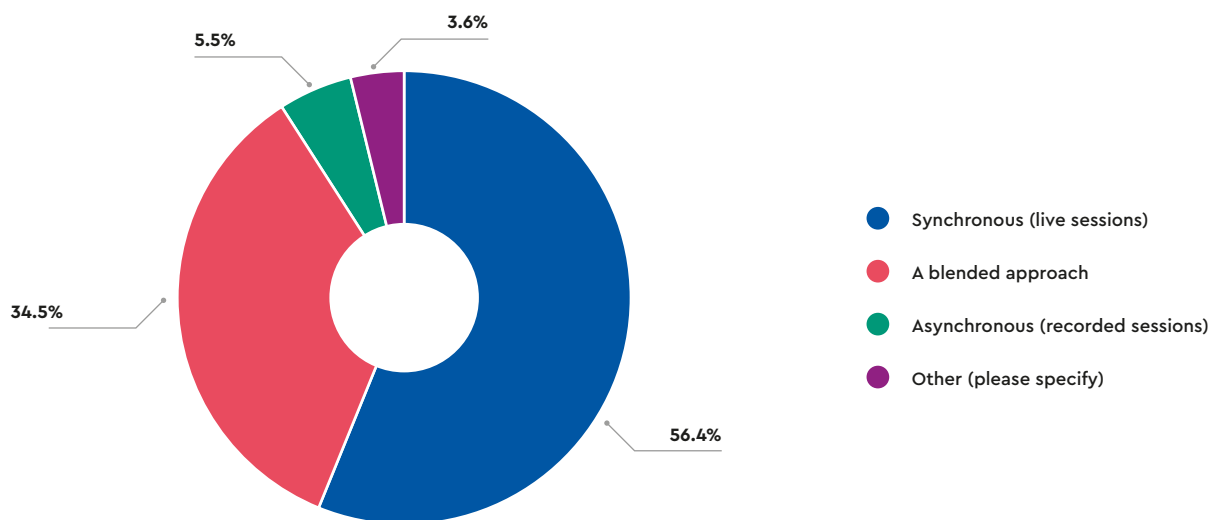

Figure 4.36: The most effective mode of online learning with young children according to ECEs during the scholastic year 2020–2021

When schools/centres were physically open, the majority of the respondents documented and assessed the progress in young children's learning and development through learning stories/notes (54.5%) (see Figure 4.37). Other respondents used checklists (32.7%), portfolios (30.9%) and journals (27.3%). One educator commented as follows:

I did this for the first term... I think that paperwork is taking our pleasure from teaching. (Respondent, Survey 2)

When my school/centre was physically open I documented and assessed the progress in young children's learning and development through:
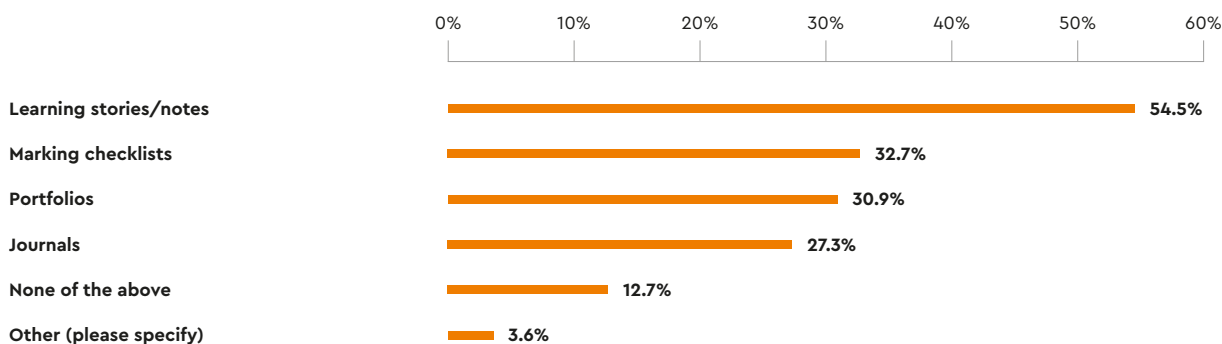
Figure 4.37: How educators documented and assessed the progress in children's learning and development when schools/centres were physically open (2020–2021)

When schools/centres were physically closed (see Figure 4.38), the majority of the respondents assessed the progress of young children's learning and development through the questions they asked during the interactive online sessions (54.4%). Other respondents relied on their observations and notes they took during real-time online sessions (40%), reflections and interpretations of the learning going on in the videos/photos of learning opportunities done at home (38.2%), and questions they asked parents about their children (34%), marking and commenting on individual worksheets (10.9%) and marking checklists (5.5%). One educator commented as follows in the "other" section:

It is very difficult to take notes and observations during online sessions when you have to control 3-year-old's accompanied by their grandma/parent. Many of them are with dummies. (Respondent, Survey 2)

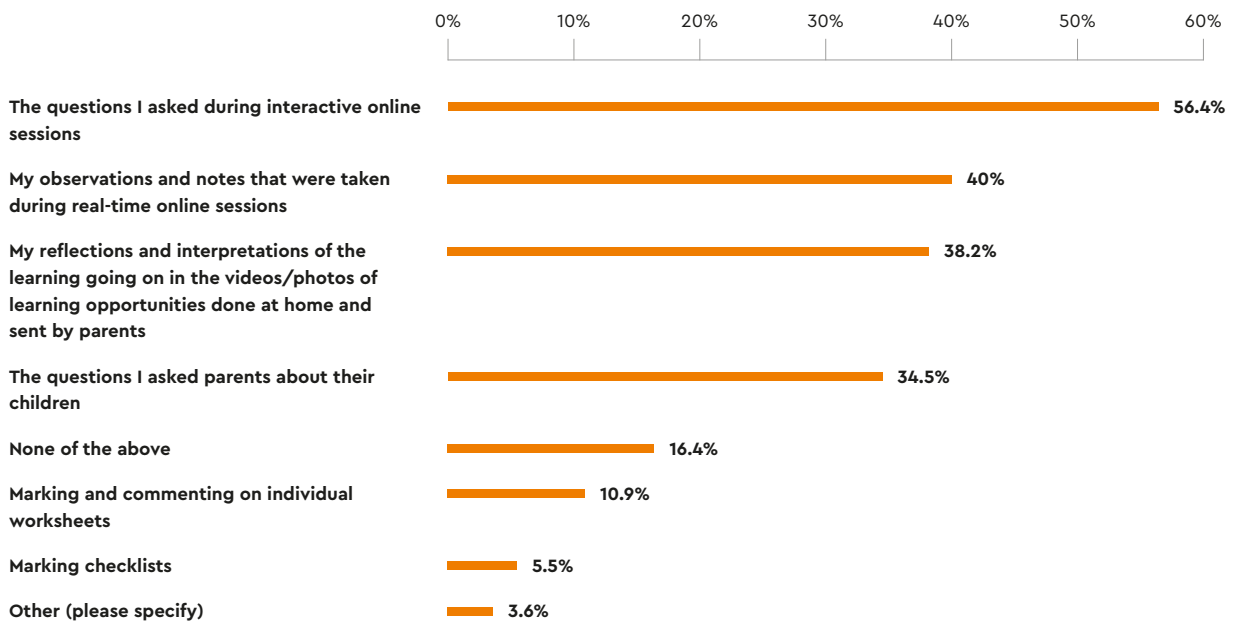**When my school/centre was physically closed I assessed the progress of young children's learning and development through:**

Figure 4.38: How educators documented and assessed the progress in children's learning and development when schools/centres were physically closed (2020–2021)

According to the responses (Figure 4.39), during live sessions, the children often participated when interacting with the educator orally (78.2%), when answering the questions posed by the educator orally (70.9%) and when expressing their emotions, thoughts, ideas, interests through gestures, orally, arts etc (50.9%). The data also indicates that the pupils participated more when engaging in learning opportunities with the support of their parents (74.5%) in comparison to engaging in learning opportunities independently (47.3%).

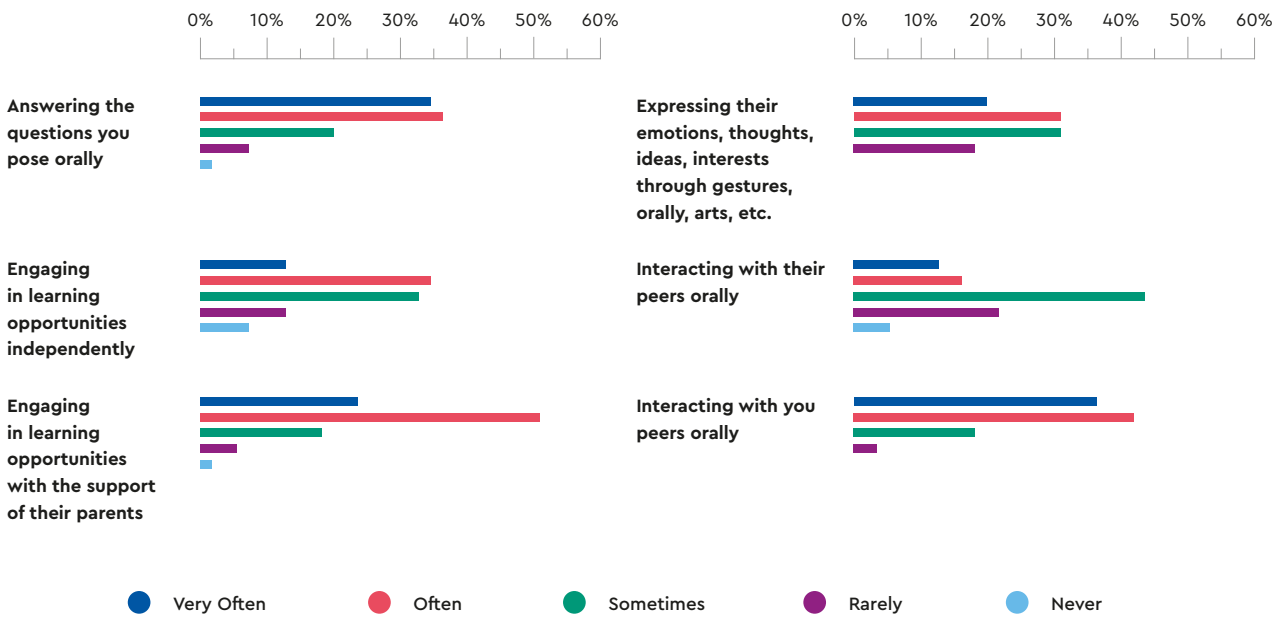**During live sessions, how often did children participate by:**

Figure 4.39: Children's participation during live sessions

Survey findings (Figure 4.40) indicate that during the physical closure of schools/centres, the most frequently used methods/approaches in online spaces were storytelling (85.2%), singing nursery rhymes (83.3%), circle-time (79.6%), opportunities for mathematical learning (77.4%), sharing online resources (73.6%) opportunities for creative learning experiences (75%), literacy learning experiences (70.6%) and sensory learning experiences at home (63.5%). On the other hand, respondents stated that they "rarely or never" offered role-play at home (46.2%), developed a children's web together (42%) or completed a worksheet (42%). Only one educator used the "other" section:

We sent Weekly Plans of activities and Circle Time in order to support Parents as much as we could since on the other hand most of the Parents still worked and hence, I did not want to add pressure on them since they had to work and also take care of their own young ones. (Respondent, Survey 2)

Indicate how frequently you offered the following through online platforms during the physical closure of the school/centre:
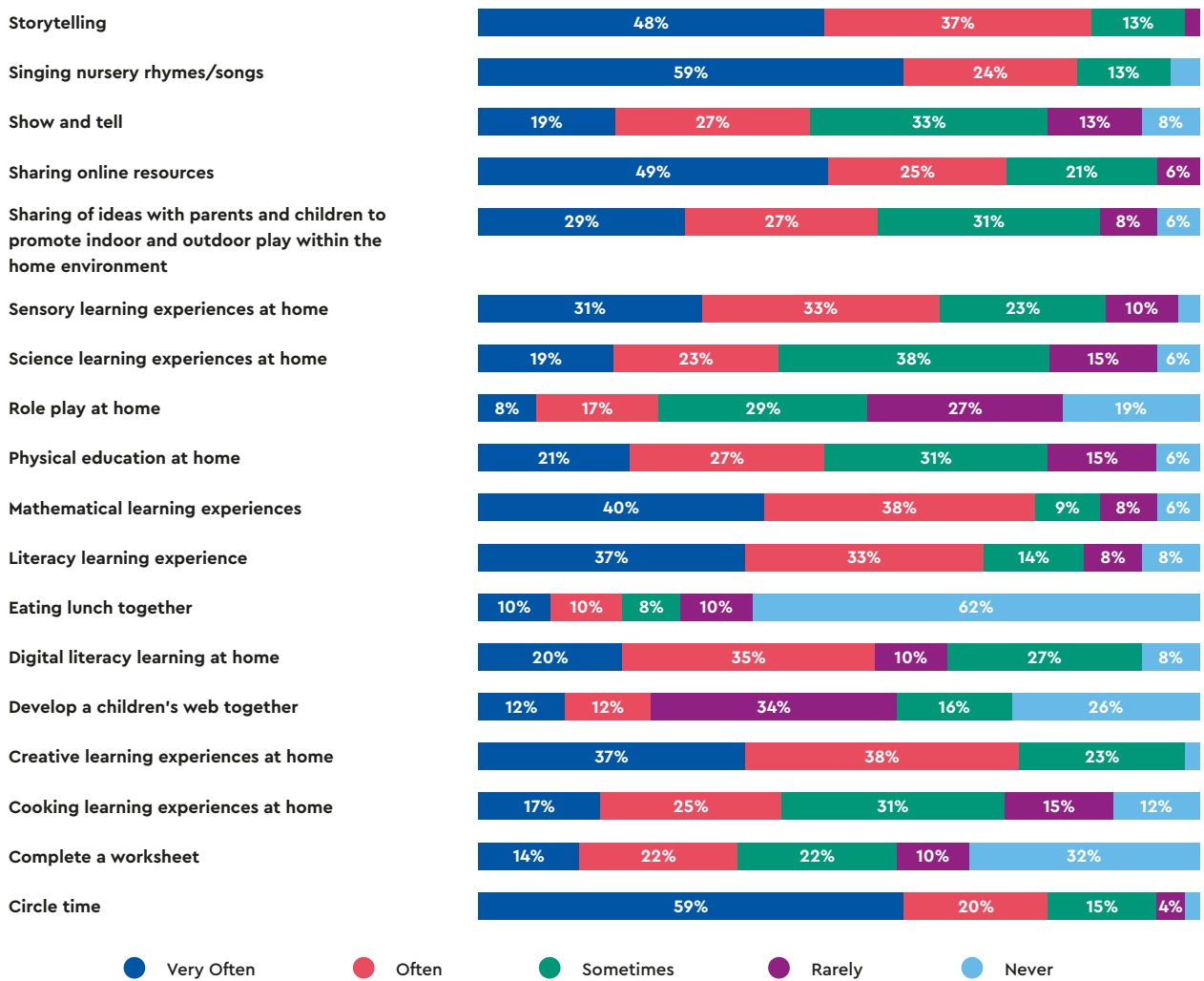
Approach/Method	Very Often	Often	Sometimes	Rarely	Never
Storytelling	48%	37%	13%		
Singing nursery rhymes/songs	59%	24%	13%		
Show and tell	19%	27%	33%	13%	8%
Sharing online resources	49%	25%	21%	6%	
Sharing of ideas with parents and children to promote indoor and outdoor play within the home environment	29%	27%	31%	8%	6%
Sensory learning experiences at home	31%	33%	23%	10%	
Science learning experiences at home	19%	23%	38%	15%	6%
Role play at home	8%	17%	29%	27%	19%
Physical education at home	21%	27%	31%	15%	6%
Mathematical learning experiences	40%	38%	9%	8%	6%
Literacy learning experience	37%	33%	14%	8%	8%
Eating lunch together	10%	10%	8%	10%	62%
Digital literacy learning at home	20%	35%	10%	27%	8%
Develop a children's web together	12%	12%	34%	16%	26%
Creative learning experiences at home	37%	38%	23%		
Cooking learning experiences at home	17%	25%	31%	15%	12%
Complete a worksheet	14%	22%	22%	10%	32%
Circle time	59%	20%	15%	4%	

Legend: ● Very Often ● Often ● Sometimes ● Rarely ● Never

Figure 4.40: How frequently EC educators offered varied approaches/methods to children and families in online spaces

More than half of the respondents (54.5%) stated that their teaching experience during the 2020-2021 scholastic year was better when compared to the previous scholastic year 2019-2020 (see Figure 4.41). 21.8% reported that it was the same and 23.6% said it was worse.

How would you rate your overall teaching experience when compared to the scholastic year 2019–2020?

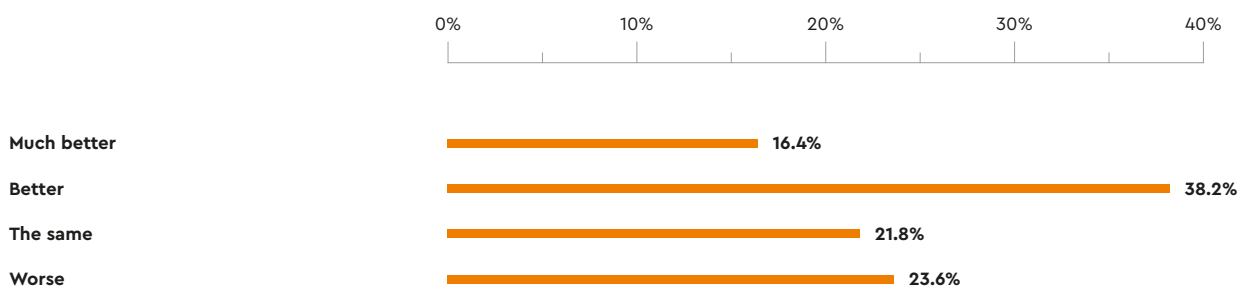|	
Much better	16.4%
Better	38.2%
The same	21.8%
Worse	23.6%

Figure 4.41: ECEs overall teaching experience when compared to the scholastic year 2019–2020

Figure 4.42 shows that 41.8% of the respondents think that young children benefitted through learning at home during the pandemic. On the other hand, 38.2% were not sure about the outcome. Only 20% of the respondents think that young children did not benefit from learning at home during the pandemic.

Overall, do you think that young children benefitted through learning at home during the pandemic:
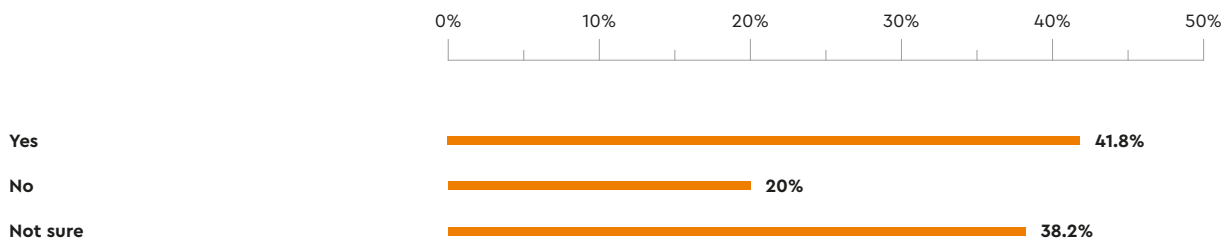

Figure 4.42: ECEs perspectives on whether they think young children benefitted through learning at home during the pandemic

Moreover, 43.6% of the respondents think that young children's learning and development were negatively influenced during the pandemic (see Figure 4.43); only 16.4% think that children were not negatively influenced. However, 40% of the respondents were unsure about the overall impact of the pandemic on young children's learning and development.

Overall, do you think that young children's learning and development was negatively influenced during COVID-19 times?
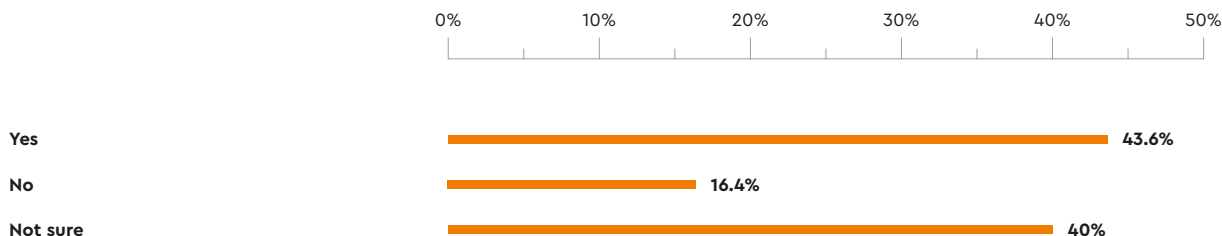
Figure 4.43: ECEs perspectives on whether they think that young children's learning and development were negatively influenced during COVID-19 times

Item 20 in Survey 2 was an open-ended question asking those participants who replied 'yes' (see Figure 4.43 above) about how they would address the negative impact on young children's learning and development. 22 responses (n=22) were received. Among those, 10 responses (n=10) highlighted the importance of physical contact and play in children's learning & development (see Figure 4.44). The statements in this category included: ***"Restrictions need to be set aside in kindergartens in order to achieve social and emotional learning, cooperative learning and inquiry-based learning." "For fruitful results, there is no other option than being physically at the childcare centre/kindergarten."*** One of the respondents also stated that ***teachers' face masks are hindering children's language development.***

7 responses (n=7) highlighted the importance of the role of parents on children's learning and development when learning from home remotely. Respondents stated that young children's learning environment is influenced by their parents (such as; it might get negatively influenced if the parents are stressed) therefore parents need to be educated on how to be part of their children's learning effectively. In this aspect, 2 of the respondents (n=2) stated that they observed a decline in the independence skills of young children due to parents` being overprotective or over-doing the tasks on behalf of the young children.

Figure 4.44: How ECEs propose to address the pandemic's negative impact on children's learning and development

4.3.2   Learning Spaces

The second survey findings indicate that during the physical closure of schools/centres (2020-2021), the majority of the respondents had access to an internet connection to plan/teach online (70.2%) and undisturbed planning/online teaching space in their home (59.6%) (see Figure 4.45). On the other hand, only 34% of the respondents stated that they had enough space for the different learning opportunities for planning/online teaching. In the comments section, one of the respondents criticised the fact that he/she had to upgrade his/her home internet at his/her own expense:

I think that it was unfair for me that I had to upgrade the internet at my own expense. If we had to go online from school, the whole issue would not have been successful as the internet at school is very, very, very bad!! (Respondent, Survey 2)

Indicate which of the following you had access to, when school/centre was physically closed in scholastic year 2020–2021

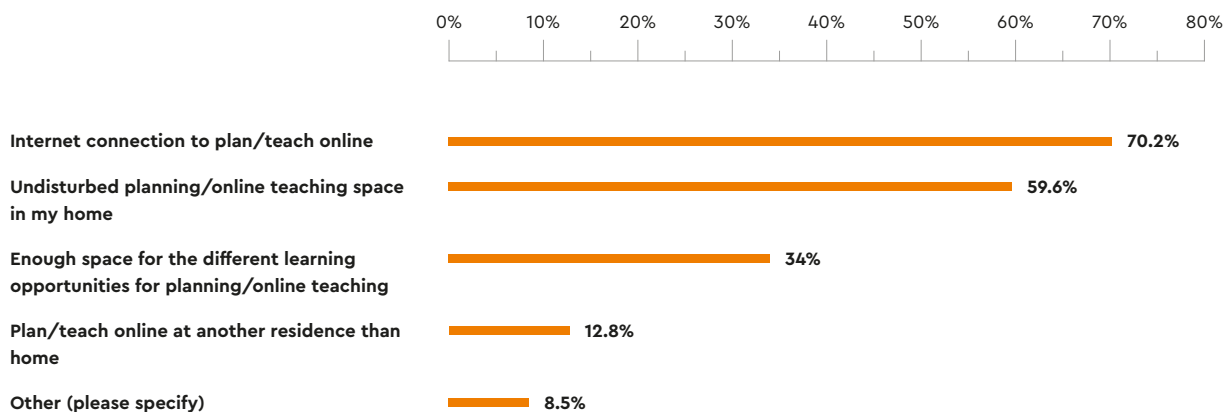|	
Internet connection to plan/teach online	70.2%
Undisturbed planning/online teaching space in my home	59.6%
Enough space for the different learning opportunities for planning/online teaching	34%
Plan/teach online at another residence than home	12.8%
Other (please specify)	8.5%

Figure 4.45: ECEs access to learning spaces when school/centre was physically closed

When schools/centres were physically open during 2020-2021 (see Figure 4.46), the majority of the respondents had the required space for their group of children (80.9%), access to the outdoor area (74.5%), the required space (53.2%) and resources (51.1%) for the learning experiences offered. However, only the minority had access to online learning spaces (36.2%) and the opportunity to connect from school with vulnerable children who were at home (19.1%).

Indicate which of the following you had access to, when school/centre was physically open in scholastic year 2020–2021:
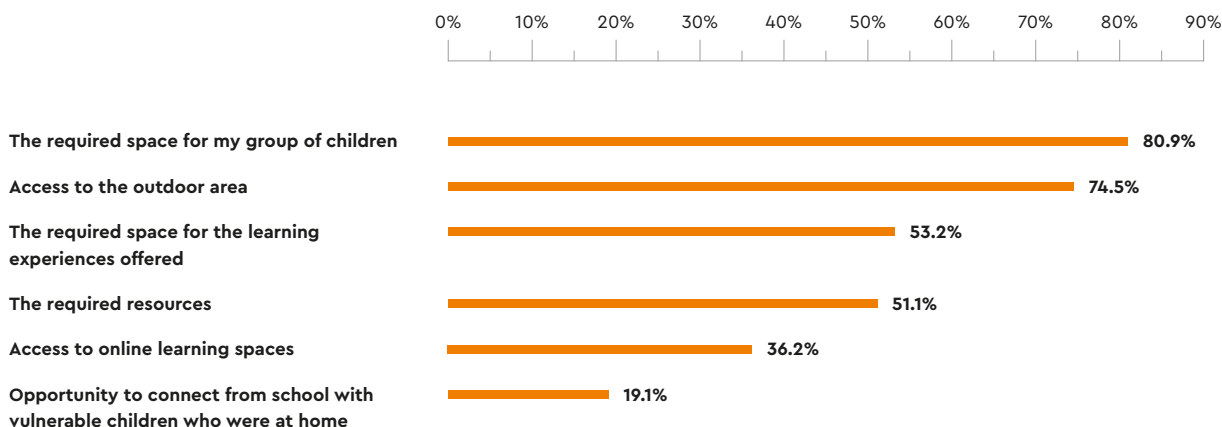
Figure 4.46: ECEs access to learning spaces when school/centre was physically open

Item 23 was an open-ended question asking respondents about the ways children benefit from the changes brought in the learning environment (in the school/centre) due to COVID-19 in the scholastic year 2020-2021. As a result, a variety of responses were collected (n=26). The most common benefit observed by the respondents (n=10) was an improvement in the children's resilience, independence, and hygiene awareness, for example,

Children learned and became more independent in following safety measures and hygiene rules. They developed more knowledge about the world and taking care of others also, they had more opportunities to take initiative and work independently. (Respondent, Survey 2)

Other respondents (n=5) noted that smaller groups (bubbles) had a positive impact on children's learning and development. Children had more physical space and time with their carer/educator. In addition, the respondents (n=2) noted that parental engagement, when school was closed, led to more awareness of their children's capabilities and, in some cases, led them to involve themselves more in their child's learning. Others pointed out the benefits and challenges of online and physical learning experiences:

For young children – none – some will never know the joy of a fully equipped classroom, hands-on messy play, outings, and much more. (Respondent, Survey 2)

Spend more quality time with parents and maybe parents informed themselves how to deal with their children. (Respondent, Survey 2)

According to the survey findings (see Figure 4.47), 83% of the respondents would like to keep exclusively face-to-face in class/setting after returning to normality (post-pandemic times). Only a small minority stated that they are interested in keeping the blended approach (part online and part face-to-face) (14.9%) and/or online learning spaces (2.1%).

Which of the following learning modes would you like to keep when returning to the school/centre in post-pandemic times?
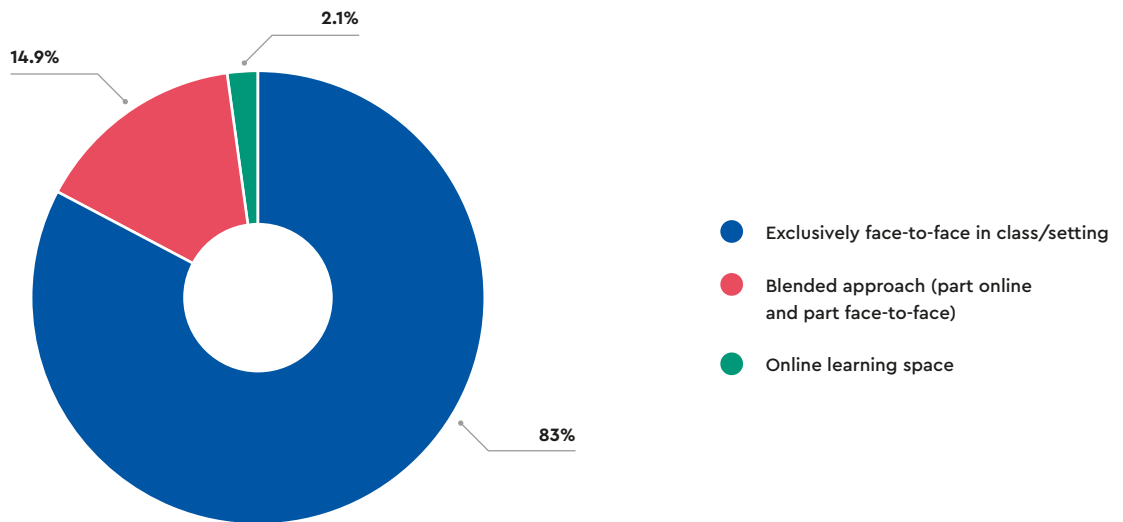

- Exclusively face-to-face in class/setting
- Blended approach (part online and part face-to-face)
- Online learning space

Figure 4.47: Learning modes ECEs would like to keep when returning to the school/centre in post-pandemic times

4.3.3   Well-being and Relationships

In comparison to the 2019-2020 scholastic year, the majority of the respondents (55.6%) felt happier during the 2020-2021 scholastic year (see Figure 4.48), while 42.2% of the respondents were more satisfied with their lives. Contrastingly, 48.9% of the respondents felt more stressed.

Compared to the scholastic year 2019–2020, indicate:

- Much better
- Better
- The same
- Worse
- Much worse
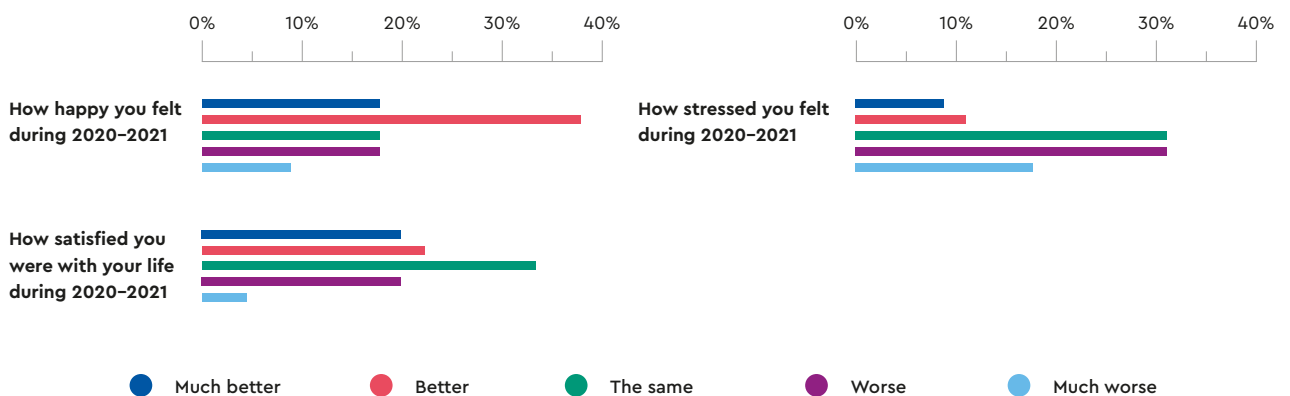
Figure 4.48: ECEs levels of happiness, satisfaction with life and stress during the scholastic year 2020–2021

Figure 4.49 shows ECEs perception of the 2020-2021 scholastic year and how they felt while working through the pandemic. The findings indicate that the great majority of the respondents (75.6%) managed to survive the year despite all the challenges. 57.8% of the respondents felt they did a good job, while only 2.2% stated that they felt overwhelmed and considered resigning. 31.1% felt exhausted, and 20% stated that their mental health suffered. 24.4% of the respondents also stated that they established a stronger relationship with the learners' parents. 15.6% of the respondents felt that this scholastic year put a lot of strain on their family life. Only 11.1% felt empowered as educators.

After working through the pandemic (2020–2021), I felt:

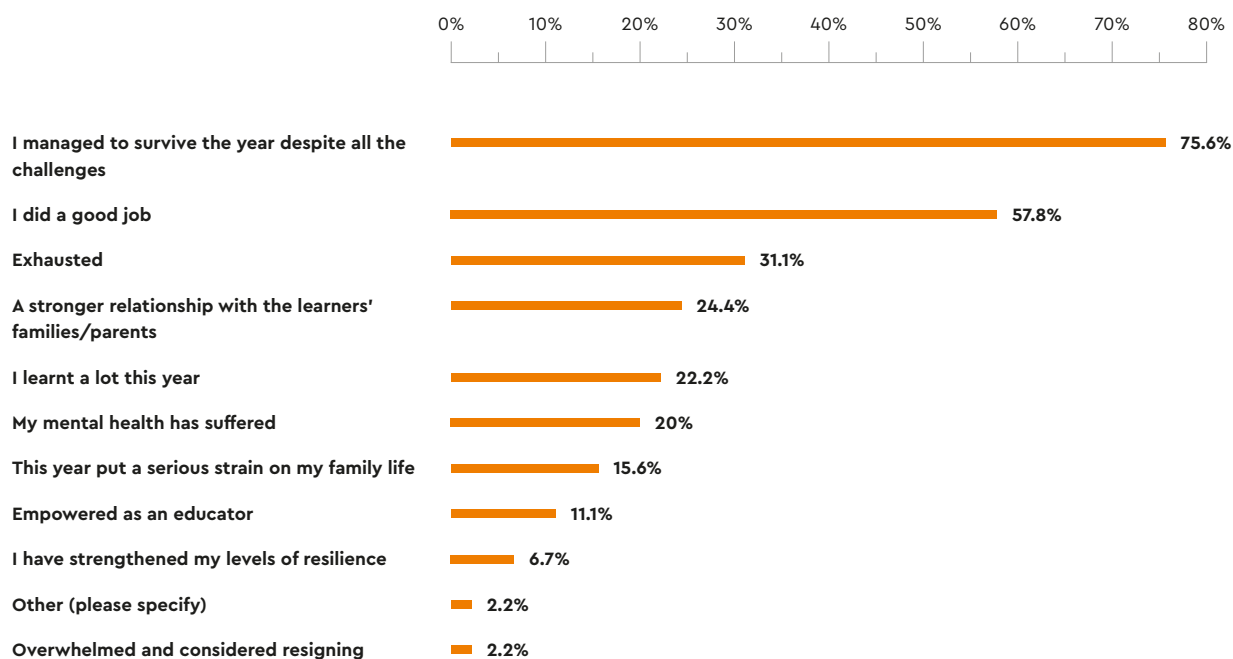| Category	Percentage
I managed to survive the year despite all the challenges	75.6%
I did a good job	57.8%
Exhausted	31.1%
A stronger relationship with the learners' families/parents	24.4%
I learnt a lot this year	22.2%
My mental health has suffered	20%
This year put a serious strain on my family life	15.6%
Empowered as an educator	11.1%
I have strengthened my levels of resilience	6.7%
Other (please specify)	2.2%
Overwhelmed and considered resigning	2.2%

Figure 4.49: How ECEs felt while working through the pandemic in 2020–2021

During 2020-2021, the majority of the respondents felt supported (see Figure 4.50) by their family/friends (77.8%), by their colleagues (73.3%), parents of children (55.6%) and school/centre management/leaders (53.3%). Only 6.7% felt that they were supported by education officers.

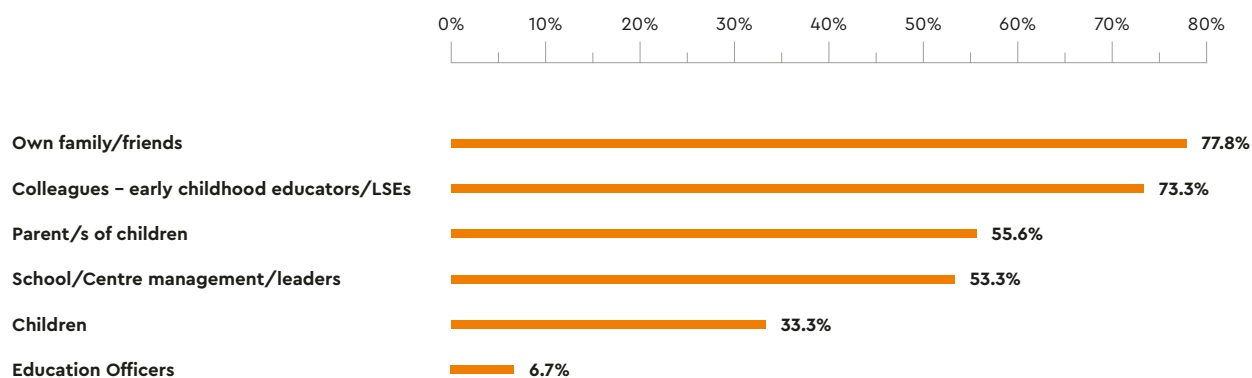**During 2020–2021, I felt supported in my relationships with:**

Category	Percentage
Own family/friends	77.8%
Colleagues – early childhood educators/LSEs	73.3%
Parent/s of children	55.6%
School/Centre management/leaders	53.3%
Children	33.3%
Education Officers	6.7%

Figure 4.50: How ECEs felt supported in their relationships with different stakeholders

Item 28 of the survey was an open-ended question asking participants to describe their overall experience as educators working in a childcare/kindergarten setting in Malta during the pandemic. Various responses were collected (n=35) and represented in a word cloud below (see Figure 4.51). The majority (n=17) stated that despite the challenges and stress, it was a positive experience in which they found the opportunity for self/professional development and found support from their families/colleagues and children's parents. Few respondents stated that the experience was **tough but rewarding; they felt appreciated by the parents through their efforts and learned to be more resilient and creative**. On the other hand, some respondents (n=14) described their experience as chaotic, stressful, and challenging with little or no positive outcomes. They found working conditions overwhelming due to the restrictions and health risks; some felt that children did not benefit from their teaching efforts. Other respondents (n=6) stated that although the conditions were not ideal, they were resilient and managed to adapt to the new situation.

Figure 4.51: ECEs experience during the pandemic (open-ended question)

The last item of the survey (item 29) was another open-ended question, but this time, asking for any general and /or additional comments from the respondents. In total, 11 comments were received. One of the respondents highlighted the importance of hands-on support from the IT department:

We educators are not the experts in this area, but we were expected to be, and this caused a lot of stress (Respondent, Survey 2)

Another respondent expressed his/her concerns on the lack of visits from early years professionals to support Learning Support Educators and children with individual educational needs in the Maltese early years sector during the pandemic:

I was an LSE myself a few years ago and remember the INCO visiting us in the class almost every week or two and checking the progress of the kids. Early intervention teachers and speech therapists used to visit too. During these past two years, I noticed a lack of presence from these professionals. (Respondent, Survey 2)

A few respondents highlighted the importance of the early years and the opportunities gained rather than the challenges faced during their pandemic experience:

Learning to handle a different way of teaching was an experience in itself. (Respondent, Survey 2)

I confirmed how quickly children adapt to changes. Ex: 3-year-olds kept their mask on for the whole day throughout the year! They amazed us all… Every experience is a learning experience. I, therefore, believe that despite all the challenges, we all gained new knowledge and skills, even children. (Respondent, Survey 2)

Covid-19 was a true lesson of life where nothing must be taken for granted. But at the same time, it brought about more consciousness about the importance of childcare centres and schools! Luckily today, with communication, the internet etc., we can keep in contact with both parents and children. (Respondent, Survey 2)

Patterns in the open-ended comments of both surveys

The following open-ended comments show how a pattern of trends that support some of the quantitative findings presented in this research report surfaced from both surveys:

Interactions between educators, carers, and parents

Through online sessions we managed to maintain a healthy link with both children and parents. Having said that I don't believe that it can or should replace the real first-hand experience in the classroom. It may be an option to reach a balance and keep some level of real-time online communication. (Respondent, Survey 1)

I even managed to get to know the mummies better, thus understanding the kids better. (Respondent, Survey 1)

I liked the parents' participation during online live lessons. You get to learn more about the child and they experience how the lessons are done in class so they can reinforce. (Respondent, Survey 2)

Spend more quality time with parents, and maybe parents inform themselves how to deal with their children. (Respondent, Survey 2)

Children from 0–3 years will surely not be able to follow long sessions, but from time to time we set up video calls with them in order to foster attachment and bond. (ECE, Survey 2)

Reasons for opting not to use 'real-time sessions'

Am not very satisfied with live sessions because some children who were so energetic at school felt shy online and thus not showing their real self. (Respondent, Survey 1)

No child or parent ever sent feedback I sent every week with learning opportunities. I felt sad and useless. Teams classroom was given to us 3 days before the end of school. (Respondent, Survey 1)

I used the class Dojo and refrained from doing live online sessions at this tender age. (Respondent, Survey 1)

The majority of parents always collaborated with sending proof of activities done at home, but I also had students who disappeared completely and even school SMT could not reach them when they called home, (ECE, Survey 1)

Working in childcare, it was up to the parents to show them the recorded videos and joining us online. The parents couldn't care less because their children are young. They gave importance to elder siblings. (Respondent, Survey 2)

Online learning is beneficial, but the age factor should be considered. After all, most parents were stressed out in order to have their children follow online sessions imagine having a toddler and a baby and working too! (Respondent, Survey 2).

The problem lies with parents being overprotected by parents, which in a way is a good sign, but this hinders the child's holistic development. For example – parents do the craft, not the child, and most of the time online, I spend it saying: "Let the children do the work." (Respondent, Survey 2)

ECEs preference for physical pedagogies

I would still opt for face-to-face teaching as you can control the children better. I feel more stressed knowing that there are parents observing what I say, do etc... I miss the class corners that we set up as these were the perfect areas to observe the children. They were great for improving the children's social skills. The fact that you get up prepare yourself for school talk with your colleagues, eat together with the kids etc... are all things I missed when we worked online. (Respondent, Survey 2)

Whilst I had a very successful virtual class, nothing beats the physical classroom, in my honest opinion. (Respondent, Survey 2)

Preferably, there should never be online sessions. Being physical at school is more fruitful. (Respondent, Survey 2)

For fruitful results, there is no other option than being physically at the childcare centre/kindergarten. (Respondent, Survey 2)

ECEs commented on how parents do not acknowledge the importance of play-based learning and the early years profession:

Not to mention the lack of participation by most parents who are of the idea that Kindergarten is the least important year. Unless the parent's mentality changes, we will always be their children's babysitters and not educators! (Respondent, Survey 1)

Another point that comes up during online sessions with parents is – "MELA KINDER MHUX JILAGĦBU JKUNU" (So kindergarten is not just about play?) – yes, in kinder, we play but with learning objectives. The way forward is that parents are more educated with regard to holistic development and the importance of play-based learning. (Respondent, Survey 2)

ECEs sharing their successes and challenges about pedagogies, curricula, and assessment practices during the pandemic

A meeting should be set up with the Kindergarten EO's to discuss the best way to teach the Emergent Curriculum online. It's one thing saying it should be done and another thing doing it online. (Educator respondent, Survey 1)

The parents want worksheets. Anything else is just playing for them. I would explain to them on a weekly basis how the Emergent Curriculum works, and yet they would still send me pictures of their children using worksheets instead of the activities given and adapted so that they could easily find the resources at home. At this point, I say we give them what they want. (ECE, Survey 1)

We used to prepare a lot of material by using the padlet weekly, daily programme and weekly programme so it would be easier for them. I found it effective to use the project approach to continue implementing an emergent curriculum. I prepared and invited the children with pictures and videos to stimulate them about the next project. Also, PowerPoint helped a lot. Parents had the opportunity to build up the map together with their kids. My first experience creating something new used to take a lot of time and space on my mobile! (Respondent, Survey 1)

During live sessions, I also let them switch off cameras to do free play and get back online on x time. (Respondent, Survey 2).

It is very difficult to take notes and observations during online sessions when you have to control 3yr old's accompanied by their grandma/parent. Many of them are with dummies (Respondent, Survey 2)

I did this for the first term... I think that paperwork is taking our pleasure from teaching (Respondent, Survey 2)
Emergent curriculum couldn't be used to the maximum. Children still play together outside etc., so why not in class as well? (Respondent, Survey 2)

I would like to return to my class but not an empty one!! (Respondent, Survey 2)

Outlining benefits and challenges of new online learning spaces in 2020–2021

Benefits:

Parent involvement when school was closed led to more awareness in the parents of their children's capabilities and, in some cases, led them to involve themselves more in their child's learning. (Respondent, Survey 2)

Children were spending more quality time with their loved ones while learning online. (Respondent, Survey 2)

The children learned to adjust in every situation. (Respondent, Survey 2)

They became more resilient and independent. (Respondent, Survey 2)

I had the experience of online sessions with young children and some groups, which is something I never thought of, went well. (Respondent, Survey 2)

Being with our students in class is very important but online teaching was fun too. We all worked together, the management, my colleagues, the parents, and our little students. If need be, for safety, I would opt again for online schooling until things are better. (Respondent, Survey 1)

Through online teaching, I had the chance to get to know my colleagues better as we worked together and learnt from their experiences, too. (Respondent, Survey 2)

Although the online learning worked it had its limitations. It was beneficial for the children, especially when the time came for them to return to the centre. Through online sessions, we managed to maintain a healthy link with both children and parents. (Respondent, Survey 1)

I felt that my online lessons were successful due to the work previously done before Covid, mainly the attachments formed beforehand. The children were eager to talk to me because they had previously understood that I was their friend. My concerns are that had this been at the beginning of the scholastic year, the experience would not have had the same results. (Respondent, Survey 1)

Challenges:

I did my best daily to upload and get back some feedback from parents, but it was to no avail or little. My page was daily uploaded with activities, but little feedback was sent. (Respondent, Survey 1)

Parents complained about everything (even when my two young children, aged 1 and almost 3, cried during an online session), and the more I gave, the more I feel I was not appreciated. (Respondent, Survey 1)

I feel that with the COVID-19 having my children at home, it was very stressful, and I couldn't give them my 100% as I normally do since I worked a lot to give the learning opportunities to my students. Parents complained about everything (even when my two young children, aged 1 and almost 3, cried during an online session), and the more I gave, the more I felt I was not appreciated. (Respondent, Survey 1)

Looking forward to starting working from school directly with the kids. Online teaching or other kinds of technology is not for me. I am seriously considering quitting my job after 33 years if we have to continue with online teaching, it's mentally draining, and my mental health is a priority. (Respondent, Survey 1)

For young children – none – some will never know the joy of a fully equipped classroom, hands-on messy play, outings, and much more. (Respondent, Survey 2)

Having said so I don't believe that it can or should replace the real first-hand experience of the classroom. It may be an option to reach a balance and keep some level of real-time online communication. (Respondent, Survey 2)

One of these students never contacted me even though I tried through teams, e-mails etc… (Respondent, Survey 2)

I had some parents that opted not to participate when we plan such activities online, including cooking activities. I miss the class corners that we used to set up as these were the perfect areas to observe the children. (ECE, Survey 2)

I would still opt for face-to-face teaching as you can control the children better. (Respondent, Survey 2)

I feel more stressed knowing that there are parents observing what I say, do etc… (Respondent, Survey 2)

I found it very difficult as I am not computer literate, and I didn't find any help during lockdown. (Respondent, Survey 1).

Internet, laptop at my own expense. (Respondent, Survey 2)

I think that it was unfair for me that I had to upgrade the internet at my own expense. If we had to go online from school, the whole issue would not have been successful as the internet at school is very bad!! (Respondent, Survey 2)

It would have been nice to get some clear guidelines on what was expected. (Respondent, Survey 1)

We didn't have proper support to go online as in live or recorded lessons. Our main platform didn't support the full version of teams, and we had no idea how to use it. (ECE, Survey 1)

Teams classroom was given to us 3 days before the end of school. (Respondent, Survey 1)

In April, it was difficult for me, and I didn't have my class emails. I don't know why but my children didn't seem to have an ilearn account yet. (Respondent, Survey 1)

I think there should be more hands-on support from the IT department. We educators are not the experts in this area but were expected to be, which caused a lot of stress. When we ask for help, we do not want links to go through on our own trying to wreck our brains to understand but explanation and quality time with a tutor. (Respondent, Survey 2)

Then my worst fears came real as eventually my contract was not renewed :((Respondent, Survey 1)

I was one that lost my job completely due to closedown of centre and is still looking for fulltime job. (Respondent, Survey 1)

Another problem that we are facing now from those children that didn't attend school are development problems that normally are tackled earlier with the help of an Early Intervention Teacher. (Respondent, Survey 2)

Outlining benefits and challenges of new physical learning spaces at school/centres in 2020–2021

Benefits:

Smaller bubbles led to more individual learning. (Respondent, Survey 2)

I confirmed how quickly children adapt to changes. Ex: 3-yr olds kept their mask on for the whole day throughout the year! They amazed us all. (Respondent, Survey 2)

Children learned and became more independent in following safety measures and hygiene rules. They developed more knowledge about the world and taking care of others also, they had more opportunities to take initiative and work independently. (Respondent, Survey 2)

Children who tend to follow others had more opportunities to take initiative and work independently. (Respondent, Survey 2)

They had more space in class and learned how to live the new normality. (Respondent, Survey 2)

The bond between the baby and the carer increased due to the bubbles. (Respondent, Survey 2)

Challenges:

I really hope that although we are going to get back to work, someone DOES stand up for us. Not because we are Kindergarten Educators, it seems like nobody cares (No plan, nothing). It's the most vulnerable period, I really can't understand why such a manner.... It hurts. I honestly feel useless, but unfortunately, it's always been this way. I thank God we have a very helpful Head of School. (Respondent, Survey 1)

Shared classes were already wrong, let alone now in this situation. (Respondent, Survey 1)

I think that the lack of resources (since most of them are packed & cannot be used, the lack of space where to store) only one cupboard available, the fact that the classroom is used from club 3–16, so everything has to be stored at the end of the day, posing even more limitations, did not benefit the children in any way. (Respondent, Survey 2)

The fact that they had to use outdoor space according to a timetable and they had to remain in the same bubble it did not make any benefit. (Respondent, Survey 2)

Social distancing with children under four is impossible. Children need contact with other children and their teachers to feel safe and loved. (Respondent, Survey 2)

The fact that the classroom was so bare, few hands-on activities were possible, and school activities and outings were not permitted. These kids were disadvantaged. (Respondent, Survey 2)

I truly wish that one day someone will realise that having fewer students in class is healthier for us but mostly for the little ones! (Respondent, Survey 2)

The reason being that as a centre we encourage parents to be full participants in their children's development. However, due to the current situation their physical presence at the centre is very limited. (Respondent, Survey 2)

I am scared and worried to get back to work, and this is stressing me. Especially knowing that children will be without a MASK in CLASS! (Respondent, Survey 2)

As a parent, I would be extremely worried about my child at school, and thus my performance as an educator will lack. I feel a lot anxious if we were to go back to class. Keep into consideration the number of children in classes and the square metres of each class. Classes are going to be crowded, and no social distance can be performed. (Respondent, Survey 1)

I was a Learning Support Educator (LSE) myself a few years ago and remember the Inclusion Support Co-ordinator (INCO) visiting us in the class almost every week or two and checking the progress of the kids. Early intervention teachers and speech therapists used to visit too. During these past two years, I noticed a lack of presence from these professionals. Respondent, Survey 2)

I had to go to school, and my child had to stay at home as he goes to a church school. This was a big strain for me as a mother, and I considered taking unpaid leave as I couldn't cope. I think it is very unfair that the education system doesn't work with all schools in the same way – whether it is private/church/government school. (Respondent, Survey 2)

Teachers' face masks are hindering the children's language development. (Respondent, Survey 2)

ECEs' unveil a plethora of emotions

Stressful but rewarding. (Respondent, Survey 2)

It was hard but I made it through for the children. (Respondent, Survey 2)

Tough because this was also my first year of teaching. However, it was also a deeply satisfying year because I was surrounded by so much love and support. (Respondent, Survey 2)

Stressful – but at the same time happy. Parents of the children who attended appreciated all I did for their children. (Respondent, Survey 2)

2020/2021 was an extremely difficult year for me. I however feel that nothing is in vain. Learning to handle a different way of teaching was an experience in itself. (Respondent, Survey 2)

Actually, for me it was quite positive. Fewer distractions in class and children were more focused. Fewer children in class made me more at ease and were able to observe them and get to know them on a much deeper level. (Respondent, Survey 2)

I would feel safe if vulnerable educators and children are given importance and clear instructions for their own safety. (Respondent, Survey 2)

A whirl-winding one. (Respondent, Survey 2)

It was a nightmare since children this age are not able to maintain social distance! Besides this, every day I lived in fear that either a parent or one of my staff would report that he is 'COVID Positive'. I prayed every day that it would pass without consequences and working under such Pressure is not pleasant at all. (Respondent, Survey 2)

Overwhelming. (Respondent, Survey 2)

Terrible. (Respondent, Survey 2)

Very difficult to cope. (Respondent, Survey 2)

The pandemic is having a profound impact, not only on me and my people's health but also on how they learn, work and live. (Respondent, Survey 2)

Something I wish never to experience again. Due to the restrictions imposed, I constantly felt that had there been no restrictions, I would have carried out activities in a way that was more beneficial to the children. I felt that the children were deprived of what was optimal for them throughout and this was very frustrating. (Respondent, Survey 2)

I felt that I was in survival mode. (Respondent, Survey 2)

Taught me never to give up in the face of any challenge and brought out more creativeness in me. (Respondent, Survey 2)

Honestly, I thought that it was going to be a nightmare as it was a leap of faith into the unknown. But kids adapt better than adults, and I managed to enjoy the scholastic year with my group of children no matter what! (Respondent, Survey 2)

I managed as I gave my all to help the children develop holistically. The parents were so supportive and I give them nothing but praise. (Respondent, Survey 2)

Every experience is a learning experience. I, therefore, believe that despite all the challenges, we all gained new knowledge and skills, even children. (Respondent, Survey 2)

It was an experience which taught me a lot. Although life was not easy, I feel that I did my utmost and had very good results. (Respondent, Survey 2)

CHAPTER 5

Discussion

This section presents an overall discussion that aims to answer the research questions of the Cov-EM study through an analysis of the data gathered from educators working with 0- to 5-year-olds:

Main research question for this research report within the Cov-EM study:

What lessons can we learn from the perspectives of Early Childhood Educators working with 0–5-year-olds during the first and second wave of the COVID-19 pandemic in Malta?

Subsidiary research questions:

(1) How did Early Childhood Educators perceive and implement early years pedagogies during the first and second waves of the pandemic?

(2) To what extent were new learning spaces available, accessible, and affordable to Early Childhood Educators during the first and second waves of the COVID-19 pandemic?

(3) How did the pandemic's first and second waves influence Early Childhood Educators' relationships and overall well-being?

The answer to these questions is presented in four key lessons that emerged from the ECEs' responses to both surveys:

Teaching and Learning
Lesson 1 *A reshaped 'online and offline' education and care for the under-fives facilitated new types of interactions, curricula, pedagogies, and assessment*

Learning Spaces
Lesson 2 *New forms of learning spaces generated challenges as well as affordances for learning*

Well-being and Relationships
Lesson 3 *'Renovated and collapsed bridges' of relationships and the 'falls and rises' of well-being for ECEs in COVID times*

Overall key lesson:
Lesson 4 *The pandemic exacerbates an urgent need for political priority to higher investment in Maltese ECEC*

The lessons learnt strengthen the theoretical foundations of the Cov-EM study and offer new understandings concerning the three concepts unpacked – teaching and learning, learning spaces and well-being and relationships with insights from ECEs. Recommendations are presented with the intent to trigger reflection, rethinking and strategic action in a post-COVID early years education epoch.

The four key lessons learnt from Early Childhood Educator respondents to both surveys (working with 0- to 5-year-olds)

Teaching and Learning

Lesson 1
A reshaped 'online and offline' education and care for the under-fives facilitated new types of interactions, curricula, pedagogies, and assessment

a. Detachments and Attachments between the actors in online and offline ECEC spaces

In COVID times, sudden centres and school closures let to the introduction of online learning in ECEC. This shift reshaped early years pedagogy, curricula and the interactions and relationships between the respective actors. This study reveals an uneven start to online learning in childcare and Kindergarten settings in Malta. The first survey unveiled that in 2020, most ECEs did not use daily online interactive live sessions with children. Emails to parents/guardians were the most popular one-way tool educators resorted to during school closures. This implies that several young children experienced a sudden loss of attachment with their primary caregivers. Ongoing theory and research show that the attachments and detachments of relationships in an individual's life – including young children - are central to well-being and mental health (Bowlby, 1988; Vrticka & Vuilleumier, 2012). Thus, in line with recent literature (Rajkumar, 2020), this study highlights how critical it is that both the COVID-19 impact on the psychological health of young children and the required action to avoid the recurrence of sudden detachments in ECEC be addressed.

This study further reports that during the third scholastic term (April – June 2020), children attending childcare and kindergarten started to experience real-time and recorded online sessions more often, as school/centre management teams encouraged. Most educators stated that they spent more time attending webinars related to digital literacy skills and planning learning experiences compared to the pre-closing of schools/centres.

The inclusion of online learning in the earliest years seemed to have helped in gradually rebuilding bridges and bonds between the children, families, and their primary caregivers at the centre/school. This remote triad between parents, educators and the children also facilitated new types of interactions with peers.

Findings show that some parents became more visible and engaged in their children's learning journeys through real-time (synchronous) and recorded (asynchronous) sessions. Half of the respondents in Survey 1 claimed that parents attended real-time sessions regularly, asked questions and had the opportunity to follow their children thanks to the online platform provided by the respective schools/centres. These findings raise questions about whether online platforms may serve as new bridges to engage parents in young children's learning journeys – thus strengthening the 'triangle of care' between parents, educators, and children in ECEC (Brooker, 2010). Open-ended comments in both surveys supported these findings.

b. The aftermath of a shift to online ECEC: A surge in child participation in curriculum and pedagogy through relationship-driven remote learning and the new reality of working remotely with parents and children

The majority of educators stated that they enjoyed interacting with the children online. Some educators declared that they communicated and supported parents and that the parents were able to ask questions to educators and follow their children. During live online sessions (Surveys 1 and 2), child participation occurred mostly when interacting orally with the educator and/or answering questions posed by the educator.

A key finding of this study is that almost half of the educators in Survey 1 and the majority of educators in Survey 2 noted that the children's level of participation increased when they were supported by their parents as opposed to when they were engaging in independent learning opportunities. This evidence supports the theory of Siemens (2004) that of connectivism and hence, acknowledging the value of technology in society and the co-construction of new knowledge between self, group members, and technology. It also links to the concept of *relationship-driven learning environments* underpinning the popular Italian Reggio Emilia approach for young children. The philosophy of this approach is grounded in the notion of learning as socially constructed between people (Vygotsky, 1978) - preceding cognitive development - and prioritising the building and sustaining of relationships between members of a group. Young children learn through participation in the environments they experience and

not from what is taught (Malaguzzi, 1993). Malaguzzi (1993), founder of the Reggio Emilia approach, referred to the environment as the 'third teacher'; the three teachers are the parent, the educator, and the environment. He strongly believed that a child's relationship with these three teachers ignites learning. Yet, in classroom contexts, it is challenging to sustain this triad. For example, most parents work and are hard to reach and engage in their children's learning process. From this study, we learn that online learning may assist in sustaining this triad through the affordances that online spaces provide for families, educators, and children.

Half of the educators (Survey 1) declared that they spent time doing online sessions with families and children during school/centre lockdown in 2020. Likewise, previous research indicates that asynchronous sessions were used more frequently during the initial stages of school closures (Foti, 2020; Steed & Leech, 2021). A minority of ECEs in this study, pointed out that real-time online (synchronous sessions) were disrupted by parents or unsuccessful with young children. These claims were supported with open-ended comments that included other reasons for opting not to use 'real-time sessions' with young children: overprotective parents, lack of feedback from parents, working parents, prioritising elder siblings' online sessions, parents' stress, absence, and shy children. In some open-ended comments, educators mentioned the fear of not being well-prepared for online sessions. This further supported the quantitative data indicating hesitation to use remote learning with young children. It was interesting to note that ECEs, in both surveys, also commented on how some parents do not acknowledge the importance of play-based learning and the early years profession. In line with early years literature, also concerning COVID-19, this evidence seems to resurface the longstanding social construction of ECEC and ECEs as "essential but undervalued" (Harvy et al., n.d.). In a Maltese early years context, ECEs (even during the second wave of the pandemic) continued to express their preference for physical pedagogies rather than remote in quantitative and qualitative data.

c. Emergent or prescriptive? Traditional or authentic? How ECEs dealt with reshaped pedagogy, curricula and assessment in online and offline early years education

During the first wave of the pandemic, and therefore the first school lockdown (2020), findings show that educators faced several flexibility issues and challenges in implementing online child-centred early years pedagogies with the under-fives. A minority of educators declared that they did not develop a 'children's web' for project-based learning as a tool to implement an emergent curriculum in the early years. This evidence indicates that a sudden shift to online teaching and learning may have disrupted the recent curricular reform at the Kindergarten level in state schools (shifting from a prescriptive to an emergent curriculum - 2018). Indeed, the minority stated that the remote learning programme was informed by the children. Comments from Survey 1 revealed the ECEs call for further support from Education Officers to implement the Emergent Curriculum during online sessions.

This situation led the majority of ECEs to re-adopt or continue implementing a more formal/traditional curriculum when centres and schools closed their doors. Survey results indicate that ready-made sheets/links with ideas/instructions for learning opportunities were the most popular. This was followed by sending work/worksheets to children's parents and PowerPoints with photos showing step-by-step instructions. It seems that this formalised approach, jeopardising play-based learning and promoting the notion of formal 'work', assisted ECEs in trying to keep in touch with parents and learners during the first wave of the pandemic. The findings show that this decision was not informed by management. Given the recent curricular reform in the early years, it is somewhat concerning that some 30% of the ECEs considered the use of worksheets with letters and numbers as an essential tool to prepare young learners for formal schooling. ECEs also declared that these were already part of their learning programme pre-COVID-19. A minority of the educators stated that parents expected them to send work/worksheets; leaders expected them to do so; and that worksheets are easy to find online. Almost half of the respondents claimed they assessed under-fives by marking or commenting on the worksheets. Some ECEs indicated that parents requested worksheets because this is what they considered children's work.

These findings corroborate findings from a survey conducted with kindergarten teachers in an Italian context about the shift to online learning during the pandemic. While online learning helped support bonding between educators and young children, activities seemed to be impoverished given the physical environment's lack of affordances (Panesi et al., 2021).

In light of the above, this study reveals that the frequency of online learning opportunities during the first lockdown was mostly prescriptive. The majority of ECEs stated that they often shared online resources related to the area of Mathematics, numbers, creative learning, physical education and sensory learning experiences, storytelling in English, nursery rhymes and the teaching of letters. A particular trend/focus on teaching numbers and letters with the under-fives is reminiscent of an empiricist view of 'school readiness' grounded in what children know (e.g., alphabet, colour, and shapes). This is worrying as it portrays a weak

image of young children – one that portrays children as 'unready' to learn. Conversely, amidst the challenges of the first wave, some ECEs declared how they managed to explore and implement the emergent curriculum using the project approach in an online space. They found the project approach 'effective to use' in online spaces.

Notwithstanding ECEs initial resistance and lack of knowledge and skills in online learning during the first wave of the pandemic, this study shows a gradual acceptance of this learning space in Survey 2. Educators used asynchronous/prescriptive tools more often during the first wave of the pandemic (2020) due to the emergency of the situation. However, some realised that meaningful interactions and learning happened when live sessions were used. Indeed, in Survey 2, a minority stated that they offered one-off online sessions for children at home. A key finding in Survey 2 is a significant increase in the respondents' use of real-time (live) whole-group sessions with children and parents through video-conferencing learning opportunities. A decrease in emails to parents with instructions and/or links to learning opportunities and emails to parents with worksheets and PowerPoints was also evident.

In some open-ended comments, ECEs stated that the online experiences that motivated and engaged the children most were hands-on activities involving experiments and crafts, that provided active participation. Some of these included science experiments, cooking and other fun activities in which children created/experimented with the readily available materials at home. Among children's most motivating/engaging online experiences, online storytelling was also highlighted. This study reveals that, as with physical learning spaces, online spaces provided new avenues for active participation and play-based hands-on learning and increased the children's level of involvement in learning (Laevers, 1994). Most ECEs respondents in Survey 2 indicated that children were more willing to participate actively during the real-time/video-recorded online sessions. They were also satisfied with the frequency, more regular attendance, and the necessary device/s. Only 16.2% of the ECEs stated that children found real-time/recorded online sessions difficult to follow. On the other hand, three ECEs stated that for some children (0-3 years) length of real-time sessions was a challenge, so they had to rearrange the timing, duration or the learning opportunity offered. This implies that some ECEs struggled to juggle play-based learning experiences from offline to online spaces. Free play during online live sessions was mentioned by one educator in Survey 2.

In Survey 2, storytelling seemed to be the most popular activity (Survey 1 – Mathematics) during online sessions. Promoting Mathematics, singing nursery rhyme activities and sharing online resources seemed to have been given less importance during wave 2. It was noted that circle time learning experiences, which required remote live sessions to be implemented, were being conducted more often. This further supports the evidence that, over time, real-time sessions became more popular with ECEs. There seems to have been a slight decrease in sensory learning and creative learning experiences from the first wave to the second wave during online sessions. The attempt to use project-based pedagogy in online learning was evident in the increase of educators stating that they 'developed a children's web' (from zero to around forty per cent in Survey 2). Thus, it may be argued that, over time, educators may have started to promote more play-based learning and child agency in online spaces. Yet, it was noted that the popular international discourse around a work and play dilemma in ECEC featured in both surveys – in Survey 1, the majority of educators' claimed they used a formal approach to teach letters, and in Survey 2, almost half of the respondents used worksheets within online spaces. In Survey 2, ECEs declared that they never offered role-play at home. Hence, from ECEs, we learn that sudden reshaped pedagogies and curricula (from offline to online ECEC spaces during COVID-19) were underpinned by contradicting philosophies and promoted a kaleidoscope of hands-on, playful, as well as traditional and more formal learning experiences for the under-fives.

The emergent curriculum approach, promoted in policy and initial teacher training in early years settings in Malta, promotes authentic assessment through the significant practice of observation (MFED, 2021a, MEDE, 2012, DQSE, 2015). In terms of early years assessment, this study reports that when most ECEs used online learning modes, they assessed children through their interpretations and reflections of the home learning environment. The educators used videos and photos as observation tools. ECEs used other strategies for assessment, such as asking questions to children and parents. An interesting finding is that half of the respondents stated they spent less time on assessment during school/centre closure in 2020. The latter remained popular among ECEs in Survey 2, whereas observations, interpretations and reflections were used less. Almost half of the respondents used observation, took notes during online sessions, and assessed young children by marking and commenting on individual worksheets. A minority of educators used worksheets as an assessment tool in Survey 2. In the second survey, most respondents claimed that learning stories/notes, journals, and portfolios (authentic assessment practice) were the most popular forms of assessment used when schools/centres were physically open. Almost forty per cent used summative assessment practice – checklists – to assess young children's learning and development. This study shows that when it comes to physical ECEC, it is evident that ECEs rely more on authentic assessment forms, as indicated in local ECEC policy documents. Yet, authentic assessment grounded in the cycle of observation, interpretation, and reflection to assess and inform planning seemed to have gradually faded in an online assessment early years arena. Thus, in line with the provision of reshaped pedagogy and curricula

during pandemic times, online and offline assessment practices tapped on traditional and authentic ways of assessing young children. Some ECEs commented about the challenges faced online conducting early years assessment practice. The difficulty of observing young children online and paperwork was highlighted.

This report shows that the pandemic brought about new challenges for assessment in a Maltese early years context. An interesting find from this study is the more prominent role of the parent in assessment which might have been overlooked in previous early years assessment practices. Will ECEs keep asking for parents' feedback regarding assessment practice in post-COVID times?

d. To stay or not? Beneficial or detrimental? Online and Offline learning during and post-pandemic

Findings indicate varied comments for or against online and offline early learning during and post-COVID-19. In Survey 1, the majority of the respondents stated that they would like to keep exclusively face-to-face in class/settings. The interest in blended learning and online learning was relatively low. Yet, more than half of the respondents in Survey 1 stated that they would like to keep blended or online learning as a learning space. In Survey 2, most respondents declared that they found synchronous (live sessions) as the most effective mode of teaching young children during school closures. However, only thirty per cent favoured a future blended (offline and online) approach in ECEC. Further, open-ended comments revealed the challenges faced by ECEs in bare physical environments and the impact of the pandemic on the recent curricular reform in Malta (from a prescriptive to an emergent curriculum in the early years) when returning to schools/centres.

A key finding in Survey 2 is that almost half of the respondents think young children benefitted from learning at home during the pandemic. Conversely, a minority of respondents think that young children did not benefit. Half of the respondents stated that significant learning losses negatively influenced young children's learning and development during the pandemic. In this light, this study calls for further research that measures pandemic-related learning losses in childcare and kindergarten settings. A trend in the open-ended responses highlighted the importance of the role of parents in learning for young children and physical contact and play in children's learning and development.

From this study, we learn that, despite the challenges and hesitations, ECEs seemed to start valuing more the affordances online spaces can bring in the learning journeys of children and their families if used purposefully and effectively. Recent research concerning ECEC and the COVID-19 pandemic highlights the need to reconceptualise pre-service and in-service teacher training to maximise learning with young children in offline and online spaces (Hodges et al., 2020; Shorty and Jikpamu, 2021). This research report argues that an ECE's ability to tap on the best of both online and offline worlds to offer meaningful curricula and pedagogies for 21st-century families and children is essential.

Learning Spaces

Lesson 2
New forms of learning spaces generated challenges, as well as affordances for learning

This study shows that, during the first wave, ECEs faced several challenges in implementing effective online learning pedagogy for young children from their new home working stations. This included lack of space (small homes), no access to digital devices, weak broadband access, and lack of the required digital literacy skills to navigate online learning. While half of the respondents seemed to be able to adapt to remote working using technology to communicate with children and parents, Survey 1 shows that the other half felt "not confident" using online technology. Only half of the respondents used video conferencing, such as Zoom, during the first lockdown (2020). It is of major concern that around thirty per cent of the ECEs reported that they did not have the necessary digital devices to work remotely. Also, only half of the respondents indicated that they had a reliable home internet connection during the first wave of the pandemic. Having strong broadband access increased to around seventy per cent of the participant educators in Survey 2. Some ECEs declared how unhappy they felt due to having to upgrade their home internet connection and purchase digital devices at their own expense. This evidence supports the popular notion of 'digital divides' in 21st-century societies (Tsatsou et al., 2009). Malta's digital infrastructure in education, though well-equipped at the primary level (82% vs 35% at the EU level) (European Commission, 2020a), leaves much to be desired for the early years sector (Government of Malta, 2019; Ministry for Education and Employment, 2016). Similarly, at the European level, the Digital Education Action Plan does not include any specific action for ECEC settings (European Commission, 2020b).

As with previous studies (Ford et al., 2021; OECD, 2021b; Steed & Leech, 2021), a lack of training and support for digital literacy for ECEs was evident in both surveys. Some thirty per cent of the respondents in Survey 1 affirmed that they could not conduct any online sessions due to a lack of knowledge and skills. An interesting finding is that ECEs found more support from colleagues rather than professional support from other stakeholders to improve their digital literacy skills. Such realities unveil the aftermath of having an early years sector that lacks human resources to monitor and support all ECEs, thus an inadequate policy infrastructure – a barrier for ECEs to sustain professionalism in practice. This unprecedented stress and confusion for ECEs in Malta shed light on the importance of embracing digital literacy skills fully in Initial Teacher Education programmes and professional development sessions for ECEs. Strategic action plans are needed for the ECEC workforce to build capacity in this area of knowledge and implement effective online learning play-based pedagogies. These findings also point to a need for equal access to online workspaces for all educators and families. Educators must be equipped with the necessary competences and resources to facilitate online learning for young children and their families. Also, we need to ask: Are all children experiencing their right to a safe and secure online environment with the necessary resources?

In the second survey, when schools/centres were physically open, the majority of respondents claimed that they had the required physical space for their group of children and access to the outdoor area. One of the educators commented that they "were more prepared and the school was equipped". However, Survey 2 indicated that only half of the respondents had the required space and resources for the learning experiences. Also, a low percentage of the participants stated that they had access to online learning spaces and the opportunity to connect with vulnerable children at home. This finding links to recent literature concerning the COVID-19 pandemic, where higher learning losses in children with special needs and socioeconomic disadvantages were reported (Chen et al., 2021; Nugroho et al., 2020; Picken et al., 2021).

Notwithstanding, positive outcomes generated through new routines within the newly organised learning school/centre spaces transpired through the ECEs insights in this study. Some respondents noted that smaller groups (bubbles) positively impacted children's learning and development. Other educators indicated that children had more physical space and time and that online parental engagement increased awareness of their children's capabilities. Sometimes, parents involved themselves more often in their child's learning journey. Findings from Survey 2 outlined several benefits and challenges emerging from the sudden necessity for ECEs to use new online and physical learning spaces.

According to ECEs some benefits of online learning spaces include parents' increased awareness of their children's capabilities, parents' engagement in children's learning, increased quality time between children, educators and parents (Camilleri et al., 2022; Deguara et al., 2022), children learned to adjust, be more independent and resilient, and some ECEs got to know each other better while working online. Conversely, the challenges highlighted were the absence of the physical environment at school/centres, children who were not in touch with the educator, lack of parents' participation during online sessions, and managing an online session with young children and parents. In the open-ended comments of Survey 2, ECEs pointed out some benefits and challenges of new physical learning spaces at schools/centres in 2020-2021. Advantages included smaller groups of children, bonding between the educator and the child, learning how quickly children can adapt to follow hygiene procedures, and having more class space. The challenges revolved around sharing classes while following COVID-19 restrictions, lack resources, limited use of the outdoor areas (due to timetables and bubbles), and the lack of social interaction and hands-on play in early years settings.

Recent studies also indicate how ECEs felt challenged to abide by the new protocols (e.g., hygiene, social distancing etc.) when schools reopened during the pandemic (Pramling Samuelsson et al., 2020; Sheasley, 2020). Overall, ECEs indicated that the new confined learning spaces at home and the re-organised school environment engendered benefits and challenges that positively and negatively affect young children's well-being, learning and development. This study also reveals that challenges brought about by the event of new learning spaces had a significant impact on the well-being and professionalism of ECEs. Thus, it is of utmost importance that the well-being of young children and the ECEC workforce should be urgently addressed. The next section will delve deeper into the developing argument of how COVID-19 influenced the well-being and relationships of ECEs working with under-fives.

Well-being and Relationships

Lesson 3
'Renovated and collapsed bridges' of relationships and the 'falls and rises' of well-being for ECEs in COVID times:

a. Opportunities and gaps engendered through twisted relationships in ECEs' lives

This research report focused on exploring the quality and opportunities of life and working relationships of ECEs during COVID-19 times. The first wave of the pandemic significantly impacted the relationship dynamics in the personal and professional lives of ECEs. For example, Survey 1 shows that during the lockdown, most ECEs spent more time with their families and less time with colleagues and school/centre leaders/managers. The lack of interaction with colleagues was highlighted as the most disadvantageous outcome of remote teaching. Yet, some ECEs commented how meeting colleagues online transpired new opportunities.

In Survey 1, most ECEs pointed out that they found support from leaders for their duties as educators and held them accountable for their work. In Survey 2, half of the ECEs claimed that they were supported by their leaders and the other half by their family, friends, and colleagues. In the open-ended comments, educators pointed out how online sessions serve as new bridges of relationships between management, colleagues, parents, and young children.

A key finding is that half of the educators claimed that their relationships with parents improved after the first wave. Similarly, around thirty per cent of the ECEs in Survey 2 established stronger relationships with parents. Some open-ended comments also supported this finding. This evidence supports recent research stating that partnering with families and creating spaces for interactions between the home and school environments supports children's overall well-being, learning and development (Egan, 2021). Yet, for ECEs in Malta, this benefit was not experienced without its challenges. The survey results revealed a tie when educators had to indicate whether parents supported their first efforts to use online modes. In their comments, some ECEs provided indicative justifications, including lack of feedback and response from parents, parents' complaints, and lack of appreciation from parents. On the other hand, some other ECEs pointed out the success of collaborating with parents due to established strong relationships before COVID-19 hit the Maltese islands. Similarly, a study by Vassallo et al. (2021) with parents of kindergarten and primary school children in Malta reported that most parents were not available because they had to share digital devices, cope with various responsibilities, workloads, and their children's e-learning sessions at home. Upon returning to physical spaces, ECEs experienced new challenges regarding parents' lack of physical presence at the centres/schools.

It can be argued that both survey findings reveal how some relationship bridges were renovated while others collapsed in online and offline spaces. It is apt to ask: Can the discovered renovation methods assist in reconstructing collapsed relationship bridges in post-COVID times?

b. The 'falls and rises' of ECEs' well-being during COVID-19

The surveys provided the space for ECEs to express their positive and negative subjective evaluations of their lives during COVID-19 times. These concerned their life and work satisfaction and general physical, social, emotional, and psychological well-being. The results signal that the onset and duration of COVID-19 transpired several 'falls and rises' in how ECEs evaluated their well-being.

Initial reactions revealed that half of the ECEs felt less happy and satisfied with their life than pre-COVID-19. Almost half of the respondents in Survey 1 indicated that their leadership team did not offer support regarding their mental well-being. Recent policy frameworks and surveys indicate the importance of the support provided by the leaders and managers in ECEC settings concerning the ECEs' professional and psychosocial needs (Eadie et al., 2021; United Nations Children's Fund, World Bank and United Nations Educational, Scientific and Cultural Organisation, 2020). In Survey 1, twenty-five per cent of the participants reported that they felt negative about their work, and the majority were not enjoying working on their own. Most ECEs were experiencing additional hours of planning compared to pre-COVID-19 times and a lack of physical movement. While ten per cent of the ECEs declared that they were happier and more satisfied in the first wave of the pandemic, half of the respondents felt happier and more satisfied with their lives during the 2020-2021 scholastic year (second wave). Yet, the evident 'rise' in happiness and satisfaction did not eliminate the increased stress level - the 'fall' - of almost half of the respondents in Survey 2. Some open-ended comments featuring words such as 'scared', 'worried' and 'stressed' supported the latter quantitative findings.

Unsafe working conditions were common in the quantitative and qualitative data gathered. Survey 1 shows that half of the ECEs experienced more stress due to many changes. Conversely, living on an island, ECEs realised that pre-COVID-19 stress related to getting ready for work early, commuting to schools/centres (traffic issues) and not being at home if their children are unwell - has decreased. The increase in family time was seen as an advantage by most ECEs.

'Rises and falls' in the well-being of ECEs featured in the second survey too. The minority pointed out how they experienced serious strain related to the new family life. Some felt overwhelmed and considered resigning during the second wave of the pandemic. Around twenty to thirty per cent of respondents felt exhausted and indicated that they suffered from mental health issues. On a positive note, most of the ECEs reported that they felt resilient in facing unforeseen challenges, and half felt they did well. The minority felt they had learnt a lot and were empowered as educators.

In the Maltese context, childcare educators returned to the centres before Kindergarten educators (i.e., in June 2020). Most childcare educators (working with 0- to 3-year-olds) stated they were happier when returning to physical service after the first centre lockdown (Survey 1). However, only half of the childcare educators felt more satisfied with how they were supported before opening in June 2020. The majority felt fearful and less safe going back to work, making them less happy with the circumstances and guidelines. The majority stated that they were satisfied with the overall learning programme in the same way as pre-COVID-19 times (Survey 1). Half of the respondents were unsatisfied with the new learning environment (due to ongoing mitigation measures) and how the transition back to the centre took place. Only half of the respondents were more satisfied with the resources provided, and around forty per cent were satisfied with the new routine. Interestingly, the majority were more satisfied with how the parents were informed about the transition from the lockdown to the opening.

In both surveys, ECEs analysed how the pandemic influenced their overall well-being as transitions occurred between online and offline arenas over time. In the open-ended comments, they mentioned the stress of having their children at home while working, the lack of appreciation from some parents, the temptation to quit their jobs if teaching continues online, feeling monitored all the time by parents and feeling unsafe to return to school. Recent research reports likewise show that ECEs highlighted similar difficulties and worries of maintaining physical distance, health concerns and working with masks (Hemmerich et al., 2021; Pramling Samuelsson et al., 2020). Other comments in the second survey showed that despite the challenges and stress, ECEs claimed that going online was a positive experience in which they found the opportunity for self-professional development and support from their families/colleagues and children's parents. Overall, the positive and negative sides of the coin transpired as ECEs expressed their emotions. Yet, some respondents described their experience as chaotic, stressful, and challenging with little or no positive outcomes. They found working conditions overwhelming due to the restrictions and health risks; some felt that children did not benefit from their teaching efforts. Heavy words threaded through their comments surfacing a negative influence on their well-being: 'overwhelming', 'terrible' and 'in survival mode'. On the other hand, positive comments like I feel 'good' or 'great' from ECEs in Survey 2 revealed a sense of resilience, hope and possibilities. These comments may also indicate an emerging 'rise from an unexpected fall' in terms of the ECEs' well-being over time.

Lesson three provides stakeholders and policymakers in ECEC with an opportunity to envisage the positive and negative sides of relationships and ongoing well-being as experienced by ECEs during the pandemic. The results locate 'collapsed' bridges and well-being 'falls' that must not be overlooked in the best interest of families and children. Immediate individual and collective action are needed to reconstruct stronger relationship bridges in ECEC and ensure a 'rise and rise' experience of well-being for all ECEs in post-COVID times.

Overall key lesson

Lesson 4
The pandemic exacerbates the urgent need for political priority to higher investment in Maltese ECEC

In the first run of the survey, ECEs' responses indicated that in 2020 there were no immediate protocols to follow, and this led to diverse reactions from management teams in the sector. Half of the respondents claimed they needed to react to the situation without guidance. These educators were free to choose whichever approach they wanted to reach out to children and their families. At the same time, the other half used the school's online platform, social media and emails. This lack of guidance destabilised the profession and, consequently, early years pedagogy, curriculum, and assessment. ECEs working with 0 to 5-year-olds felt that their profession and the sector were being undermined compared to the primary and secondary levels of education.

This resulted in the lack of, or unclear guidelines, inadequate training/support regarding digital literacy, and equal access to online platforms, as elaborated in some of the open-ended comments of both surveys (September 2020, Survey 1, and September 2021, Survey 2).

Additionally, Survey 2 indicated that only 6.7% of ECEs felt supported by Education Officers in 2020-2021. In the early years sector, in 2022, Malta has three Education Officers Early Years that need to support and monitor all educators and centres/schools (0-7 years). This makes it impossible to provide the necessary monitoring and support for the Maltese ECEC workforce. Human resources to support ECEs in a Maltese context is a longstanding issue that needs to be tackled urgently. As Sollars (2018) states, regarding early childhood education in Malta, "Throughout its history, there has never been an entity to focus, drive, monitor and support an ECE agenda, its development or the education of the primary stakeholders" (p. 10). In this light, some educators also highlighted the disappearance of other professionals that used to assist them in practice during pre-COVID times. These tracked insights of ECEs in Malta during the COVID-19 pandemic echo findings from recent international research showing a discrepancy in support and guidance between early years and primary teachers (Alban Conto et al., 2020; Nugroho et al., 2020; OECD, 2021c). Unsurprisingly, only 11.1% of the educators in the second survey stated that they feel empowered in their profession.

It is interesting to note how one of the educators points out the aftermath of fragmented foundations in the Maltese early years sector – between church, state, and independent schools - and how this surfaced issues of inequity for educators during COVID-19 times. For example, an educator had to work in a state school (where she is employed) while the son stayed at home because, at the time, church school had a different protocol to follow. In the same vein, data further transpires the lack of multisectoral collaboration and support in the early years sector through the impact on the employment of some educators working in childcare and kindergarten settings - e.g., contracts not renewed and job loss due to private centre closures. Likewise, European ECEs experienced pay deductions, unemployment, or redundancy during the COVID-19 pandemic (Van der Graaf et al., 2021). These findings echo the persistent notion of the early years workforce as 'undervalued' in terms of pay, status and profession (Eadie et al., 2021; McMullen et al., 2020).

Overall, findings from this study indicate that when *reactive* rather than *proactive* actions and arbitrary quick-fix decisions take over, a negative trend overshadows the quality of the ECEC sector. In light of such evidence, we argue that moving from a programmatic to a systemic approach that employs multisectoral collaboration and action is no longer an option for Maltese ECEC. An early years network or advisory governance group must be in place (MFED, 2021a). Further, a unified vision must be developed to allow for the co-creation of overarching policies and the development of strategic action plans within the three educational sectors and beyond. Politicians and educational leaders in Malta need to ensure that such a democratic and sustainable structure is equipped with the necessary policy infrastructure to offer ongoing support to the workforce and early years centres/schools and build the capacity for proactive behaviours. A proactive systemic approach would also assist school/settings leaders and educators in taking informed pedagogical decisions in the best interest of all young children and their families – whatever the challenge must be faced. This instrumental next step is referred to in the new National Policy Framework for Early Childhood Education and Care (MFED, 2021a).

In conclusion, it is opportune to ask: Will the Maltese government invest in the necessary policy infrastructure to realise the recently published ECEC national policy documents (MFED, 2021a, 2021b), or will we wait for more times of crises to wake up and act? We need to remember that 90% of the architecture of a brain is shaped in the first five years of life (Centre of the developing child, Harvard, n.d); thus, young children's needs cannot wait. Also, the ECEC workforce cannot be neglected at the political level. This long-standing disregard for the ECEC profession - exacerbated by the pandemic - continues to generate low morale and regrettably leads to a retention crisis in the sector.

The four lessons learnt from the analysis of ECEs' insights during COVID times are an eye-opener for politicians and decision-makers in Maltese education and beyond – investment in ECEC needs to be given political priority now, before it is too late (Bonello, 2020, 2022). The following comment from one of the ECEs working with under-fives in Malta echoes this concluding argument:

Covid-19 was a true lesson of life where nothing must be taken for granted. But at the same time, it brought about more consciousness about the importance of childcare centres and schools! (Respondent, Survey 2)

CHAPTER 6

Conclusions and Recommendations

- This study revealed that ECEs need to tap on the best of both online and offline worlds to offer meaningful curricula and pedagogies for 21st-century families and children. The benefits unveiled through increased online learning between waves one and two of the pandemic should not be disregarded in future ECEC. These include stronger relationships with leaders, families, and colleagues for ECEs, parental involvement in pedagogical and assessment practices, new modes to promote playful and hands-on learning at home, and children's increased level of participation when joining online sessions with parents. There is a need to generate capacity building to strengthen ECE's technological preparedness in online learning spaces to maximise children's learning. Research and training should focus more on eLearning modules and help ECEs co-construct new knowledge about promoting play, child agency and parent partnership through online learning arenas.

- Similar to previous local studies (Baldacchino, 2018; Bonello, 2022), a destabilised programmatic approach exacerbated long-standing legacies of formal education in a COVID-19 Maltese early years context. Stakeholders responsible for the quality of the early years provision should create opportunities for dialogue between parents, educators and other professionals in the field. Awareness needs to be raised to ensure that (i) Highly-formalised approaches are not replacing time for curiosity, wonder, joy, and play – the way young children learn best, and (ii) all children are experiencing their right to quality education right from the start (United Nations, 1989). Opportunities for in-service ECEs to dialogue, reflect, and develop a shared understanding through a community of practice are to be offered regularly; curriculum time for ECEs working with under-fives, if adequately and regularly provided, may be an opportunity to empower collaborative critical reflective practice and professional growth in ECEC.

- Increased monitoring and support for ECEs in school/settings must move towards quality provision in post-COVID times. There is the need for capacity building of early years leaders to support and train ECEs working sustainably within the three educational early years sectors – state, church and independent. Training in leadership skills should be related explicitly to ECEC. Higher education institutions must invest in courses for early years leaders to increase accessibility to professional monitoring and support within schools. The Maltese ECEC sector needs to recruit Education Officers Early Years, Heads of Department Early Years, and Early Years Support Teams to ensure adequate monitoring and support for ECEs in childcare and kindergarten settings.

- Digital divides for the early years workforce and families with young children were exacerbated during COVID-19. These need to be addressed if the ECEC provision is to be inclusive. All ECEs and families of young children need adequate devices and broadband access to participate fully in a 21st-century early years educational context.

- The pandemic has exacerbated previous challenges for ECEs in a Maltese context and how this negatively impacted their well-being. For example, an overworked and neglected workforce, unsafe working conditions, and using personal savings to sustain the service jeopardise the recruitment and retention of the profession. COVID-19 has shown that society cannot fully function without ECEC service provision. The Maltese ECEC sector needs to ensure the active functioning of a sustainable system that provides a range of well-being support programmes for all ECEs. Educators in the early years sector need spaces to be listened to, to be treated the same as educators in upper years, to feel well, and to voice their opinions and experiences - individually and collectively – in matters that concern them.

- ECEs working with the under-five need to be recognised and valued as other teachers in terms of pay and status, not just in future pandemics but throughout their careers. This study resurfaces the argument that strengthened and progressive career pathways for all ECEs paralleled with pay progression, in a Maltese context, are long overdue. A workforce plan is needed to ensure career development and achieve a graduate-led workforce in Maltese ECEC. ECEs need opportunities to study while working in the early years sector. At this point, decision-makers in Maltese education may opt to take short, medium, and long-term actions or let a pre-COVID fragile profession be led to crisis after a pandemic.

- At the governance level, there is an urgent need for political priority to higher investment in ECEC. A systemic approach is to be established in the Maltese ECEC sector. This approach needs to be guided by a cross-sectoral early years ministerial advisory group that includes the participation of ECEs, parents and the under-sevens in decision-making processes. Strategic action planning is key to ensuring that the new policy framework for the early years (MFED, 2021a) is realised in practice. Through increased investment in ECEC, no ECE is to be left behind. All educators working with the under-fives are to be given the same opportunities and be recognised and valued as other teachers at any other level in the Maltese education system.

Concluding thoughts

The Cov-EM study set out to create new understandings about the impact of COVID-19 on the personal and professional lives of stakeholders in Maltese Early, Primary and Higher Education. In this report, we evidence that, over time (from the first to the second wave, i.e., the scholastic year 2019/2020 and the scholastic year 2020/2021), ECEs experienced several benefits and challenges, some of which existed already, and were subsequently exacerbated by the pandemic. Key findings from the lens of ECEs have taught us some valuable lessons foundational to Maltese education, economy, and society – and we argue that these should not be overlooked. The located gains and gaps generated an opportunity for stakeholders in Maltese ECEC to rethink, reflect and hopefully act to reconceptualise ways of knowing education for the under-fives in post-COVID recovery. If, individually and collectively, we focus on possibilities, difficult weights may lead to beautiful gains in future ECEC arenas.
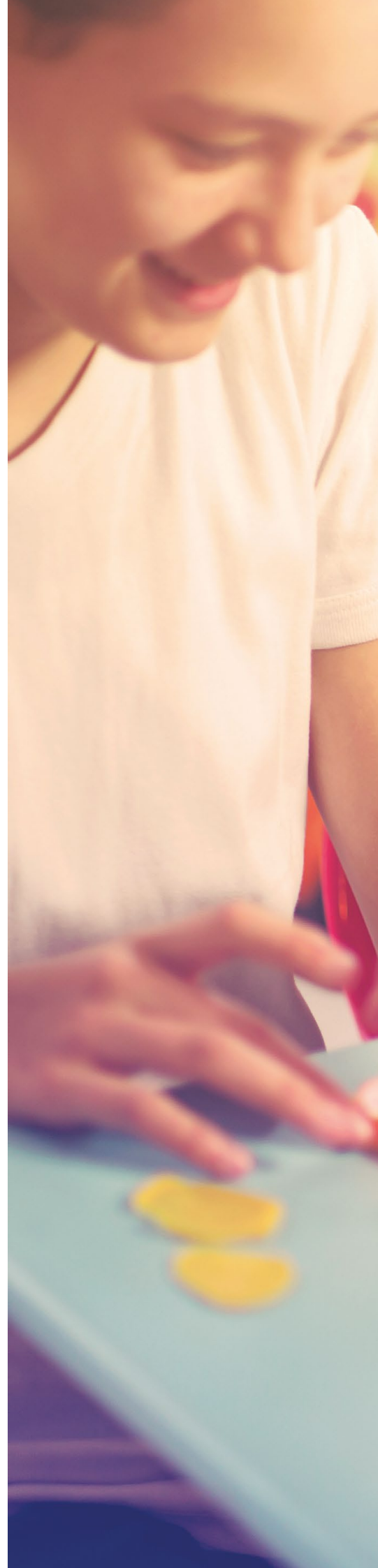
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Appendix

Characteristic	Survey 1 2020 (N=263)	Survey 2 2021 (N=79)
	% (n)	% (n)
Gender		
Female	99.6 (261)	97.5 (77)
Male	0.4 (1)	2.5 (2)
Other	0	0
Age range in years		
Under 18	0	1.3 (1)
18–24	13 (34)	10.1 (8)
25–34	37 (97)	22.8 (18)
34–44	28.2 (74)	22.8 (18)
45–54	13 (34)	32.9 (26)
55–64	8.8 (23)	10.1 (8)
65+	0	0
Nationality		
Maltese	99.2 (261)	88.9 (71)
Other	0.8 (2)	10.1 (8)
Region/Location of residence		
Southern Harbour, Malta	19 (49)	22 (17)
Northern Harbour, Malta	20 (50)	25 (20)
South Eastern Malta	17 (44)	14 (11)
Western Malta	12 (31)	19 (15)
Northern Malta	18 (46)	16 (13)
Gozo	9 (22)	3 (2)
Missing data	5 (13)	1 (1)
Role in education		
Kindergarten Educator	76.4 (201)	73.4 (58)
Childcare Educator	11.4 (30)	0 (0)
Learning Support Educator	11.1 (29)	13.9 (11)
Other	1.1 (3)	12.7 (10)
Highest level of education		
Vocational Qualification	45.7 (113)	2.5 (2)
Secondary Level	20.2 (50)	7.6 (6)
Bachelor's Degree	17 (42)	16.5 (13)
Post-graduate Degree	17 (42)	8.9 (7)
Diploma Level 4	0	24.1 (19)
Diploma Level 5	0	22.8 (18)
Award Level 4	0	8.9 (7)
Award Level 5	0	6.3 (5)
Primary Level	0	2.5 (2)

Characteristic	Survey 1 2020 (N=263)	Survey 2 2021 (N=79)
	% (n)	% (n)
Type of residence		
Flat/Apartment	32.5 (81)	0
Terraced House	27.7 (69)	0
Maisonette	26.9 (67)	0
Semi-detached Villa/House	4.4 (11)	0
Detached Villa/House	2 (5)	0
Other	6.4 (16)	0
Education sector		
State School/Childcare Centre	71.1 (117)	45.6 (36)
Independent School/Childcare	12 (30)	26.6 (21)
Private Childcare Centre	9.2 (23)	20.3 (16)
Church School/Childcare	7.6 (19)	7.6 (6)

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