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Measuring Quality of Privately-Owned Early Childhood Care and Education Centers in the United Arab Emirates: A Ras Al Khaimah Case Study

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Executive Summary

Early childhood is a critical period in our social, cognitive, linguistic, emotional, and self-regulatory development, and extensive research has been conducted on children's overall developmental processes, influencing factors, and their lifelong impacts. Research suggests the over-arching significance of supporting children's early development through caregiver-child communication, social interactions, and play. Such interactions and opportunities for development in children's early years are critical for later academic achievement and well-being. Moreover, the positive long-term effects of high-quality early childhood education (ECE), in particular on children's development, as well as the economic, social, and cultural development of communities on a larger scale, have been extensively documented.

In the Arab Gulf region, especially in the United Arab Emirates (UAE), little research has been done to document and analyze ECE quality, practices, and their impacts. This case study focuses on the emirate of Ras Al Khaimah in the UAE, investigating the scope of programs and their quality, challenges, and opportunities for growth and improvement. The study found and documented extreme variations in the quality of early childhood education centers (ECECs) in the emirate and highlights the need to improve ECE policies, practices, and facilities by adopting recognized international standards, best practices, and support structures. This paper goes on to present data-driven policy recommendations to improve the quality of ECECs in Ras Al Khaimah and the greater UAE.

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Table of Contents

Introduction.....	5
The UAE's Progress Towards Quality in ECE.....	6
History of ECE Regulation and Management in the UAE	6
Evolution of Current ECE Standards and Reforms in the UAE	7
Progress Overview of ECE Provision in Ras Al Khaimah.....	8
Private and For-Profit Model	8
Licensing	8
Quality Assurance	8
Mapping of ECE Services.....	8
Curriculum.....	9
Tools Used to Measure ECEC's Quality.....	9
Early Childhood Environmental Rating Scale-Revised Edition (ECERS-R).....	9
Classroom Assessment Scoring System (CLASS™).....	9
The UAE's National Child Care Standards	10
Key Findings.....	10
ECERS-R Overall Average Scores	10
Quality Levels Based on ECERS-R Subscale Average Scores.....	10
CLASS Dimensions' Average Score Rating	13
National Child Care Standards Findings.....	14
Challenges for ECE in Ras Al Khaimah and the UAE.....	16
High Cost of ECEC Operation.....	16
Government Support	16
Teacher's Recruitment, Qualifications, and Professional Training Opportunities	16
Parental Expectations of ECE and Care.....	16
Policy Recommendations.....	17
Build a Federal Child Development Policy.....	17
Ensure an Increase in Public and Private Expenditures.....	17
Setting-up Emirate Based Education Council to Monitor ECE	18
Raise the Number and Scope of Federal-Emirate Partnership.....	18
Increase the Availability of Open Data Access Related to ECECs.....	18
Create Programs that Integrate Care with Formal ECE in the UAE	18
Support Working Mothers	18
Encourage the Establishment of Diverse Forms of Early Child Care Provisions in Communities.....	18
Build a Stronger Early Education Workforce.....	18
Require ECEC's Compliance with Accreditation Standards.....	19

Raise Public Awareness and Increase Community Involvement.....	19
Ensure Opportunities for Professional Development and Training of Teachers and Staff.....	19
Increase the Availability of ECE Programs in Universities.....	19
Ensure Improvement in Structural and Process Quality Variables.....	20
Design Stronger ECE Curriculum for 0-4 Year Age Group.....	20
Connect Professional Teaching Practices with Policy and Research	20
Primary Focus of ECECs: Developing Children as Life Long Learners.....	20
Raise the Profile of the ECE Sector in the UAE to Attract More Qualified Graduates.....	20
References.....	21

Introduction

Quality care and education in the first eight years of life plays a critical role in young children's overall development. In particular, international studies have shown the importance of programming, such as early childhood education (ECE), on children's long-term positive development outcomes (Cloney, Page, Tayler, & Church, 2013; National Institute of Child Health and Human Development Early Child Care Research, 2000; Schweinhart, 1993). Young children with high-quality ECE experiences have increased vocabularies, better language, math, and social skills, have more positive relationships with peers, and score higher on school-readiness tests (Boocock, 1995; Cloney, Page, Tayler, & Church, 2013; Cost, 1999).

In addition, studies have shown that beyond the academic effects of ECEs, students who attend high-quality preschool programs continue to be healthier, more socially adept, and earn higher incomes than their peers who did not (Heckman & Karapakula, 2019). Furthermore, studies in the United States (US) have shown that for every US dollar invested in ECE, there is a rate of return of seven US dollars or more through a reduced need for spending on other services, such as remedial education, grade repetition, and special education, as well as increased productivity and earnings for these children as adults (Reynolds, Temple, White, Ou, & Robertson, 2011).

Of note, one long-term study in the US recently showed that children of parents who attended a high-quality preschool program in the 1960s were better educated, healthier, better employed, and more likely to stay stably married, especially if they were boys born to preschool-educated fathers (Mongeau, 2019). In fact, the negative effects of the quality variations in the ECE that children receive are the strongest among children from low socio-economic backgrounds and whose parents have little education (OECD, 2001, 2006) as they are more likely to have linguistic, social, and developmental inefficiencies from low-quality ECE provisions.

High-quality early childhood education centers (ECECs) are generally defined by several characteristics: responsive and engaged teachers that support a child's learning; indoor and outdoor environments that are safe, use child-centered learning, and are stimulating and well-stocked with teaching materials; predictable and balanced daily schedules and routines; evidence-based pedagogies and learning and culturally sensitive curriculum; supportive assessments of each child's progress; and ample opportunities for family involvement in their child's education (Bowman, Donovan, & Burns, 2000; Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart, & Elliot, 2003). The ECE settings which provide an emotionally warm, responsive, non-judgmental climate; supports social interactions among peers and teachers, child initiated activity, children's autonomy; opportunities for developmentally challenging, open-ended activities and playful learning; practical demonstrations by teachers; dialogic and collaborative talk; engage children in achievable regulatory challenges, which encourages children's learning and development (Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; Whitebread, Jameson, & Basilio, 2015).

The current proposed universal Education for All indicators of ECE quality developed by UNESCO in 2012, and refined in 2015, as well as other emerging literature, involve a much wider range of indicators that have been shown to have positive outcomes for children. These indicators include space and furnishings, personal care routines, listening and talking activities and interactions with fellow children, program structure, relationship with parents and staff, and ECEC responsiveness to staff professional development needs (UNESCO, 2012, 2015). In addition, two key elements in effective scaffolding of children's self-regulation in ECE settings have been identified, and should be measured, as the extent of metacognitive talk, including explicit verbalizations by the adults of explanations and strategic questions (Neitzel & Stright, 2003; Robinson, Burns, & Davis, 2009), and the contingency of support offered by the adults (Pino-Pasternak, Whitebread, & Tolmie, 2010).

Furthermore, according to Galguera (2015), the quality of ECE should "reflect local values and perspectives on young children's development as well as scientifically established predictors of their cognitive, language, and socio-emotional development" (p. 499). Unfortunately, the existing literature related to ECECs quality, and consequent child development outcomes, is primarily based on studies from western countries (Berlinski, Galiani, & Gertler, 2009; Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002; Grantham-McGregor, Fernald, Kagawa, & Walker, 2014; Rolleston, James, & Aurino, 2013; Schweinhart, 1993) and do not reflect the current relationships between the local perspectives and data-driven best practices and policies in other contexts.

Over the past decade, the importance of ECE has become widely accepted in the Arab Gulf region, and the broader Middle East in general, yet the research studies related to ECE quality, and consequent child development outcomes in these contexts, have been scarce. In the United Arab Emirates (UAE) only three notable studies related to ECE have been conducted to date. One looked at the curriculum of ECE centers (Al-Momani, Ihmeideh, & Momani, 2008), the second examined the quality of ECECs in the emirate of Dubai (Karaman, 2011), and the most recent one compared the patterns of dialogic teaching in kindergarten classrooms of Finland and the UAE (Muhonen, Pakarinen, Lerkkanen, Barza, & Von Suchodoletz, 2018).

This comprehensive census case study was completed in 2018 and assessed both structural and process quality indicators using a mixed methods approach to collect and analyze data from all the private ECE providers in the UAE emirate of Ras Al Khaimah, which makes it pioneering not only on the national level but regionally as well. The purpose of this case study is to evaluate the quality of ECECs in Ras Al Khaimah using contextualized international tools and a questionnaire and checklist developed from the UAE's Nursery Child Care Standards, to better understand the status, challenges, and opportunities of quality ECE in Ras Al Khaimah and the Emirates.

This working paper first presents a brief overview of the establishment and growth of ECE in the UAE, the ECECs in Ras Al Khaimah and their main characteristics, and the tools used in this study to measure the quality of ECECs. It then highlights the key findings and discusses the observed challenges for ECE in Ras Al Khaimah. The paper concludes with ECE policy recommendations, which can potentially be used by local and federal stakeholders to review and strengthen the main objectives and standards for ECE in the country and address the challenges facing this emerging and critically important education subsector.

The UAE's Progress Towards Quality in ECE

The UAE has been making progress towards high-quality ECE provisions gradually over the last five years, but continues to have room for improvement and, in some instances, requires urgent attention and intervention. In the past decade in particular, the education sector in the UAE has seen increasingly higher rates of enrolment of children aged up to four years in private ECECs, making the ECE sector more of a focus of governments at the federal and local levels, and leading to several initiatives and steps taken to improve the ECE provisions for both Emirati and expatriate children residing in the UAE.

ECE standards and guidelines recommended by the federal government are applicable to all ECECs in the country. However, additional local government institutions are involved in ECE regulation in some emirates. The emirates of Abu Dhabi, Sharjah, and Dubai established their own education council/authority, whereas ECE in the other emirates has been overseen by multiple ministries whose responsibilities and mandates are assigned at the federal level. This has led to inconsistencies in the alignment of curriculum to ECE standards, quality assurances and controls, and the quality of ECE services and teachers among the emirates. Furthermore, over the last four decades this gap in the quality of ECEC provisions between the different emirates has grown larger in part due to a lack of efficient coordination among federal and local governmental education regulatory bodies, as well as in some instances due to a complete lack of local regulatory institutions. In the case of Ras Al Khaimah, ECE has been more or less neglected.

This section goes into more depth about the history of regulations and management of ECE and the evolution of current standards and reforms in the UAE. Additionally, it provides a background for understanding the status of ECE provisions, main characteristics of ECECs, and possible contributing factors leading to ECECs' quality levels in Ras Al Khaimah.

History of ECE Regulation and Management in the UAE

The first public kindergarten was established in Ras Al Khaimah in 1955, when the emirate was part of the Trucial States (Al-Momani, Ihmeideh, & Momani, 2008), and the first public kindergarten in the UAE after unification became operational in Abu Dhabi in 1972 (Karaman, 2011). Later, public kindergartens were established in Dubai and the other emirates and enrolled children aged four to six years. Initially after unification in 1971, the governance of all kindergartens in the UAE was managed by the Directorate of Education in Kuwait. This was until 1980, which was when the first kindergarten section was created in the newly established UAE Ministry of Education (Karaman, 2011). Towards the end of the 1980s, the Ministry of Education created a department jointly responsible for public kindergartens and primary education. At this time, only public kindergartens were operational, and only after the 1980s did the Ministry allow private nurseries and kindergartens to provide care and education for children aged 45 days to five years of age.

With the introduction of Federal law No. 5 on Child Care Nurseries in 1983 to regulate the licensing and governance of nurseries across the whole of the UAE, private nurseries were opened and provided services to children from 45 days old to five years of age (UAE Government, n.d.). Over the past four decades, the number of private nurseries then increased exponentially with the rapid economic growth of the country, which has included a dramatic increase in the expatriate population, as well as of the number of Emirati women entering the workforce (Karaman, 2011). However, accurate data for nurseries is lacking.

From the 1980s till 2016, ECE was coordinated by three separate ministries at the federal level. The Ministry of Social Affairs governed licensing, the Ministry of Education set the curriculum and standards for public kindergartens, and the Ministry of Health monitored related health issues. In early 2016, the private nurseries came under the Federal Ministry of Education, who now oversees all its aspects and children up to four years of age are allowed to attend private or government nurseries.

At present, some emirates have additional ECE regulatory bodies to monitor childcare standards and to provide parenting services and support for children with special needs. This leads to overlap in responsibilities among different ministries and education regulatory bodies. Moreover, responsibilities to monitor the quality of ECECs gets distributed among these government institutions resulting in inconsistencies in alignment of curriculum to standards, as well as a reduced quality of care and education provisions provided to children.

The Ministry of Education has recently published operational nursery licensing to ensure compliance of ECECs with conditions of the local Municipality, the Director of Civil Defense, and the Public Health Department, as well as checks upon ECEC's compliance with the Early Childhood Education Institutions taskforce's standards through nursery (which will be expanded upon in the next section of this paper) in all emirates. The emirate based Department of Economic Development issues the needed commercial business operating license. At the time of this study, the Ras Al Khaimah government did not appear to have any additional ECE regulatory body or ECE standards in place.

Evolution of Current ECE Standards and Reforms in the UAE

In the past, the Abu Dhabi Education Council (ADEC), Sharjah Education Council (SEC) and Dubai's Knowledge and Human Development Authority (KHDA) have played a leading role in defining the minimum acceptable requirements for the setting and services that should be provided in all types of childcare institutions. They have drafted various iterations of ECE standards for private and public nurseries and kindergartens, with the intension of ensuring safe and healthy environments that foster children's physical, intellectual, psychological, social, and emotional development.

For example, the UAE National Child Care Standards (Government of Dubai, 2009) were established in Dubai and made applicable to all childcare services in the country, as defined in the Federal Law No. 5 (1983), including any premises dedicated to the care of children up to four years of age, inclusive of ECECs attached or annexed to a school or government department. Similarly, the emirate of Abu Dhabi's Executive Council established the Abu Dhabi Early Childhood Authority (ADECA), tasked with developing and implementing a comprehensive strategy for early childhood development in the emirate, and review and evaluate policies and programs related to early childhood in coordination with the relevant entities. Additionally, ADECA aims to propose legislation, policies, and regulations related to early childhood (WAM, 2019). However, these emirate based ECE frameworks, standards, and engagement plans have not been adopted at the federal level.

During this past decade, there has also been some clarity in defining ECE goals worldwide, which has had regional and national impacts. The Sustainable Development Goals (SDGs) set by the United Nations, have a clear focus on ECE quality and how to achieve it, rather than on an emphasis placed on participation. The SDGs include goals such as ensuring equal access of all girls and boys to quality early childhood development, care, and pre-primary education so that they are ready for primary education; building and upgrading education facilities that are child, disability, and gender sensitive, and provide safe, non-violent, inclusive and effective learning environments for all; substantially increasing the quality of teachers by 2030 (United Nations, 2015). To participate in the global agenda, and to adhere to the SDGs, the UAE for the first time included the development of the ECE sector in the its overarching strategies, such as in the UAE's Vision 2021 National Agenda (UAE National Agenda, 2018) and UAE's 2071 Centennial five-decade government plan (Ministry of Cabinet Affairs & the Future, 2018).

Since the transfer of supervision of ECE to the Ministry of Education, in accordance with the provisions of Federal Law No. 14 (2016) amending certain provisions of Federal Law No. 1 (1972) regarding the functions and powers of the various ministries, the Inspection Directorate has developed and updated all types of compliance operations in the areas of childcare and protection. This is in line with the UAE's Vision 2021 that includes goals of developing a first-class educational system, generating a distinctive leap in educational outcomes, and keeping abreast with modern international trends in teaching practices, facilities, and tools (Ministry of Education, 2018). The Inspection Directorate ensures that each Early Childhood Education Institution (ECEI) in the UAE adheres to the policies, regulations, and rules of action established by the Ministry. It has standardized regulatory practices in order to achieve accurate and fair monitoring and providing different directorates in the Ministry with oversight reports, including appropriate recommendations. The ECEI Compliance Inspection Manual, includes all the compliance standards and national referential laws relevant to the main domains and elements related to ECEI. It also outlines all the tools and models that will be used to ensure ECEIs comply with the laws and regulations governing their work. Furthermore, it forms a basis for ensuring the efficiency, effectiveness, and quality of regulatory processes (Dillon, 2019).

In 2018, the Nurseries Investor Guide was also issued by the Ministry of Education to provide clear guidance on the processes and procedures for applying for a Ministry of Education operational nursery license, as well as how to receive approval to operate a nursery in the UAE as a business (Ministry of Education, 2018). Of note, the Nurseries Investor Guide is important to highlight as the majority of ECECs in the UAE are privately owned and adopt a for-profit model (Bennett, 2009), and this may have negative implications on learning outcomes, accessibility, quality, transparency, safety, and accountability of early care and education to serve its purpose. In addition, interviews with

nursery managers in Ras Al Khaimah highlighted a disturbing trend that this guide was often the only material provided to the nurseries when they were established. Moreover, at the time of data collection for this study, a number of these nursery managers were not aware of the ECEI Compliance Inspection Manual and requested additional information sessions for more information.

Progress Overview of ECE Provision in Ras Al Khaimah

The majority of ECECs in Ras Al Khaimah are stand-alone structures set up in rented villas built for family use and thus are located in residential areas. Approximately 3,298 children aged between 45 days old and four years of age were receiving ECE and care in Ras Al Khaimah ECECs between 2016 and 2018. The federal government provides kindergarten services to Emirati nationals' children aged four to six years of age as part of their K-12 formal education system. As no governmental support is provided to children below four years of age, the private nurseries/ECECs provide services to both national and expat children in Ras Al Khaimah. This section further highlights key characteristics of ECE provision and ECECs in the emirate, such as their private and for-profit statuses, licensing, quality assurance mechanisms, location distribution, and curriculum offerings.

Private and For-Profit Model

The ECEC provision in Ras Al Khaimah is private and follows a for-profit model. With the continued expansion of Ras Al Khaimah, and consequent increase in expatriate population, as well as an increase in awareness of ECE among locals, the number of private nurseries/ECECs is mushrooming in the emirate and are likely to continue to expand at a rapid rate. For example, except for one, the rest of the thirty-nine licensed ECECs in Ras Al Khaimah became operational only after 2006.

Such private provision mainly serves the needs of high-income families, although all such ECECs, regardless of customer demographics are expected to adhere to the federal ECE framework and standards. Monthly fees per child were in the range of AED 600-2000, which makes ECE unaffordable to modest-income families in Ras Al Khaimah. Considering that, as previously stated, the negative effects of quality variations in ECE quality are strongest for those with low socio-economic backgrounds, the affordability, regulation, and standardization of ECE provisions would have widespread positive impacts on children's linguistic, social, and developmental growth, future success in all aspects of their lives, and stable societal and family participation.

Licensing

There were 39 licensed private ECECs/nurseries operational in the emirate at the time of data collection between the end of 2016 and mid 2018, all of which took part in this census case study. Similar to other emirates, the Ministry of Education issues the nursery license, whereas the Department of Economic Development, Government of Ras Al Khaimah, issues the commercial business license to operate. Of note, a centralized, current, and complete list of the licensed centers was not available from the Ministry but was provided by the Department of Economic Development, as it seems they are not as regulated and documented as educational institutions as they are as businesses.

Unlicensed childcare provided by untrained child-minders also exists in Ras Al Khaimah and services low-and moderate-income families. This form of childcare is commonly run in homes and is not subjected to regulations or regulatory bodies' standards and oversight, potentially leaving a substantial number of children at risk with unknown and undocumented ramifications for their social, emotional, physical, and developmental wellbeing. However, unlicensed childcare provisions were not included in the present study.

Quality Assurance

The inspections of Ras Al Khaimah nurseries are mainly carried out by the Ministry of Education, as per the ECEI Inspection Manual. Remedial plans are issued and compliance is monitored in nurseries by the Ministry of Education as well. However, there is no system at the local or federal level to provide overall evaluation ratings of a nursery/ECEC based on such quality checks. Lack of such evaluation ratings, and their subsequent accessibility and distribution, for nurseries does not help parents to make informed decisions at the time of admission, nor does it allow for competition and public pressure to influence policies and practices.

Mapping of ECE Services

The geographic distribution of ECECs in Ras Al Khaimah suggests that their location is not linked to population density (see *Figure 1*). However, the map does link the location of nurseries with socio-economic status of families, as several ECECs are located in residential areas of affluent expatriate and local populations, whereas other more low-income areas do not have centers. This suggests an inequity of ECE services in Ras Al Khaimah that is consistent with the implications of the private, for-profit model of provision.



Figure 1. Map of Locations of licensed ECECs in Ras Al Khaimah between 2016 and 2018

Curriculum

The Ministry gives flexibility to nurseries to choose a curriculum type as long as it covers the overall development of children and basic principles of care and learning activities. Many of the ECEC managers in Ras Al Khaimah claimed adoption and implementation of one main curriculum type that has been approved by the Ministry, such as the British Early Years Foundation Stage (EYFS), American, Montessori, or German curriculum. However, several ECECs were found not to observe the curriculum they had adopted and reflected in their marketing brochures, which has implications for the quality of care, expectation of parents, as well as the training and hiring practices of each nursery.

Tools Used to Measure ECEC's Quality

To examine both the structural and process quality indicators in ECECs in Ras Al Khaimah this study used two reputable and validated international scales, as well as a questionnaire and checklist based on the UAE's National Child Care Standards. Each of these tools is explained in depth below.

Early Childhood Environmental Rating Scale-Revised Edition (ECERS-R)

ECERS-R measures the early childhood setting's environment and includes spatial, programmatic, and interpersonal features that directly affect the children and adults. This tool uses observation methods to rate each of the 43 items categorized under seven subscales, namely space and furnishings, personal care routines, language-reasoning, activities, interaction, program structure, and parents and staff (Cryer, Clifford, & Harms, 2005). Each item is expressed as a seven point scale with descriptors for 1 (inadequate), 3 (minimal), 5 (good), and 7 (excellent). Levels of program quality are based on current definitions of best practice and on research relating practice to child outcomes. The structural variables of ECECs in Ras Al Khaimah were assessed using this scale.

Classroom Assessment Scoring System™ (CLASS™)

CLASS is an observation instrument developed to assess effective teacher-child interactions in classrooms and childcare settings, and covers the process variables. The CLASS Toddler edition used in the study was most appropriate as it includes domains related to toddlers (approximately 15-36 months old) and children of these age groups are enrolled in Ras Al Khaimah ECECs. The CLASS Toddler focuses on process quality, examining teacher-child interactions in the context of the unique needs of children in their developmental period of 15-36 months. This tool breaks high quality teacher-student interactions into two crucial domains: emotional and behavioral support and engaged support for learning (La Paro, Hamre, & Pianta, 2012). Positive climate, negative climate, teacher sensitivity, regard for child perspectives, behavior guidance, facilitation of learning and development, quality of feedback and language modeling are the eight domains of the outcome measures of CLASS. A rating ranging from 1 (minimally characteristic) to 7 (highly characteristic) is given for each dimension and represents the extent to which that dimension is characteristic of that classroom.

The UAE's National Child Care Standards

A questionnaire and checklist based on the UAE National Child Care Standards (2009) was developed in order to assess evidenced-based quality areas in ECECs. The National Standards define the minimum acceptable qualitative and quantitative requirements for the setting and services that should be provided by all types of child care settings, to offer a safe and healthy environment that fosters children's physical, intellectual, psychological, social, and emotional development. The standards are divided into eight specific objectives representing the minimum requirements that should be met in a child care setting, namely licensing and administration, building and equipment, child care organization, care and learning activity, safety and security, health practices, nutrition, and partnership with parents.

Key Findings

This section outlines the key findings of this mixed methods, census case study, as well as their implication for the quality of provisions provided by ECECs in Ras Al Khaimah and the social, emotional, physical, and developmental wellbeing of young children in the emirate. The study collected and analyzed data from all of the 39 private ECE providers in Ras Al Khaimah, and the results are organized below by the tool used to measure the ECECs' structural or process quality variables. For the ECERS-R structural observation tool, the results presented include quality levels using the ECECs' overall and individual subscale scores. Similarly, the scores of ECECs on the CLASS Toddler tool's process dimensions are presented in the same format. Lastly, the key themes emerging during interview sessions with the Ras Al Khaimah ECECs' managers using the questionnaire and checklist developed using the UAE's National Child Care Standards are discussed.

ECERS-R Overall Average Scores

In Ras Al Khaimah, the overall quality of ECECs' environments, in terms of measures such as space and furnishings it offers to children, provisions to enhance language and reasoning among children, daily activities organized for children, interactions among children and staff, and program structure, vary considerably. The study data on the 39 ECECs shows that during 2016–2018, six ECECs (15 %) scored the rating of 6, having a 'very good' quality level, nine ECECs (23%) received a 'good' quality rating, while 24 ECECs (61%) scored below a 4, which is a 'below average' quality rating, as per their overall ECERS-R average scores (see *Figure 2*).

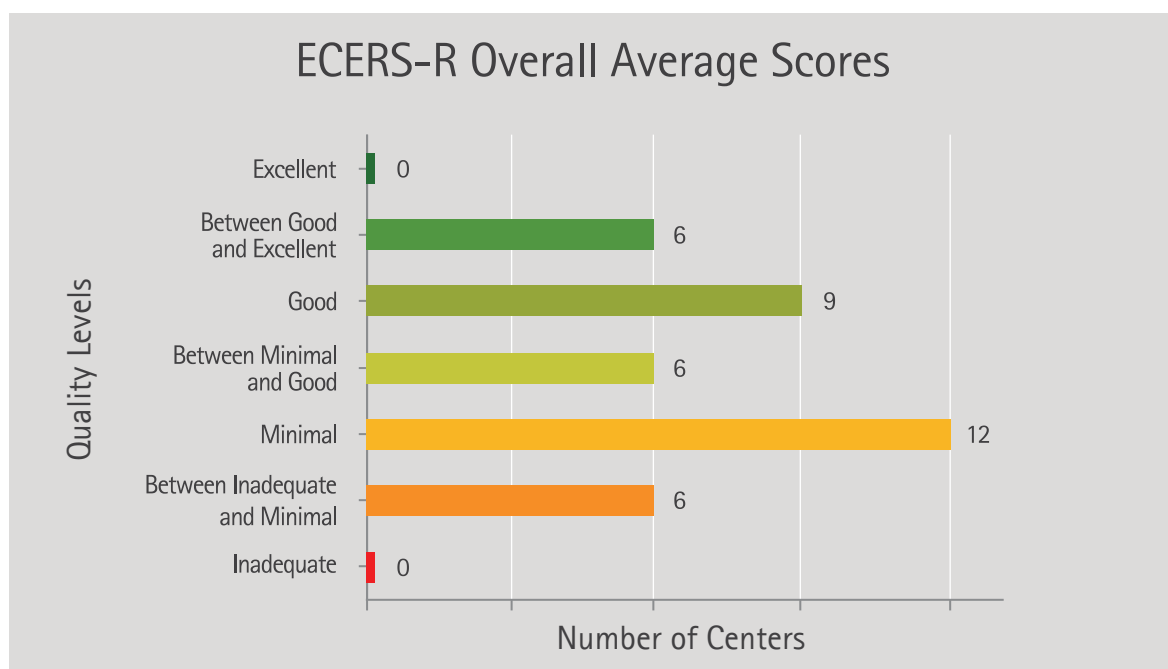


Figure 2. Overall quality levels of ECECs in Ras Al Khaimah

Quality Levels Based on ECERS-R Subscale Average Scores

ECERS-R consists of seven different subscales and includes a total of 43 items. The ECERS-R average subscale scores for these items highlight the strengths and weakness of Ras Al Khaimah ECEC's environment. The subscale average score of ECECs reveal that none of the average scores for any items were above a 5, or a 'good' quality level (see *Figure 3*). As a matter of fact, individual subscale average scores of several ECECs were far below the 'good' quality level, which is a pressing cause for concern. In addition, the average subscale scores were raised to close to a 4.8 rating (between 'minimal' and 'good' quality level), due to the inclusion of a few high quality ECEC outliers operating in Ras Al Khaimah.

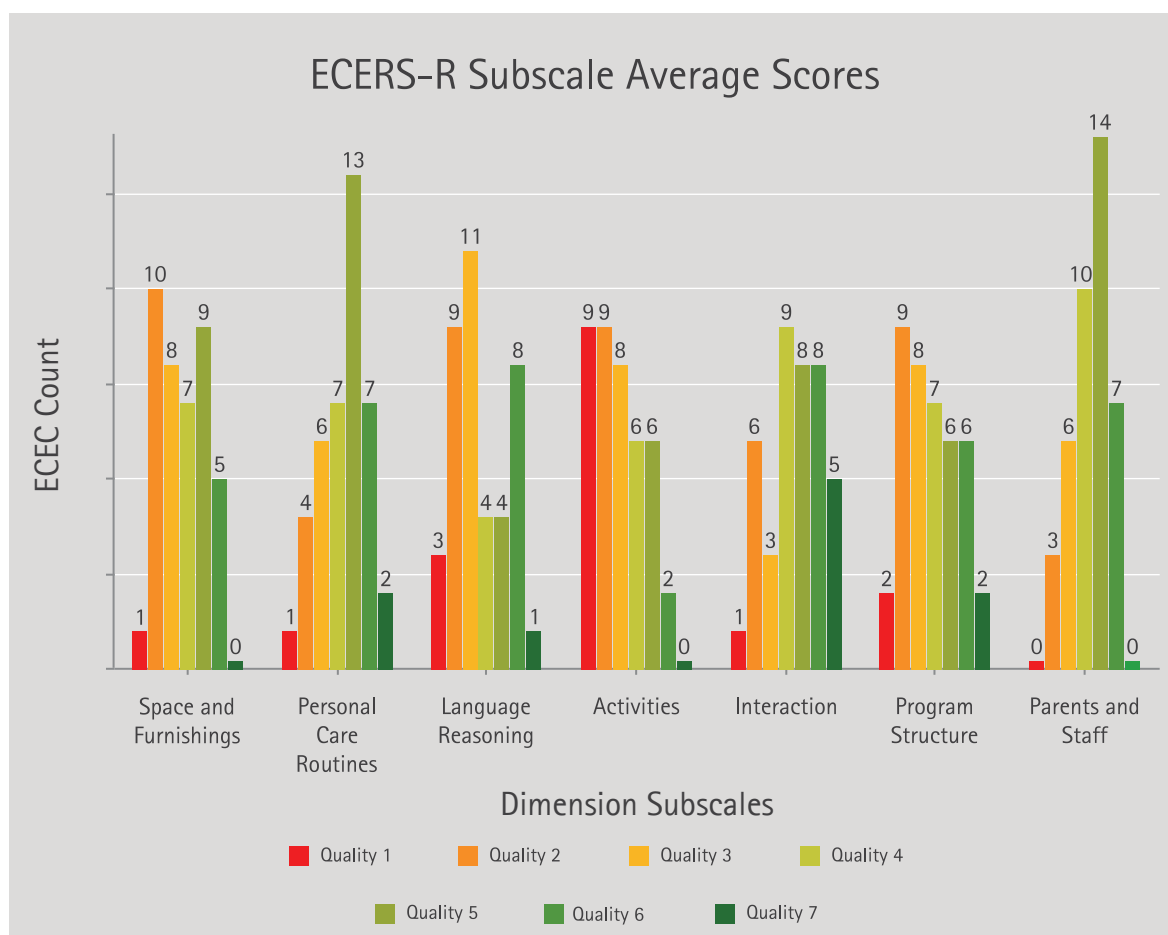


Figure 3. Range of ECERS-R CLASS subscales' average scores

Under the following headings, ECEC based observations regarding each of the ECERS-R subscale measures are discussed. In addition, the items in each subscale that are below the minimum expected quality levels for ECECs are highlighted, their implications for children's health, well-being, and development are explained, and their impact on the structural and process components of quality care are presented.¹

Space and Furnishings

The average subscale score for space and furnishings was close to a 4, suggesting a quality level between 'minimal' and 'good'. However, there were ECECs (26%) whose quality rating was below minimum and 2% had an inadequate quality rating on this subscale. Particularly, furniture for relaxation and space for privacy in the classroom is commonly lacking in Ras Al Khaimah based ECECs. Young children grow bored and disinterested when forced to sit at desk for long periods, and the researchers noted that children were sitting for as long as two hours in one chair as teachers rotate between rooms. This can have multiple negative unintended consequences for the young child, both physically and mentally; such as that children who showed emotional distress often had nowhere to seek a quiet space to practice uninterrupted self-regulation, resulting in unruly and aggressive behavior.

Personal Care Routines

Except for 13% of the participating ECECs, the rest met the 'minimum' quality rating level on this subscale, and the average subscale score was close to a 'good' quality level of 5. However, improvements can be made in the nap/rest facilities provided to children. Opportunities for naps and rest time were often not in line with children's age group needs, leading to exhausted and anxious children. We observed children displaying aggressive and disruptive behavior, contributing to a negative environment in the classrooms. Many teachers resorted to addressing poor behavior (normally unsuccessfully) with discipline methods such as shouting, threats to miss out on playtimes, or promises of sweets, which are not techniques in line with established classroom or behavioral management best practices.

Language-Reasoning

Lack of access to, and use of, books and pictures in the classroom is a pervasive issue in all Ras Al Khaimah based ECECs. Minimal use of books and pictures was observed in classrooms where they were available, and the average quality level

¹Information about subscale and item averages can be requested directly from the main author of this paper.

for this subscale was approximately 4, or 'minimal.' Another observed deficiency was the inadequate use of language to facilitate the development of reasoning skills, as well as language fluency, in most of the classrooms. Nearly 23% of the ECECs received the quality level of 2, which is below the minimum standards expected, and 8% got quality level ratings of 1, suggesting a severely inadequate support of children's language and reasoning development in classrooms in Ras Al Khaimah.

Activities

Activities received a particularly poor subscale average score of 3.4, which means a rating of just above minimum quality. On all items in this subscale, from fine motor skills to dramatic play, the 39 observed ECECs scored particularly low. Dramatic play is overlooked in a majority of Ras Al Khaimah ECECs, and many managers have little or no understanding of what it entails and the many benefits and supports it can offer to developing language and reasoning skills, as well as confidence and creativity. Also, fine motor skill activities (involving puzzles, beads, etc.) are not a high priority for these classrooms, as they focus mainly on rote learning. Additionally, there are often not enough resources (such as puzzles) to offer to all children in a classroom.

Art is variable in its provision in ECECs, as even when it is offered daily in some ECECs, it is often done for marketing purposes, creating content for ECEC blogs and other social media platforms for the parents to be sent and the community to see. The implications of this practice often mean that there is low priority placed on the time offered to children to be creative, minimizing provision for highly individualized play and skill development in these contexts.

Nature and science activities overall were also neglected in ECECs and teachers stated a lack of resources to be the reason. However, the research team encountered very successful and interesting science lessons planned and delivered with very few resources, including games and experiments using cheap or handmade materials, in a few ECECs. Nearly a quarter of ECECs (23%) received the quality level of 2, which suggests that activity provisions were below minimum standards, and 7% of ECECs were noted as providing inadequate activities to children in classrooms, as they received a quality level of 1.

Interaction

Nearly 18% of the ECECs observed got a quality rating of below minimum standards in terms of interaction among students and between students and their teacher. On the other hand, staff-child interactions received a higher rating, close to a 6, indicating very good interactions among the staff and children in Ras Al Khaimah ECECs. Fifty-four percent of ECECs scored a quality level of 'good' and above, and some ECECs received a level of 7, or 'excellent', on this item.

Under this subscale, supervision of children by teachers and discipline techniques used by teachers was also observed. The supervision of children during gross motor activities was good in the Ras Al Khaimah based ECECs. However, the general supervision of children received a score of about 4.5, as we observed children left unsupervised on multiple occasions, for example when they were walking between buildings to access the bathroom or in cases where there are no support staff around and teachers must attend to a particular child while leaving the remaining students alone in the classroom. Most ECECs lack any form of disciplinary policy and while the use of redirection techniques does occur, there is a widespread tendency to use ineffective discipline techniques throughout the day just to get children to follow basic routines. Discipline received a rating score of 4, which suggests a quality level of between 'minimum' and 'good.'

Program Structure

All the items included in the program structure subscale have room for improvement since the average quality rating scores were around 4, indicating an average level of quality between 'minimum' and 'good.' In this study, the results are skewed by a few high quality ECECs whose schedules were found to be balanced, however scheduling was observed to be a consistent issue across the majority of the lower quality ECECs in Ras Al Khaimah. A flexible schedule, where children move between activities and rooms, indoors and outdoors, and which successfully alternates between active and quieter periods was missing. Group time also appeared as an issue which needs to be addressed, as in ECECs without interest centers, it was not possible to allow a range of individual and small group activities to happen simultaneously.

In such classrooms, children experienced all activities and routines as a classroom group, which may not be stimulating enough for children, and may not provide opportunities for informal conversations between children and teachers or support staff, expressing creativity, building, or learning independently. Across ECECs, a lack of activity centers and traditional teaching pedagogy may be having negative implications on children's learning experiences and development in low quality ECECs. Five percent of ECECs received an inadequate quality level of 1 and 23 % ECECs received a quality level of 2, suggesting lower than minimum quality levels in terms of program structure.

Parents and Staff

Provisions for the personal needs of staff were observed to be of an average quality level in Ras Al Khaimah ECECs. This subscale's average score was 4.7, which is close to the 'good' level. However, a couple of items on this subscale scored poorly, such as lack of access to storage for personal belongings of teachers and staff, no break times for teachers or

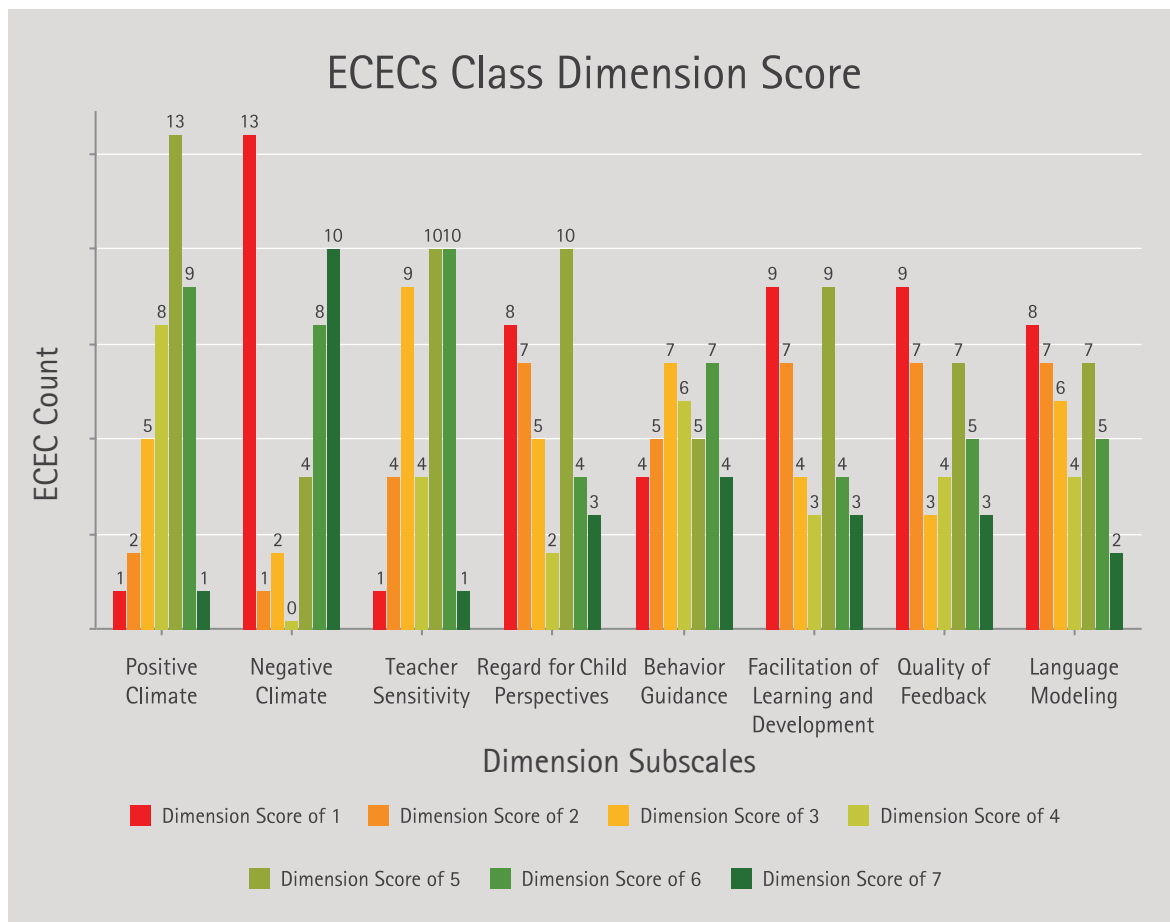


Figure 4. Range of CLASS dimensions' subscale average scores

opportunities for professional development through in-house or external training or courses. Lack of such provisions could prevent teachers and staff from being fully invested in their roles, may lead to stagnation in their career, and may adversely impact the professionalization of the field.

CLASS Dimensions' Average Score Ratings

These dimensions are based on developmental theory and research suggesting that interactions between young children and caregivers are a primary mechanism of child development and learning (La Paro, Hamre, & Pianta, 2012; Morrison, & Connor, 2002). A teacher at a high-quality ECE provides positive interactions, attention, support, guidance, and a variety of enriched play experiences and learning opportunities in a safe environment. In order to provide specific information about the quality of the classrooms, average score ratings for CLASS dimensions are presented.²

Overall, the CLASS Toddler dimensions' average rating for all ECECs was below the 5 out of 7 range, suggesting a mid-range of scores concerning the holistic effective emotional and behavioral support in teacher-child interactions in Ras Al Khaimah ECE classrooms and childcare settings (see Figure 4). While this would suggest that the quality of provisions is neither good nor bad, but in truth it highlights a larger underlying issue in regards to consistency within and across centers, and a lack of prioritization, focus, and training on accepted and emerging social, emotional, and developmental theories and practices that inform standards and best practices around the world. The trend could be interpreted as a focus on quantity of students, not quality of processes and practices.

Under the following headings, ECEC based observations regarding each of the CLASS process dimension measures are discussed, which represents the extent to which that dimension is characteristic in ECECs. This section concludes with a brief overview of the implications of these scores, providing examples of what they entail in the classroom.

Positive Climate

Measuring the connection between the teacher and children, the positive climate dimension reflects the average level of warmth, respect, and enjoyment communicated verbally and nonverbally in the classroom and childcare settings. In Ras Al Khaimah ECECs scored approximately a 5 on this dimension, signifying a mid-range, positively reinforced connection between the teachers and children, with room for improvement.

² The ratings for Ras Al Khaimah based ECECs' CLASS domains, namely emotional and behavioral support and engaged support for learning, are available in the project report and can be requested by contacting the main author of this paper.

Negative Climate

Some level of negative climate was observed in all classrooms, which reflects the overall level of expressed negativity, as the average rating score for the non-negative climate dimension was 4.3. This is important to note as it shows the prevalence of negative reinforcement of behaviors and corroborates the findings from the ECERS-R subscales, which highlighted the lack of disciplinary and redirection techniques utilized consistently in Ras Al Khaimah ECECs, which leaves children bereft of consistent routines and a sense of safety, stability, and support, negatively impacting their development.

Teacher Sensitivity

The dimension of teacher sensitivity encompasses the teacher's responsiveness to, and awareness of, children's individual needs and emotional functioning. It also includes the teacher's availability as a secure base for the children, providing emotional stability and support. The ECECs in Ras Al Khaimah scored in the mid-range with a 4.6 average score on this dimension.

Regard for Child Perspectives

Average score for the dimension of regard for child perspectives was on the lower side of mid-range, 3.8, highlighting the fact that teacher's interactions with children and classroom activities had less emphasis on children's interests, motivations, and points of view. In addition, independence and responsibility among children was not promoted much. All these factors limit children's opportunities for growth.

Behavior Guidance

Dimension of behavior guidance received an average score of 4.4, suggesting teacher's average level of ability to promote behavioral self-regulation in children by using proactive approaches, supporting positive behavior, and guiding and minimizing problem behavior. All of these components are necessary for supporting the social, emotional, and developmental growth of children.

Facilitation of Learning and Development

The dimension of facilitation of learning and development considers how well the teacher facilitates activities to support children's learning and development, as well as observes how the teacher connects and integrates learning into activities and tasks. The average score for ECECs was found to be a concerning 3.8, which is on the lower end of mid-range and highlights the pressing need for the professionalization of ECE teaching, as well as the disconnect between ECECs as education centers and for-profit businesses.

Quality of Feedback

Quality of teacher's feedback in response to what children say and/or do can promote learning, understanding and children's participation in the classroom. This dimension scores were also in the mid-range in Ras Al Khaimah based ECECs.

Language Modeling

The quality and quantity of teacher's use of language-stimulation and language-facilitation techniques to encourage children's language development was observed under the language modeling dimension. A similar trend of a lower mid-range rating, 3.7, was observed for this dimension.

All these findings for CLASS must be understood in the context of the prevalence of rote learning classroom practices in many Ras Al Khaimah ECECs. What we have observed was a real absence of effective language use in the classroom. Teachers used the same repetitive format, such as shouting out letters of the alphabet, asking children to repeat again and again and then offering workbook activities in silence, which is not how young children have been shown to learn effectively. In these classrooms, the research team rarely observed (1) individual teacher-child conversations, (2) children asking questions, or when they did they received one-word answers, it was also observed that (3) assistants worked in complete silence throughout the observation, and (4) children lacked materials such as stories read to them or dramatic play props were used to stimulate conversations. All of these observed behaviors are not aligned with internationally recognized and evidence-based best practices that have had proven social, emotional, and developmental gains for young children. For the many children with speech delays coming from language-poor households, this was an even more grave concern.

National Child Care Standards Findings

ECECs in Ras Al Khaimah have not actively referred to any ECE standards in the past. Few nursery managers were aware of the National Child Care Standards, which are the Dubai based standards used in absence of federal or Ras Al Khaimah issued ECE standards. Although the new ECEI standards were announced in 2016, most of the ECEC managers and staff were not aware of these standards until 2018 when the second iteration of ECEI standards was published. In order to measure ECEC quality using local UAE-based standards, and to get additional information about certain structural and

quality variables that were not covered by ECERS-R or CLASS, additional data was collected using tools based on the National Child Care Standards.

ECEC's Location, Building, and Equipment

All ECECs were located in a quiet area, which allowed for the safe arrival and departure of children. The ECEC classrooms were either on the ground or first floor of a multi-story building or stand-alone structure and had the necessary licenses secured from the Municipality, Directorate of Civil Defense, and Public Health Department. However, many of the ECECs did not have basic standards of having natural ventilation and light in classrooms, enough activity rooms according to the children's age groups, the net floor area per child was not sufficient, and no separate infant sleeping room. Also, quite a few ECECs did not have enough toilets and washbasins suitable for independent and safe use by children, or some existing ones were in the immediate vicinity of activity rooms.

In addition, a few ECECs did not have proper diapering areas for infants and toddlers, and sometimes the hand wash and the diapering area was located close to the food preparation area in the same room. This trend continued with some ECECs not having a facility for a nurse room equipped with first-aid equipment and a provision for temporary care and isolation of a sick child, as per Public Health Department regulations.

Almost half of the ECECs in Ras Al Khaimah did have a garden with natural plants to allow children to experience and interact with and be stimulated by the natural environment. ECEC furniture was also child-sized, readily accessible, comfortable, durable, easily movable, cleaned and maintained and in sufficient quantity in almost all ECECs. However, only a few centers had furniture made of natural materials and in neutral colors, as per the standards. Most of the ECECs had age-appropriate, washable, safe, and non-toxic equipment, materials, and toys, but many of the ECECs were not using learning materials compatible with the adopted curriculum.

Supervision of Child Care and Education

All ECEC managers and/or supervisors, in addition to their administrative duties, were responsible for the overall supervision of the ECECs' physical environment, assignment of duties and supervision of staff, parent relations, and the preparation of the unit and daily lesson plans. About 66% of ECECs had a qualified childcare supervisor responsible for the care and supervision of a specific group of children, assisted by an adequate number of qualified childcare assistants and nurses. A similar trend was observed in teacher's qualifications. Only a few teachers had bachelor's degree in education or ECE, and many of the ECECs did not have a professional development plan in place to improve their performance in childcare and early childhood education. Also, only about 50% of the ECECs followed the teacher/child ratio as per the National Child Care Standards, and some were operating as a full-time ECEC, and others as part-time (club, summer camp, day care) centers, or a mix of both.

Safety and Security

Most ECECs had adequate safety features in their schools. However, 15% of ECECs were not in compliance with all the directives of the General Directorate of Civil Defense, in particular, the adequacy and validity of alarm systems, fire extinguishers, electrical systems, stairways, exits, and direction signs. Almost 50% of ECECs had not established clear procedures for emergency evacuation of the building, and did not have periodic fire drills with the children. Only a few ECECs had maintained insurance against all risks and accidents covering children, staff, and third-party liability, and the rest had no insurance at all.

Health Care

Ten percent of ECECs were found not to comply with the standards concerning general hygiene, which requires ECECs to implement a comprehensive procedure for cleaning, disinfecting, and sterilization of the place, equipment, and furniture as necessary, as well as after each use, to ensure the protection of children at all times.

All ECECs provided, and maintain in efficient order, a fully equipped first-aid kit and placed it in a location known to all staff, away from the reach of children. Thirty-three percent of ECECs did not have any contract with a practicing pediatrician to make periodic visits and thus were out of compliance with this standard. It was observed that a handful of ECECs allowed sick children in the center, but all ECECs followed the standard of notifying parents in case symptoms of sickness were noticed during the school day, and they gave basic medications to the child. All ECECs were aware that in the event of a serious illness or injury to a child, staff are mandated to apply first-aid treatment and, based on the severity of the case, emergency services are to be called or a staff member accompanies the child to the nearest hospital, notifying the parents. However, not all ECECs maintained detailed documentation of such events.

Most of the ECECs were hesitant to admit children with special needs to their center, although all the ECEC managers reported that special arrangements and conditions of admission were agreed upon with the parents of special needs children, and that staff cooperated with the parents and other specialists overseeing the child to follow up on their progress, exchanging information about the optimal course of action to achieve the best possible results.

Challenges for ECE in Ras Al Khaimah and the UAE

The key findings highlighted in this working paper provided context for the various dimensions, as informed by the local and international tools and standards, impacting the structural and process quality of ECE provisions in Ras Al Khaimah. The documentation and analysis of these comprehensive dimensions allow for important insights to emerge, speaking to the challenges and opportunities faced by ECECs on the various levels of policy, programmatic, and operational practices. This section succinctly provides an overview of some of the overarching documented and pressing challenges that ECE and ECECs in Ras Al Khaimah are facing. It also briefly discusses the implications of these challenges and potential intervention points to address the general deficiencies in the system, which can improve the quality of ECE provisions in the emirate and across the UAE.

High Cost of ECEC Operations

The operational cost of a high-quality ECEC is very high in Ras Al Khaimah, and in the UAE at large. Hiring qualified and experienced teachers, teaching assistants and other support staff, as well as teaching and learning resources, are a costly affair without any substantial government subsidies and support. Young children may be missing out on opportunities for their overall development as a result of compromised ECEC provisions due to the private, for profit-model currently being utilized in several low-quality ECECs in Ras Al Khaimah. However, the ECECs with high-quality scores on ECERS-R and CLASS in our study had a clear understanding of the consequences of not maintaining structural and process quality in ECECs and the impact of the increase in child enrolment in nurseries, leading to continuous capacity utilization of ECECs and thereby increasing the size of their profit.

Government Support

In Ras Al Khaimah, the majority of ECECs are currently private entities, and owners do understand the scope and areas of improvement needed in their centers. However, they find current support levels and structures from local and federal governments inadequate. The centers have identified challenges that they face that they could use government support to address, such as the lack of clarity concerning existing ECE policy and standards, lack of federal ECE frameworks and standards, inconsistent dissemination of the frequent changes in the ECE inspection parameters, and the centers' difficulty in adhering to constantly changing ECE related policies, procedures, and the governance of nurseries in the UAE. Currently ECEC managers need to visit the Ministry of Education for clarification and to collect accurate information face-to-face, which often necessitates numerous visits with inconsistent or partial results. Human and financial investments by all ECE stakeholders need more commitment, which could lead to a mobilization of resources and efforts to improve this underserved education sector uniformly in all seven emirates of the UAE.

Teacher's Recruitment, Qualifications, and Professional Training Opportunities

There are issues concerning the recruitment and retention of trained educators and professionals in the ECE sector. In Ras Al Khaimah, the percentage of teachers with a specialized qualification, such as an associate or bachelor's degree in education, or ECE specifically, willing to teach in an ECE setting is low. The Emirati ECE graduates prefer to work in public kindergartens teaching four to six years olds, as the remuneration is much higher in public government schools. The qualified expatriate teachers choose to teach in private international nurseries located in bigger emirates like Abu Dhabi, Sharjah, and Dubai, since the packages are better as compared to smaller emirates such as Ras Al Khaimah.

All Ras Al Khaimah ECE staff and teachers had at least pre-service training in kindergarten teaching, or a level 4 and above certification in ECE. These professional development opportunities are offered by private institutions based in Dubai and Abu Dhabi, or in their country of origin. Ongoing professional development trainings and up-skilling opportunities for the mainly expatriate teachers and staff in Ras Al Khaimah are scarce. They are also usually inaccessible due to a lack of funding and the unaffordable high costs of professional certifications and qualifications. A few opportunities exist in other emirates, however, most of the expatriate teachers in Ras Al Khaimah do not have the financial capacity to enroll or commute, and there may be concerns around the language of instruction.

Lack of continuous professional development and training opportunities negatively impacts the teachers' ability to keep up with the best practices and pedagogical advancements in the area of early childhood education. The status of professional training opportunities in Ras Al Khaimah, and in the other emirates as well, has grave implications for not only the quality of the provisions, but the professionalization of the profession, and has severe impacts on young children's care, learning, and optimal development expected at their age.

Parental Expectations of ECE and Care

In Ras Al Khaimah, unrealistic parental expectations and irrational demands of ECE and ECECs have a negative impact on the quality of provisions. ECECs tend to meet and prioritize parents' needs and expectations, even as some of them are over and above children's developmental levels. One common observation has been that parents demand teachers

focus on writing activities in the classroom over play and wide-ranging, recommended, age appropriate activities, even for very young children. Parents have limited understanding of the true value of a quality early years education and what this entails.

At times, parents' focus seems to be on finding a low-cost ECEC that offers merely daycare facilities. Parents enroll their children in ECECs to develop learning routines and administer and structuralize behavior modifications to prepare children for formal education. In addition, a number of infants and young children in Ras Al Khaimah spend a substantial amount of time with maids at home and are at an increased risk of difficulty in adjusting to the ECEC environment, displaying common speech delays, anti-social and disrespectful behavior, and complex attachment issues with their maid. The parents of special needs children also expect improvements in social interactions and skill development, increasing their child's school readiness with the assumption that their child will outgrow these development delays by themselves with interventions at ECECs, which is neither realistic nor feasible as these conditions require specialized interventions and therapies.

The growing number of working mothers (Emiratis and expatriates) means an increasing demand for quality full-day ECECs for children aged 45 days to four years of age, and afterschool care for children above four years in Ras Al Khaimah and the greater UAE. Since many working mothers seek a low cost, full-day care option, they are forced to enroll their children in low-quality ECECs which are mainly driven by the income of day care rather than motivation to provide a high-quality care and learning environment to children for the entirety of the day.

Policy Recommendations

While evaluating the private ECECs' provisions in Ras Al Khaimah, both the structural and process quality variables were examined using the two most widely used international scales in the ECE sector, as well as a questionnaire and observation tool based on local standards. All Ras Al Khaimah ECEC services were mapped, showing a clustering in certain affluent areas, and were rated in accordance to their characteristics. This analysis noted numerous overarching challenges that ECE and ECEs in Ras Al Khaimah and the greater UAE face, as well as highlight the need for numerous systematic, organizational, structural, and process reforms on all levels of governance and society. In order to address the existing gaps in quality ECE provision and care in Ras Al Khaimah and the UAE, the following measures are recommended.

Build a Federal Child Development Policy

The establishment of an integrated federal child development policy covering early childhood care and education, nutrition, primary healthcare, immunization, health check-ups, and ensures universal availability of high-quality early child care for all children, birth through age eight, could create a strong foundation for quality ECE provisions in the country. Under the policy, it is essential that a complimentary federal and emirate level ECE strategy is clearly defined with supporting standardizations, streamlined regulatory approaches, an assessment and rating system (complete with a dissemination strategy targeting families), and a national learning framework, as part of ECE quality reform.

An investment in human capital during the first four years of age can support ECECs to deliver high-quality ECE to all UAE based children, thereby increasing the rate of return to the economy and decreasing the need and costs of later academic interventions, such as grade repetition and foundation years. We recommend that this policy catch up with the significant body of research on the field and encourages the use of best teaching practices used for care and education of young children around the world.

Developing the federal system to ensure all early childhood teachers are certified and issued license to work in ECECs, maintaining the professional registries and databases to record important yearly information and metrics, such as ECE enrolment numbers, quality of ECE, teachers' qualifications and minimum salaries, staff training opportunities, gender equality and ECE access, and equitable access for all children, regardless of socio-economic statuses, to good quality ECE, will bring substantial improvements to the quality and lifelong impacts of ECECs' provisions.

Ensure an Increase in Public and Private Expenditures

There is a need to further increase the spending in the ECE sector in a drive to increase focus on ECE, improve its quality, universal accessibility, and provision to all children in the UAE, as per the family's choice. Setting up high minimum standards for ECE at the federal level must be a top priority investment. Structural indicators of ECE settings must be regulated consistently at the Federal and emirate levels to ensure high structural quality and its improved effects on process quality, which should also be assessed periodically.

We recommend subsidies be given by the local government to private ECECs, proportionally to their performance, on a yearly basis. Subsidies must also be provided to ECECs to purchase diverse stimulation, learning, and literacy resources. Currently, the government financing to private ECECs is minimal in the UAE, and thus owners have adopted their current for-profit models. The monthly fee is thereby exorbitant and a significant number of expatriate and Emirati families do

not send their wards to ECECs for early care and education, with many children up to four years of age being raised solely in the home. This "child-at-home" model is common in the UAE, and children are primarily under the care of housemaids who typically are not required to have any professional qualifications in child care or development, but end up spending considerable time (30-70 hours per week) child rearing. This model proliferates predominantly because of the availability of low- paid housemaids. Subsidized ECECs can avoid the harm to maternal attachment or prevent problematic behavior or developmental delays among young children that may be caused by the existing "child-at-home" model.

Setting-up Emirate Based Education Council to Monitor ECE

In order to have uniform high-quality ECE provisions in each emirate, it is highly recommended to have an Early Childhood Education Department (ECED) under the Education Council which oversees all ECECs' performance, surveillance, support systems, and data collection of vital statistics related to ECE. Under the ECED, setting up an expert committee to investigate the cases related to child abuse and establishing a hotline phone number to report such cases can be very effective at ensuring children's safe childhoods. Effective dissemination of ECE related guidelines and any updates must be done by organizing information sessions for teachers, parents, families, and communities in all emirates.

Raise the Number and Scope of Federal-Emirate Partnership

We envision the establishment of federal-emirate partnerships that facilitate collaboration on achieving and continuously supporting high-quality early learning environments in ECECs across the Emirates. This can be done through funding emirates' professional development systems and activities, as well as through providing scholarship opportunities and subsidies to any ECEC that is delivering, or is actively committed to providing, quality early childhood care and education to children and families. These quality assurance measures should be followed up on quickly and all possible support and advice should be provided.

Increase the Availability of Open Data Access Related to ECECs

ECECs' related data, such as child profiles, assessment outcomes, achievement of milestones, nursery profiles, teacher qualifications, and structural and classroom quality scores, should be posted on the Ministry of Education's website. This information can be helpful for parents, the ECE community, researchers, and educators who are the key stakeholders in ECE. This data can be used to generate a child's profile and their progress can be tracked throughout their formal schooling, as well as used to monitor the UAE's progress in improving the quality and reach of ECE.

Create Programs that Integrate Care with Formal Early Childhood Education in the UAE

A drive to support and encourage non-government organizations (NGOs) and social entrepreneurs to initiate local centers for teacher's preparation (like the Center for Inspired Teaching), after school activity centers (like the Playeum Children's Center for Creativity), child-care and education programs (like Sesame Street Preschools or the Madrasa Pre-school program), and improve parenting skills by educating the masses about child development, is recommended. This could include activities such as providing examples of child stimulation in the home through teacher's home visits, providing teaching resources to families and ECEC facilities (such as Lively Minds), and helping to raise early childhood development awareness in the community (Whitebread, Kuvalja, & O'Connor, 2014). Organizations and systems should be encouraged to support parental and community involvement in ECE. Furthermore, the availability of services to families with young children, including education, health, and social services within ECE settings should be supported by government bodies.

Support Working Mothers

With the predicted increase in the number of women working outside the home in the near future, it is important to support working mothers by having government ECEC provisions at workplaces in both the public and private sectors. In addition, there should be a focus on the establishment of ECECs in such a way to ensure their even distribution and accessibility in all areas across the emirates.

Encourage the Establishment of Diverse Forms of Early Child Care Provisions in Communities

It is recommended that both federal and local governments encourage the set-up of different types of early childhood care facilities under the UAE's early childhood development strategy. Other early care and education provisions could be nursery, daycare centers, family day-care homes, parent support groups for stay at-home mothers, play groups, family centers, drop in services for very young children, and after-school care for children aged four to eight years. This will help lead to optimal child development outcomes for children in the Emirates.

Build a Stronger Early Education Workforce

There is a need to have a federal policy on qualifications for teacher and staff working in public and private ECECs, which can be developed based on policies adopted by other, high performing countries with the highest quality care levels for

children in their early years. Federal and local grants and scholarships must be created for current teachers to upskill their qualifications at a professional training program, bachelor's, or master's degree level, focusing on early childhood or other education related fields. These courses will prepare teachers to meet the developmental needs of children.

Advanced education should include training in methods of research and provide opportunities for action research projects in an ECEC setting. Dialogue with universities must be initiated to ensure the development and provision of programs and services for continuing training and professional development, potentially granting ECE degrees for current and future ECEC teachers and staff. This would assist in the professionalization of the career, and increase the rates of recruitment and retention, developing early childcare professionals into educators with the requisite skills and knowledge to purposefully support children's optimal development. In addition, the Emirates National Qualification Framework (NQF) should include guidelines for ECE.

Require ECEC's Compliance with Accreditation Standards

Federal and local ECE strategy must adopt related accreditation standards to improve the quality of ECECs. With the development of ECEC quality ratings and improvement systems, we can ensure that children throughout the UAE have access to high-quality ECE, and government subsidies to the nurseries could be based on these quality ratings. Poor quality ECECs must not be allowed to operate, as they put children at risk of developmental delays or are harmful to their safety and wellbeing, potentially leading to abuse. The ratings system should be transparent and must provide families with access to information about aspects of ECEC's quality levels on the dimensions known to influence children's developmental outcomes, allowing families to make informed decisions.

Lack of such ECECs quality assurance systems in the UAE has also been one of the main factors leading to low enrolment numbers in ECECs and nurseries, compared to that of enrolment rates in formal kindergarten grades. This could be because of parent concerns over the quality of services provided in ECECs and nurseries, knowing their "for-profit" model and having little information about the requirements placed on private centers in terms of minimum qualifications of teachers, standards, and content of educational programs, such as safety, hygiene and health standards, professional development and staff salaries, and the staff-child ratios.

Raise Public Awareness and Increase Community Involvement

Actively reaching out to, informing, educating, and engaging the community, parents, and families to raise the awareness of benefits of quality early years education and learning opportunities in ECECs is key to increasing the number of children partaking in ECE. It will also help all groups better understand and make informed decisions about their expected outcomes of their child's participation in ECE. Teachers and parents' mutual support of designing the best possible curriculum for an individual child's needs, as well as their continuation of support through home learning, has proven to be a successful model of delivering ECE programs in several countries worldwide, and could be used here in the UAE with appropriate buy-in of all actors' for increasing their awareness levels and training.

ECECs should also incorporate the involvement and contribution of families and members of the community to increase the community's awareness, agency, and buy-in concerning ECE and its importance to society. It could help provide new and stimulating activities for the children to partake in and grow from. On the other hand, children in ECECs should have the opportunity to visit the community to have hands-on experience understanding their world and their place in it.

Ensure Opportunities for Professional Development and Training of Teachers and Staff

As touched on in other recommendations, in-house, peer-to-peer, and government support for external training opportunities will ensure that ECEC's teachers and staff are aware of recent advancement in ECE and will prepare them to plan and implement developmentally appropriate learning experiences that promote social-emotional, physical, cognitive development, health, and general competencies of each child served; establish and maintain a safe, caring, inclusive, and healthy learning environment; observe, document, and assess children's learning and development using guidelines established by ECE frameworks; strategies to be used with special educational children's needs; and engage in reflective practice.

In-service training opportunities can include active workshops related to educational program and practice, pedagogies and instructional practices, high-quality interactions with children, a curriculum model providing both theory and application and their effective implementation, classroom visits with observations (monitoring and assessment), as well as feedback and opportunities for teachers to reflect upon learning and shared experiences.

Increase the Availability of ECE Programs in Universities

Also, as previously briefly touched upon, all major federal and emirate-based universities should be encouraged to offer national and internationally accredited ECE programs to graduate effective and skilled teachers and staff. In fact, several

research studies have found that teacher's higher educational qualifications, systematic in-service training, and experience in ECE and children's development significantly predicted classroom quality, including more positive interactions with children and teachers being less authoritarian in their instructional style, supporting children's development (LoCasale-Crouch, Konold, Pianta, Howes, Burchinal, Bryant, & Barbarin, 2007).

Ensure Improvement in Structural and Process Quality Variables

Structural quality indicators like staff to child ratios, teacher's qualifications, staff wages, stability and continuity of teachers and teaching assistants in classrooms, working conditions in ECECs, and process quality indicators such as teacher-child relationships, quality of feedback, facilitation of learning and development, and language modelling are all noted areas of needed improvement in Ras Al Khaimah ECECs. The physical spaces and materials in ECECs need to be upgraded in order to support a full range of important play experiences, including physical play, exploratory, sorting, and constructional play with objects, symbolic play, with a full range of means of expression and communication, pretend play, and games with rules.

Design Stronger ECE Curriculum for 0-4 Year Age Group

Curriculum is a key determinant of high-quality ECE. Over the past few decades, there has been increasing evidences that formal and more traditional educational approaches are not the most appropriate settings for young children to learn in. Developmentally appropriate ECE curriculum giving equal precedence to both cognitive and social development would lead to higher quality ECE and improved social behaviors, as suggested in the literature (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, (Eds.), 2010). Additional focus should be on early numeracy, literacy, play, and ICT. In order to maximize learning, development and social outcomes, there should be a scope in ECE curricula to incorporate child-initiated content and activities as well.

Most OECD countries have a curriculum or learning standards from age three up until compulsory schooling. It is recommended that guidelines to design and implementation the curriculum and standards be issued to public and private ECECs in the UAE and alternative ECE approaches like Montessori, Steiner, Reggio Emilia, High/Scope, Forest Schools and Tools of the Mind, etc. be adapted, piloted, and evaluated, with only effective approaches being implemented widescale. These approaches put emphasis on the child as the active learner, with the teachers acting as collaborators, facilitators, and partners in the learning process.

Connect Professional Teaching Practices with Policy and Research

High-quality early learning for all children can only be ensured by connecting professional teaching practice with policy and research. The progress toward the goal of improved quality in ECEC must be measured and monitoring at fixed intervals. This is needed to ensure quality ECECs sustainability and such data should inform evidence-based policy revisions, effective advocacy, and public accountability.

Primary Focus of ECECs: Developing Children as Life Long Learners

Child's participation and learning experiences should serve as a strong foundation to develop children's ability to think critically, imagine (utilizing their higher cognitive functions), and to become a self-regulated learner that practices inquiry with integrity, communicates and collaborates well, is socio-emotionally developed, and understand and utilizes basic literacy and numeracy, creativity, motor skills. This will help their school readiness and create life-long learners.

Assessment of children's progress should be observation-based and lead to a qualitative profile of the child and the teacher should closely monitor the developmental trajectory of each child to help them design learning activities. They should also keep the parents informed of their child's progress on a regular basis.

Raise the Profile of the ECE Sector in the UAE to Attract More Qualified Graduates

This is a necessary step to ensure that society recognizes the importance of early years education. It will help raise the profile of the ECE sector, which in turn will help to attract qualified graduates to build a stronger, highly motivated and well-paid workforce. This will lift the quality profile of ECECs, as well as help to professionalize the field, positioning it as a recognized, viable career trajectory.

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