



An Evaluation on Quality Learning Environment of an Islamic-Based Child Care and Education Centre

Hazlina Abdullah^{1,*}, Norul Hidayah Mamat@Muhammad²

¹Faculty of Major Language Studies, Universiti Sains Islam Malaysia, Bandar Baru Nilai 71800, Nilai Negeri Sembilan, Malaysia

²IMU Centre for Education, International Medical University, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

*Corresponding Author; E-mail: hazlina@usim.edu.my

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ABSTRACT

Quality learning environment of early childhood setting has long been debated and discussed, foreseeing the impact on children's physical, cognitive, emotional and social outcomes. The widespread usage of global quality measures such as the Early Childhood Environment Rating Scale–Revised (ECERS-R) has led to a new perspective of assessing the quality. Therefore, this paper focuses on an evaluation on quality learning environment of an Islamic-based child care and education centre using four subscales of ECERS-R, namely space and furnishings, personal care routines, language reasoning and programme structure. The findings indicate that the daily planning and implementation of activities do reflect the quality. To a certain extent, by using ECERS-R as a reference, it was noted that the subscales of language reasoning and programme structure are closely followed, even though there is a gap in terms of some items in space and furnishings and personal care routines. In addition, there are significant practices exclusively practised by the centre with the aim of inculcating religious values among the children. This preliminary study adds to the small but growing literatures on Islamic-based early child care and education centre in Malaysia.

Keywords: Quality learning environment, Islamic-based, early child care and education centre, quality measurement

INTRODUCTION

Early childhood development has garnered continuous interest from various individuals, be it practitioners or researchers particularly on the establishment of quality learning environment. Studies have shown that higher quality of learning environment "is predictive of a range of positive developmental outcomes for children including language development, cognitive functioning, social competence and emotional adjustment" (Peisner-Feinberg et al., 2001 in Perlman, Zellman & Le, 2004, p. 398). According to Huntsman (2008), high quality care within the context of learning environment is commonly associated with better language, cognitive development as well as mathematic readiness, reemphasising the importance of having quality learning environment. Two dimensions of quality of early childhood development programme namely structural quality and process quality are normally referred to in identifying the quality of the environment. The former refers to regulative aspects of quality (Environment Rating Scale & NAEYC Accreditation, 2009) such as staff education, staff stability, staff-children ratio and group size (Espinosa, 2002) while the latter focuses on the dynamic aspects of children's experiences (Environment Rating Scale & NAEYC Accreditation, 2009) that include environment, activities, schedule and interaction (Espinosa, 2002).

LITERATURE REVIEW

Ishimine, Tayler & Bennet (2010, p. 69) proposed a model of relationship between curriculum and quality in early childhood education and care context, whereby "the curriculum, defined as the planned learning opportunities for children" is said to influence both structural and process qualities with process to be of direct impact on children's learning compared to structural quality. Rather, the impact of structural quality on the outcomes is indirect through the process quality, thus "enhances process quality, which then directly influences overall quality" (ibid.). In child care centres, both play equal roles in providing the quality of learning environment and eventually reflect children's physical, cognitive, emotional and social outcomes.

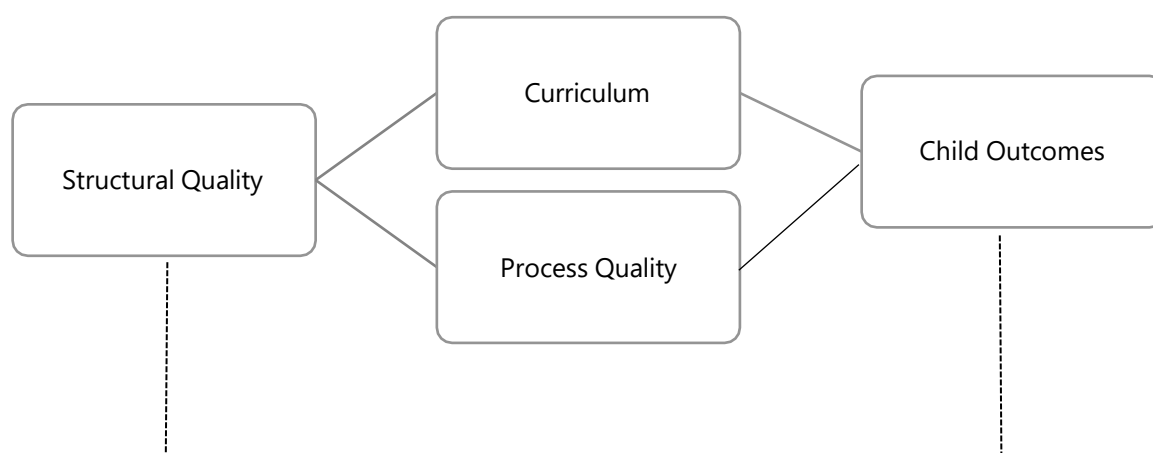


Figure 1. Model of relationship between curriculum and quality (Adopted from Ishimine, Tayler & Bennet (2010))

Based on the acclaimed positive impacts on children, numerous studies have been conducted to assess the extent of both structural and process qualities. Pianta, Howes, Burchinal, Bryant, Clifford, Early & Barbarin (2005) conducted a study to look at the extent of pre-kindergarten programme ecology consisting of the programme, classroom and teacher attributes, to predict the observed quality and teacher-child interaction. It was found that programme and teacher attributes were modest predictors of observed quality whereas location, child-staff ratio and length of the day were not linked to quality. The study also suggested that the relationship between distal features (for instance ratio, group size, caregiver characteristics, global quality assessments) of programmes and teachers, and quality in pre-kindergarten is related to elementary school settings compared to child care settings.

On the other hand, quality is more towards proximal (the actual events experienced by children) of teacher and child characteristics (Pianta, Howes, Burchinal, Bryant, Clifford, Early & Barbarin, 2005) which are indicative of process quality. Consequently, Early, Maxwell, Burchinal et. al. (2007) explored relationship between teachers' education, specifically educational degree and major, and two essential outcomes namely classroom quality and children's academic skills in pre-kindergarten entry. Through the replicated secondary data analysis from seven major studies of early care and education to predict classroom quality and children's academic outcomes from the educational attainment and major teachers of four year olds, the findings revealed mainly null or contradictory associations, indicating that policies focusing only on teachers' education, of which an aspect of structural quality, is not sufficient for classroom quality improvement or maximizing children's academic gains. Thus, it was suggested that in order to raise the effectiveness of early childhood education, an

extensive range of professional development activities and supports with regards to teachers' interaction with children are needed (Early, Maxwell, Burchinal et. al. 2007).

Another perspective of measuring the quality of early childhood education was highlighted by Tobin (2005). His study took into account the quality measurement from an anthropologist's point of view that emphasised the risk of over-generalising and essentialising the quality standards of education. Drawing on the examples of his ethnographic work on early childhood care and settings in Japan and France, he contended that quality standards are cultural constructs. This leads to some reservations on "the universality of such core United States standards of quality in early childhood education and care as low student-teacher ratios and multicultural curricula" (Tobin, 2005, p. 421). He stresses that quality in early childhood education should be viewed as a process as opposed to a product and a continuing conversation instead of a document leading to the conclusion that "a good start would be to drop the word 'standards', which implies a one-size-fits-all solution to questions of practice" (p. 434). If there is a need to have a kind of standards, it should include "a process for involving parents in discussions of best practice" and "shows evidence of adapting the standards to the needs and values of the local community" (Tobin, 2005, p. 434).

Numerous assessment tools have been constructed and published to measure the quality of early childhood programmes. Quality Learning Instrument (QLI) was developed by Walsh and Gardner (2005) with nine warranted aspects of early years environment which include motivation, concentration, independence, confidence, well-being, social interaction, respect, multiple skill acquisition and higher-order thinking skills. They also illustrated QLI data collection grid that entails the interactional triangle of children, adults and their physical environments. The instrument is considered as a comprehensive and alternative assessment in measuring the quality of early years learning environment. Of other instruments which are used, Environment Rating Scales (ERS) are widely applied as the most common tool to assess the quality. The "ultimate value of an assessment with the ERS is to improve the daily experiences that children and their teachers share in an early childhood setting" (Harms, 2010, p. 14). There are four Environment Rating Scales, assessing different early childhood context namely Infants and Toddler Environment Rating Scale – Revised (ITERS-R), Family Child Care Environment Rating Scale – Revised (FCCERS-R), School Aged Environment Rating Scale (SACERS) and the Early Childhood Environment Rating Scale – Revised (ECERS-R) (Clifford, Reszka & Rossbach, 2010). The focus of these Environment Rating Scales is mainly the process quality that "has been found to be more predictive of child outcomes than structural indicators of quality" (Whitebook, 1989 in Clifford, Reszka & Rossbach, 2010, p. 2).

Early Childhood Environment Rating Scale – Revised (ECERS-R) is cited as the most widely used to aid practitioners and researchers in examining early childhood environments and programme providers. It was first published in 1980 by Thelma Harms and Richard M. Clifford (Sakai, Whitebook, Wishard & Howes, 2003) and followed by a revised edition in 1998 (Clifford, Reszka & Rossbach, 2010). ECERS-R consists of seven subscales; space and furnishings, personal care routines, language-

reasoning, activities, program structure, interaction and parents and staff with 43 items. It is considered as a comprehensive, observation based instrument that measures process quality among children of two and a half to five years of age.

The significance of using ECERS-R has been demonstrated through several practices of selecting mentor teachers, teachers on going participation and licensing status in several states in United States (Sakai, Whitebook, Wishard & Howes, 2003). Internationally, it has been adapted and utilised in Canada, Germany, Italy, Sweden, Russia, Iceland, Portugal, England, Spain, Austria, Singapore, South Korea, Hungary, Greece and Turkey (Clifford, Reszka & Roszbach, 2010) while others are in the process of testing the adaptability of the scale such as in Chile and Bangladesh (Limlingam, 2011). The scale has also been subjected to psychometric properties studies in terms of reliability, validity and factor structure (Clifford, Reszka & Roszbach, 2010; Perlman, Zellman & Le, 2004 and Sakai, Whitebook, Wishard & Howes, 2003) with almost similar findings whereby the scale, though rather reliable, can be divided into two main factors, 'teaching and interaction' and 'provisions for learning' (Clifford, Reszka & Roszbach, 2010) as well as 'caregiving and interactions' and 'activities and materials' (Sakai, Whitebook, Wishard & Howes, 2003) instead of seven different subscales.

Streams of literatures have cited the use of ECERS-R as an assessment tool in various early childhood programme settings. A study by Warash, Markstrom & Lucci (2005) examined the impacts of ECERS-R as a training device in highlighting the aspects of quality classrooms to directors and teachers. Four licensed child care centres were involved in the study where the initial ECERS-R scores were reviewed by the directors who in turn informed the teachers. The findings identified significant improvements in three subscales; personal care routines, activities and interaction in which the changes were initiated by directors and teachers based on the initial scores (Warash, Markstrom & Lucci, 2005). Similarly, another study by Warash, Ward & Rotilie (2008) was done to determine the improvement of the overall scores of ECERS-R based on the review with the directors and teachers, to compare the before and after test score, to look at the effectiveness of ECERS-R training and to assess the reported changes by individual teacher after completing one of the modules of ECERS-R. Thirty-five teachers participated in the study and reportedly initiated the changes after the completion of the module. Among the highest subscales changes were space and furnishing, personal care routine and activities, directly indicating the effort based on ECERS-R comprehension in maximising the possibilities of establishing a quality learning environment for the children. In another light, some studies choose to employ a single subscale of ECERS-R rather than all to measure the learning environment. Erbay & Omeroglu (2010) conducted a study to examine pre-school educational environments based on specific variables such as school type, number of floor in school building, the presence of garden and number of children in classroom in different types of pre-school namely government primary school, autonomous pre-school, pre-school within the private primary schools and private pre-schools. One of the sub scales of ECERS-R, "classroom space and furniture" was used as the data collection tool. A total of 86 classes from 30 pre-school within the government primary

schools, 23 classes within autonomous pre-schools, 16 pre-school within the private primary schools and 17 private pre-schools were taken as samples. Findings revealed that lower number of children in classroom, private schools, single floor and the existence of a garden positively influenced the organisation of pre-school educational environment (Erbay & Omeroglu, 2009). These studies emphasised the usability of ECERS-R in providing the measurable quality learning environment which is crucial in early childhood education and programme.

Despite the constant emphasis on the quality learning environment of early childhood education, the process may not be adequately transparent with the lack of research and practice in terms of criteria of quality in developed countries (Peralta, 2008). In Malaysia, the assessment of quality is more towards aspects of structural quality especially on preschool teacher education in ensuring the quality of preschool education. Akiko (2010) reiterated a concern on the qualification of preschool teachers which ranges from secondary education to bachelor due to unclear stipulation of qualification requirements. Recently, Malaysian pre-school education came under fire of lacking trained teachers (Preschool mess, 2012), leading to direct and indirect impact on early years learning experience. With an increasing number of children enrolled in preschools from 16.2% in 2005 to 44.5% in 2010 and the establishment of 8,831 preschool classes in 2011 (Literacy rate above 93 percent, 2012), it is indeed a growing concern towards the quality of education and care learning environment. The process quality receives less attention aside from the stated policy. In Early Child Education and Care Policy Review 2007 (2008), Quality Improvement Accreditation System (QIAS) was mentioned to be in the process of setting up to rate child care centres. A total of four visits a year and the usage of a standardised instrument issued by Ministry of Woman, Family and Community Development were planned. The effort was to be applauded yet there was no further elaboration of the actual implementation and the details of instruments. The shift of interest among parents has seen the growth of Islamic-based early childhood education and care centres or preschools in lieu of the Islamic curriculum as providing extra benefits compared to the normal centres. Though different in terms of orientation and implementation, the quality of learning environment for both types of centres remains a question.

Therefore, the purpose of this study is to evaluate the quality learning environment of an Islamic-based child care and education centre in terms of process quality by adapting four subscales of ECERS-R; space and furnishings, personal care routines, language reasoning and programme structure. The purpose is further expanded into three research questions:

- 1) What is the level of quality learning environment of an Islamic-based child care and education centre?;
- 2) To what extent does the Islamic-based early child care and education centre's learning environment reflect the four sub-scales of ECERS-R namely space and furnishing, personal care routine, language reasoning and program structure?; and

- 3) What are other significant practices in the Islamic-based child care and education centre which are not in the ECERS-R subscales?

METHODOLOGY

Participant Selection

An Islamic-based early child care and education centre (hereafter named as AF Kindy) was chosen for this study. It is situated in a housing area where the majority of the residents are Malay Muslim government officers. It is a private-owned centre, together with two other branches in the same area – another early child care and education centre and a nursery for babies up till three years old. AF Kindy accommodates 65 children aged four to six years old and it operates from 7.00 a.m. to 6.30 p.m.

Design

Observation was employed as the main tool in collecting data. According to Merriam (2009), observation is different to other tool in that it “takes place in the setting where the phenomenon of interest naturally occurs and it represents a firsthand encounter with the phenomenon of interest” (p. 117). Hence, observation fits into the context of this study as it was adopted to observe a child care centre in the natural setting, giving a first-hand encounter of what actually happened in the setting.

The observation was conducted based on adaptation of Early Childhood Environment Rating Scale–Revised (ECERS-R). ECERS-R contains 43 items with seven subscales. They are:

Table 1. ECERS-R Profile

1. Space and Furnishings	1. Indoor space 2. Furniture for routine care, play and learning 3. Furnishings for relaxation and comfort 4. Room arrangement for play 5. Space for privacy 6. Child-related display 7. Space for gross motor play 8. Gross motor equipment	5. Interaction	29. Supervision of gross motor activities 30. General supervision of children (other than gross motor) 31. Discipline 32. Staff-child interactions 33. Interactions among children
2. Personal Care Routines	9. Greeting/departing 10. Meals/snacks 11. Nap/rest 12. Toileting/diapering	6. Program Structure	34. Schedule 35. Free play 36. Group time 37. Provisions for children with disabilities

	13. Health practices 14. Safety practices		
3. Language-Reasoning	15. Books and pictures 16. Encouraging children to communicate 17. Using language to develop reasoning skills 18. Informal use of language	7. Parents and Staff	38. Provisions for parents 39. Provisions for personal needs of staff 40. Provisions for professional needs of staff 41. Staff interaction and cooperation 42. Supervision and evaluation of staff 43. Opportunities for professional growth
4. Activities	19. Fine motor 20. Art 21. Music/movement 22. Blocks 23. Sand/water 24. Dramatic play 25. Nature/science 26. Math/number 27. Use of TV, video, and/or computers 28. Promoting acceptance of diversity		

(<http://ers.fpg.unc.edu/c-overview-subscales-and-items-ecers-r>)

In evaluating the quality of learning environment of the AF Kindy, the present study adapted only on four aspects of ECERS-R namely; *Space and Furnishings*, *Personal Care Routines*, *Language-Reasoning* and *Programme Structure*. This is due to the time factor of conducting the study, and also because the four aspects are more concrete and tangible to be examined within the observation period. For the reason that it was at the end of the school year, the other three aspects; *Activities*, *Interaction* and *Parent and Staff* were not feasible to be observed because they should be observed several times before any conclusive remark can be made.

Procedure

After obtaining an agreement from the principal of AF Kindy, the observation commenced, whereby the first author undertook the role of a nonparticipant observer, as this role "requires less access than the participant role, and gatekeepers and individuals at a research site may be more comfortable with it" (Creswell, 2008, p. 223).

The observation period of ten and a half hours was considered adequate as according to the ECERS-R implementation, the substantial portion of operation is as below (Refer Table 2). Thus, the observation carried out for this study is considered valid and adequate.

Table 2. Calculating “substantial portion of the day”

Number of hours	Substantial portion of operation (1/3) of these hours
4	1 hour, 20 minutes
4.5	1 hour, 30 minutes
5	1 hour, 40 minutes
5.5	1 hour, 50 minutes
6	2 hours
6.5	2 hours, 10 minutes
7	2 hours, 20 minutes
7.5	2 hours, 30 minutes
8	2 hours, 40 minutes
8.5	2 hours, 50 minutes
9	3 hours
9.5	3 hours, 10 minutes
10	3 hours, 20 minutes
10.5	3 hours, 30 minutes
11	3 hours, 40 minutes
11.5	3 hours, 50 minutes
12	4 hours

Harms, Clifford & Cryer (2011),

http://ers.fpg.unc.edu/sites/ers.fpg.unc.edu/files/ECERS_SubstantialPortion.pdf

Permission to take photographs of the classroom setting and materials for further analysis was granted. In addition, information was also gathered through asking questions to the teachers about their general and religious curricula and activities.

Data Analysis

The type of data gathered was field notes, “a written account of the observation” (Merriam, 2009, p. 128) accompanied by semi-structured text data and pictures taken during the observation. The data are presented in the form of descriptive analyses based on the four aspects of ECERS-R: *Space and Furnishings*, *Personal Care Routines*, *Language-Reasoning* and *Programme Structure*.

FINDINGS AND DISCUSSION

The findings of the study were based on formal classroom quality evaluation, using ECERS-R as the reference and focusing only on four aspects, which are *Space and Furnishings*, *Personal Care Routines*, *Language-Reasoning* and *Programme Structure*. Both findings and discussion are presented according to the research questions.

Research question 1:

What is the level of quality learning environment of an Islamic-based early child care and education centre?

Space and Furnishings

The AF Kindy is a double-storey semi-detached house converted into an early child care and education centre. Upon entering the centre, there is an open space with a set of television. On the walls, there are several posters like *'Parts of the Body'*, *'How to brush your teeth'*, numbers, motivational quotes and also time-tables. Children's progress charts of reading (*"Bacalah Anakku"* – Malay reading book, *"I Can Read"* – English reading book and *"Al- Barqy"* – Early Quran) were also shown on the classroom wall. Apart from that, the children's artwork can be found displayed on the walls and display boards. Some are mounted at the child's eye-level, while some are placed a bit higher.

There is also a corner to place children's bags. Apart from that, on the ground floor also, there is one space converted into a classroom for the four-year-olds, with desks and chairs suitable for children. Further inside is the kitchen area, where food distribution and preparation take place (The foods are not cooked at the centre but brought there during meal-time). There is also a water dispenser / container that allows children to independently pour their own drinks whenever they feel thirsty, and also a sink where children queue to wash their hands before and after meals.

The first floor houses another three classes – two for six-year-olds and another one for five-year-olds. A simple reading spot is dedicated at the corner of an open space on the first floor. It is only indicated by a chair and a magazine rack which holds few English and Malay children books, some of which are already torn. There is no floor cushion or comfortable seating for children to do leisure reading.

Probably due to space limitation, there is no special area for play, except at a corner of the ground floor where a small open cabinet is placed, with an abacus and several wooden blocks in sight. There were hardly any other toys available. It was also noted that there is no space for privacy available for the children, who at times do not want to be among the mass.

The outdoor area, which is originally the porch and the lawn of the double-storey house, acts as the playground of the centre. Here, children are given the chance to perform gross motor play (e.g. running, jumping etc.) and also it is the place where the children assemble in the morning for a brief meeting before they start their classes at 8.30 a.m. There, several play equipment such as the slide, see-saw, *'horse'*, *'car'* and a *'house'* – all plastic-made, are available. Monitoring is made by teachers when the children go out and play.

Personal Care Routines

In terms of the greeting routine, children were welcomed by the teacher on duty, who opened the centre's gate and took the children's bags from their parents, and held the

children by their hands to be brought inside the centre. As for the departing routine children were made sure to have their things and led to their parents outside the centre.

According to the Head of the Centre, meals and snacks are served to children at around 9.30 a.m., 1.00 p.m. and 4.30 p.m. daily. On the observation day, during the morning snack time, children were served with 'jemput-jemput' (fritters), rice with chicken and vegetable for lunch, and biscuits for tea. It was also observed that the children voluntarily lining up at the sink in the kitchen area to wash their hands before and after every meal time.

Afternoon nap time was at around 2.00 p.m. where children slept on mattresses in the classrooms (now classroom-cum-relaxation room) on the second floor. Rest time, which allowed children to perform free play, took place in between the morning activities, around 10.30 a.m. and then at 6.00 p.m. while waiting for the respective parents to fetch the children. Again, teachers on duty monitor the children to ensure safety.

During the observation, few children were seen using the toilets independently, and one of them (a girl) was noticed to wash her hands thoroughly after the call of nature. The toilets were in an acceptable level of cleanliness, though improvement could still be made. For instance, the hose was seen to be on the floor, which could cause accidents. And the interior part did not portray any children element (i.e. the toilets were simply plain and basic). Soap was within reach near the sink, but there were no steps or stool available.

In terms of health practices, children were seen to have very high discipline in washing their hands before and after meals, and also after toileting. Apart from that, on the observation day, a girl who had a stomachache was attended by a teacher, who applied some ointment as a reliever. Children were also checked if their nails have been cut, and an inspection of hair lice was also done.

Language-Reasoning

Apart from the formal reading books used in class ("*Bacalah Anakku*" – Malay reading book, "*I Can Read*" – English reading book and "*Al- Barqy*" – Early Quran), the centre also provides additional picture books like "*The Animal Kingdom*" and "*Nursery Rhymes*" and some other Islamic story books.

It could be seen that teachers at the AF Kindy tried to develop the children's reasoning skills through question and answer sessions in several occasions. The first example was after a video-viewing session of '*Amalan Qurban*' (The Practice of '*Qurban*') in conjunction with the Eidul Adha celebration, and the second was during a story-telling session by the teacher on the topic of Prophets Ismail and Ibrahim. For the former, children were shown the process of slaughtering the animals for '*Qurban*' purposes, in which children were seen to be engrossed in the video shown to them, and started asking questions once the video ended. In the latter, children were eager to ask and also answer questions when the teacher told a story of the two prophets,

and how the practice of 'Qurban' started. Teachers encouraged children to think and ask further questions by explaining and probing thoughtful questions to them.

The flow of the lesson on the day of observation was from a big group activity (video-viewing) leading to small group activity of naming, colouring and pasting animals that could be sacrificed. Thus, the smaller group activity allowed more personalised interactions between teacher-child and also child-child interactions. Almost all students were noted to be interacting with the teachers, and with each other. The colouring and pasting session also witnessed the cooperation between the children, their patience and tolerance where the researcher observed how different children deal with their peers while completing their tasks. For example, a girl waited patiently for a boy to finish his colouring before she could use the same pencil colour. The informal use of language was also observed to have been taken place during rest and meal times where teachers engaged themselves in conversations with the children. For instance, "*Bila balik kampung?*" (When are you leaving for your hometown?), "*Mak masak apa untuk Hari Raya Haji?*" (What will your mother cook for Eidul Adha?). These informal chit-chats also encouraged child-to-child conversations. Nevertheless, an observation worthy noting was the minimal use of English language by the teachers, using Malay instead during the interaction.

Programme Structure

On the day of observation, for the reason that it was the end of year, the centre conducted a freer and relaxed kind of activity (i.e. video-viewing). Nevertheless, from the schedule available, it could be seen that there were subjects like Jawi, Mathematics, Islamic Studies, Malay language, English language and Little Scientists taught to the children. There was also '*Special Subject and Special Event*' period conducted on Fridays to celebrate certain special events. According to the teachers, even though the schedule seemed formal with '*serious*' subjects, the teaching approaches and techniques covered time for play across the subjects.

Free play activities were observed to take place at the playground of the centre, where several play equipments were available for children. For those who could not get access to the see-saw, slide or car, they would play '*police and thief*' game.

On the day of observation, whole group and small group activities were in balance. Teachers were seen to attend to individual needs and guiding the children as they interacted with each other. Teachers also knew each and every child's name which promoted the sense of positive self-esteem and the feelings of being appreciated.

However, the centre, like many other '*normal*' early child care and education centres, did not provide any facilities or services for children with disabilities. Thus, the students enrolled at the centre were all physically '*normal*'. Nevertheless the teachers were seen to tackle different child in a different way. For example, it was observed that for a boy who was seeking for attention throughout the day, the teachers did try to accommodate his behaviour without neglecting the others. The individual reading sessions also provided the teachers with an avenue to help children with reading problem, and to identify any learning difficulties.

Even though there is lack of readily available tool to measure the quality of early childhood care and education in Malaysia, the level of quality was noticeably implemented in the centre. It implies the thought and effort by the early childcare provider to instill the sense of quality in children's learning environment. It is possible that the environment was planned based on developmentally appropriate practices as a standard reference commonly used to appropriately define the types of activities, teaching strategies and learning experiences for different age group (Bredekamp & Copple, 1997 in Warash, Markstrom & Lucci, 2005). According to Harms & Clifford (1980 in Sakai, Whitebook, Wishard & Howes, 2003), developmentally appropriate practices are demonstrated through the access to appropriate materials and opportunities to choose activities, a safe and healthy environment, a nurturing environment that supports relationship between children and staff and among children as well interactions that may extend children's learning comprehension. Some of these aspects were visibly reflected during the communication and activities in the centre. The usage of Malay, the home language in communicating with children may also reflect the cultural construct (Tobin, 2005) to accommodate children's language proficiency.

Research question 2:

To what extent does the Islamic-based early child care and education centre's learning environment reflect the four sub-scales of ECERS-R namely space and furnishing, personal care routine, language reasoning and program structure?

The AF Kindy, which is an Islamic-based Early Child Care and Education centre possesses the basic characteristics (with a few exceptions) outlined by the four sub-scales of ECERS-R. The quality learning environment can be generally rated between minimal to good. Improvements in certain areas listed below could increase the rating of the centre;

- Having a properly designed space for relaxation and comfort, with soft furnishings and toys gives opportunity for children to relax and rest. A cozy and homely area is also vital when at times children can snuggle and daydream.
- Children also need opportunities, space and time to be alone, thus having a space for privacy is also one factor towards positive classroom behaviour.
- The meals and snacks provided were acceptable, however healthier food with less oil and fat would be better for the children. An awareness of the food pyramid and also "*pemakanan sunnah*" (the Prophet's eating habits) should be cultivated in the children.
- The nap area can be more comfortable, without jeopardising the cleanliness and hygiene aspects.

Among the seven subscales of ECERS-R, space and furnishings have been quoted as receiving less attention compared to personal care routines, language reasoning, activities, programme structure and parents and staff (Huntsman, 2008; Erbay & Omeroglu, 2009). The similar was observed in the centre where physical spaces may not be the first priority and being overlooked in the planning of learning environment.

Maxwell (2007 in Huntsman, 2008) stated that the quality of physical environment is related to assessment of self-perceived competence especially among three-year-olds. The features of physical setting should not be underestimated as it is significantly correlated with caregiving behaviours (NICHD, 1996 in Huntsman, 2008). Despite the lesser emphasis, space and furnishing subscale has the highest feasibility for improvement. A study by Warash, Ward & Rotilie (2008) indicated that space and furnishing rated as the highest subscale change followed by personal care routine and activities. The most significant changes made by teachers who went through ECERS-R training were furnishings for relaxation and comfort, room arrangement for play, space for privacy and indoor space. Likewise, similar situation was depicted in the centre, where children lack of spaces for comfort and privacy, yet it can be improved by taking into consideration children's need for appropriate setting. In another study, significant change was demonstrated through personal care routines (Warash, Markstorm & Lucci, 2005), where basic health and sanitation are deemed important in children's development. Based on the observed setting, the changes could be made through the meals/snacks provided as it directly contributes to the quality of learning. On the other hand, items such as books and pictures, encouraging children to communicate, using language to develop reasoning skills and informal use for language reasoning subscale and schedule, free play and group time for programme structure were covered to a certain extent, indicating the feasible assessment based on ECERS-R.

Research question 3:

What are other significant practices in the Islamic-based child care and education centre which are not in the ECERS-R subscales?

When Muslim parents opt to send their children to an Islamic-based early child care and education centre, there must be certain expectations to some extent of what practices do the centre provide. Outlined here are some of the notable aspects of Islamic elements found to be present in the centre.

First and foremost, the Islamic element could be felt by looking at the children who covered their "*aurah*" (dressing in an Islamic way). It is even more obvious by looking at the girls who were all wearing "*hijab*" (head scarves). Getting the children to understand the concept of "*aurah*" since young would very much contribute to their personality later on in life.

The centre also allotted two different toilets for the children. The one situated on the ground floor was for the boys, while the other one on the first floor was for the girls. The division would teach children more about the boundary and limit between boys and girls.

Apart from the normal educational and motivational posters displayed in the centre, there were also posters of '*Let's Wudhu*' (Performing ablution), alif, ba, ta , numbers in Arabic language, names of fruits in Arabic, "*Mammals*" in Arabic language, and also posters of some common words in Malay, English and Arabic words. These portrayed the significance placed upon Islamic affairs and Arabic language, which is closely related to the language of the Quran.

Posters of the five Pillars of Islam and the six Pillars of Iman were also seen in the centre. These two pillars which are significant portions of the foundation in which a Muslim's beliefs stand on, are indeed crucial to be introduced to Muslim children. Other than that, there was also a roster of "*Imam*" (one who leads prayers) and "*Muazzin*" (one who summons the faithful to prayers). Six-year-old boys were trained to take turns in becoming the "*Imam*" and "*Muazzin*", which is a vital role especially when they have their very own families to lead.

The children were also taught how to perform prayers and they are exposed to "*sembahyang berjemaah*" (praying in a group led by a leader). Not only were the children taught the five times of obligatory prayers, but also the "*sembahyang sunat*" (non-obligatory prayers). On the observation day, the children performed "*solat sunat Dhuha*" (Dhuha prayers), preceded by "*tayammum*" (the use of pure earth to wipe over the hands and face with the intention of making prayer permissible).

During meal time, besides washing their hands, children were also guided to recite prayers before and after their meals. They were also seated on the mat, and such arrangement was seen to foster closer bonds among the children and teachers.

Islamic values through daily practices, activities and appearance are commonly adopted by Islamic-based education and care centres (Lihanna, 2004). In the centre, the schedule is integrated with the Islamic practices such as '*doa*' recitation and prayer, which can be considered as unique compared to other centres that follow the 'normal' curriculum. The uniqueness probably triggered parents' interest in sending their children to religiously affiliated centres, hoping to inculcate religious values (Lihanna, 2004) and establish Muslim personality among the children. The increase of interest may be related to the Muslim population in Malaysia with Islam as the official religion.

CONCLUSION

In conclusion, this study achieves the main purpose of evaluating the quality of learning environment of an Islamic-based early childhood education and care centre. The findings provide insights into the actual setting that reflects the level of quality, the gap that may need further improvement and significant practices. It further provides the understanding towards the planning of activities and curriculum by child care providers. Even though the assessment of quality by a measure such as the Early Childhood Environment Rating Scale-Revised (ECERS-R) is not readily available, the setup of the centres does apparently follow certain guidelines where children's outcomes are carefully thought of. Despite the preliminary nature of the study, it adds to the small but growing literatures on Islamic-based centres. It is also recommended that the measurement of quality particularly the establishment and implementation of a standardised tool such as ECERS-R to be established. Otherwise, ECERS-R can be adapted as a reference.

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AUTHORS' CONTRIBUTION

Hazlina Abdullah: Formal analysis, writing – original draft, final editing, and submission.
Norul Hidayah Mamat@Muhammad: Writing – original draft, and formal analysis.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

ETHICS STATEMENT

Formal institutional approval and permission were obtained from all participating early childhood education and care centers prior to data collection.

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