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ABSTRACT

The benefits of quality early childhood experiences are indisputable, as studies have increasingly shown the positive result of high-quality early childhood care and education on child outcomes. These benefits have urged many countries around the world in the recent years to prioritize preschool programs on their national plan, targeted at pursuing quality preschool education agenda. Today, early childhood education has been regarded as of paramount importance across the globe by governments, policymakers and societies alike. And the quality aspect of preschool education program is of concern worldwide. Studies worldwide revealed that variation of preschool programs offered has resulted in quality discrepancy, which happened due to multiple policy implementation approaches practiced by the individual countries. Thus, the emphasis on quality aspect in preschool education calls for policy attention and intervention. This paper reviews related literature on the definition and understanding of quality preschool education. In addition, it highlights issues and challenges related to policy implementation for standard quality preschool provision.

Keywords: Early childhood care and education, preschool education, policy, structural quality

MANUSCRIPT - STRUCTURAL QUALITY FOR POLICY IMPLEMENTATION IN public PRESCHOOLS: a conceptual overview

**INTRODUCTION**

The benefits of quality early childhood experiences are indisputable, as studies have increasingly shown the positive result of high-quality early childhood care and education (ECCE) on child outcomes (Bakken, Brown & Downing, 2017; Barnett, Jung, Youn & Frede, 2013; Duncan & Magnuson, 2013). These benefits have urged many countries around the world in the recent years to prioritize preschool program on their national plan, targeted at pursuing quality preschool agenda (Duncan, Magnuson & Murnane, 2016; Hu, Mak, Neitzel et al, 2016; Li, Yang & Chen, 2016; Snaider, 2018).

Early childhood education has been regarded as of paramount importance across the globe by governments, policymakers and societies alike. And the quality aspect of preschool education program is of concern worldwide (Hu, Mak, Neitzel et al, 2016; Smidt, 2018; Tan 2017; Umek, 2014). At the global level, one of the 2030 Agenda for Sustainable Development Goals adopted by United Nations Member States in 2015 is quality education, whereby it aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Among the targets under this goal to be achieved by the year 2030 include ensuring all children, regardless of gender, to have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

Malaysia through its blueprint, Malaysia Education Blueprint (MEB) 2013-2025 has established its commitment to raise the quality of all preschools and encourage universal enrolment by 2020. Prior to MEB 2013-2025, the National Standard Preschool Curriculum (NSPC) was also introduced and became part of the National Education Act 1996 (Dahari & Ya, 2011). The NSPC establishes that all preschools, regardless of their types, whether private or government-owned are required to adhere to the NSPC (Dahari & Ya, 2011). The NSPC however, focuses purely on the curriculum aspect of preschool program, which actually concentrates on one element of preschool quality that is process quality. Malaysia has yet to have a similar standard guideline for structural quality variables (Ministry of Education Malaysia, 2013). With MEB 2013-2025 stressing on the importance of improving the quality of ECCE, it is essential that Malaysia has a NSPC-alike guideline that look after the standardization of structural quality elements in preschool program.

**BACKGROUND**

ECCE is a general term that refers to educational programs tailored for children from birth to six years of age. Generally, program for young toddlers are often referred to childhood care, while the education part of the programs called preschool or kindergarten are meant for older children aged four and above (Bakken, Brown & Downing, 2017; Barnett, Jung, Youn et al, 2013). ECCE programs involve both elements of physical care and education designed for children under compulsory school age (Bakken, Brown & Downing, 2017; Barnett, Jung, Youn et al, 2013; Duncan & Magnuson, 2013). Apart from their substantial contribution to cognitive stimulation, socialization, child development, and early education; they are also essential service for working parents (Bakken, Brown & Downing, 2017; Barnett, Jung, Youn et al, 2013; Duncan & Magnuson, 2013).

ECCE programs comprise of a part-day and full-day programs, beneath a wide range of education, health, and social welfare agencies, funded and provided by both the public and private sectors in a variety of ways.These programs may be funded and delivered by public sector (the predominant pattern in the Nordic countries, for example) funded by public sector, but delivered by private sector (as in the Netherlands and Germany, for example), or include a combination of both as in many of the less developed countries such as Brazil and most of Africa, for example (Kamerman, 2006). They may be provided for free, particularly programs delivered under education agencies, or they may impose a charge of income-related fees; but in majority of Europe, they are profoundly funded by government (Kamerman, 2006).

ECCE systems differ across countries in terms of the age range and governing body responsible. About 50 percent of Organisation for Economic Cooperation and Development (OECD) countries have a unitary system for the age range zero to five, or sometimes until eight years of age (Guerriero, 2017); and Ministry of Education (MoE)is identified as the responsible governing body in these countries. In countries with a split system, Ministry of Social Affairs or the like is responsible for provisions to children aged zero to two; whereas the MoE is usually responsible for the preschool provisions of children starting at age three (Guerriero, 2017). In some of the European countries, children are guaranteed a place when they reach a certain age (for example, age one in Sweden, Denmark, and Finland; and age three in Germany) (Kamerman, 2000). In African and Asian countries, children may be permitted to enter ECCE program when they are three or four years old; and it ends when compulsory primary school begins at age five, six or seven. However, limited access is observed in most of the countries in Africa, Asia and Latin America (Kamerman, 2006).

Additionally, the extent of centralisation varies across countries, with some countries having a strong localized policy at the state level, such as the United States and Germany (Guerriero, 2017). Moreover, countries adopt different policies in addressing educational inequalities with some countries applying targeted approaches, such as the United States and the Netherlands (Kamerman, 2000). Consequently, selection effects in the usage of provisions exists, and more prominently, the variations of quality provision (Freitas, Shelton & Tudge, 2008; Slot, Lerkkanen & Leseman, 2015).

Studies worldwide revealed that preschool education programs in many of the countries are conducted by multiple agencies, resulting in quality variations of the service provided. In the United States for example, preschool programs are provided at multiple levels of government’s involvement (federal, state, and sometimes local) (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016). And these programs are largely decentralized, with primary responsibility lies at the state level, rather than federal (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016). Each program is guided by specific goals about service provision and target population. Thus, program differences exist in the aspects of program design, community involvement, human resources, staff training, and quality assurance (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016). Denmark goes down even further, whereby the preschool programs provision are put under the obligation of municipalities or local level. Denmark has ninety-eight municipalities, with each offering different types of preschool program (Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018). Though preschools in Denmark are publicly funded, ironically, these programs are not even regulated at the state level (Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018). Almost similar to the United States, preschool programs in Austria are regulated at nine Austrian federal states. Due to that, there is no uniform level of legislation regarding preschool education in Austria (Smidt, 2018).

In the context of Asia, in China for instance, majority of preschool programs are funded by private sector, while public preschools are funded by variety of public agencies (Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Li, Yang & Chen, 2016). However, studies found that public preschools in China are of higher quality than the private ones due to its superior policies (Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Li, Yang & Chen, 2016). Preschool programs in Singapore on the other hand, are funded predominantly by private sector including community organizations, religious groups, as well as social and business entities (Tan, 2017). Singaporean government focuses only on the regulatory role, leaving the provision of preschool education to private sector (Tan, 2017). Indonesia is quite similar to the United States, whereby it has a variety of preschool programs with different purposes and are administered by multiple ministries (Brinkman, Hasan, Jung et al, 2017). The two main ones are kindergarten and playgroup under the jurisdiction of the Ministry of Education and Culture (Brinkman, Hasan, Jung et al, 2017). However, surprisingly, among all of these countries, Indonesia is the only country with a standard national policy on structural aspects (Brinkman, Hasan, Jung et al, 2017).

Based on this, it is safe to conclude that variation of preschool programs offered has resulted in quality discrepancy, which happened due to multiple policy implementation approaches. Thus, as Kamerman (2001) concludes, the main cross-national variations include the following aspects: the policy-making authority; administrative agencies involved; funding strategies; delivery strategies; and program details, which include program philosophy, age group served, access and percentage of age group covered, specific eligibility criteria; location of care as well as primary caregiver.

ECCE in Malaysia is no different than the rest of the world. It is basically categorized into two main groups, the birth to four years old, and the four to six years old (Boon, 2010). ECCE for the birth to four years old is being provided by the childcare centres and falls under the sole responsibility of Ministry of Woman, Family and Community Development (local acronym is KPWKM) (Boon, 2010). KPWKM, through its Department of Social Welfare, is the main coordinator for national programs concerning the growth and development of children (Boon, 2010). Among KPWKM’s major role is to register all childcare centres that offer care and education for children between birth to four years old (Boon, 2010). While ECCE for the four to six years old is being offered by the preschool providers with three federal governmental agencies’ involvement, i.e. MoE, Department of Community Development, Ministry of Rural Development (local acronym is KEMAS); as well as Department of National Unity and Integration, Prime Minister’s Department (local acronym is JPNIN) (Mustafa & Azman, 2013; Boon, 2010). In Malaysia, preschool normally takes in children from as early as four to six years old and is considered as preparatory class for primary school (Dahari & Ya, 2011).

Preschool education in Malaysia is unique, with both public and private sectors providing the service (Mustafa & Azman, 2013). Public preschools that mainly focus on social obligation functions, are funded by both federal and state government (Ismail, 2013). In contrast, private-run centres are geared towards profit making orientation without neglecting the main objective of providing quality preschool education (Mustafa & Azman, 2013). State funded preschools basically are run by the State Islamic Religious Department (Ismail, 2013). While federal funded preschool program is being provided by three different agencies mentioned earlier, namely MoE; KEMAS, and JPNIN (Boon, 2010; Mustafa & Azman, 2013). In the last two decades, preschool institutions including those of state funded as well as private and NGO-run have mushrooming nationwide (Dahari & Ya, 2011). Preschools operated by these providers complement the federal government’s effort in providing quality education to children aged four to six years old, especially for parents who can afford to pay for the service (Mustafa & Azman, 2013). Preschools in Malaysia are so diverse due to the country’s multicultural society and individual needs (Dahari & Ya, 2011). The sign of awareness from multiple stakeholders on the significance of early childhood education is exemplified in the increase number of preschools in Malaysia since it was introduced in 1950s.

There are, however, important issues emerging as numerous agencies start to provide preschool education. Since every agency has its own mission, expectations, orientation, priorities and abilities, the situation evokes imbalance and unstandardized quality provided by each of these agencies (Boon, 2010). Preschool quality does not only vary among the wide array of preschool providers; it is in fact varies even within the few public providers. As each of these agencies has its own core services besides providing preschool program and governed by different authorities, each is accountable to its individual sets of goals and objectives (Dahari & Ya, 2011). Thus, resulting in preschool quality discrepancy, ranging from different daily operations to the very details of structural quality aspects (Ismail, 2013). According to Mustafa & Azman, (2013), the structural quality variation among the federal funded providers includes, but not limited to classroom size, teacher-student ratio and teachers’ qualification. Besides that, different regulations set by different implementing agencies has also resulted in a vague and unclear guideline on the overall standard quality of public preschool program (Boon, 2010).

**UNDERSTANDING PRESCHOOL QUALITY**

Part of the challenge in ensuring high quality preschool is that there is no one formula for achieving it. The general consensus is that quality must be comprehensive. Consequently, defining and measuring preschool quality becomes a complex task. Quality has become the universal focus of provision and practice, as more voices are added to the discourse, i.e. policy makers, preschool teachers, ECCE managers, funding and support agencies, parents, researchers and educators. Each of these stakeholders tries to define quality in their own context. There is no single meaning of quality, as it depends on national and international context.

While there is no definite meaning of quality, the concept obviously includes both structural and process elements. Although consideration to the process factors of what children experience in the preschool settings are essential, it is equally obvious that the crucial element in terms of achieving quality also relates to what made up the preschool settings, such as class size, adult-child ratios and teachers’ qualification, which is known as structural quality. Structural variables are considered to be precursors to process quality, which in turn is most strongly related to child development, well-being and learning (Vandell et al., 2010). Hence, in view of enhancing process quality, focus should be directed towards improving the structural quality aspects; thus, it is essential to investigate the policy implementation of standard structural quality among public preschools.

**DEFINING PRESCHOOL QUALITY**

There is a large body of literature that attempts to understand the definition of preschool quality (Cryer, Tietze, Burchinal et al, 1999; Brinkman, Hasan, Jung et al, 2017; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Phillipsen, Burchinal, Howes et al, 1997; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Umek 2014). The meaning of ECCE quality varies across numerous studies of the quality of care. Historically, the meaning of quality in ECCE have included multiple proximal (i.e. curriculum and classroom interactions) and distal (i.e. program and state policies) features of classrooms that promote children’s development in multiple aspects (Dunn, 1993). Nevertheless, due to limited consensus on what indicators are most important, thus it resulted in a broad or nonspecific definition of quality (Layzer & Goodson, 2006). Taking into consideration on such broad definitions, some researchers have conceptualized ECCE quality in terms of global quality with two primary parts - structural and process quality. This is in line with the wide practice of experts in ECCE whereby the common categorization aspects of quality in preschool program is measured by the Early Childhood Environment Rating Scale (ECERS) - structural quality and process quality (Harms, Clifford & Cryer, 1998). Structural quality refers to elements that are measurable and regulated such as class size, teachers’ educational level and teacher–child ratio (National Institute of Child Health and Human Development [NICHD], 2006). Process quality, in contrast, refers to a more proximal factor of direct contact by caregivers who assist children in developing physically, linguistically, intellectually, emotionally, and socially (Harms, Clifford & Cryer, 1998). Examples of structural quality elements include class size, teacher education, and teacher-child ratio. These elements are often the regulated aspects of classrooms and programs. Elements of process quality, on the other hand, focus on a more dynamic aspects of early childhood education, including human interactions occurring in the classrooms such as teacher-child and peer-to-peer interactions (Cassidy et al., 2005a; Hamre & Pianta, 2007; Vandell & Wolfe, 2000).

**STRUCTURAL QUALITY, PROCESS QUALITY AND RELATIONS BETWEEN THE TWO**

ECCE quality is a multidimensional concept and widely defined as promoting children’s well-being and positive developmental outcomes (Layzer & Goodson, 2006). A common distinction is made between structural and process quality (Pianta et al., 2005; Sylva et al., 2006; Thomason & La Paro, 2009). As mentioned in the earlier section, structural quality involves the distal and regulatable factors, such as child-staff ratios, group size as well staff training and education (Abbott-Shim, Lambert & McCarty, 2000; Thomason & La Paro, 2009). Structural quality is partially determined by legislation, policy and funding; and it is a major factor in the macroeconomic costs of ECCE. On the contrary, process quality concerns more of the proximal processes of children’s daily experiences which involves the social, emotional, physical, and instructional aspects of teacher-child and peer interactions while being in the childcare settings (Pianta et al., 2005; Slot, Lerkkanen & Leseman, 2015).

Regardless of the different perspectives on what makes up a ‘high-quality’ setting, a common meaning found in most of the academic literature is in terms of structuraland processquality. While the two elements are closely related, they offer different ways to comprehend, differentiate and measure quality in ECCE settings.

Structural quality comprises of ‘inputs-to-process-characteristics which create the framework for the processes that children experience’ (Cryer, Tietze, Burchinal et al, 1999). In the ECCE context, these inputs include factors such as staff qualifications and skills, group size, as well as the facilities of teaching and care. A situation considered to be of high structural quality may have teachers with high qualifications, small group size, a hygienic environment and follow a set of accredited curriculums. Most structural quality measures can be regulated by policy as it is typically calculated by the human, financial and time resources (inputs) that are required to deliver services (Cryer, Tietze, Burchinal et al, 1999).

Structural qualities are the features of preschool settings which are often translated into regulatory form and policies (Cryer, Tietze, Burchinal et al, 1999) due to its quantitative features. Structural variables determine the presence or absence of resources that facilitate the interactions characteristic of an environment of preschool. They are variables that can be more easily controlled (Thomason & La Paro, 2009), but are measured through the indirect ways. Structural quality refers to a host aspect of ECCE learning environment and workforce conditions that are often controlled by the relevant government agencies involving centres, classrooms and teachers’ characteristics (Slot, Lerkkanen & Leseman, 2015). The common structural quality aspects known as ‘iron triangle’ are the adult-child ratio, group size as well as teachers’ education and training (Cryer, Tietze, Burchinal et al, 1999). The element of continuous in-service professional development and the use of educational program, however was later added to this traditional ‘iron triangle’ features of structural quality (Slot, Leseman, Verhagen et al, 2015).

Quite a number of studies have depended on structural characteristics as the measure for preschool quality (Brinkman, Hasan, Jung et al, 2017, Ismail, 2013; Ismail & Ismail, 2015). Studies have also found that these structural characteristics are associated with children’s development (Burchinal, 2018; Burchinal, Howes & Kontos, 2002), the ultimate indicator of quality care. Thus, it has motivated some countries to set minimum standards for at least some aspects of structural quality due to its regulatable features (Brinkman, Hasan, Jung et al, 2017). However, these characteristics represent only a piece of the overall quality, and help in setting the stage for process characteristics.

A comprehensive understanding of the quality components requires an examination of what actually happens in the early care setting, that is, the process quality. The interactions between teachers and children, the availability of learning and teaching materials for children as well as supervision and support in the use of those materials are termed as process quality, which tell us much more about the quality of care children received.

Basically, process elements refer to daily experiences that children undergo in preschool settings. Process indicators tend to focus on dynamic aspects (Thomason & La Paro, 2009), and directly impact the children learning experiences through teacher-child interactions, peer interactions and manipulation of learning materials. Process quality is often referred to the interactive activities that children experience in the classroom, or simply put, the experience children have in childcare settings. These process characteristics are often tougher to measure than their structural counterparts. They include the warmth, sensitivity, and responsiveness of the caregivers, the emotional tone of the setting, the activities available to children, the developmental appropriateness of activities, and the learning opportunities available to children (Hartman, Warash, Curtis et al, 2016). Studies have shown that children’s cognitive and socio-emotional development are highly associated with these process measures (Cryer, Tietze, Burchinal et al, 1999). Unlike the structural quality features, process characteristics are not generally subject to state or local regulations (Hartman, Warash, Curtis et al, 2016).

Process quality refers to the ‘aspects of the classroom environment as experienced by children – their interactions with teachers and peers, and the materials and activities available to them’ (Harrist et al., 2007). Studies have shown that process quality elements have an influence on children’s experiences, wellbeing and development (Litjens & Taguma, 2010). Process quality is essentially measured by methods in delivering the ECCE services and how children experience the inputs; for example, how those inputs affect the relationships between staff and children, communication with families and wider community support services. A setting considered to be of high process quality may involve regular, supportive engagement between teachers and children, a stimulating curriculum and effective pedagogical practices.

To understand the entirety of quality care children are receiving, it is necessary to understand both aspects of quality. With that comprehension, only can we examine the relationship between structural and process characteristics of quality to begin to address ways to improve and standardize the quality of early childhood care and education.

Structural and process indicators thus, provide two different perspectives when it comes to defining the quality of ECCE. While each has a unique approach of observation, a high process quality generally resulted from a high structural quality. For instance, structural indicators such as the right class size and staff–child ratios or the presence of qualified teachers facilitate the process aspects such as positive child experiences and interaction with the childcare environment; and should this relation exist, it differs among countries and settings. There are many structural inputs that could result in good process quality (Cryer, Tietze, Burchinal et al, 1999). Studies have shown that structural quality provides a basis and is linked to process quality (Early et al., 2006). Studies have also shown that structural elements may not only be correlated with process variables, but essentially, they may be significant preconditions to process quality (Hu, Mak, Neitzel et al, 2016; Slot, Leseman, Verhagen et al, 2015). Process quality has been found to improve once structural quality is well regulated (Bordin, Machida, & Varnell, 2000; Cryer, Tietze, Burchinal et al, 1999). In contrast, process quality can be hindered if structural quality is poor (Phillipsen, Burchinal, Howes et al, 1997). Some claimed that strong structural features may produce the positive outcome of process quality (Bordin, Machida, & Varnell, 2000; Cryer, Tietze, Burchinal et al, 1999; Slot, Leseman, Verhagen et al, 2015). However, it is asserted that process aspects are more predictive to child development as compared to structural aspects when they are concurrently assessed.

Bronfenbrenner’s ecological theory (1979) looks at child’s development in the context of an ecosystem that form his environment. This theory defines intricate layers of environment that affects a child’s development. It stresses on child’s own biology as a key factor influencing his development. The interaction between a child’s natural biology, his immediate family and community environment, as well as the societal landscape plays significant roles in his development. Changes or conflict in any one layer will essentially affect the other layers. This theory principally highlights the importance of an ideal ecosystem that resulted in proper child development.

The context, according to Bronfenbrenner (1979), consists of four unique systems: micro, meso, exo, and macro; each having either direct or indirect effect on a child’s development. The fifth system, chrono, was later added to incorporate the time dimension as it relates to a child’s environment.

The microsystemis the innermost part, the closest to the child and has a direct contact and the greatest impact on the child. The microsystem involves the relationships and interactions a child has with his immediate surroundings. The microsystem in this context is process quality. This layer of process quality has the most immediate and earliest influence on the child. However, interactions at outer layers can still impact the inner structures. The mesosystemis the next layer and contains the microsystem. The mesosystemlayer provides the connection between the structures of the child’s microsystem. It focuses on the connections between two or more systems, for instance, parents’ and teachers’ involvement in the child’s education, if mutual, will result in well-functioning mesosystem. The exosystemis the third layer that contains micro and meso systems. Even though this layer is not directly encountered by the child, it does have an impact on his development. The second outermost context layer is the macrosystem. This societal blueprint influences all lower layers of the ecosystem. Aspects of the macrosystem that influence other lower layers is the structural quality, which can exclusively or collectively shape a child’s development. Policies and decisions made at a wider level can also indirectly affect the child. Thus, policy implementation on preschool education can be considered as a macrosystem that indirectly impacted the child. The timecomponent of Bronfenbrenner’s model or the chronosystem layer involves various aspects, such as chronological age, duration and nature of periodicity. An event has varying degrees of impact on development, and the impact decreases as time progresses.

In summary, the development of this theory is supported on the concept that children do not grow in silo, but instead develop in a variety of contexts in which they interact continuously. The interaction of structures within a layer and between layers is key to this theory. Child development is not only shaped by the immediate environment, but also by the interaction with the larger surroundings. Bronfenbrenner’s (1979) model in this context is used to analyze ECCE policy implementation within two ecological contexts: (i) structural quality (macrosystem), and (ii) process quality (microsystem).

**ISSUES AND CHALLENGES OF STRUCTURAL QUALITY FOR POLICY IMPLEMENTATION IN PUBLIC PRESCHOOLS**

It has been a constant challenge to set a standard for a quality preschool education program because there are many factors that form barriers towards the implementation of it. The issues such as a wide range of policy aims; a combination of public and private funding; a complex governance and management system with a mix of national and state involvement; a persistent fragmented structural and organizational aspects between ECCE and primary schooling; variation in regulation and quality assurance of ECCE services; as well as unstandardized level of competencies and qualifications of the ECCE workforce have always been discussed globally.

ECCE policy and systems vary widely across countries; each is established to serve different and various aims. For some countries, the main objective may be to ensure school readiness and support children’s well-being, healthy socio-emotional development and their sense of citizenship (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016). For others, it may be to facilitate parents to get access to the labor market, or to cultivate cultural values and community integration (Bakken, Brown & Downing, 2017; Barnett, Jung, Youn et al, 2013; Duncan & Magnuson, 2013). This implies that ECCE policy is set to meet a range of social, economic, educational, and political needs of an individual country. These differing goals also mean that the early childhood system may be focused on achieving different outcomes for children. It is common for ECCE to have multiple policy aims as it reveals the potential value and impact of quality, but they can occasionally compete or conflict with each other. Documenting policy aims could help in explaining the orientation of ECCE services and give a broader view to the ECCE system.

Generally, the funding of ECCE program involves a combination of public and private sectors’ effort (Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Li, Yang & Chen, 2016); thus, it would have an impact on the aspect of accessibility, sustainability and viability of the sector. It is a challenge for countries worldwide to secure adequate funding for a high quality, affordable and accessible ECCE system (Hu & Szente, 2009; Song, Zhu, Xia et. al, 2014). Adding to the complexity of the funding mechanism is the existence of the multiple organizations, as there is usually a mix of private, voluntary and public ECCE providers (Brinkman, Hasan, Jung et al, 2017). The complexity of funding and the dependency on private funding in some countries impacts directly on the sustainability and viability of providers from the private and voluntary sectors. The need for significant public investment in ECCE services to sustain provision, secure the quality of services, and enhance participation is clearly demonstrated in most of the countries worldwide (Hu, Mak, Neitzel et al, 2016; Smidt, 2018; Tan 2017; Umek, 2014). Hence, a common scenario of a mixed private, public and community funded ECCE program, resulting in a diverse variety types of ECCE services (Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Li, Yang & Chen, 2016). This situation often leads to a wide array of provider types and service delivery models, with different staffing, curricula and regulatory requirements. Even though this scenario provides alternative and options for parents, but it can also lead to inequity in provision and quality for children.

In most of the countries worldwide, the governance and management system are rather complex, with responsibilities distributed between different levels in the system (Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018). Across the globe, there is a mix of national and regional or local level governance as well as between a range of national agencies or ministries in managing the ECCE system (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Li, Yang & Chen, 2016; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018). Thus, resulted in complexity in the development and delivery of policy for ECCE program. It does not only impose challenges to ensure effective communication, clarity of roles and responsibilities, as well as effective coordination and integration, but essentially to ensure the governance and management system supports the development of a coherent early childhood education and care system (Boon, 2010; Dahari & Ya, 2011). On the contrary, this complexity and distributed system governance model serve as strengths in encouraging regional and local participation and autonomy within a national framework, hence allowing the ECCE services to have the flexibility to meet diverse local needs. It also implies the need for collaboration between the different agencies (Boon, 2010; Dahari & Ya, 2011). However, it is observed globally that national level governance increases as provision moves towards the pre-primary year and transition to the schooling system (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018).

In addition, there is also a persistent fragmented structural and organizational aspects between ECCE and primary schooling, which suggest the absence of systemic coherence within ECCE and between ECCE and primary schooling (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hujala, Fonsen & Elo, 2012). This also implies that ECCE has gradually becoming an established government responsibility to integrate both levels of education (Brinkman, Hasan, Jung et al, 2017). Very few countries have secured a full structural and systemic integration of ECCE with later phases of education (Dorsey, 2015; Hartman, Warash, Curtis et al, 2016).

Regulation and quality assurance of ECCE services are utilized differentially to verify standard of an improved and sound quality assurance system. In general, governments worldwide aim to deliver high quality ECCE and recognize the need for greater regulation in order to achieve this (Brinkman, Hasan, Jung et al, 2017; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014). Majority countries manage their ECCE services, with regulatory obligations being distributed among national and local agencies (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014), demonstrating the need to guarantee all ECCE services satisfy minimal standards provision. Some countries seem to manage better, and some aspects of service delivery are more controlled than others, with health and safety in service delivery, and securing child protection being the most regulated aspects (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014). This suggests that the mechanism of accreditation is underutilized as compared to inspection when it comes to quality assurance aspect; although in majority of the countries, the two complement each other. Most countries with both accreditation and inspection processes elevate the outcomes to advise for further quality advancement through putting forward their quality credentials to the key bodies involved. However, perhaps the use of quality reports as a tool to support quality improvement could be more effective rather than quality assurance.

The role and level of qualifications and competencies of the ECCE workforce are categorised by diversity and variability. And there are under-qualified and under-compensated staff at all levels, particularly at management level. Studies have shown that staff who work in ECCE are categorised by their diversity of qualification, role and status (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014); hence showing the multifaceted nature in the staffing of ECCE services, which varies by age, provider’s type, location, and professional role of staff. Many countries do not expect graduates to work at a senior level in ECCE sector (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014), despite the fact that the qualification requirement for leaders, and those who work with older children, is generally higher. Options for upgrading competencies is typically discretionary for staff and leaders. Specific training in leadership and management is also rare. Salary levels vary significantly within the sector, contingent upon the type of setting, role and type of delivery contract offered. The absence of professional status and qualification level in some areas of the workforce has resulted in a relatively low pay rates for some practitioners, particularly those working with younger children (Brinkman, Hasan, Jung et al, 2017; Dorsey, 2015; Hartman, Warash, Curtis et al, 2016; Hu, Mak, Neitzel et al, 2016; Hu, Fan, Wu et al, 2017; Hu, Yang, Wu et al, 2018; Hujala, Fonsen & Elo, 2012; Ismail, 2013, Ismail & Ismail, 2015; Slot, Leseman, Verhagen et al, 2015; Slot, Bleses, Justice et al, 2018; Smidt, 2018; Umek 2014).

**CONCLUSION**

ECCE is experiencing a period of robust and significant structural and systemic development; hence requires ongoing policy attention and investment. In particular, increases in public expenditure and enhanced statutory entitlements to preschool services are the most common recent or planned changes. The evidence demonstrates the dynamic nature of preschool policy and reflects the growing visibility and importance of preschool development as a significant part of the educational and social systems worldwide. However, the continued complexity of the sector as well as the diversity of providers and funding mechanisms make the policy changes hard and the change agenda complex. The changes also indicate that over recent years there has been a major increase in ECCE budget to support the development of preschool infrastructure, and the enhancement of service quality. This attention and investment need to be maintained.

references

Abbott-Shim, M., R. Lambert & F. McCarty (2000). Structural Model of Head Start Classroom Quality. *Early Childhood Research Quarterly*, Vol. 15/1, Pp. 115-134, http://dx.doi.org/10.1016/S0885-2006(99)00037-x

Bakken, L., Brown, N., & Downing, B. (2017). Early Childhood Education: The Long-Term Benefits. *Journal of Research in Childhood Education*. https://doi.org/10.1080/02568543.2016.1273285

Barnett, Jung, Youn & Frede (2013). Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up. *National Institute for Early Education Research* 2013

Boon, N. S. (2010). Governance of Education Related ECCE Policies in Malaysia. *International Journal of Child Care and Education Policy* https://doi.org/10.1007/2288-6729-4-1-45

Bordin, Machida, & Varnell (2000). The Relation of Quality Indicators to Provider Knowledge of Child Development in Family Child Care Homes. [*Child and Youth Care Forum*](https://link.springer.com/journal/10566) October 2000, Volume 29, [Issue 5](https://link.springer.com/journal/10566/29/5/page/1), pp 323–341

Brinkman, S. A., Hasan, A., Jung, H., Kinnell, A., Nakajima, N., & Pradhan, M. (2017). The Role of Preschool Quality in Promoting Child Development: Evidence from Rural Indonesia. *European Early Childhood Education Research Journal*, *25*(4), 483–505. https://doi.org/10.1080/1350293X.2017.1331062

Brofenbrenner, Urie (1979). The Ecology of Human Development: Experiments by Nature and Design. Harvard University Press

Burchinal, M., C. Howes and S. Kontos (2002). Structural Predictors of Child Care Quality in Child Care Homes. *Early Childhood Research Quarterly*, Vol. 17/1, pp. 87-105, [http://dx.doi.org/10.1016/S0885-2006(02)00132-1](http://dx.doi.org/10.1016/S0885-2006%2802%2900132-1)

Burchinal, M. (2018). Measuring Early Care and Education Quality. *Child Development Perspectives*. https://doi.org/10.1111/cdep.12260

Cassidy, Deborah J.; Hestenes, Linda L.; Hansen, Joanna K.; Hegde, Archana; Shim, Jonghee; & Hestenes, Steve. (2005a). Revisiting the two faces of child care quality: Structure and process. *Early* *Education and Development, 16*(4), 505-520.

Cryer, D., Tietze, W., Burchinal, M., Leal, T., & Palacios, J. (1999). Predicting Process Quality from Structural Quality in Preschool Programs: A Cross-Country Comparison. *Early Childhood Research Quarterly*. https://doi.org/10.1016/S0885-2006(99)00017-4

Dahari, Z., & Ya, M. S. (2011). Factors that Influence Parents’ Choice of Pre -Schools Education in Malaysia : An Exploratory Study. *International Journal of Business and Social Science*. https://doi.org/10.1093/aob/mch183

Dorsey, Emily E. (2015). Optimizing Early Care and Education Services in a Rural County: Collaborations between State Preschool and Community Based Programs (Doctoral dissertation)

Duncan, G. J., & Magnuson, K. (2013). Investing in Preschool Programs. *Journal of Economic Perspectives*. https://doi.org/10.1257/jep.27.2.109

Duncan, G. J., Magnuson, K., & Murnane, R. J. (2016). Reforming Preschools and Schools. *Academic Pediatrics*. https://doi.org/10.1016/j.acap.2015.12.003

Dunn, Loraine. (1993). Proximal and distal features of day care quality and children’s development. *Early Childhood Research Quarterly, 8*(2), 167-192.

Dussaillant, F. (2016). Usage of Child Care and Education Centers: The Proximity Factor. *SAGE Open*. https://doi.org/10.1177/2158244016652668

Early, D. et al. (2006). Are Teachers’ Education, Major, And Credentials Related To Classroom Quality And Children’s Academic Gains In Pre-Kindergarten? *Early Childhood Research Quarterly*, Vol. 21/2, pp. 174-195, <http://dx.doi.org/10.1016/j.ecresq.2006.04.004>

Freitas, L., T. Shelton & J. Tudge (2008). Conceptions of US and Brazilian Early Childhood Care and Education: A Historical and Comparative Analysis. *International Journal of Behavioral Development*, Vol. 32/2, Pp. 161-170, <http://dx.doi.org/10.1177/0165025407087216>.

Guerriero, S. (Ed.) (2017). Pedagogical Knowledge and the Changing Nature of the Teaching Profession, Educational Research and Innovation, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264270695-en>

Hamre, Bridget K., & Pianta, Robert C. (2007). Learning opportunities in preschool and early elementary classrooms. In Robert C. Pianta; Martha J. Cox; & Kyle L. Snow (Eds.), *School readiness* *and the transition to kindergarten in the era of accountability* (pp. 49-83). Baltimore, MD: Brookes.

Harms, T., R. Clifford & D. Cryer (1998). Early Childhood Environmental Rating Scale-Revised, Teachers College Press, New York, NY

Harrist, A. W., S.D. Thompson & D.J. Norris. 2007. 'Defining Quality Child Care: Multiple Stakeholder Perspectives.' *Early Education & Development* 18 (2): 305–336. doi:10.1080/10409280701283106

Hartman, S. C., Warash, B. G., Curtis, R., & Day Hirst, J. (2016). Level of Structural Quality and Process Quality in Rural Preschool Classrooms. *Early Child Development and Care*. https://doi.org/10.1080/03004430.2015.1137563

Hu, B. Y., Fan, X., Wu, Y., & Yang, N. (2017). Are Structural Quality Indicators Associated with Preschool Process Quality in China? An Exploration of Threshold Effects. *Early Childhood Research Quarterly*. https://doi.org/10.1016/j.ecresq.2017.03.006

Hu, B. Y., Mak, M. C. K., Neitzel, J., Li, K., & Fan, X. (2016). Predictors of Chinese Early Childhood Program Quality: Implications for Policies. *Children and Youth Services Review*. https://doi.org/10.1016/j.childyouth.2016.09.013

Hu, B.Y., & Szente, J. (2009). Exploring the Quality of Early Childhood Education in China: Implications for Early Childhood Teacher Education, Journal of Early Childhood Teacher Education, 30:3, p. 247-262

Hu, B. Y., Yang, Y., Wu, H., Song, Z., & Neitzel, J. (2018). Structural and Process Predictors of Chinese Parental Satisfaction Toward Early Childhood Education Services. *Children and Youth Services Review*. https://doi.org/10.1016/j.childyouth.2018.04.022

Hujala, E., Fonsén, E., & Elo, J. (2012). Evaluating the Quality of the Child Care in Finland. *Early Child Development and Care*. https://doi.org/10.1080/03004430.2011.646721

Ismail, F. L. M., (2013). Service quality and leadership in public preschool education in Malaysia (Doctoral dissertation)

Ismail, F. L. M., & Ismail, A. (2015). Managing Public Preschool Education : Links Between School Leadership and Provisions of Service Quality. *International Journal of Education and Social Science*

Kamerman, Sheila B. (2000). Parental Leaves: An Essential Ingredient in Early Childhood Care and Education in Society for Research in Child Development (SRCD), Social Policy Report

Kamerman, Sheila B. (2001) *Early Childhood Education and Care: International Perspectives*. New York: Columbia University, ICFP.

Kamerman, Sheila B. (2006). A Global History of Early Childhood Education and Care. Background Paper Prepared For the Education for All Global Monitoring Report 2007: Strong Foundations: Early Childhood Care And Education

Layzer, J. And B. Goodson (2006). The ‘Quality’ Of Early Care and Education Settings: Definitional and Measurement Issue. *Evaluation Review*, Vol. 30/5, Pp. 556-576, <http://dx.doi.org/10.1177/0193841X06291524>

Li, H., Yang, Weipeng & Chen, Jennifer J. (2016). From ‘Cinderella’ To ‘Beloved Princess’: The Evolution of Early Childhood Education Policy in China. *International Journal of Child Care and Education Policy* (2016) 10:2

Litjens, I. & M. Taguma. 2010. *Revised Literature Overview For The 7th Meeting For The Network On Early Childhood Education And Care*. Paris: OECD

Ljubica Marjanovic Umek (2014). The Structural Quality of Preschools: How It Influences Process Quality and Children’s Achievements. *Journal of Contemporary Educational Studies* 2/2014, 10-23

Ministry of Education Malaysia. (2013). Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education). *Ministry of Education Malaysia*. https://doi.org/10.5923/j.ijis.20120206.05

Mustafa, L. M., Nor, M., & Azman, A. (2013). Preschool Education in Malaysia : Emerging Trends and Implications for the Future. *American Journal of Economics*. https://doi.org/10.5923/j.economics.20130306.15

National Institute of Child Care and Human Development. (2006). The NICHD Study of Early Childcare and Youth Development.

Phillipsen, L. C., Burchinal, M. R., Howes, C., & Cryer, D. (1997). The Prediction of Process Quality from Structural Features of Child Care. *Early Childhood Research Quarterly*. https://doi.org/10.1016/S0885-2006(97)90004-1

Pianta, R. et al. (2005). Features of Pre-Kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, Vol. 9/3, pp. 144-159, <http://dx.doi.org/10.1207/s1532480xads0903_2>

Slot, P. L., Bleses, D., Justice, L. M., Markussen-Brown, J., & Højen, A. (2018). Structural and Process Quality of Danish Preschools: Direct and Indirect Associations With Children’s Growth in Language and Preliteracy Skills. *Early Education and Development*. https://doi.org/10.1080/10409289.2018.1452494

Slot, P. L., Leseman, P. P. M., Verhagen, J., & Mulder, H. (2015). Associations Between Structural Quality Aspects and Process Quality in Dutch Early Childhood Education and Care Settings. *Early Childhood Research Quarterly*, *33*, 64–76. https://doi.org/10.1016/j.ecresq.2015.06.001

Slot, P., M. Lerkkanen & P. Leseman (2015). The Relations between Structural Quality and Process Quality in European Early Childhood Education and Care Provisions: Secondary Data Analyses of Large Scale Studies in Five Countries, CARE

Smidt, W. (2018). Early Childhood Education and Care in Austria: Challenges and Education Policies. *Early Child Development and Care*, *188*(5), 624–633. https://doi.org/10.1080/03004430.2017.1403431

Snaider, C. (2018). Spotlight on Early Childhood Education. A Newspaper Coverage Analysis of Universal Preschool Debate in Argentina. *International Journal of Child Care and Education Policy*. https://doi.org/10.1186/s40723-018-0045-2

Song, Z., Zhu J., Xia, Z. & Wu, X. (2014). The early childhood education of disadvantaged children in China, European Early Childhood Education Research Journal, 22:3, p. 355-365.

Tan, C. T. (2017). Enhancing the Quality of Kindergarten Education in Singapore: Policies and Strategies in the 21st Century. *International Journal of Child Care and Education Policy*. https://doi.org/10.1186/s40723-017-0033-y

Thomason, A. & K. La Paro (2009). Measuring The Quality of Teacher–Child Interactions in Toddler Child Care. *Early Education and Development*, Vol. 20, pp. 285-304, <http://dx.doi.org/10.1080/10409280902773351>

Umek, Ljubica M. (2014). The Structural Quality of Preschools: How it Influences Process Quality and Children's Achievements. *Journal of Contemporary Educational Studies 2/2014*

Vandell, Deborah Lowe, & Wolfe, Barbara. (2000). *Child care quality: Does it matter and does it need to be improved?* Madison: Institute for Research on Child Poverty, University of Wisconsin-Madison.

Vandell, D. et al. (2010). Do Effects of Early Child Care Extend To Age 15 Years? Results from the NICHD Study of Early Child Care and Youth Development. *Child Development*, Vol. 81/3, Pp. 737-756,  [http://dx.doi.org/10.1111/J.1467-8624.2010.01431.X](http://dx.doi.org/10.1111/j.1467-8624.2010.01431.x)

cover letter

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Editor-in-Chief

**Malaysian Online Journal of Educational Management (MOJEM)**

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**June 23rd, 2019**

Dear Editor-in-Chief,

Appended please find a copy of research article entitled ‘Structural Quality for Policy Implementation in Public Preschools: A Conceptual Overview’ coauthored by Nadzmin binti Ahmad Nazir, Dr. Nor Hafizah binti Mohamed Harith and Dr. Suhaimi bin Abd Samad, which we would like to have considered for publication in the **Malaysian Online Journal of Educational Management (MOJEM)**.

2. This manuscript builds on our current study that looks at the structural quality for policy implementation in Malaysian public preschools. In this manuscript, we highlight that variations of preschool programs offered has resulted in quality discrepancy, which happened due to multiple policy implementation approaches practiced by the individual countries. Such situation calls for policy attention and intervention.

3. We believe that this manuscript is appropriate for publication by **MOJEM** because it focuses on policy intervention to improve the current preschool education program, particularly in structural quality aspects. Our manuscript creates a paradigm for future studies of policy implementation relating to structural quality in preschool program.

4. This manuscript has not been published in any language before by any of the authors and is not under consideration for publication elsewhere. Each author has seen and approved the submission of the manuscript. Look forward to your favorable consideration.

Thank you.

Sincerely,

(Nadzmin binti Ahmad Nazir)