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Early Childhood Care, Education, and Development in the Philippines: Principles, Legal Aspects, and Public Health Implications

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REVIEW ARTICLE

Abstract

The process of child development is unique in every child but the manner and sequence are predictable, hence early care and education must take into consideration the age of the child and the natural developmental stages of childhood. Early childhood care and education puts emphasis on the social, emotional, cognitive, and physical needs of the child for a strong foundation of learning and well-being all throughout life. Previous studies present evidence that early childhood education affects a child's holistic development into adulthood; therefore, addressing discrepancies between the existing care and education programs and children's level of understanding is important to maximize a child's development potential. This review focused on early care and education in the Philippines and its public health implications. First, this review briefly discussed the basic principles and theories of child development and the legal and administrative fundamentals of early childhood care and development in the Philippines. It also provided a discussion on the public health implications of early child care and education. Finally, it concluded with providing recommendations to parents and the education and health sectors which can contribute to the enhancement of early education in the Philippines.

Keywords: *early intervention (education), child development, Philippines*

Introduction

Child development is defined as the progression of changes in the body and abilities as the child grows from birth to adulthood in a chronological and sequential way. The process of child development is unique for every child; however, the manner and sequence of development are somewhat predictable. Child development is different from child growth as the latter only refers to the physical state, whereas the former encompasses biological, emotional, and psychological changes that occur in a child.

Development during early childhood is critical and has long-term consequences, hence children need to be provided with care and education not only from childhood but starting from birth. The significance of comprehensive childhood care and education is highlighted by UNESCO's Education for All movement and most recently, the Incheon Declaration towards inclusive and equitable quality education and lifelong learning for all [1]. Despite the efforts and progress towards achieving this goal, many challenges remain. This review focused on early care and education in the Philippines and its public health implications. Specifically, it aimed to discuss the legal and administrative bases of early childhood care and development in the Philippines and the public health implications of early child care and education. Finally, it concluded with providing recommendations to parents and the education and health sectors which can contribute to the enhancement of early childhood care and development in the Philippines.

Early Childhood Development: Principles and Theories

Early childhood is an important developmental stage in humans. According to psychologists, it is the stage where an individual develops physical, cognitive, and psychosocial skills. During this period, the interaction between biological and environmental factors, such as culture, experiences, and relationships with others influence development [2]; therefore, it is important to provide the child with responsive

caregiving, good health and nutrition, protection, and education for the child to develop to his/her full potential.

Early childhood care and education is essential for child development. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), early childhood care and education focuses on the social, emotional, cognitive, and physical development of a child towards a strong foundation for lifelong learning and wellbeing [3]. Early education must consider the age of the child and the natural developmental stages of childhood in order to maximize learning; a parent cannot immediately enroll a child to school and expect a child to learn without assessing for readiness. According to psychologists, there are three theories of child development and learning that influence discussions of school readiness and have an impact on early education. These three theories include the maturationist, environmentalist, and constructivist perspectives of development.

The Maturational Theory developed by Arnold Gessell states that development is a biological process that occurs automatically in predictable, sequential stages over time and that body types are connected to the personality development of the child [4]. This theory is mainly focused on the physical and mental development of the child which is assumed to have a relationship with the child's heredity. With the maturationist perspective, many educators and families are led to the idea that young children will acquire knowledge naturally as they grow physically and become older, if they are healthy.

According to maturationists, school readiness is a state at which all healthy young children can perform tasks. Maturationists believe tasks, such as reciting the alphabet and counting, are required for learning more complex tasks, such as reading and arithmetic, since learning proceeds from simple to complex process. However, they also believe that if a child is developmentally, physically and mentally unready for school, referrals to transitional kindergartens, retention, or holding children out of school for an additional year might be necessary.

Another theory of child development and learning is the Environmentalist Theory where John Watson, B.F. Skinner, and Albert Bandura have contributed greatly to its perspective of development. They believe the child's environment affects learning and behavior and that human behavior, development, and learning are reactions to the environment. With these perspectives, many are led to assume that young children develop and acquire new knowledge by responding to environmental conditions.

Environmentalists believe that school readiness is the stage when a child can respond appropriately to the environment of the school and the classroom. Every child must be able to respond appropriately to changing environments, which is necessary for a child to participate in teacher-initiated learning activities.

Lastly, the Constructivism or Constructivist perspective of readiness and development, founded by Jean Piaget, John Dewey, Maria Montessori, and Lev Vygotsky, focuses on the assumption that learning is an active, contextualized process of constructing knowledge by personal experiences. Since children are naturally curious, constructivists see them as active participants in the learning process and that they are continuously testing their hypotheses about the world and their environment through social negotiation and interactions.

Early Childhood Care and Development in the Philippines

In developing countries such as the Philippines, education of children and youth is viewed as a critical factor for health and well-being and future economic productivity. Cognizant of the importance of the early years of children, the Philippine government crafted several laws that provide crucial support to the development of children to their fullest potential.

The history of early childhood care and development in the Philippines dates back to 1978 with the enactment of Presidential Decree No. 1567, entitled "The Barangay Day Care Center Law," mandating the establishment of at least one day care center in every barangay. This was amended in 1987 with the passage of Republic Act No 6972 or the Barangay-Level Total Development and Protection of Children Act. RA 6972 mandates that there should be a day care center in each barangay to provide quality care and attention for Filipino children aged 0-6 years even at the family and community level [5]. Following this development, the Philippine government also formulated Republic Act 8980, otherwise known as the Early Childhood Care and Development (ECCD) Act. The ECCD program's goal is to improve the survival and development potential of children, particularly the most vulnerable and disadvantaged. The ECCD Act entails providing the child's right to health, nutrition, psychosocial, and cognitive stimulation, and at the same time enhancing the environment in which they live. One of the

law's objectives is to ensure that children transition from home-based care and education to school-based without any difficulty and prepare them for formal education.

As specified in the ECCD Act, early childhood care and development services in the Philippines are delivered through two programs: a) center-based and b) home-based. Center-based services are provided through public or private schools, community or church-based education programs, workplace-related child care and education programs and child-minding centers. Home-based programs, meanwhile, are offered through neighborhood-based play groups, family day care programs, parent education, and home visiting programs. Conforming to the basic tenets of child development, one of which states that children develop and learn at different rates, the ECCD curriculum is focused on the individual needs and the sociocultural background of each child. The curriculum also includes appropriate objectives, practices, and activities that are adapted for children up to four years of age [6]. Republic Act No.10410, known as the Early Years Act of 2013, also recognizes the importance of a child's early years as a crucial time for development and further strengthened the existing ECCD system. In addition, the responsibility for the development of children is divided between the ECCD Council and the Department of Education; children 0-4 years of age and 5-8 years of age are placed under the ECCD Council and Department of Education, respectively [7].

The right to have free, accessible, quality and culturally sensitive education is one of the basic social and cultural rights highlighted in the 1987 Philippine Constitution. According to Article 14, it is the responsibility of the state to promote and protect the rights of all its citizens to quality education [8]. In the Philippines, the Department of Education, formerly known as the Department of Education, Culture and Sports, is mandated by law through the Education Act of 1982 to manage the education system in the Philippines. The main objectives of the education system are geared towards producing competent individuals and professionals that will contribute to the advancement of the country and improvement of the quality of life of its citizens. Educational institutions must also instill moral values, patriotism, and civic participation to communities. Furthermore, areas which lack educational facilities must be given due attention to ensure that they are given an equal chance of contributing to the development and progress of the country [9].

There are existing laws that support early childhood education in the Philippines, but more must be done. A part of the Philippines' commitment to the Global Movement on Education for All is the total elimination of school dropouts as well as avoiding repetitions in Grades 1-3. In the annual Poverty Indicators Survey conducted by the National Statistics Office in 2004, 6% of elementary school-aged children included in the survey were not enrolled in school due to reasons ranging from lack of interest to financial difficulties [10]. Recognizing the need to strengthen early child care and education in the Philippines, then President Gloria Macapagal-Arroyo, in her 2004 State of the Nation Address, urged the Congress to legislate an extra year of schooling through standardization of what is being taught in barangay day care centers [11]. On June 2005, the National Pre-school Education Program entitled *Pre-school sa Bawat Barangay: Paghahanda sa Grade 1* was implemented, which aimed to include preschool in the education ladder. Executive Order 685 of 2008 supplemented the National Preschool program by including children enrolled in day care centers in the preschool coverage.

Following these developments, on January 2012, Republic Act 10157 was ratified and implemented. This law institutionalized kindergarten into the basic education system as mandatory and compulsory for all Filipino children who are at least five years old, including the use of the learner's mother tongue as the primary medium of instruction for the kindergarten level. Complemented by the ECCD Act and other previous policies, this law acknowledged that early child education is vital since learning capacity is at its peak at younger ages [12]. More than a year after passing the Kindergarten Education Act, Republic Act 10533, also known as the "Enhanced Basic Education Act of 2013," was ratified; this law enhanced the Philippine education system by strengthening the existing curriculum and by increasing the years of basic education to include one year of kindergarten education, six years of elementary education, and six years of high school education divided into four years of junior and two of senior high school (K-12). Prior to this law, formal education in the Philippines was composed of four stages: pre-primary level composed of nursery and kindergarten, primary education for six years, secondary education for four years, and tertiary or college education usually for four years or longer, depending on the degree [13]. Aside from promoting mother tongue-based multilingual education, the updated curriculum also launched outcome-based education [14].

Public Health Implications of Early Childhood Care and Education

Early childhood programs consider the developmental needs of children and their easy transition to school. The United Nations' World Fit for Children [15] states that through the process of holistic development, children can survive, be physically healthy, mentally alert, emotionally secure, socially competent, and able to learn. Holistic development includes both cognitive and non-cognitive skills. Cognitive skills are closely associated with academic achievement and traditional outcomes of success while non-cognitive skills are linked to productivity and skills [16]. ECCD programs and projects have organizational structure, curricula, and training methods to achieve a holistic development. Furthermore, ECCD programs promote a caring, safe and stimulating family and home environment, which directly impact on children's development [17]. ECCD programs also initiate community involvement and parent assemblies which articulate child-friendly policies, system services (health and welfare packages), communal and social influences, which although less directly influential to children's development, are important nonetheless [18]. Another advantage of ECCD programs is that parents and the community are involved in planning so that children will be better prepared for school. Since ECCD is an integrated program of health, preschool teachers and parents also learn how to prepare healthy and low-cost food in the house. Community participation in ECCD takes part in making and adapting a child-friendly community where children live, enabling children to play and develop social skills by interacting with fellow children and adults, and having policies that support growth and development of young children.

Several studies have been done in the past to determine the effect of early education on different aspects of child development. In the United States, experimental programs on preschool education started as early as the 1960s. The High Scope/Perry School Program, which studied African American children aged 3-4 years who were born in poverty, showed significant differences between children who received high-quality preschool education and those who did not. When followed up, children who were included in the preschool group had higher scores on achievement and literacy tests and were more likely to finish high school than their counterparts. In addition, they also showed better behavior inside and outside the classroom. The effects of the preschool education they received were also seen in adulthood; when the participants in the preschool group were followed up, a higher proportion were employed, were less reliant on dole-outs, and less likely to be arrested [19,20]. Another review of interventions done in the United States and Canada showed that programs which addressed several risk factors, such as early childhood education and family support services were more effective in instilling long-term effects on disorderly behavior and delinquency [21]. Another study showed increases in cognitive and non-cognitive abilities among those who had undergone preschool education. These parameters were measured through test scores, grade retention, and special education placement for learning disabilities for cognitive development while the non-cognitive skills were determined using self-assessment and parent and teacher ratings. The study also verified previous findings that preschool programs can be an effective tool in the fight against increasing crime rates by not only improving educational attainment but also by tackling gaps and issues in non-cognitive skills that are related with criminal activity [22]. Another study by Reynolds [23] suggested that attending a Child-Parent Center (CPC), another preschool program, was associated with better well-being.

Although there are several studies evaluating the effect of ECD programs in developed countries, evidence of its effect in developing countries is limited. In the Philippines, the Asian Development Bank (ADB) launched the Early Child Development Project in 1998 which aimed to support the Philippine government's objectives of reducing child mortality, malnutrition, and primary school drop-out rates [24]. The project, which was implemented in 10 provinces with high need for ECD services, addressed the needs of children starting from prenatal care up to enrolment in primary school. It provided services for the integrated management of childhood illnesses (IMCI), expanded immunization program (EPI), supplemental feeding, and deworming. To evaluate the performance of the project, 10 key performance indicators were identified; however, of these ten, only the targets for functional protein energy malnutrition prevention, proportion of LGUs with active child development workers, proportion of targeted municipalities having implemented early childhood development subprojects, and significant reduction of the proportion of children 0 – 4 years old with below average overall psychosocial development, were achieved. Reductions were observed for the indicators for under-5 mortality rate, underweight, stunting, wasting, and anemia but did not achieve the project targets. The ECD project also promoted food fortification, being at the forefront of the drafting of the Republic Act 8976, otherwise known as the Food Fortification Law and supporting the Republic Act

81729 or the Act for Salt Iodization Nationwide (ASIN). Another study which evaluated the impact of an ECD program was done by World Bank in 2006 [25] and used intent to treat difference-in-difference propensity score matching to measure the program's impact. Results of the evaluation showed significant improvements in terms of social, cognitive, motor and language development in children aged four and below living in areas where the program was implemented when compared to children who lived in areas where the program was not implemented. The findings also suggest a direct relationship between impact and duration of exposure to the program, with higher impacts observed as duration of exposure to the program increased. On the other hand, nutrition-related indicators, such as diarrhea and parasitic infections showed mixed impacts, with significant reduction observed in children aged 0-4 years old but not in older children while predominantly negative impacts were observed for the proportion with anemia and hemoglobin count. The study did not provide an explanation for these negative findings; nevertheless, the authors suggested further investigation to explain these outcomes. In 2015, the Australian Council for Educational Research (ACER), in partnership with the South East Asian Ministers of Education Organization Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH) and the Assessment, Curriculum and Technology Research Centre (ACTRC) of the University of Melbourne and University of the Philippines, initiated a three-year longitudinal study to evaluate the long-term impacts of early education in the Philippines [26]. Entitled the Philippines Early Childhood Care and Development (ECCD) Longitudinal Study, the project aims to measure the effects of the first three years of schooling on Filipino children's social, emotional, literacy, and numeracy skills. The study, composed of 4500 students coming from across all three main islands of the Philippines, including those who reside in conflict and disaster-affected areas, will monitor and compare the growth and development of children enrolled in pre-school education and those who did not. The study is ongoing and will conclude in 2018.

The Philippine government has significantly invested on early childhood care, education, and development; nevertheless, much still needs to be done. In a study done by Albert and David in 2012 [27], late school entry was identified as a major factor that influenced attendance in primary school in the Philippines, hence affecting the country's goal of achieving Universal Primary Education (UPE). Furthermore, data from World Bank showed that the Philippines, when compared to its Southeast Asian neighbors, was below par in terms of primary enrollment [28]. Impeding the country's performance were several sociocultural and economic factors, namely: perceptions of parents on their child's school readiness, poverty, gender differences, and maternal education [27]. In the Philippines, school readiness among young children was one of the reasons why some children were not enrolled. Data from the Annual Poverty Indicators Survey (APIS) conducted by the National Statistics Office (NSO) showed that majority of the preschool-aged children who were not in school were deemed too young for school; lack of nearby schools and economic constraints also influenced the parents' decision to enroll their children (Table 1).

Table 1. *Percentage (%) of pre-school-aged and elementary school-aged out-of-school Filipino children (in 2007, 2008, and 2010) according to reason for non-attendance and data source.*

Reason for Non Attendance	Pre-school-aged children			Elementary school-aged children			
	APIS 2007	APIS 2008	APIS 2010	APIS 2007	APIS 2008	FLEMMS 2008	APIS 2010
Too young to go to school	83.52%	80.46%	70.45%	34.03%	29.21%	34.86%	18.36%
Lack of Nearby School	4.53%	3.88%	6.06%	8.61%	7.45%	7.66%	10.08%
High cost of education	4.53%	3.62%	3.54%	12.90%	11.52%	13.32%	11.36%
Lack of Personal Interest	3.83%	6.94%	13.31%	24.49%	31.68%	23.78%	42.92%
Illness/Disability	0.54%	1.06%	1.36%	8.08%	9.48%	6.76%	10.08%
Other Reasons	3.05%	4.04%	5.28%	11.55%	10.53%	13.53%	6.9%

Source: Annual Poverty Indicators Survey 2007, 2008, 2010, and Functional Literacy, Education, and Mass Media Survey 2008, National Statistics Office

In terms of health indicators, malnutrition is still a problem. Although the prevalence of anemia in six month- to one-year-old infants has decreased by 9.8% in 20 years (from 49.2% in 1993 to 39.4% in 2013) and in one- to five-year-old children by 30.7% (from 42.0% in 1993 to 11.3% in 2013), stunting among children remains a problem. According to the 8th National Nutrition Survey conducted by the Food and Nutrition Research Institute, 33.4% of Filipino children 0-5 years old were stunted [29]. The 2016 UNICEF Regional Report on Nutrition Security in ASEAN also classifies the Philippines as a high prevalence country (in the 30-39% range) and one of the top ten countries with the highest stunting burden in the world [30]. Addressing these issues will also influence education since malnutrition is known to be associated with poor academic and cognitive performance in children [31,32,33].

Child-rearing and discipline practices, which can be influenced by culture, can also affect child development and must, therefore, also be addressed. Traditionally, Filipino parents use authoritarianism to instill values in children; physical punishments, such as spanking, pinching, ear-pulling, or whipping are used to reinforce values [34]. A review by Gershkoff [35] suggests that parental corporal punishment, such as spanking, is associated with a child's decreased moral internalization, mental health, quality of relationship between parent and child, and increased risk of being a victim of physical abuse. The effects of corporal punishment are not confined to childhood alone, as the findings of the review also suggest corporal punishment is associated with decreased adult mental health, increased aggression, criminal and antisocial behavior, and risk of abusing own child or spouse. Although corporal punishment is prohibited in schools as mandated by the Department of Education [36], the ratification of House Bill 4907 which seeks to ban corporal punishment and instead promote positive discipline and the Anti-Corporal Punishment Act of 2017 which prohibits corporal punishment and all other forms of degrading punishment for children, is still pending [37].

Conclusions

Numerous studies present evidence that early childhood education does affect a child's holistic development into adulthood; however, problems may arise if there is a disconnect or discrepancy between the existing programs and the child's development level. Therefore, it is important to address these issues to maximize the potential of programs. Early childhood care and education is a shared governance; it necessitates the shared responsibility of national, municipal, barangay, communities, and families to ensure the rights and full development of children. Since perception of school readiness influences participation in early education, teacher knowledge, as well as their expectations of the child's level of learning, should be at par with the level of the child's abilities to reduce stress and to improve the efficiency of learning. Educators must also always consider the basic tenet of child development, which states that children learn and develop at varying rates. Teachers must recognize the needs of each child in their class, and should not forget that the purpose of early childhood education is to develop the child to his/her maximum potential, and not to create high-performing children according to adult expectations. The significant support of parents is also needed to ensure holistic development of children. Children are active learners; therefore, their interaction with other individuals and their environment provide experiences that affect the child's growth and development. Both teachers and parents must foster a child-friendly environment, and must have a good positive relationship with the child, to help them develop high self-esteem and self-sufficiency in the future. Finally, more research is needed to provide evidence on the effectiveness of existing early care and education programs, since programs must be aligned or must address the needs of a child depending on his stage or level of development, and should be regularly evaluated and modified according to advancements in evidence-based research.

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