# ANALYSIS OF ENABLING FACTORS IN HEALTH INTEGRATED EARLY CHILD EDUCATION SUPPORT SYSTEM IN TANJUNG JABUNG TIMUR DISTRICT 2022

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#### ABSTRACT

**Background:** Indonesia has implemented social services for early childhood, such as health and nutrition services at Integrated Service Posts, Daycare Parks, Playgroups, Early Childhood Education. In East Tanjung Jabung the number of active integrated service posts is 58.68% higher than the provincial average and the coverage of baby visits to posyandu is 102.5%. There are 291 early childhood education units with a percentage of early childhood screening coverage of 97.2% in 2018 and 97.4% in 2019, decreased to 36.8% in 2020 due to the pandemic.

**Methods:** mixed-method research with quantitative analysis to see the different characteristics of service posts, and qualitative analysis of 4 postal managers, 4 postal tutors, and 2 postal cadres. A total of 16 early childhood educations are divided into 4 types of systems, namely traditional, integrated early childhood education, integrated health preschool, and pilot stunting locus of early childhood education. Purposive sample selection. Data collection time is August-November 2022.

**Results:** based on a quantitative analysis of system-supporting factors that influence the success of healthintegrated early childhood education compared to other types of early childhood education, namely the number of meetings per month (p value = 0.033), the length of time preschool operates (p value = 0.033), the level education of early childhood management (p value = 0.036), and periodic training attended by cadres (p value = 0.021). Going deeper into the qualitative analysis, it was found that the supporting factors were human resources as tutors who were able to fulfill their obligations well, and had creativity to support and maximize learning activities and achievements.

**Conclusion:** The differences in the effectiveness and efficiency of each early childhood education program depend on the role of administrators, tutor capacity, funding, multi-sectoral support, and community participation.

**Keyword:** early childhood education, capacity building, mix-method, integrated health education, community empowerment, systemic support

#### INTRODUCTION

Healthy and smart early childhood is an asset for the nation in the future. Early age (age 0-8 years) is often referred to as the "golden age", which only comes once and cannot be repeated, greatly determines the quality of human resources. The number of Indonesian children in 2022 for the 0-6 year age group is predicted to be 8% of the total population in Indonesia, or close to 20 million children. This number is absolutely huge, and requires an optimal process of growth and development starting from home care and through health, nutrition and education services<sup>1</sup>.

The health status of children aged 0-6 years is still very low, the total birth rate is 2.102 while the infant and toddler mortality rate is 17.22. In Jambi Province, based on the health profile of Jambi province in 2021, the number of neonatal deaths is 313, the number of under-five deaths is 313 (the under-five mortality rate is reported to be 5.5 per 1000 live births), low birth weight is 1.8%, babies are exclusively breastfed only 65.5%, infants who received complete immunization were 95.3%, toddlers who received vitamin A were 92.5%, health services for toddlers were only 65.6%, and toddlers who were weighed were only 54.1%. There is also a wide disparity in the health and nutrition status of Indonesian children, especially between children from rich and poor families, between regions (cities, villages), and between parents with different backgrounds.

Indonesia has implemented social services for early childhood, such as health and nutrition services at Posyandu, Daycare Centers, Playgroups, Early Childhood Education (PAUD), Kindergartens, Raudhatul Atfhal, and Toddler Family Development. However, there are disparities

between provinces, districts and cities throughout Indonesia<sup>2</sup>. The number of active integrated service posts in Jambi Province is 56% of the 3,269 total posyandu. In East Tanjung Jabung the number of active integrated service posts reached 58.68%, higher than the provincial average and the coverage of baby visits to posyandu was 102.5%. The prevalence of stunting in East Tanjung Jabung in 2007 was as high as 48.5%, decreased in 2013 to 40%, in 2019 decreased to 20.05% and in 2021 increased to 25.6%, in the first year it became the government's locus of stunting East Tanjung Jabung Regency activates all multi-sector programs including integrated service posts and integrated early childhood education, this is what has caused a drastic reduction in the stunting rate from 2013 to 2020. In East Tanjung Jabung Regency alone for early childhood education units there are 291 with a percentage of coverage Early childhood screening was 97.2% in 2018 and 97.4% in 2019, decreasing to 36.8% in 2020 due to the pandemic<sup>3</sup>.

Early Childhood Education began to be developed in 2001 through informal channels, namely through family education and education organized by the surrounding environment with the aim of the program being children aged 3-4 years and stimulation by cadres in the form of "playing together". At present there are early childhood education programs that have been integrated with integrated service posts and Toddler Family Development Activities (BKB) so that they can widely reach children in rural areas. This program focuses on activities through providing a vehicle for educational play, improving parents' abilities and stimulating children's development, as well as influencing parenting patterns in their family environment<sup>4</sup>. For children aged 5-6 years, services are provided through Kindergartens (TK) and Raudhatul Athfal (RA) with the aim of helping children develop various potentials physically and psychologically, which include moral and religious values, social, emotional, and independence, cognitive, language, physical motor and arts so that they are ready to enter basic education<sup>5</sup>.

Tanjung Jabung Timur District with SEAMEO-RECFON conducted an early childhood development intervention through an integrated PAUD called the ECCNE (Early Child Care Nutrition Education) program by training early childhood teachers to become tutors, then looking at the impact on the knowledge and active role of parents and nutritional status and early childhood psychosocial health<sup>6</sup>. This program has been running for 3 years since 2019, every year 10 preschools are trained from 10 stunting locus villages, growing in 2010 an additional 10 preschools are assisted, but until now there have been no baseline and endline studies related to this program, no research has

been conducted. looking at long-term development and long-term benefits in early childhood education. Therefore, a study is needed to observe the practice of implementing various types of early childhood services, the benefits of each form of early childhood services on nutritional status, psychosocial development, teacher skills, the active role of the family, and assess the level of success of programs with other types of early childhood education.

# METHOD

Mix-method with research quantitative analysis to look at the different characteristics of early childhood education service posts, and qualitative analysis of 4 postal managers, 4 postal tutors, and 2 postal cadres. A total of 16 early childhood education systems are divided into 4 types of systems, namely regular/traditional early childhood education, integrated early childhood education, health integrated early childhood education, and stunting locus early childhood education as a pilot. The selection of samples of early childhood education and informants was carried out purposively with the help of data from the East Tanjung Jabung District Education Office. The research was conducted in two districts, namely Rantau Rasau District and Muara Sabak Barat District, East Tanjung Jabung Regency. Data collection time is August-November 2022. Quantitative analysis was

carried out using kruskal-walis using SPSS, while qualitative analysis was carried out by content analysis using an open-code application. This research has received ethical approval with the number: 230622105040

# RESULT

Based on the results of a quantitative analysis of table 1, the characteristics of early childhood education in East Tanjung Jabung Regency in 2022, namely that most of the funding sources come from the education office and assistance/contributions from parents and donors from private institutions (81.3%). Funding sources are routine 14 PAUD units (87.5%), growth measurement facilities 15 PAUD units have weight measuring devices, only 8 PAUD units have height measuring devices (50%), 8 units have a Towards Healthy Card (KMS) paud (50%) and has Maternal and Child Health books as many as 7 paud units (43.8%). Most of the playing tools have outdoor games (62.5%), puzzles (68.75%), blocks (68.75). 37.5% colored pencils are available as writing tools, 50% of early childhood education units have reading books.

No.	Characteristics	Frequency (N)	Percentage (%)
1.	Source of Early Childhood Funds		
	a. public health Office	3	18.8
	d. Others (donors, grants, non-governmental	13	81.3
	organizations)		
2.	Nature of Funding		
	a. routine	14	87.5
	b. not a routine	2	12.5
3.	Growth monitoring tool		
	a. Weight scales	15	81.3
	b. Body Length / Height Measurement Tool	8	50.0
	c. Towards Healthy Card (KMS)	8	50.0
	d. MCH Book	7	43.8
4.	Game props		
	a. Outdoor game props	10	62.5
	b. puzzle	11	68.75
	c. Block	11	68.75
	d. card game	9	56.25
	e. musical instrument game	1	6.25
5.	Stationery		
	a. colored pencils	6	37.5
	b. pencil	9	56.25
	c. read book	8	50.0
	d. crayon	9	56.25

# Table 1. Characteristics of Early Childhood Education in East Tanjung Jabung Regency in 2022

Based on the results of the Kruskal Walis bivariate test on enabling factor variables supporting the implementation of early childhood education in East Tanjung Jabung Regency, it is known that there are differences in the number of meetings at different types of early childhood education (0.033), there are differences in the sustainability of early childhood programs at different types of early childhood education (0.033), there are differences in the educational levels of PAUD managers with different types of PAUD (0.036), there are differences in periodic training attended by cadres with different types of PAUD (0.021). While it is known that there is no difference in the number of target households, availability of sanitation facilities, availability of student portfolios, and community participation in different types of early childhood education.

 Table 2. Results of bivariate analysis of enabling factors for health-integrated early childhood education in East Tanjung Jabung Regency in 2022

No.	Variable	Frequency (N)	Percentage (%)	p-value
1.	Meeting in 1 month		<b>i</b>	
	a. 1-10 times	3	18.8	0.033
	b. 11-20 times	7	43.8	
	c. >20 times	6	37.5	
2.	Target number of households			
	a. less than 50 households	7	43.8	0.470
	b. more than 50 households	9	56.3	
3.	Drinking water and waste disposal facilities			
	a. drinking water facilities are available	14	87.5	0.392
	b. trash disposal facilities are available	15	93.8	
4.	Student portfolio			
	a. portfolio ownership	13	81.3	0.238
	b. arranged monthly	8	50.0	
5.	Society participation			
	a. active	12	75.0	0.199
	b. not active	4	25.0	
6.	The duration of the early childhood school			
	operates	4	25.0	0.033
	a. under 10 years	12	75.0	
	b. more than 10 years			
7.	Number of Managers			
	a. less than 2 people	12	75.0	0.182
	b. more than 2 people	4	25.0	
8.	Total monthly funds			0.188
	a. under IDR 500,000	4	25.0	
	b. more than IDR 500,000	12	75.0	
9.	Management Education			
	a. Low education	2	9.1	0.036
	b. higher education	2	9.1	
	c. S1/S2/S3	18	81.8	
10.	Management training periodically			
	a. yes, once a year	10	45.5	0.321
	b. yes, every two years	4	18.2	
	c. yes, only once	5	22.7	
	d. Never	3	13.6	

11.	last education			
	a. low education	12	40.0	0.739
	b. higher education	8	26.7	
	c. Diploma	4	13.3	
	d. S1/S2	6	20.0	
12.	Cadre periodic training			
	a. yes, once a year	15	50.0	0.021
	b. yes, once every 2 years	1	3.3	
	c. yes, only once	8	26.7	
	d. Never	6	20.0	
13.	The activeness of the community in			
	participating in early childhood	8	50.0	0.299
15.	Empowerment of consultation in the	16	100.0	1.000
	community			
16.	Empowerment in the form of parental ability	15	93.8	0.192
	training			
17.	Empowerment of family members	2	12.5	0.392
18.	Parent training course empowerment	5	31.3	0.275
19.	Supervision			
	a. Public health center	15	93.8	0.343
	b. education and related services	12	75.0	
	c. regular supervision	14	87.5	

Going deeper into the results of the qualitative analysis: The scopes above are the scopes that become a benchmark for how early childhood education managers must ensure their students can achieve these 6 aspects in child development, including health services carried out in order to support or play a role in achieving several aspects on. Some of the coverage above the researcher obtained from the following informants:

"...jadi dikelompok bermain dan taman kanakkanak ada 6 aspek yang dikembangkan dulu. Yang pertama dari nilai agama dan moral, kedua fisik motoric nya juga harus dikembangkan baik halus dan kasar, ketiga koknitif (pengetahuannya), keempat sosial emosional yang mana harus diajarkan cara bersikap, bersosialiasi, dan beradaptasi, dan juga selanjutnya bahasa jadi perkembangan bahasa itu penting juga dari cara dia bahasa ekspresif maupun reseptif, dan yang terakhir perkembangan seni. Jadi 6 aspek tadi harus dikembangkan baik kelompok bermain maupun taman kanak-kanak..." (Informan P.001.Pr/33th) Informants who admitted that the school curriculum was prepared by the manager directly by referring to the curriculum guidelines made by the education office to ensure that every early childhood school used the same curriculum in every school.

"dari supervisi, bagian kurikulum. Jadi kurikulum sekolah itu kami yang nyusun. Dari kurikulum operasionalnya digabungkan sama kurikulum KTSP (kurikulum tingkat satuan pembelajaran). Jadi kurikulum itu disusun baik dari tambahan sampe kurikulum 2013. Jadi saya sebagai pengelola saya yang nyusun...

...dari kurikulum yang sudah disusun kan ada tim kurikulum, jadi guru-guru ini saya ajak untuk menjadi tim kurikulum srcara langsung..." (Informan P.001.Pr/33th)

Several other informants stated that managers were only involved in compiling activities using the existing curriculum. Children's learning activities will be adapted to lesson themes that refer to a curriculum compiled directly by the school or using a curriculum from the government in the education sector.

The first supporting factor for early childhood education activities is human resources or teachers as teaching staff who can fulfill their obligations properly, and have good creativity to support and maximize learning activities and achievements for children.

"kalau pendukung mungkin dari sdm, guru-guru yang udah mau berkejasama dengan baik, guru-guru yang sudah mau diarahkan, yang kreatif nah itu pendukung kami..." (Informan P.001.Pr/33th)

"itu kan bersama-sama pak untuk kemajuan sekolah harus ada kerja samanya dengan kepala sekolah saya kan ga harus tau, jadi saya percayakan kemeraka jika saya tidak ada ditempat"

In addition to support from the school itself, support from the community is also something that can advance children's learning activities at school.

There are several inhibiting factors experienced by some managers of the early childhood education system including limited study rooms, infrastructure, low teacher salaries, and the number of teachers who do not match the student ratio.

"kami kurang kelas gitu pak, karena anaknya banyak ruangannya masi sedikit sama APE" dalam...

mungkin alat peraga untuk didalam kelas itu masih kurang gitu pak hanya beberapa saja gitulah jadi biasanya kami dari dinas itu baru dua kali dapat APE itupun udah lama seperti puzel, terus ini mainan profesi yang tukang" itukan sebenarnya kalau banyak mungkin enak kita mainkan sama anak" tapi misalkan cuman dua terus anaknya banyak itu yang susah pak"

#### (Informan P.003.Pr/39th)

Another inhibiting factor felt by managers is the difficulty in providing understanding to children's parents, to include their children in early childhood education, because there are still many parents who lack understanding about children's education at this early age. So many parents don't want to send their children to kindergarten, just waiting to be sent to elementary school.

## DISCUSSION

Given that services in early childhood are usually fragmented between health and education systems, and both health and education are integral components of a child's early development, we treat the concept of capacity building in early childhood development as a cross-sectoral issue. We follow the article by Black et al <sup>7</sup> in understanding that the education sector in the early childhood education system has traditionally focused on early childhood education and the transition to primary school, whereas the health sector focuses on health and nutrition, particularly starting from birth/ before birth.

The characteristics of programs and delivery models have to do with the degree to which a particular program is more aligned with health or education delivery systems, and that may vary from country to country. However, cross-sectoral integration is critical to the effectiveness of programs and services to support child development, care and education. Building capacity for effective delivery of early childhood services in the health, education and social protection sectors, among other things, requires convergence of goals and a shared understanding of child development in a holistic way (attending to a child's physical, cognitive, emotional and social development, as defined in Black et al.)<sup>8</sup>. It also requires leadership, strategic innovation that fits within existing structures, evidence-based intervention models, an adequate workforce, and effective partnerships that help make interventions more culturally relevant, help finance them, and help create long-term institutional support and sustainability for interventions.

The main challenges and considerations for integrating nutrition and early childhood education programs in the field are: First, different sources of funding. Health/nutrition funding has historically responded to health/nutrition indicators, while PAUD programs target education and development outcomes. Staff Workload: The workload of nutrition counselors, community health workers, PAUD center staff, and volunteers providing interventions is often guite high<sup>9,10</sup>. Oversight responsibilities<sup>11</sup>: In integrated challenges may programs, relate to expanding the oversight role for inspectors, who already have multiple responsibilities,

including (1) monitoring compliance with policies, procedures and action plans to track activities achieved and scope achieved achieved; and (2) mentoring and building workers' skills to deliver high-quality programs.<sup>12</sup>

Building capacity in health and education systems in low- and middle-income countries to deliver high-quality early childhood services requires coordinated efforts across sectors, effective governance, adequate funding, adequate manpower, reliable data systems, and monitoring, evaluation, and repair cycle; it also requires partnerships with sector, communities, the private and parents<sup>13</sup>. In addition, building capacity requires leadership, innovative strategies to existing structures. evidence-based fit intervention models. effective and partnerships that help make interventions more culturally relevant, help finance them, and help create long-term institutional support and sustainability for those interventions<sup>14</sup>,<sup>15</sup>.

# CONCLUSION

Based on the results of the quantitative analysis: there are significant differences between the four types of early childhood education in terms of the number of meetings, the continuity of implementation, the educational background of the administrators, and the periodic training attended by cadres. Meanwhile, based on the results of a qualitative analysis: the difference in the effectiveness and efficiency of each early childhood education program depends on the role of the manager, tutor capacity, funding, support from other agencies, and community participation. The suggestion in the research is that a program, whether small or scale, can be sustainable as long as there is demand, there is support, and it is cost-effective. Part of this involves partnering with families, communities, NGOs, donors and others who can engage with a program or initiative, support it, evaluate it, fund it and improve its sustainability and effectiveness over time.

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