

***Optimizing Child Development Through the First Three Years:
The Important of Responsive Parenting and Early Learning Stimulation***

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Abstract

In Indonesia, the prevalence of inappropriate childcare remains relatively high. Data from the Indonesian Early Childhood Report, in 2021, 4 out of 10 early childhood children experience inadequate childcare. Meanwhile, from 0–3 years old, the brain grows rapidly to form strong connection, thus decent childcare is important during this period. Responsive parenting and early learning are two important domains that could support children’s developmental needs. Unfortunately, in Indonesia there are still not enough research have been done to explore decent parenting. This quantitative study investigates responsive parenting practices and early learning implementation for children aged 0-3 years in three Indonesian cities: DKI Jakarta, Pandeglang, and Kupang. Data collected from 1200 parents, assessed by the modified of Infant-Toddler Home Observation for Measurement of The Environment (Infant-Toddler HOME) instrument. Result shows 85% of participants are able to demonstrate responsive parenting and 82.4% can provide early learning domain. Early learning score found positively correlated with parents’ educational level (.232, $p<0.01$), social-economy level (.269, $p<0.01$), and the child’s age (.318, $p<0.01$). The availability of learning materials varies significantly between respondents residing in urban and rural areas, highlighting notable contrasts between two environments. This finding serves as a baseline for further research and intervention on families. Future intervention should be applied to support Indonesian children’s optimal development.

Keywords: Responsive Parenting, Early Learning, Home Stimulation, Toddler

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Introduction

Children's development occurs very rapidly during the golden period, from the age of 0 to 5 years. This critical period, known as '*the first window of opportunity*', the brain has optimal capacity to absorb various information and form strong connections as the child's base to think, behave, and live the later life (Center on The Developing Child Harvard University, 2015; Center for Community Child Health, 2017). Children's brain development is not only influenced by biological factors, it also requires exposure to stimulation and experiences from the environment. A child's home environment, including home stimulation and parental attitudes towards the child plays a significant role in supporting the children's development and influencing their future adult life (Parveen, 2007; Tierney & Nelson III, 2013; The National Academy of Science, Engineering, & Medicine, 2015; Mansur & Setyaningsih, 2021). When home environment is not supportive, children may experience under stimulation and stress, which result in suboptimal brain growth (Center on The Developing Child Harvard University, 2015).

Based on Indonesian Law No. 35 Year 2014 and Government Regulation No. 44 Year 2017 about 'Parenting Practices' have stipulated that every child has the right to receive proper parenting and care. According to Caldwell and Bradley (2003) a stimulating and supportive home environment is an environment that is responsive to children, accepts children's behavior without punitive action, has a clear structure and organization, provides learning materials for children, directly involved parents in stimulation and childcare, and provides diversity in stimulation. In line with this, responsive parenting is one of the most important domains to support a stimulating home environment.

According to The Nurturing Care Framework (2018), responsiveness in parenting refers to parent's ability to understand and meet children's need based on the child's behavior. Examples of parents' responsive behavior are how parents respond to children's words or verbalizations, giving praise for children's positive behavior, parents' activeness in naming objects that children see. Research shows that parents who are responsive to their children have various benefits, first and foremost children will feel safe and comfortable around their parents, so this can support healthy attachment formation. Parents' responsiveness also supporting various aspects of child development, namely language and communication development, cognitive abilities, social skills, and fewer behavioral and emotional problems (Landry et al., 2001; Warren & Brandy, 2007; Booth & Jernberg, 2010; Hanen Early Language Program, 2018; Hentschel, Yousafzai, Aboud, 2021; Luby, Rogers, McLaughlin, 2022).

Early learning at home also plays an important role to support children's development. Early learning refers to various stimulation, experiences, and exposures that lead to learning that can be provided through play, literacy activities, learning materials, and support in the children's learning process (Fesseha & Pyle, 2016; Milner, et.al., 2019). In early child, playing and reading were found to be useful to support and improve children's ability to think, communicate, and connect with the world (Nores & Barnett, 2009; Black et al., 2016).

Unfortunately, according to a report from the Indonesian Ministry of Women Empowerment and Child Protection, the trend of inappropriate child care in Indonesia from 2019 - 2021 is still relatively high. Referring to the 2021 Early Childhood Profile Report, 3.69% early childhood children are reported to have received inappropriate care (Badan Pusat Statistik, 2022). In line with this report, Mansur & Setyaningsih (2021) stated that more than half of

the Indonesian parents in their study provided low developmental stimulation for their children. Data from SIMFONI PPA (2023) from the 1st of January 2023 to June 2023 shows there have been 5,604 cases of violence against children. More specifically, 730 victims were children aged 0 to 5 years. The high amounts of inappropriate care and children's violence represent that responsive parenting has not been applied in many household systems. In fact, inappropriate child care has a huge long-term risk of experiencing various problems in their lives, that is social-emotional problem, behavioral problem, deterioration of cognitive function and academic performance, developmental regression, and inhibition (Mizenberg, Poole, & Vinogradov, 2008; Baker & Cunningham, 2009; de Vera, 2018; Harper, 2018).

Various factors are considered to be closely related to parents' ability in providing responsive parenting and early learning. Low income parents, problems in mental health, and low social support can interfere the quality of responsive parenting (Moore, et.al., 2013; Lurie, et.al., 2021). Parents with low educational and socioeconomic levels are less able to afford high quality stimulation, engage in supporting the child, have limited information to support their children's development, have less family investment on education and learning materials (de Coulon, et. al., 2011; Lucassen, et.al., 2015; Miller, Votruba-Drzal, & Coley, 2019; Berkes, et.al., 2019; Lurie, et.al., 2021). Childhood trauma in parents also affect their ability in parenting, for example low self-esteem in nurturing children, anxious in raising children, feels detached or too attached, overwhelm by children's emotional needs, and so on (Pressley & Wilson, 2022).

By the time this study conducted, data on inappropriate child care has mostly been obtained through reporting to institutions, the presented data tend to focuses only to the amount of violence on children. There have not been many researches and surveys that explore the level of decent parenting in reality. Meanwhile, the field data related to responsive parenting practices and early learning requires as the first step to make interventions.

Based on yearly report by Badan Pusat Statistik (2022), in 2021 the percentage of toddlers who have received inappropriate care is greater in rural areas than urban areas (4.36% compared to 3.17%). Referring to those report, researcher see the urgency to collect data from both urban and rural area which have affiliation with Tanoto Foundation. First affiliated area is DKI Jakarta as the capital city accounts for 2.36% inappropriate care; second affiliated area is Banten which reported has 4.10% inappropriate care. In addition, researcher also collecting data from East Nusa Tenggara province as it is also among the provinces in Indonesia that contribute high percentages of inappropriate parenting, viz. 7.49%. This study conducted with the aim of being a preliminary study, expected to provide a field data as a basis for the Indonesian family interventions to support 0-3 years old children's development.

Method

Research Design

Quantitative study design was applied in this research to evaluate home stimulation, specifically responsive parenting and early learning. Children and parents' demographic data; and parents' childhood experience were also examined to find out what variables correlated with home stimulation.

Participants and Data Collection

A multistage random sampling method was applied. Researchers implement primary sampling unit up to village level, then conducted randomization to select two neighborhood areas. From each selected area, then it was selected again two smaller division group of household to find 10 respondents from each group. The data were collected from 1200 primary caregivers of 0 – 3 years old children consist; (a) 400 participants from DKI Jakarta; (b) 400 participants from Pandeglang, Banten; and (c) 400 participants reside in Kupang, East Nusa Tenggara. All cities are located in Indonesia.

The data were collected from February 26th until March 15th, 2023. This research use structured interview and direct observation based on the test instrument. Prior to data collection, respondents were given informed consent containing information regarding research objectives, procedures, respondents' rights, guarantees of data confidentiality, as well as the risks and benefits of research for respondents. Researchers also ask for consent from respondents to provide data voluntarily.

Measurement

Respondent's Demographic Data

Demographic data of each respondent were collected using a structured questionnaire developed by researcher. Parents' age, gender, ethnicity, marital status, education level, occupation, areas of living, household income and excess, children's gender, age, and birth order were assessed.

Responsive Parenting and Early Learning

Based on The Nurturing Care Framework (NCF) guideline, Home Observation for Measurement of The Environment (HOME) was used to evaluate responsive parenting and early learning (Hentschel, Yousafzai, & Aboud, 2021). In this research, the modification of Infant-Toddler HOME was applied to measure the variables. Basically, Infant-Toddler HOME consists of six subscales, that is: (1) Parents' Responsiveness; (2) Acceptance and Nurturing; (3) Structure and Organization; (4) Learning material (e.g. the number of children's books in the household); (5) Parents' Involvement; and (6) Variety. Responsive parenting was examined by the 1st subscale (parents' responsiveness) and early learning assessed by the 4th subscale (learning material).

Parents' Adverse Childhood Experience

Parents' childhood history was measured by The Adverse Childhood Experience (ACE).

Analysis Method

The data from 1200 respondents were double cleaned, checked for missing values and outliers. Researchers also carried out data rechecking by selecting 20% of answers randomly from the total sample. Descriptive analyses were performed to see the results of the distribution of participants' answers. Associations between total score of Infant-Toddler HOME questionnaire, participant demographic data, the parents and children's ACE, were determined by Pearson's product-moment and Spearman correlation. One-way Anova and t-test also conducted to evaluate the differences of home stimulation score between respondents in each cities. Cronbach Alpha were conducted to count the reliability coefficients of Infant-Toddler HOME practices survey was 0.668.

Results

Table 1 shows the characteristics of parents' respondents. The majority of respondents had a relationship with their children as biological parents (90.6%). The age category of respondents mostly ranged from 26 - 30 years old (27.7%), followed by 31 - 35 years old (25.4%) and 36 - 40 years old (17.1%). Most of the parents' respondents, 41.4%, are senior high school graduates. About 96% of parents' respondents are married. The children's demographic data can be found in Table 2. From the children's data, there is no significant differences between boy (51%) and girl (49%) respondents. The age category of children respondents mostly ranged from 13 – 25 months old (36.3%) followed by 25 – 36 months old (31.8%).

Table 1: Parents' Demographic Data

| Parents' Demographic Data | Percentage |
|---|-------------------|
| Parents' Relationship To The Child | |
| Biological Parents | 90.6% |
| Grandparents | 6.3% |
| Family members | 1.4% |
| Non-family members | 1.7% |
| Parents' Age Group | |
| <20 years old | 1.2% |
| 21 – 25 years old | 12.6% |
| 26 – 30 years old | 27.7% |
| 31 – 35 years old | 25.4% |
| 36 – 40 years old | 17.1% |
| 41 – 45 years old | 8.3% |
| 46 – 50 years old | 2.1% |
| 51 – 55 years old | 1.9% |
| 56 – 60 years old | 1.8% |
| 61 – 65 years old | 0.8% |
| 66 – 70 years old | 0.3% |
| 71 – 75 years old | 0.1% |
| 76+ years old | 0.8% |
| Parents' Gender | |
| Male | 12.6% |
| Female | 87.4% |
| Parents' Educational Level | |
| Not entering school | 2.0% |
| Elementary level | 18.9% |
| Junior high school | 18.8% |
| Senior high school | 41.4% |
| Associate's degree | 4.1% |
| Bachelor degree | 12.5% |
| Master degree | 0.9% |
| Postgraduate | 1.3% |
| Parents' Monthly Outcome | |
| < IDR 900.000 | 20.3% |
| IDR 900.000 – IDR. 1.250.000 | 16.9% |
| IDR 1.250.001 – IDR. 1.750.000 | 15.5% |
| | 14.8% |

| | |
|---------------------------------|-------|
| IDR 1.750.001 – IDR 2.500.000 | 20.8% |
| IDR 2.500.001 – IDR 4.000.000 | 8.4% |
| IDR 4.000.001 – IDR 6.000.000 | 2.1% |
| IDR 6.000.001 – IDR 10.000.000 | 0.3% |
| IDR 10.000.001 – Rp. 15.000.000 | 0.6% |
| IDR 15.000.001 – IDR 30.000.000 | 0.3% |
| >IDR 30.000.000 | |
| Parents' Marital Status | |
| Married | 96.3% |
| Separated (not divorce) | 0.8% |
| Divorced | 1.3% |
| Death of the spouse | 1.6% |

Table 2: Children's Demographic Data

| Children's Demographic Data | Percentage |
|-----------------------------|------------|
| Children's Age Group | |
| 0 – 6 months old | 13.6% |
| 7 – 12 months old | 18.3% |
| 13 – 24 months old | 36.3% |
| 25 – 36 months old | 31.8% |
| Children's Gender | |
| Male | 51% |
| Female | 49% |

Table 3: HOME Total Score Descriptive Statistic

| Areas | N | Min Score | Max Score | Mean HOME | Std. HOME | Dev. |
|-------------|------|-----------|-----------|-----------|-----------|------|
| All areas | 1200 | 24 | 86 | 62.03 | 9.392 | |
| DKI Jakarta | 400 | 28 | 86 | 65.29 | 9.470 | |
| Kupang | 400 | 33 | 84 | 60.52 | 9.415 | |
| Pandeglang | 400 | 24 | 79 | 60.27 | 8.407 | |

As stated in Figure 1 (HOME Total Score Categories), result shows only 15.8% of parents with children under 3 years old had an adequate HOME score, meanwhile 82.4% of studied parents do not practice adequate child caregiving. The percentages of HOME Scores for each dimension can be seen in Figure 2. From the figure, on the responsive parenting dimension, 21.8% parents are placed in adequate category and the rest of the respondents (78.2%) have not demonstrated adequate ability to apply responsive parenting. On the learning material subscale, 15.1% of respondents scored in the adequate category, meanwhile 84.9% respondents have a lack access to provide optimum learning materials. Respondents who got an adequate score on acceptance, warm, and nurture scale were only 9.8%, while 90.2% of the parents have not applied a warming and nurturing parenting well. Furthermore, 88.3% of the respondents difficult to apply in structure at home. Only 11.7% of parents got adequate score in structure and organization subscale. From parents' involvement subscale, 27% of respondents got adequate score, 73% of them have not been involved properly. The last HOME subscale, variety, 15.3% participants are placed in adequate category, but 84.7% of

the parents do not achieve a high score in providing a variety of stimulation in their parenting practices.

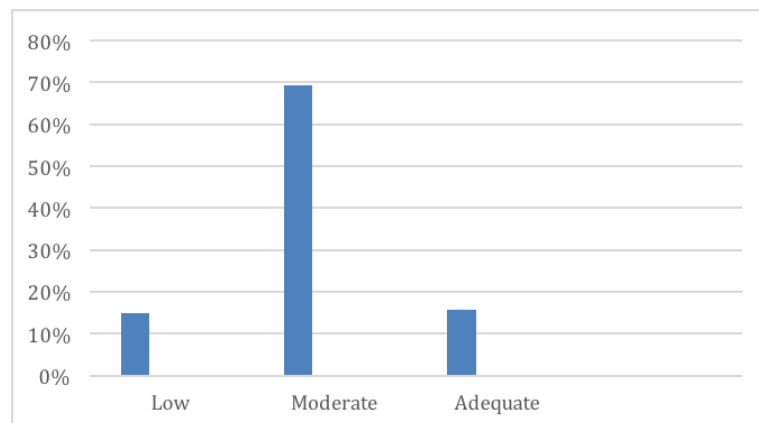


Figure 1: HOME Total Score Categories

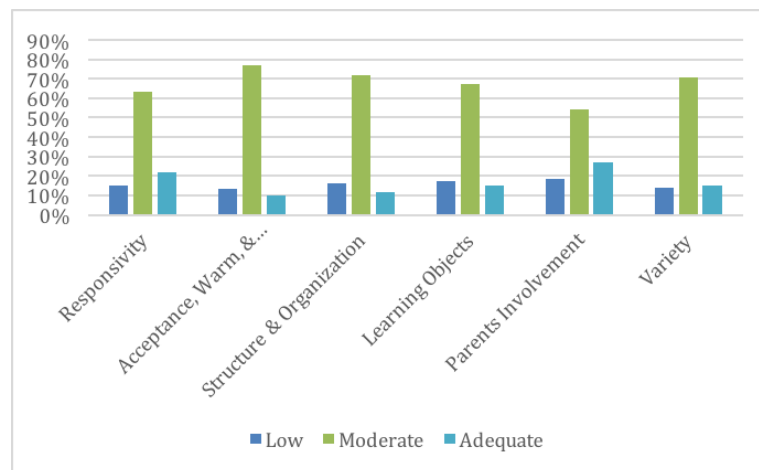


Figure 2: HOME Dimension Score Categories

Correlation inter-variable can be seen in Table 4. Result shows a positive correlation between parent's education level with total home stimulation (.211, $p < 0.01$), learning material (.232, $p < 0.001$), structure and organization (.114, $p < 0.001$), parents' involvement (.218, $p < 0.001$), and variety (.121, $p < 0.001$). Parent's socio-economic level correlated positively with total home stimulation score (.212, $p < 0.01$), learning material (.269, $p < 0.01$), parents' involvement (.191, $p < 0.01$), and variety (.121, $p < 0.01$). Parent's childhood experience assessed through parents' ACE which correlated with total home stimulation score (.158, $p < 0.01$), structure and organization subscale (.159, $p < 0.01$), and acceptance, warm, and nurture (.267, $p < 0.01$). Meanwhile, children's age was positively correlated with the total score of HOME (.197, $p < 0.01$), object learning (.317, $p < 0.01$), and variety (.154, $p < 0.01$). Furthermore, the relationship between grandparents and grandchild has a negative correlation with the parent's involvement subscale (-.068, $p < 0.01$), in other words, children who are raised by grandparents have low parental involvement. Parents' gender also shows a correlation with parents' involvement, female parents found to be more involved in parenting (-.098, $p < 0.001$).

Table 4.a: Correlation Inter-variables Pearson

| | Parent's Age | Parents' Level of Education | Parent's Socio-Economic Status | Parents' ACE | Child's Age |
|--|---------------------------|-----------------------------------|-----------------------------------|------------------------------------|-----------------------------------|
| HOME Total Score | .028 <i>p>0.05</i> | .211** <i>p<0.01</i> | .212** <i>p<0.01</i> | .158** <i>p<0.001</i> | .197** <i>p<0.01</i> |
| Responsive Parenting | .0091 <i>p>0.05</i> | .0076 <i>p>0.05</i> | -.024 <i>p>0.05</i> | -.0079 <i>p>0.05</i> | -.0047 <i>p>0.05</i> |
| Learning Material | .0189 <i>p>0.05</i> | .232** <i>p<0.01</i> | .269** <i>p<0.01</i> | .024 <i>p>0.05</i> | .318** <i>p<0.01</i> |
| Structure & Organizational | .0076 <i>p>0.05</i> | .114** <i>p<0.01</i> | .099 <i>p>0.05</i> | .159** <i>p<0.01</i> | .108 <i>p>0.05</i> |
| Acceptance, Warm, & Nurturing | .0085 <i>p>0.05</i> | -.0097 <i>p>0.05</i> | .051 <i>p>0.05</i> | .267** <i>p<0.01</i> | -.074 <i>p>0.05</i> |
| Parents' Involvement Variety | -.033 <i>p>0.05</i> | .218** <i>p>0.01</i> | .191** <i>p<0.01</i> | .086 <i>p>0.05</i> | -.016 <i>p>0.05</i> |
| | .043 <i>p>0.05</i> | .121** <i>p<0.01</i> | .129** <i>p<0.01</i> | .086 <i>p>0.05</i> | .154** <i>p<0.01</i> |

Table 4.b: Correlation Inter-variables Spearman

| | Parents' Relational Status With The Child (Grandchild) | Parent's Gender (Male) | Parents' Gender (Female) |
|-----------------------------|--|------------------------------------|-----------------------------------|
| Parents' Involvement | -.068** <i>p>0.01</i> | -.098** <i>p<0.01</i> | .098** <i>p<0.01</i> |

One way ANOVA and t-test was conducted to evaluate the differences of HOME score result among three areas. In Table 5, it is found that there are score different of HOME stimulation between respondents who live in DKI Jakarta with respondents in Pandeglang ($p < 0.01$, mean differences 3.7561) and Kupang ($p < 0.01$, mean differences 3.5111).

Table 5: T-Test

| | DKI Jakarta | Kupang, East Nusa Tenggara | Pandeglang, Banten |
|-----------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
| DKI Jakarta | 1.2639 <i>p>0.05</i> | 3.511** <i>p<0.01</i> | 3.756** <i>p<0.001</i> |
| Kupang, East Nusa Tenggara | 3.511** <i>p<0.01</i> | 1.2639 <i>p>0.05</i> | -1.019 <i>p>0.05</i> |
| Pandeglang, Banten | 3.756** <i>p<0.001</i> | -1.019 <i>p>0.05</i> | 1.2639 <i>p>0.05</i> |

Conclusion

HOME scores have a positive correlation with parent's education and socio-economic level, which means the better the socioeconomic level of parents, the higher home stimulation can be provided. High level of education and socio-economic status, as well as stable employment are important components in forming a supportive home environment to support the process of intergenerational knowledge transfer and children's achievement (Davis-Kean, 2005; Davis-Kean, Tighe, Waters, 2021).

In this study, no correlation was found between parent's responsiveness and demographic data. Warren and Brady (2007) states that there are some characteristics of parents associated with parents' responsive behavior, especially by mothers. Not only demographic background, but mental health problems also can hinder parent to show responsiveness to children. This finding also backup by field data that in total 7% of parents have a history of being neglected or abused. As this research was not intended to assess parent's mental health condition, thus in order to support better responsive parenting, especially for vulnerable parent groups, the provision of mental health services on child development that are evenly distributed need to be given more attention by public stakeholders.

A unique finding on the learning material subscale was found in this study. In this study, the availability of learning material such as book and playing tools are link to parents' education level, socio-economic level, and children's age. The variation of toys between low education parents (no school background, elementary school graduates) and parents with at least high school education have different variations. Parents with low education provide more physical-motor play activities for their children (running, cycling, playing kites, balls), while parents with at least high school education provide more varies toys, including physical-motor, educational (eg. puzzle, blocks), and imaginative toys (eg. dolls). Children of parents with low socio-economic status tend to play functionally (e.g. running around, pull and push, sorting objects) rather than engaging in constructive, sociodramatic and pretend play. This can be caused by poor quality parent-child interactions, less responsive parents, and limited parental resources to support children's play (Rubin et al., 1976; Fromberg & Bergen, 2015). Cost-related factor also contributes to the parent's decision to buy toys, whereas low income parents tend to have limited resources to fulfil learning materials for the children (Kurdi, 2017; Lurie, et.al., 2021). In line with Yulianti, Denessen and Droop's (2019) explanation, parents with middle and high education levels can provide additional materials for children to learn, such as encyclopedias, tablet games and access to the internet. Children from families with high socio-economic status also tend to enjoy more opportunities and resources for learning (Sun et al., 2018).

In learning material subscale, this research found that awareness of reading and book ownership as an effort to stimulate children's literacy is still limited. In the HOME assessment manual, parents who provide at least three books to their children and read to them at least three times a week will receive one score (the higher the score, the better the quality of environmental stimulation). In fact, in the field data, parents who read to their children at least three times a week were only 21.4%, while 56.6% of parents never read to their children. Children who have at least three books are only 25.5% and those who do not have at least three books are 51.2%. Even though, the number of children's books at home is also related to their cognitive development (Salinas, Valenzuela, Aranis, 2021). In the context of Indonesia, in general, literacy awareness is still looked at the responsibility of schools only, especially in rural areas. Wijaya, et.al. (2019) stated factors that hinder support for

children's literacy in Indonesia are parents who do not have high reading competence, so that at home there is no reading habit, reading assistance, and parents do not spend much time accompanying children to carry out literacy activities. In Wijaya's study, it can be seen that regional factors of residence, socio-economic conditions, and parental education level play a major role to enhance parents' ability to stimulate home literacy. It is align with this research finding that the data shows that parents with higher education (senior high school and above) tend to have an awareness of reading books to their children. Literacy skill is mainly learned from Indonesian subject at school, whereas at an early age children actually need to practice their literacy skill and develop pre-reading and pre-writing foundation so that later at school they may not experience problems in the learning process (Dove, et al., 2015; Senechal & LeFreve, 2002). Stern and Nordtrum (2014) stated that the ability of students in Indonesia to read fluently and understand reading material is only 70% which is relatively low. This literacy problem will have a big impact in the future if it is not addressed immediately, in which early intervention to encourage children reading habit at home must be initiated from an early age.

Learning materials such as special rooms for playing or learning, learning tools, and toys are mostly owned by respondents who live in the capital city (DKI Jakarta), namely 43.8%. Meanwhile, only 27.4% of respondents in Kupang and 28.8% of respondents in Pandeglang have learning materials. This is in line with the explanation of Miller and Votruba-Drzal (2013), which in their study explained that children living in urban and suburban areas are more exposed to enriching and stimulating activities, so they have a higher quality of learning environment. Meanwhile, learning objects and materials are important facilities to support children's learning process (Gogoi, 2015; Fidesrinur, 2020). Infant cognitive development is at the sensory-motor stage, where children understand the world through their senses and exploration of the surrounding environment. At the next stage, toddler age, the child's thinking stage is at the concrete operational stage, meaning that children learn things from concrete objects (Marotz & Allen, 2013). Therefore, it is expected that at these critical ages children have a high exposure to concrete experiences and learn through people and objects (Gogoi, 2015).

In regard to the unequal ownership of learning facilities, play objects, and literacy awareness between respondents, policies and interventions are needed to support parents and children who come from low social-economic level, low educational levels, and those who live in rural areas. This can be a case that requires further exploration. In this case, policymakers can focus on giving education about the importance of learning object for toddler, improving learning materials in rural areas, and providing equal availability or access to play for disadvantaged children to support optimal child development and learning processes.

Other dimensions in HOME that also support children development are parents' involvement and the application of structure. We found that those dimensions account for large percentage of low category scores. In the parents' involvement dimension, 31.8% of fathers reported being less/not involved in childcare. This finding also validated through negative correlation result between gender (male parent) with parents' involvement subscale. In the context of Indonesian culture, men are regarded as leaders in the household system. In this patriarchal culture, the social norm that applies is that men are responsible for the family financial stability, but they are not charged with household and childcare (Dewi, 2019; Vioni & Liansah, 2023). This is against the developmental needs of children, namely the presence of a father involvement that is not just about providing financial support. Studies have shown the benefits of father involvement on children's physical, cognitive, social-emotional and mental

health development (Rosenberg & Wilcox, 2006; McMunn, et.al., 2017). The behavior of fathers who are able to build healthy relationships with mothers can also positively influence the child's development (Rosenberg & Wilcox, 2006; Garcia, et.al., 2022). In addition, the results of this study show that 29.5% of toddlers are looked after by other children who are less than 12 years old which according to Badan Pusat Statistik (2022), it falls into the category of inappropriate child care based on Indonesian standard, and turns out to be a large percentage collected from research data. When looking at the main reasons for the lack of parental involvement in children's daily lives, in general it is due to low income parents working and being in different areas with the child. Looking at this non-ideal situation, providing education with an aim to prepare parents ready to provide sufficient childcare should be promoted to prevent the lack of parental involvement in children's daily lives. For parents who are economically self-sufficient and stable, the use of daycare services can also be an alternative solution to support more ideal child care.

Once again, education level and social economic found to have correlation with parents' involvement. There are 39.8% from participants who were considered as parents with low education levels (junior high school and below). They feel doubtful and unsure of their own educational abilities, so they rely or leave the responsibility to others to help their children in education, for example support from uncles, aunts or neighbors. Research shows that parents who has no school background rarely spend time playing with their children and mostly in the low socioeconomic status group. That can be one of the barriers related to parental involvement because they prioritize activities to earn a living so that they cannot be present in children's activities (Yulianti, Denessen, & Droop, 2019). This is also reinforced by Gan and Billige's (2019) research which states that parents who are supportive of their children tend to have more socio-economic resources to use in participating in their children's learning. Parents with high socioeconomic status also not only invest more time and resources to support their children's development and learning, but also have good quality interactions with their children (Li, Sun, & Dong, 2022). Playing does not only come with toys, doing daily household chores or play simple things with children are also one of the learning facilities to provide various benefits in child development (UNICEF, 2018; Tepper, Howell, Bennett, 2022). The provision of training programs on how to interact and play with children that are simple, applicable, and able to stimulate children's development need to be encouraged, especially for parents from low socioeconomic backgrounds.

Problems in the structure and organization dimension lie in parents' ability to apply rules consistently, run routines with a clear structure, and there are differences of parenting behavior between caregivers. In fact, structure is one of the important aspects in a child's life. Consistent parents can provide a sense of security, children will perceive parents as predictable and trustworthy. Moreover, children who have a secure foundation have greater courage to explore the environment (Jernberg & Booth, 2012). Although the structure and organization dimension accounted for a considerably low percentage, parents in DKI Jakarta seemed to be more aware and able to apply rules consistently (68.8%) compared to the other two cities. This could be due to the fact that Jakarta is a capital city area that has a hustle-style life, so the demands of society to be structured are very clear.

Nevertheless, a total of 86.6% of respondents were considered to have the ability to show acceptance, warmth, and nurture to children, it is a protective factor for children's development that must be maintained. A total of 49.6% of respondents showed acceptance by giving their children positive labels, such as "*my darling*"; "*pretty girl/handsome*"; "*good boy/girl*". Results also show that on average respondents can show a good acceptance

response when their child is expressing negative emotions. A total of 35.8% of respondents chose to calm an emotional child by hugging. When the child made a mistake, 54.5% of respondents were also able to invite children to discuss, provide explanations, and assist them to making solutions. This is an important parenting behavior considering that toddler is a critical period for children in developing emotion regulation competency. Parents' acceptance to the children's emotion will help them to regulate and express their emotions appropriately (Gottman, et. al., 1996; Thompson & Meyer, 2007). This behavior aligned with authoritative parenting style and positive discipline concept, where parents show a warm and open attitude towards children's behavior, but can still provide enough control over children (Baumrind, 1971; Nelsen, Erwin, Dufy, 2015). Children with nurturing parents respond more positively to direction from parents than children with punitive parents (Eisenberg, 1992). They also tend to grow into healthier, capable, and optimally functioning adults if they have a nurturing home environment (Smith, et al., 1994).

In this preliminary study, 86.2% of participants showed moderate to adequate scores on the "variety" dimension. Referring to the results of the questionnaire, varied stimulation that is often shown by parents is mostly bringing their children to relatives' homes. Indonesia as a country with a collective culture has a close kinship with relatives. Even in suburban and rural areas, it is normal for parents and their families to live in the same residential area. Children and parents also often do activities together, such as having the same meal time with parents. These activities could a protective factor for children's development, especially for their social development. Children who have more opportunities to meet other people have superior social-emotional development because they have facilities to engage with the real world.

This research shows parents' ACE does not have any correlation with responsiveness and learning material subscale. Despite this finding, the correlational data showed that parents' ACE has a low significant positive correlation with HOME total score, structure and organization subscale, and acceptance subscale. This finding is quite contradictory with other findings that suggest parents with trauma related to some challenges in parenting and often described in a negative light (Widom, Cajaza, DuMount, 2015; Siverns & Morgan, 2019). However, the intergenerational trauma does not hold for all parents, some researcher state that the cycle of abuse must understood within a wider point of view. Sometime social and cultural contexts also play an important role in parental experiences and could be a protective factor for parents with childhood trauma (Berlin, Appleyard, & Dodge, 2011; Widom, Cajaza, DuMount, 2015, Siverns & Morgan, 2019). This result can be a cornerstone for future research or intervention that aim to explore emotional areas of parenting.

In overall, in order to be more representative or to provide a more comprehensive description of parenting behavior in Indonesia, this research needs to be conducted in more areas/provinces. The various ethnic groups in Indonesia produce different cultures. Cultural diversity in Indonesia can be a variable that greatly influences research results. Therefore, a qualitative survey that focuses on cultural factors on proper parenting in Indonesia is recommended to be conducted to get a broader view of the implementation of responsive parenting and early learning implementation. The involvement of multidisciplinary experts will also enrich the results of the research, such as sociologists to examine cultural factors and medical teams to examine physical health factors of children.

Various studies have addressed the impact of responsive parenting practices and home stimulation on children's future success. Longitudinal studies can be conducted to evaluate

the output of parenting practices interventions on children's development, such as intelligence capacity, school readiness, academic performance, and behavior. Data from this preliminary study can be utilized as baseline data for the intervention. Providing education is a concrete and fundamental step that must be accomplished. The manifestation of parenting theory is not easy to implement, so providing education for parents needs more concrete and practical. Regular multidisciplinary consultation (eg. psychologist, doctor) and follow-up sessions also need to be presented as a form of social support for parents in overcoming challenges in implementing responsive parenting practices and providing a better stimulation toward children.

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References

- Badan Pusat Statistik. (2022). Profil Anak Usia Dini 2021. Retrieved from <https://www.bps.go.id>
- Baker, L. & Cunningham, A. (2009). Inter-parental Violence: The Pre-Schooler's Perspective and The Educator's Role. *Early Child Edu*, (37). doi:10.1007/s10643-009-0342-z
- Baumrind, D. (1971). Current patterns of parental authority. *Dev Psychol.*, 4(1 Pt.2):1–103.
- Berkes, J., Raikes, A., Bouguen, A., Filmer, D. (2019). Joint roles of parenting and nutritional status for child development: Evidence from rural Cambodia. *Dev Sci*, 22(5). DOI:10.1111/desc.12874
- Berlin, L.J., Appleyard, K., & Dodge, K.A. (2011). Intergenerational continuity in child maltreatment: Mediating mechanisms and implications for prevention. *Child Development*, 82(1), pp. 162-176. DOI:10.1111/j.1467-8624.2010.01547.x
- Booth, P.B., Jernberg, A.M. (2010). *Theraplay: Helping Parents and Children Build Better Relationships Through Attachment-Based Play*. San Francisco, CA: John Wiley & Sons, Inc.
- Caldwell, B., Bradley, R. (2003). *HOME Inventory Administration Manual*. Little Rock, AR: Print Design.
- Center for Community Child Health. (2017). The first thousand days: An evidence paper. Retrieved from <https://www.researchgate.net/publication/320057527>
- Center on The Developing Child Harvard University. (2015). *The science of early childhood development*. Retrieved from <https://developingchild.harvard.edu/>
- Davis-Kean P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 19(2), 294–304. <https://doi.org/10.1037/0893-3200.19.2.294>
- Davis-Kean, P.E., Waters, N., Tighe, L. (2021). The role of parent educational attainment in parenting and children's development, 30(2). <https://doi.org/10.1177/09637214219931>
- de Coulon, A., Meschi, E., Vignoles, A. (2011). Parents' skills and children's cognitive and non-cognitive outcomes. *Education Economics*, 19(5), pp. 451-474. <http://dx.doi.org/10.1080/09645292.2010.511829>
- de Vera, M.L.A. (2018). Long Term Effects of Abuse and Violence on Children's Behavior. *Am J Biomed Sci & Res.*, 4(5). doi:10.34297/AJBSR.2019.04.000832
- Dewi, D.M. (2019). The representation of patriarchy in Indonesian children's folk tales from Sumatera Island. *Lingua Cultura*, 13(3), pp. 167-172. DOI:10.21512/lc.v13i3.5646

- Dove, M.K., Neuharth-Pritchett, S., Wright, D.W., & Wallinga, C. (2015). Parental involvement routines and former Head Start children's literacy outcomes. *Journal of Research in Childhood Education*, 29(2): 173-186.
- Eisenberg, N. (1992). *The Caring Child*. Cambridge, Massachusetts: Harvard University Press.
- Fidesrinur, E.R. (2020). Parents involvement through play materials selection for toddlers in family setting. *Advances in Social Science, Education, and Humanities Research*, 503, pp. 15-26. DOI:10.2991/assehr.k.201205.079
- Fromberg, D.P. & Bergen, D. (2015). *Play from Birth to Twelve. Contexts, Perspectives, and Meanings*. New York: Routledge.
- Gan, Y. & Bilige, S. (2019). Parental involvement in home-based education and children's academic achievement in China. *Social Behavior and Personality An International Journal*, 47 (12):1-15. DOI:10.2224/sbp.8491
- Garcia, I.L., Fernald, L.C., Aboud, F.E., Otieno, R., Alu, E., Luoto, J.E. (2022). Father involvement and early childhood development in a low-resource setting. *Soc Sci Med*, 302. DOI:10.1016/j.socscimed.2022.114933
- Gogoi, S. (2015). Importance of teaching learning materials for young children. *International Journal of Current Research*, 7(09), pp. 20269-20273. Retrieved from <https://www.journalcra.com/article/importance%E2%80%99s-teaching-learning-materials-young-children>
- Gottman, J.M., Katz, L.F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10: 243–268.
- Harper, B., Ogbonnaya, I., McCullough, K. (2018). The Effect of Intimate Partner Violence on The Psychosocial Development of Toddlers. *J Interpers Violence*, (33). DOI:10.1177/0886260516628286
- Hentschel, E., Yousafzai, A.K., Aboud, F.E. (2021). *The Nurturing Care Framework: Indicators for Measuring Responsive Care and Early Learning Activities*. Retrieved from https://nurturing-care.org/wp-content/uploads/2021/03/Proposed_indicators.pdf
- Ho, G.W.K., Belcher, H.M.E., Budhathoki, C., & Tucker, S.J. (2015). Parents' use of praise and criticism in a sample of young children seeking mental health services. *Journal of Pediatric Health Care*, 30(1): 49-56. DOI:10.1016/j.pedhc.2015.09.010
- Kurdi, B. (2017). Investigating the Factors Influencing Parent Toy Purchase Decision: Reasoning & Consequences. *International Business Research*, 10(4). DOI:10.5539/ibr.v.110n4pl04

- Landry, S.H., Smith, K.E., Swank, P.R., et al. (2001). Does early responsive parenting have a special importance for children's development or is consistency across early childhood necessary? *Dev Psychol.*, 37: 387–403.
- Li, S., Sun, J., & Dong, J. (2022). Family socio-economic status and children's play behaviors: the mediating role of home environment. *Children (Basel)*, 9(9): 1385. DOI:10.3390/children9091385
- Luby, J.L., Rogers, C., & McLaughlin, K.A. (2022). Environmental conditions to promote healthy childhood brain/behavioral development: informing early preventive interventions for delivery in routine care. *Biological Psychiatry Global Open Science*, 2(3): 233-241. DOI:10.1016/j.bpsgos.2021.10.003
- Lucassen, N., Kok, R., Bakermans-Kranenburg, M.J., et al. (2015). Executive functions in early childhood: The role of maternal and paternal parenting practices. *British Journal of Developmental Psychology*, 33: 489–505. DOI:10.1111/bjdp.12112
- Mansur, H. & Setyaningsih, W. (2021). Analysis of parents' factors in providing developmental stimulation among pre-school age children in Pakis Sub-District, Malang, East Java. *Public Health and Preventive Medicine Archive*, 9(1): 25-31.
- Marotz, L.R., Allen, K.E. (2013). *Developmental Profiles: Pre-Birth Through Adolescence*. Belmont, CA: Wadsworth Cengage Learning.
- McMunn, A., Martin, P., Kelly, Y., Sacker, A. (2017). Fathers; Involvement: Correlates and Consequences for Child Socioemotional Behavior in the United Kingdom. *Journal of Family Issues*, 38(8), pp. 1109-1131. DOI:10.1177/0192513X15622415
- Miller, P. & Votruba-Dzal, E. (2013). Early academic skills and childhood experiences across the urban–rural continuum. *Early Childhood Research Quarterly*, (28). DOI: 10.1016/j.ecresq.2012.12.005
- Miller, P., Votruba-Drzal, E., Coley, R. (2019). Poverty and Academic Achievement Across the Urban to Rural Landscape: Associations with Community Resources and Stressors. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 5(2), pp. 106-122. DOI:110.138.151.140
- The National Academy of Sciences, Engineering, and Medicine. (2015). *Children Development and Early Learning: A Foundation for Professional Knowledge and Competencies*. Retrieved from <https://nap.nationalacademies.org/resource/19401/ProfKnowCompFINAL.pdf>
- Nelsen, J., Erwin, C., Duffy, R. (2015). *Positive Discipline The First Three Years*. New York: Harmony Books.
- Parveen, A. (2007). Effects of home environment on personality and academic achievements of students of grade 12 in Rawalpindi Division. [Research thesis, National University of Modern Languages].

- Rosenberg, J., Wilcox, W.B. (2006). *The importance of fathers in the healthy development of children*. USA: U.S. Department of Health and Human Service.
- Rubin, K.H., Maioni, T.L., Hornung, M. (1976). Free play behaviors in middle-and lower-class preschoolers: Parten and Piaget revisited. *Child Dev.*, 47: 414–419.
- Salinas, V., Valenzuela, E.A., Aranis, D.P. (2021). Cognitive development and parenting during early childhood among Mapuche and non-indigenous Chileans. *Early Childhood Research Quarterly*, 55, pp. 165-178.
<https://doi.org/10.1016/j.ecresq.2020.11.001>
- Senechal, M., & LeFevre, J. A. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, 73(2): 445-460.
- SIMFONI PPA. (2023). *Rate Anak Korban Kekerasan*. Retrieved from <https://kekerasan.kemenpppa.go.id/ringkasan>
- Smith, C.A., Cudaback, D., Goddard, H.W., & Myers-Walls, J.A. (1994). *National Extension Parent Education Model of Critical Parenting Practices*. Manhattan, KS: Kansas Cooperative Extension Service.
- Tepper, D.L., Howell, T.J., Bennett, P.C. (2022). Executive functions and household chores: Does engagement in chores predict children's cognition? *Australian Occupation Therapy Journal*, 69, pp.585-598. DOI:10.1111/1440-1630.12822
- Thompson, R.A. & Meyer, S. (2007). *Socialization of Emotion Regulation in the Family. Handbook of Emotion Regulation*. New York, USA: Guilford Press.
- Tierney, A.L. & Nelson III, C.A. (2009). Brain development and the role of experience in the early years. *Zero Three*, 30(2): 9–13.
- UNICEF. (2018). *Learning Through Play*. Retrieved from from <https://www.unicef.org/sites/default/files/2018-12/UNICEF-Lego-Foundation-Learning-through-Play.pdf>
- Vioni, E., Liansah, I. (2023). Gender Equility in Patriarchic Culture. *INCOLS ASSHER*, pp. 168-177. https://doi.org/10.2991/978-2-494069-23-7_16
- Warren, S.F. & Brady, N.C. (2007). The role of maternal responsivity in the development of children with intellectual disabilities. *Ment Retard Dev Disabil Res Rev.*, 13(4): 330–338. DOI:10.1002/mrdd.20177
- Widom, C. S., Czaja, S. J., & DuMont, K. A. (2015). Intergenerational transmission of child abuse and neglect: Real or detection bias? *Science*, 347(6229), pp.1480-1485. DOI:10.1126/science.1259917
- Yulianti, K., Denessen, E., & Droop, M. (2019). Indonesian parents' involvement in their children's education: a study in elementary schools in Urban and Rural Java, Indonesia. *School Community Journal*, 29, 253-278.

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