# Stimulation Application Training for Early Intervention Detection of Child Development for Teachers at TK Sejahtera 4 Tasikmalaya City

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#### ABSTRACT

Stimulation, early detection and early intervention is an effort to prevent developmental deviations in a comprehensive and coordinated manner that can be held in the form of partnerships between families (parents, child caretakers and other family members), the community (cadres, community leaders, professional organizations, non-governmental organizations) and professionals (health, education and social). PAUD and Kindergarten teachers have a role, one of which is an indirect target in the implementation of SDIDTK so that it is expected to help improve the quality of early childhood growth and development and readiness to enter formal education. The goal in the form of a community partnership program is to teach kindergarten teachers to use the SDIDTK application to make it easier to monitor children's growth and development. The method used is by training teachers about the SDIDTK application and then providing assistance when monitoring children's growth and development The expected outcome after conducting SDIDTK training for teachers using the SDIDTK application is that teachers will be skilled at monitoring child development. Conclusion This application can be useful for teachers in carrying out monitoring of children's growth and development

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#### INTRODUCTION

According to data in Indonesia, it shows that there are still many children who experience developmental disorders, the data also shows a lack of monitoring, stimulation, detection, early intervention, child growth and development, this is caused by a lack of tools, instruments and personnel who can carry out monitoring. (Windiyanti et al., 2021). In West Java, the growth and development detection program is still limited to children who are suspected of experiencing growth and development disorders. (Hendrawati et al., n.d.). From data from the Tasikmalaya City Health Service in 2016, less than 75% of growth and development monitoring was not carried out, this was caused by several factors, one of which was inadequate personnel in efforts to monitor growth and development as well as a lack of tools or instruments which were indeed inadequate for implementation. monitoring children's growth and development. (Indonesian Ministry of Health, 2016). Several studies state that children aged 0 - 6 years' development will increase vertically. This means that monitoring of children's growth and development is carried out appropriately (Putro, 2022)

The existence of two different but inseparable events is often known as growth and development. The large number of parents who do not realize that their children are experiencing delays in growth and development greatly causes many children to experience delays. (Inggriani et al., 2019) Stimulation of early detection and early intervention is an effort to prevent deviations in the growth and development of toddlers in a comprehensive and coordinated manner that can organized in the form of a partnership between the family (parents, child care providers and other family members), the community (cadres, community leaders, professional organizations, non-governmental organizations) and professional staff (health, education and social). One of the functions of education is to prepare quality children who can make the life of the nation and state intelligent, which can not only be assessed academically but in terms of social personality in forming a complete human being (Indriawati et al., 2022)

PAUD and Kindergarten teachers have a role, one of which is an indirect target in implementing Stimulation, Detection, Early Intervention, Child Growth and Development so that it is hoped that it can help improve the quality of early childhood growth and development and readiness entering formal education (Yuliani, 2018). One effort to improve physical, mental and psychosocial is by improving the growth and development process of children by nurturing children under 5 years and pre-school children (Yuliani, 2018). In the Journal (Nisa Karima, Nur Ayu Virginia Irawati, Giska Tri Putri, 2021) it is stated that several kindergarten teachers have not been exposed to early intervention detection stimulation training on child growth and development. (Nisa Karima, Nur Ayu Virginia Irawati, Giska Tri Putri, 2021). There are several things that must be played as a teacher, one of which is that the teacher must be able to be a good role model for students, and be able to teach and guide children who are unable to socialize, which is one of the disorders of anal development. (Andi, 2015). Apart from that, service Child growth and development services will be important because they can detect growth and development abnormalities early (Rahayu et al., 2021).

Apart from that, one way to prevent delays in children's growth and development is by providing stimulation of children's growth and development (Windiyani et al., 2019). Adequate health and balanced with optimal care in a place where children grow and develop is one of the the key to early intervention detection of child growth and development (Renityas et al., 2022). One effort to overcome the problems above is by using technology for health which is experiencing improvement and modernization in this day and age. An SDIDTK application is an application that stores some knowledge and can stimulate and detect early intervention in children's growth and development, according to the fact that artificial intelligence is a system designed in a certain field. (Susilowati et al., 2019).

The use of this application will of course be aimed at all health workers including the community, both parents, cadres, and teachers who work in early childhood education and kindergarten. The aim of

forming a community partnership program is to teach Kindergarten Teachers to use the Early Intervention Detection Stimulation Application for Child Growth and Development to make it easier to carry out monitoring of children's growth and development. Socialization of Early Intervention Detection Stimulation Training. Child Growth and Development using this application is not only limited to providing knowledge but will provide insight. and skills for teachers in monitoring children's growth and development and will directly apply the results of the training in the form of applications that can be used to monitor children's growth and development. Based on several problems experienced by partners, we as the Community Partnership Program implementation team provide several solutions that can be offered to partners. The solution that can be offered to partners is by teaching cadres about the Androidbased Early Intervention Detection Stimulation Application for Child Growth and Development so that it can make it easier to carry out growth and development checks on children. Apart from that, the solution offered is in the form of assistance when monitoring children's growth and development. The solution provided is expected to get the expected results.

The objectives of holding Stimulation Detection Early Intervention Training for Child Growth and Development are:

- After training, teachers are able to use the Android-based SDIDTK application
- Implementation of monitoring of children's growth and development using the Android-based Early Intervention Stimulation Detection Application for Child Growth and Development
- Able to understand and increase insight and knowledge about the importance of monitoring children's growth and development.

The expected outcome after carrying out Early Intervention Detection Stimulation Training on Child Growth and Development for teachers using the Early Intervention Detection Stimulation Application on Child Growth and Development is that teachers will be skilled in monitoring children's development.

# METHOD

Stages to complete the Stimulation Application Detection Early Intervention Training activity for Child Growth and Development:

- Manage community service permits with the relevant team and collaborate regarding the implementation of the service to be carried out
- Provide invitation letters to partners to carry out community service
- SDIDTK Application Training for Kindergarten Teachers at Prosperous Kindergarten Schools is planned to be carried out for 2 days starting from 07.30 until finished
- First Day Measuring teacher skills before training on the SDIDTK Application, Training teachers on how to use the Android-based SDIDTK application
- Evaluation by measuring the skills of teachers regarding the use of the SDIDTK Application as well as assisting with SDIDTK examinations at Sejahtera Kindergarten.

Preparation for this activity takes the form of coordinating with partners and determining when is the right time to carry out this activity

# RESULTS

Training activities on Stimulation Applications, Early Intervention, Child Growth and Development, were carried out from morning to evening, assisted by students, attended by Teachers at Prosperous Kindergarten 4, Tasikmalaya City and attended by the Principal of Prosperous Kindergarten 4, Tasikmalaya City for 2 days by providing training on how to use the Stimulation application. Early

Intervention Detection of Children's Growth and Development which will help teachers in monitoring children's development and at the end of the activity, an evaluation will be held for each teacher using the SDIDTK application for students as a form of early intervention detection of children's growth and development.

### DISCUSSION

Knowledge of the principles of child development is very important in obtaining a picture of a child's behavior as well as being an illustration of a child's developmental behavior, apart from that it can be useful in providing guidance and stimulation to reach the perfect stage of growth and development. (Niati, 2019). Good nutrition and good nutrition as well as appropriate parenting patterns will provide stimulation and growth for children. (Aceh & traditional cakes typical proper Acehfile:///C:/Users/INE/Desktop/MESAC/TERCER SEMESTRE/EDUCACION PARA LA SALUD/Using education theory to design a patient e-health education.pdf, 2020). If undernutrition will cause stunting in toddlers, in 2018 the stunting movement will continue to be carried out with efforts to improve healthy communities. (Purnama et al., 2023). Toddlers in Indonesia need to pay attention because toddlers in Indonesia are the nation's successors. One of the efforts to make the lives of toddlers smarter is by routinely monitoring children's growth and development (Yuliani, 2018).

One of the things that is most synonymous with children's intelligence is the development that occurs in children, so efforts are made to provide training to kindergarten teachers as an effort to prevent developmental deviations. Quality and comprehensive coaching assistance can be provided by stimulating deviations in children's growth and development. Monitoring of child growth and development or SDIDTK is not only carried out on children who experience growth and development disorders but on all children (Munir et al., 2022). Piaget's theory states that cognitive development is divided into four stages, first sensory motor, pre-operational, concrete operational and formal operational (Firman & Anhusadar, 2022). From an early age, children have begun to know what is called education so that they can develop their potential and aspects of their intelligence (Indriawati et al., 2022). A professional staff. The SDIDTK program is usually integrated with posyandu or early childhood/kindergarten activities, but it is recommended that SDIDTK examinations in PAUD/TK be carried out if there is a request from the Puskesmas, followed by midwife visits to the land. (Khairunnisa et al., 2022). Based on the results Research states that the trigger factor for the success rate of stimulation is the lack of support from other people or family. (Latifah et al., 2017)

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#### CONCLUSIONS

Based on the activities carried out by lecturers and students of the DIII Midwifery Study Program, Faculty of Health Sciences, Muhammadiyah University, Tasikmalaya, which were carried out at Kindergarten Sejahtera 4, Tasikmalaya City, it is hoped that it will be useful for increasing the skills and knowledge of Kindergarten Teachers regarding the importance of monitoring children's growth and development using the Early Intervention Detection Stimulation Application. Child Growth and Development.

# REFERENCES

- Aceh, kue tradisional khas, & kue tradisional khas Acehfile:///C:/Users/INE/Desktop/MESAC/TERCER SEMESTRE/EDUCACION PARA LA SALUD/Using education theory to design a patient e-health education.pdf. (2020). *No* 東関連指標に関する共分散構造分析 *Title. 2507*(February), 1–9.
- Andi, J. (2015). Pembangunan Aplikasi Child Tracker Berbasis Assisted Global Positioning System (A-GPS) Dengan Platform Android. *Jurnal Ilmiah Komputer Dan Informatika (KOMPUTA)*, 1(1), 1–8. elib.unikom.ac.id/download.php?id=300375
- Firman, W., & Anhusadar, L. O. (2022). Peran Guru dalam Menstimulasi Kemampuan Kognitif Anak Usia Dini. *Kiddo: Jurnal Pendidikan Islam Anak Usia Dini*, 3(2), 28–37. https://doi.org/10.19105/kiddo.v3i2.6721
- Hendrawati, S., Mardhiyah, A., Mediani, H. S., Nurhidayah, I., & Mardiah, W. (n.d.). *Pemberdayaan Kader Posyandu dalam Stimulasi Deteksi dan Intervensi Dini Tumbuh Kembang (SDIDTK) pada Anak Usia 0 6 Tahun Pendahuluan Pembangunan kesehatan merupakan bagian dari upaya membangun manusia seutuhnya , antara lain dengan diselenggarakannya . 1*(1), 39–58.
- Indriawati, P., Prasetya, K. H., Sinambela, S. M., & Taufan, I. S. (2022). Peran Guru dalam Mengembangkan Kompetensi Sosial pada Anak Usia Dini di TK Cempaka Balikpapan. *Edu Cendikia: Jurnal Ilmiah Kependidikan, 2*(03), 521–527. https://doi.org/10.47709/educendikia.v2i03.1917
- Inggriani, D. M., Rinjani, M., & Susanti, R. (2019). *Wellness and healthy magazine*. *1*(February), 115–124. Kementerian Kesehatan RI. (2016). *Pedoman Pelaksanaan SDIDTKA*.
- Khairunnisa, M., Purwoko, S., Latifah, L., & Yunitawati, D. (2022). Evaluasi Pelaksanaan Program Stimulasi, Deteksi, dan Intervensi Dini Tumbuh Kembang di Magelang. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 6*(5), 5052–5065. https://doi.org/10.31004/obsesi.v6i5.1885
- Latifah, U., Dina, I., & Mutiarawati, M. (2017). Peningkatan Ketrampilan Guru Paud Dalam Melakukan Stimulasi Deteksi Intervensi Dini Tumbuh Kembang Anak. *Jurnal Pengabdian Masyarakat Progresif Humanis Brainstorming*, *1*(1), 36–41. https://doi.org/10.30591/japhb.v1i1.686
- Munir, Z., Rora, R. R., Rohim, A., Kurniawan, R., Elvin, M., Avian, N., Muhaimin, A., & Budiawan, E. (2022). *Pendampingan Guru Tpa Ar-Rahmah Dengan Keterampilan Pengukuran Tumbuh Dan Kembang Siswa. 2*(2), 24–29.
- Niati, W. (2019). Al Fitrah Journal Of Early Childhood Islamic Education Wika Niati PERAN GURU PAUD DALAM MENSTIMULASI PERKEMANGAN BAHASA ANAK PADA KELOMPOK B USIA 5-6 TAHUN DI TK DARMA WANITA KAB.SELUMA. *Of*
- Early Childhood Islamic Education, 3(1), 38–48.
- Nisa Karima, Nur Ayu Virginia Irawati, Giska Tri Putri, S. M. (2021). Optimalisasi Aplikasi Deteksi Tumbuh Kembang Berbasis Android Di Puskesmas Simpur Bandar Lampung Pada Masa Pandemi COVID-19. *Jurnal Pengabdian Masyarakat Ruwa Jurai*.
- Purnama, D., Shalahuddin, I., Rosidin, U., Sumarni, N., & Witdiawati. (2023). Health Education for Mothers With Stunting Toddlers About Supplementary Feeding (PMT) in RW 01 Wetan City Village Sub-District Garut Kota. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 6(4), 4588–4596. https://doi.org/10.35568/abdimas.v6i4.3953
- Putro, K. Z. (2022). Peran guru dalam meningkatkan kemampuan sosial anak berkebutuhan khusus melalui program inklusi. *Jurnal Golden Age*, *6*(01), 151–159. http://e-journal.hamzanwadi.ac.id/index.php/jga/article/view/4623%0Ahttps://e-journal.hamzanwadi.ac.id/index.php/jga/article/download/4623/2592
- Rahayu, S. F., Anggeriyane, E., & Mariani, M. (2021). Upaya Penguatan Program Stimulasi, Deteksi Dan Intervensi Dini Tumbuh Kembang (Sdidtk) Melalui Pemeriksaan Antropometri Pada Anak

Prasekolah. *Jurnal EMPATI (Edukasi Masyarakat, Pengabdian Dan Bakti)*, *2*(1), 71. https://doi.org/10.26753/empati.v2i1.522

- Renityas, N. N., Sari, L. T., & Noviasari, I. (2022). Pemberdayaan Kader Posyandu Dalam Stimulasi Deteksi Dan Intervensi Dini Tumbuh Kembang Pada Anak Usia 0-5 Tahun. *Indonesian Journal of Professional Nursing*, *3*(2), 134. https://doi.org/10.30587/ijpn.v3i2.4920
- Susilowati, E., Mujiastuti, R., Ambo, sitti nurbaya, & Sugiartowo. (2019). Stumulasi, deteksi dan intervensi dini tumbuh kembang (SDIDTK) anak pada posyandu Kelurahan Penggilingan Jakarta Timur. *Jurnal Pengabdian Masyarakat Teknik*, *1*(2), 59–68.
- Windiyani, W., Sundari, S. W., & Nurdianti, D. (2019). Rancang bangun aplikasi Stimulasi Deteksi Intervensi Dini Tumbuh Kembang Anak (SDIDTK) bagi bidan di posyandu. *Jurnal Riset Kebidanan Indonesia, 3*(2), 87–94. https://doi.org/10.32536/jrki.v3i2.59
- Windiyanti, W., Susilawati, S., & Pratiwi, E. N. (2021). *DINI TUMBUH KEMBANG ANAK KNOWLEDGE* OF CADRES ABOUT STIMULATION OF EARLY INTERVENTION

DETECTION OF CHILD DEVELOPMENT penilaian Stimulasi Deteksi Intervensi Dini. 10(1), 50–53.

Yuliani, I. (2018). Pelatihan Stimulasi Deteksi Intervensi Dini Tumbuh Kembang (SDIDTK) Bagi Guru Dan Wali Murid Paud Pada PAUD Baitunnur Gentan Sinduharjo Ngaglik Sleman. *Jurnal Pengabdian Dharma Bakti, 1*(1 edisi Februari), 30–38. http://dharmabakti.respati.ac.id/index.php/dharmabakti/article/view/14

#### APPENDIX



FIGURE 1. Training activities