



Early Detection of Children with Special Needs by Educators

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ABSTRACT

The early detection of children with special needs is very important for educators, as they require special handling in the learning process so that they can develop optimally. The first important level for early detection is the early childhood education level. Early childhood teachers become agents who play a major role of early detection. Problems that occur due to late diagnosis of children with special needs often lead to learning and behavioural problems. If not handled properly, these disturbances will continue to the next level of further education. Knowledge of various types of disorders and early intervention in children with special needs must be the responsibility of early childhood education teachers to reduce the negative effects of any disruption that may occur. In order to assist teachers in early detection, this paper presents a study related to various developmental disorders that occur in children with special needs, and the skills, techniques and steps that are needed for early detection.

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1. INTRODUCTION

Education is the key to a nation's progress and teachers play a major role in educational change. Various changes that have occurred in the current era of globalisation have spurred the education system in Indonesia to continue to develop. With more than 50 million students and 2.6 million teachers in over 250,000 schools, the education system in Indonesia faces major challenges, as the third largest education system in the Asian region and the fourth largest in the world. The main challenge for Indonesian education currently is how to prepare the creation of Indonesia's 'golden generation' by 2045 due to the demographic bonus of Indonesia's population (Kemendikbud, 2017).

Educators need to update their competencies in order to be able to educate students in accordance with the demands of the time. Moreover, their knowledge and skills must also be improved in the initial process of identifying learning problems in their students (Sapriani, 2019). Likewise, students of the golden generation must also be given the opportunity to develop optimally in line with the stage of their development so that they do not become a burden on those around them and on the government (Kemendikbud, 2017).

Early childhood education pupils are expected to be ones who grow physically and mentally healthy. There are Indonesia's hope for the future and will become the backbone of the country, helping it to compete with other nations around the world. A golden generation that is physically and mentally healthy is a generation that will develop optimally at each development stage (Kemendikbud, 2017).

The terminology of early childhood education in Bahasa Indonesia were called Pendidikan Anak Usia Dini (Early Childhood Education or PAUD). PAUD educators need to have great sensitivity to their students' condition, especially their growth and development (Suryana, 2016). Early childhood is the foundation for development and will continue to influence the following development period. Students who grow physically and mentally healthy are those who develop optimally according to their stage of development (Black, Walker, Fernald, Andersen, DiGirolamo, Lu, McCoy, Fink, Shawar, Shiffman, Devercelli, Wodon, Vargas-Baron, & Grantham-McGregor, 2017; Berk, 2013; Santrock, 2007).

From the perspective of developmental psychology, there are several indicators of a healthy child. In physical development, a healthy child has a body whose growth is in accordance with corresponding developmental stage, with optimal gross and fine motor development. Psychological development is indicated by the development of thinking (cognition), emotional and social aspects. A healthy child will think, feel and take part in social interaction according to their developmental stage and in accordance with the environmental demands (Berk, 2013; Santrock, 2007).

In reality, not all children grow according to the normal development stages. There are groups of children who have obstacles to optimal development; in this case of this study, children who have developmental problems or disorders (Mash & Wolfe, 2016; Phares, 2020). In general learning settings, children with special needs will show delays in their knowledge development. The higher the level of education, the more difficulties the child will face if they do not receive the right diagnosis and therapy. Therefore, at the earliest level of education, in this case early childhood, the role of PAUD teachers is a vital part of the process in which children with special needs are given a proper diagnosis and receive treatment for their condition. Educators are the first professionals who interact directly with children in formal education settings (Ardianingsih & Mahmudah, 2017).

Preschool teachers can be early detectors of whether their students are experiencing obstacles or problems in their development and learning (Berk, 2013; Mash & Wolfe, 2016). Early detection is one of the initial attempts in educational settings to identify appropriate diagnoses and therapies for children, so that early treatment can be given to help the children develop optimally in the future (Ardianingsih & Mahmudah, 2017).

The role of early detection performed by PAUD teachers is vital, as based on research by Damayanti, Hamdan and Khasanah (2017) and the service programme of Yanuvianti et al. (2015), children with special needs who do not receive early diagnosis and treatment generally become a burden, which makes it more difficult for teachers at higher levels of education.

The benefits for children with special needs who are detected early include accurate diagnosis from the beginning of their learning process (Suryaningrum et al., 2016). If they are correctly diagnosed and given treatment at the early stages of their development, the disturbance to their learning process could be reduced. Early detection is the first step in making an accurate diagnosis that will help improve the condition of children with special needs in the future (Rinayati et al., 2021; Suryaningrum et al., 2016). Educators or teachers who make early detections and pass on referrals to experts will be informed of the correct diagnosis and given recommendations to better prepare them to handle children with special needs (Mangunsong, 2009; Suryaningrum et al., 2016). This paper aims to provide an overview of the information needed to improve the knowledge of educators, especially PAUD teachers, and help them to detect children with special needs in their classroom at an early stage.

2. RESEARCH METHOD

The method used was a literature study with a structured search method. Literature studies are review activities that always start from existing knowledge; the activities include exploring, observing, analysing and identifying knowledge (Arikunto, 2013). Literature studies or reviews are a critical evaluations of published materials with two main purposes; collecting scientific sources that are in accordance with the research topic, and drawing conclusions from the findings. The process of conducting a literature review begins with determining the topic, organising and collecting the literature, then making an outline and recording the findings. (Rahman, 2017). For this paper, we collected data from textbooks, published online journals, and international proceedings, mostly in the psychology and education disciplines. We gathered most of the information from more than 45 recently published resources materials, obtained offline from university libraries and online using search terms related to the study topic. The study materials date from the last 20 years, from 2000 to 2021.

The keywords adopted in the literature search were relevant with the research topic i.e.: 1) children with special needs; 2) inclusive early childhood education in Indonesia; 3) children with special needs in early childhood education or preschool setting. Afterward, we continue to the search using the term: 4) early detection for children with special needs; and subsequently the 5) early detection of children with special needs in preschool setting for educators. From this process, we drew up an outline in two sections for the assessment of children with special needs and the process of early detection in the preschool setting for educators. The final step of the literature review was to write up the findings and present them in the paper.

3. RESULTS AND DISCUSSION

Information regarding early detection of children with special needs by educators is divided into two sections. First, a literature review of children with special needs, to differentiate between normal children, normal children with problems and children with disorders or abnormalities. We also describe the differences in each type of child with special needs. Second, a definition of early detection and the related techniques for detecting children with special needs that can be used by teachers, especially early childhood education educators or PAUD teachers.

Definition of Children with Special Needs

According to Mash and Wolfe (2016), children with special needs are groups who face obstacles to developing optimally; in this case, children who have developmental problems or disorders. 'Special needs' is an umbrella term for a wide variety of diagnoses. Children with such needs may have developmental delays or disorders, medical conditions, or behavioural and learning issues. It is a term for children with learning problems or disabilities that make it harder for them to learn than other children of the same age (Mangunsong, 2009; Odom & Diamonds, 2018; Adnan, 2012; Desiningrum, 2017)

Normality-Abnormality in Children

In terms of developmental delays or problems, children can be classified into three main categories; (1) normal children, (2) normal children with problems and (3) children with disorders or abnormalities. In determining whether a child's behaviour is normal or not, there are certain issues that must be considered, especially not allowing the child to be labelled by their abnormalities. Diagnostic labels are often misunderstood and attached to the person, not only to their behaviour. Labels such as 'disturbed', 'abnormal', and 'crazy' can make the child feel stigmatized (Mikelsteins & Ryan, 2018).

In the concept of abnormal psychology, disorder or abnormality should be attached to the child's behaviour and not their identity. According to Mash and Wolfe (2016) the three main categories of problems in children are:

- (1) The individual displays a degree of distress, such as fear or sadness. The condition is temporal in nature, according to situations that occur and then gradually disappear. This condition falls under the normal child category.
- (2) The behaviour of the child indicates disabilities, such as an inability or limitation in activities in one or more functions, such as physical, emotional, cognitive, and behavioral areas. Behaviours generally appear over a period of time, and do not disappear quickly, even if the child shows the ability to learn how to eliminate problems. This represents the category of normal children with problems.
- (3) The individual has a condition of distress or disability that can result in further effects such as death, pain, limitation, or loss of psychological freedom. This is the category of children with disorders or abnormalities.

Classification of Children with Special Needs

To classify a child as normal or with special needs, they need to be put in the category of those with disorders or abnormalities. This is because children with special needs require different handling in their education because of their developmental delays or abnormalities (Adnan, 2012; Mash & Wolfe, 2016, Suryaningrum et al., 2016). In addition, there are also other classifications of children with special needs, related to those with limitations in one or more abilities, such as physical, motor, cognitive, emotional and/or social (Mangunsong, 2009; Desiningrum, 2017). In our paper, the limit of classification of children with special needs refers to those that have disorders or abnormalities that may be detected in early childhood education (preschool), based on *The Diagnostic and Statistical Manual of Mental Disorders* (Nuckols & Nuckols, 2013). Below are the categories of developmental disorders in children who are classified as abnormal in the preschool context :

(a) Intellectual Disability

Definition: Intellectual Disability is often referred to as mental retardation. Its characteristics are often associated with mental limitations in the fields of reasoning, planning, and judgment, which have an impact on adaptive adjustments, such as the conceptual, social, and practical skills needed in everyday life (Mash & Wolfe, 2016; Schalock, 2010; Phares, 2020, Tassé et al, 2012; Israel & Wicks-Nelson, 2020).

The behaviour at School: the capacity to think more slowly than peers of their age; delays in daily skills, for examples the skill of putting on one's own clothes, taking a shower, eating, going to the toilet, and using existing facilities. The child often associates with other children under their own age. They also find it difficult to socialise (Mash & Wolfe, 2016).

Characteristics or Symptoms: a lack of comprehension; difficulties in understanding commands, even though they have been explained repeatedly; and quick to forget (things that are learned one day are forgotten the next. Attention is very easily distracted by circumstances. They are often dumbfounded, do not respond appropriately, and remain silent (Mustikawati & Mugianingrum, 2015; Mash & Wolfe, 2016; Schalock, 2010) Apart from these symptoms, intellectually disabled children also experience obstacles to the development of their adaptive behaviour (self-help skills). For example, they are not able to control urination and defecation even when they are 4 or 5 years old; and wearing their own clothes or take a shower. The child has a history of delays in physical and motor development; for example at 10 months of age they are being able to crawl; at 15 months of age they cannot walk alone; there are delays in language development, and they are not able to babble 'mamama dadada' at 12 months of age and are unable to say meaningful words at 24 months of age (Mash & Wolfe, 2016; Schalock, 2010; Tassé, et al, 2012; Israel & Wicks-Nelson, 2020).

(b) Communication Disorder

Definition: The child has difficulties in producing words correctly, in using verbal language in communicating, or in understanding what other people say (Mash & Wolfe, 2016; Hedge & Pomaville, 2021; Israel & Wicks-Nelson, 2020).

The behaviour at School: The child is only able to use non-verbal language to convey ideas (hand drawing, pointing, etc.), sometimes accompanied by certain syllables that are generally poorly understood: "aaaauuu"; "Numm u-u". The child often looks frustrated or angry when they want to say is not understood. They usually often shout if they want to say something and have very unclear articulation of speech. Their arrangement of sentences is irregular, making it difficult or time-consuming to understand them (Mash & Wolfe, 2016; Hedge & Pomaville, 2021).

Characteristics or Symptoms: There are certain characteristics in communication disorders; for example, the child uses a limited number of words in communication; a limited language structure compared to applicable language rules; and limitations in speaking, which can be seen from the difficulty in arranging or placing words in a sentence to explain something. The disturbance in communication is not accompanied by sensory problems, motor problems, or other medical and neurological problems. Other characteristics include stuttering, manifested as repeated sounds or syllables, long letters, sounds or syllables that sound like the child is saying a whole word, and broken words such as 'pause'. The problem can also manifest itself as inaudible sounds or syllables, or the child suddenly becoming silent in the middle of pronouncing a word. The child also shows unnecessary use of words or changing words or syllables when speaking (Mash & Wolfe, 2016; Hedge & Pomaville, 2021; Israel & Wicks-Nelson, 2020).

(c) Attention Deficit and Hyperactivity Disorder (ADHD)

Definition: According to the American Psychology Association, ADHD is demonstrated by behaviour such as being unfocused (inattentive), hyperactive, and impulsive (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Nuckols & Nuckols, 2013).

The behaviour at School: The common condition of children with ADHD is shown by them being unable to stay still, running around at every opportunity, jumping, knocking into things, or being restless when sitting in class. They are also very reactive when seeing, hearing, or holding something, and are careless. Other behaviour includes the difficulty to focus when speaking, and they often seem to be ignorant of intentional or unintentional. They usually forgetful; for example, forgetting instructions or forgetting their possessions (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Rief, 2015).

Characteristics or Symptoms: ADHD children usually have three main problems: (1) problems with focusing, (2) impulsive behaviours, and (3) hyperactive behaviour problems. In problems with focusing, children with ADHD seem to easily understand what is being learned, which makes them appear to be smart, but they refuse to listen. ADHD children also have difficulty in focusing on paying attention and are easily distracted by surrounding situations. They also move around frequently, are unable to stay

still, bang on tables, walk around in class, and cannot sit quietly. They often forget to bring what they have been told to and frequently lose things because they do not know where to keep them. They usually cannot focus for a long time, making them appear lazy in completing tasks and in playing games for a long time, as they become bored quickly. They often fail to complete tasks they have started. In social interaction, children with ADHD talk a lot or actively, and they do not experience obstacles to their social development and adaptive behaviour. Regarding impulsive behaviour problems, ADHD children tend to act before thinking. Individuals are closely controlled by their feelings, so they react quickly. They are also less able to perform activities in sequence and usually having difficulties in prioritising activities. ADHD children are not able to queue or wait for their turn to play. In social settings, they like to interrupt other people's conversations or answer questions before they have been asked. They are also easily disturbed and irritated. Impulsive children can also quickly switch from one activity to another. In hyperactive behaviour problems, the ADHD child shows excessive and seemingly aimless movements, and is unable to control and coordinate their motor activities, meaning that important and insignificant movements cannot be distinguished. The child also seems to be move continuously without becoming tired (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Rief, 2015; DuPaul & Kern, 2011).

(d) Conduct Problems / Oppositional Defiant Disorder

Definition: The indicators of conduct problems or oppositional defiant disorder can be observed at preschool age. Over time, these can develop into pathological disorders, such as psychopathic behaviour. Conduct problems in children can be described as antisocial behaviour, manifested by inappropriate behaviour and a destructive attitude. With oppositional defiant disorder, children usually like to perform activities that are forbidden and always rebel against authority figures, such as parents or teachers. The behaviour they display is mostly governed by their desire and is not in accordance with the family, social norms, individuals, or even the rights of others. Children with this problem have difficulty controlling their behaviour and emotions; they often grow up and thrive in disadvantaged families and unsupportive living environments (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Rowe et al. 2010).

The behaviour at School: In formal education setting, the child with conduct problems or oppositional defiant disorder tend to look as child with high aggressiveness both verbally and non-verbally (physically). They often deliberately hurt others or damage objects around. They easily go mad or have tantrums. In social interaction, they like to interrupt what other people do on purpose. The older the age, the more severe the behavior can be, for example, crossing out properties, destroying property that is not his/her (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Rowe, et al, 2010; Pardini & Frick, 2013).

Characteristics or Symptoms: In general, the characteristics of oppositional behavior appear mostly in preschool children (Haswell, 1981). They are usually categorised into four main characteristics: (1) property violations, (2) aggression, (3) status violations and (4) oppositional behaviour. In property violations, the children usually show tendencies to like torturing or disturbing animals or plants. They also like to perform vandalism by damaging school facilities. Child with property violations also have symptoms such as stealing and most of what they say is lies. Regarding the characteristics of aggression, children with conduct problems have tendencies to escape or leave their house or class without permission. If they make promises, they will break them, so they always remain unfulfilled. They also like to skip school and break rules intentionally and have a history of trying chemical or banned substances, such as cigarettes or liquor, from an early age. In relation to the characteristics of status violations, the children deliberately attack others both verbally and physically. They like to take revenge on or show intense jealousy towards others. Their attitude and behaviour have a certain degree of rudeness; they are always blaming other people. They like to fight or bully their friends and other people. Regarding oppositional behaviour, the child with conduct problems appears to be temperamental or often out of control. They usually challenge and oppose others, and often fight or argue with authority figures such as teachers and parents. They are often angry, stubborn and like to annoy people. Other symptoms are that they feel resentful towards authority figures and are easily

provoked by their emotions or emotional disturbances Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020).

(e) Anxiety Disorders

Definition: Anxiety problems in children mean that mood conditions are characterised by strong negative emotions and signs of physical complaints or tension, which the child tries to anticipate so that no harm or bad luck will appear in the future (Headley & Campbell, 2013; Mash & Wolfe, 2016). Such disorders include separation anxiety disorder, specific phobias, social anxiety disorder, selective mutism, panic disorder, general anxiety disorder, and obsessive-compulsive disorder. However, the most common issue in preschool children who show anxiety problems is separation anxiety. Separation anxiety disorder (SAD) is one of the most common such disorders in childhood and is predictive of adult anxiety disorders, especially panic disorder (Kossowsky et al., 2013; Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020).

The behaviour at school: Children with anxiety problems usually appear tense when entering a new environment. There are also anxiety reactions such as crying or tantrums, or panic when approaching a new location or place. In separation anxiety, children will cry and display anger or tantrums if they are separated from their attachment figure. This could be their parents, caregivers, or grandparents, etc. This disorder is indicated by excessive anxiety or fear due to separation from the home or figures that are emotionally attached to the child (Kossowsky et al., 2013; Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020).

Characteristics or Symptoms: Anxious behaviour that is a problem when compared to other children. Usually the response is intense and abnormal, in particular repeatedly indicating stress conditions when children anticipate or in are situations when they are separated from home or from significant attachment figures. They tend to persistently and excessively show concerns about losing this figure or worry that the figure will be hurt by illness, accident, or death. They also show intense concern about unpleasant events such as being missing, kidnapped, suffering accidents, or suddenly becoming ill when they are separated from home or the attachment figure. The anxious child usually refuses to go outside the house and to go to school. Anxious children who are separated most of their time feel afraid or reluctant to be alone or without their attachment figure. They refuse to sleep alone or sleep away from home without this figure and tend to having nightmares. They persistently and excessively suffer physical complaints such as headaches, stomach pain, vomiting/nausea, when separated from the figure (Masi et al., 2001; Mash & Wolfe, 2016).

(f) Autism Spectrum Disorder

Definition: Autism is a complex neurological development disorder that is shown by abnormalities in social communication and unusual behaviour. It is characterised as a deficiency, with persistence in the lack of social interaction and communication skills that are seen in the rigidity and repetition of the same interests and behaviour (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Nuckols & Nuckols, 2013; Wetherby & Prizant, 2000).

The behaviour at School: Autistic children sometimes show behaviour such as disliking interaction with teachers, and being annoyed when in the presence of teachers. When they grow older, they usually talk less. Autistic people rarely speak fluently, and often use language others do not understand. It is rare for them to show special emotional expressions and body language like children in general. Most of the time, they are busy with their own activities and seem not to be interested in what is happening outside themselves or what other children are doing in the classroom (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020; Wetherby & Prizant, 2000).

Characteristics or Symptoms: The most common symptom of autistic children is that they do not like to make eye contact. They usually do not want to speak when spoken to and do not respond when addressed. In social interaction settings, they do not want to play with other children and are engrossed in their own activities. They usually have two-way communication, and tend to refuse to communicate.

They use non-verbal language that is awkward, strange and difficult to understand. Their emotions are flat, but if their activities are disturbed, they will go berserk or easily display tantrums. The autistic child makes certain movements continuously that appear rigid and repetitious, usually flapping their hands or rocking their body (Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020).

Early Detection of Children With Special Needs

Early detection is a comprehensive screening effort to find developmental irregularities and to identify and recognise risk factors in children. Through this, irregularities in child development can be identified at an early stage, so that prevention, stimulation, healing and recovery efforts can be given with clear indications at critical times of the development process (Direktorat PSLB, 2007). Early detection involves the first efforts to identify the problems of a child who is suspected of having a disturbance or disorders and who needs further examination or diagnosis by a professional or expert. In this case, the diagnosis is authorised by a pediatrician or psychologist (Chamidah, 2009; Mangunsong, 2009; Garnida, 2015; Ardianingsih & Mahmudah, 2017; Olivia, 2015; Desiningrum, 2017). This paper focuses on the information that is important in the early detection of students made by preschool educators.

Early Detection Techniques

Methods or techniques that can be used by early childhood education teachers to detect at an early stage students who are suspected of having developmental problems or disorders can be grouped into three categories (Chamidah, 2009; Ardianingsih & Mahmudah, 2017; Olivia, 2015; Desiningrum, 2017).

(1) Observation

The preschool teacher who wishes to make an early detection must obtain data collected through direct observation of children in classroom and informal settings, such as playtime. A list of the important behavioural aspects to observe can be seen in Table 1. These need to be compared with the behaviour of other children of the same age. If the number of children observed is lower or greater than their peers, it is necessary to make the assumption that the children are suspected of having special needs and the next steps must be taken.

Table 1. Child Behavior List for Observation

DEVELOPMENT ASPECT	BEHAVIOUR TO BE OBSERVED
Gross Motor Aspect	<ul style="list-style-type: none"> - the child moves a lot - when sitting on a bench they often move their feet - they cannot sit still - they go up and down the stairs one foot at a time (not using alternate legs) - they cannot play hopscotch (<i>engklek</i> in Bahasa Indonesia), - they can't stop from running easily - they cannot stand upright, always needing a wall to lean on - they are afraid of getting off a slide - they cannot catch a ball / throw a ball properly - they cannot jump off a chair - they cannot walk upright and walk unsteadily
Fine Motor Aspect	<ul style="list-style-type: none"> - holding the pencil in the grip - they can't hold a pencil properly yet - if asked to draw, they still just scribble and cannot draw a certain shape - they can't draw a straight line yet - they can't draw a circle yet - their colouring of pictures is still not neat - they cannot fold paper neatly - they are stiff when using scissors - they cannot insert their fingers into the scissor holes properly - they can't hold a block with they thumb and index finger yet

	<ul style="list-style-type: none"> - they are unable to make a little ball from playdough with a circular motion with their palms - they cannot make sausages from night candles with a twisting motion with their palms - they cannot eat using a spoon yet - they cannot button their own clothes yet - they cannot put on their own shoes yet
Cognitive Aspect	<ul style="list-style-type: none"> - they are not able to count from 1 – 10 to and then to 20 - they cannot name the four basic colours - they do not understand the difference between big-small, heavy-light, bad-good etc - they can't sort objects from largest to smallest - they do not know the directions (right-left, up-down, front-back) - they do not understand the concept of time (now, yesterday, tomorrow) - they do not know their home address yet - they do not yet know the names of familiar objects in the environment and their functions - they do not understand the concept of addition and subtraction - they cannot focus on the teacher yet - they find it easy to forget - they find it difficult to understand information
Language Aspect	<ul style="list-style-type: none"> - they cannot distinguish car or train sounds yet - they cannot distinguish between animal sounds yet - they do not understand simple commands yet - they cannot pronounce vowels clearly - they cannot pronounce consonants correctly - their articulation is not clear - they slur certain letters - they cannot form complete sentences - they are not able to ask questions in understandable form - they cannot answer questions
Social Aspect	<ul style="list-style-type: none"> - they cannot wait their turn in a game - they do not understand food etiquette (before eating, wash your hands; read a prayer before eating; food must be finished; do not talk when eating; when finished eating put your plate in the sink) - they cannot play together with friends yet - they are unable to follow the rules of a game - they are not used to defecating in a toilet - they are not orderly when using objects according to their function - they are still unruly - they do not understand the implications of breaking rules - they are still prone to tantrums if their desires are not fulfilled - if angry, their expression is exaggerated - they are still whiny - they are still very dependent on the teacher - they cry when the mother/caregiver leaves them at school

Remarks : Compiled from Bentzen (2000), Sattler and Hoge (2006), Mash and Wolfe (2016), Israel and Wicks-Nelson (2020), Chamidah (2009), Sattler (2002), Ardianingsih and Mahmudah (2017), Olivia (2015), Desiningrum (2017), Hamdan et al. (2020) and Hamdan et al. (2021).

(2) Interviews

The early childhood educator involved in early detection must collect data through interviews with parents, caregivers or other people in contact with the children daily so that the observation of the teacher in the classroom can be supported. Data that need to be extracted include pregnancy history, birth history, and post-birth history, as well as problematic behaviours that appear in the home setting and in the environment around the house. If there are signs of problems during pregnancy, birth and infancy (post-birth), as well as consistency in problem behaviour both at home and at school, the child can be strongly suspected of having problems or developmental disorders and is categorised as a "suspect" child with special needs (Sattler & Hoge, 2006; Whitcomb, 2013; Mash & Wolfe, 2016; Olivia, 2015; Israel & Wicks-Nelson, 2020).

(3) Expert Referral

The observational and interview data collected become material to consider if children are suspected as having special needs and need to be properly assessed by experts. The data will be used to write referral letters to these experts. This letter data will contain information from observation and the interviews and indicate that the child is strongly suspected of having behavioural problems in both the home and school settings. The letter will be addressed to a pediatrician (in the case of physical problems) or a child psychologist (in the case of behavioural problems) for further examination and treatment. In the letter, the main data that has been obtained by the teacher should be conveyed, making a strong case that the child has disruptive problems (special needs). It is also necessary to convey that the teacher requests the results of the expert recommendations for handling of the matter in school (Lindsay, 2018; Sattler & Hoge, 2006; Whitcomb, 2013; Mash & Wolfe, 2016; Israel & Wicks-Nelson, 2020).

Early Detection Flowchart

If the teacher has a child or a number of children whose are suspected of having problems or are experiencing obstacles to their development and may be categorised as children with special needs, then the teacher can take the steps for early detection shown in Figure 1 (Chamidah, 2009; Ardianingsih & Mahmudah, 2017; Olivia, 2015; Desiningrum, 2017).

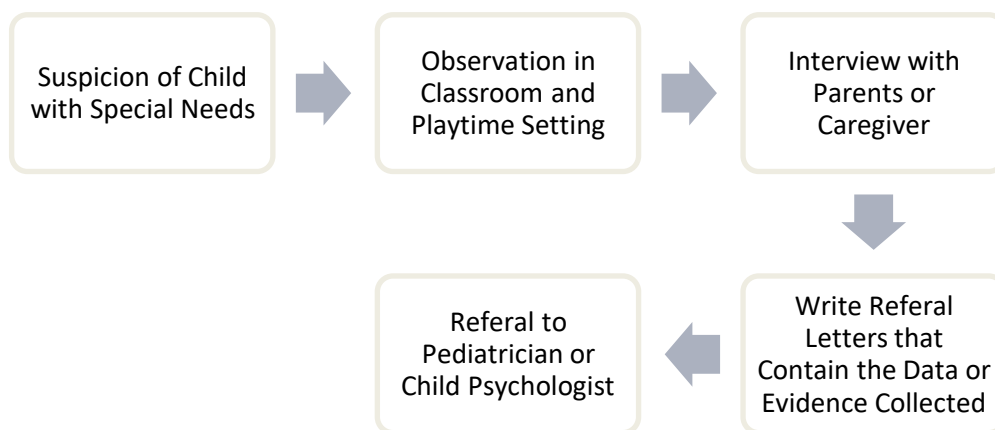


Fig. 1: Early detection flowchart

4. CONCLUSION

Based on the description of the data from the literature study, it can be concluded that it is important to conduct early detection at the earliest level of education, especially by preschool educators or teachers. These need to differentiate between normal children and those with special needs based on knowledge of the classifications and list of behaviours that indicate impairment in child development. Teachers who already have

children suspected of having special needs need to make observations in school and play settings and also conduct interviews with caregivers to strengthen the data. The final step in early detection that the teacher needs to make is to write referral letters to expert for further examination and treatment.

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REFERENCES

- Adnan, E. (2012). Mengenal Anak Berkebutuhan Khusus. Bahan Ajar Diklat Berjenjang: Diklat Dasar [Getting to Know Children with Special Needs. Tiered Education and Training Teaching Materials: Basic Education and Training]. Direktorat Pembinaan Pendidik Dan Tenaga Kependidikan PAUD NI Direktorat Jenderal PAUD NI Kementerian Pendidikan Dan Kebudayaan
- American Psychiatric Association, & American Psychiatric Association. (2013). DSM 5. *American Psychiatric Association*, 70.
- Ardianingsih, F., & Mahmudah, S. (2017, September). Early detection of child development deviation training program in the context of special needs children identification. In *9th International Conference for Science Educators and Teachers (ICSET 2017)* (pp. 535-539). Atlantis Press. <https://doi.org/10.2991/icset-17.2017.88>
- Arikunto, S. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktik* [Research Procedure: A Practical Approach]. Jakarta: Rineka Cipta
- Baker, B. L., Brightman, A. J., Blacher, J. B., Heifetz, L. J., Hinshaw, S. R., & Murphy, D. M. (2004). *Steps to independence: Teaching everyday skills to children with special needs*. Baltimore: Brookes Publishing Company.
- Bentzen, W.R. (2000). *Seeing Young Children: A Guide to Observing and Recording Behavior*. Toronto: Thomson Learning, Inc.
- Berk, L. E. (2013). *Child development*. 9th Edition, London, Pearson.
- Black, M. M., Walker, S. P., Fernald, L. C., Andersen, C. T., DiGirolamo, A. M., Lu, C., ... & Lancet Early Childhood Development Series Steering Committee. (2017). Early childhood development coming of age: science through the life course. *The Lancet*, 389(10064), 77-90. [https://doi.org/10.1016/S0140-6736\(16\)31389-7](https://doi.org/10.1016/S0140-6736(16)31389-7)
- Chamidah, A. N. (2009). Deteksi dini gangguan pertumbuhan dan perkembangan anak [Early detection of growth and development disorders in children]. *Jurnal pendidikan khusus*, 5(2), 83-93. <https://doi.org/10.21831/jpk.v4i3.789>
- Damayanti, T., Hamdan, SR, Khasanah, AN. (2017). Kompetensi Guru di Dalam Proses Pembelajaran Inklusi pada Guru SD Negeri di Kota Bandung [Teacher Competence in Teaching Students with Special Needs at SDN Bandung City]. *SCHEMA, Journal of Psychological Research* 1(1). Fakultas Psikologi Unisba. <https://doi.org/10.29313/schema.v0i0.1947>
- Desiningrum, D. R. (2017). *Psikologi anak berkebutuhan khusus* [Psychology of children with special needs]. Yogyakarta: Psikosain.
- Direktorat PSLB (2007). *Pedoman khusus identifikasi anak berkebutuhan khusus* [Special guidelines for identifying children with special needs]. Jakarta: Direktorat PSLB
- DuPaul, G. J., & Kern, L. (2011). Young children with ADHD: Early identification and intervention. American Psychological Association.
- Garnida, D. (2015). *Pengantar Pendidikan Inklusif* [Introduction to Inclusive Education]. Bandung: Refika Aditama.
- Hamdan, SR., Kusdiyati, S., & Sari, Y. (2020). *Buku Ajar Psikologi Abnormal Anak dan Remaja* [Textbook of Abnormal Psychology of Children and Adolescents]. Fakultas Psikologi Universitas Islam Bandung
- Hamdan, SR., Borualogo, IS., & Sari, Y. (2021). *Buku Ajar Psikologi Perkembangan Anak* [Child Development Psychology Textbook]. Fakultas Psikologi Universitas Islam Bandung
- Haswell, K., Hock, E., & Wenar, C. (1981). Oppositional behavior of preschool children: Theory and intervention. *Family Relations*, 440-446.

Headley, C., & Campbell, M. (2013). Teachers' knowledge of anxiety and identification of excessive anxiety

- in children. *Australian Journal of Teacher Education*, 38(5), 48-66. <http://dx.doi.org/10.14221/ajte.2013v38n5.2>
- Hegde, M. N., & Pomaville, F. (2021). *Assessment of communication disorders in children: resources and protocols*. San Diego: Plural Publishing Inc.
- Israel, A. C., Malatras, J. W., & Wicks-Nelson, R. (2020). *Abnormal child and adolescent psychology*. Routledge.
- Kemendiknas. (2012). *Kebijakan Peningkatan Layanan Melalui Pendidikan Inklusif* [Service Improvement Policy Through Inclusive Education]. Kementerian Pendidikan dan Kebudayaan Direktorat Jenderal Pendidikan Dasar.
- Kemendikbud. (2017). *Peta Jalan Generasi Emas Indonesia 2045* [Indonesia's Golden Generation Roadmap 2045]. Jakarta : Kementerian Pendidikan dan Kebudayaan Republik Indonesia. <https://paska.kemdikbud.go.id/wp-content/uploads/2018/08/170822-V.2-Generasi-Emas-2045-.pdf>
- Kossowsky, J., Wilhelm, F. H., Roth, W. T., & Schneider, S. (2013). Separation anxiety disorder in children: disorder-specific responses to experimental separation from the mother. *Journal of Child Psychology and Psychiatry*, 53(2), 178-187. <https://doi.org/10.1111/j.1469-7610.2011.02465.x>
- Lindsay, G. (Ed.). (2018). *Screening for children with special needs: multidisciplinary approaches* (Vol. 36), Routledge.
- Mangunsong, F. (2009). *Psikologi dan Pendidikan Anak Berkebutuhan Khusus* [Psychology and Education of Children with Special Needs]. Depok: LPSP3
- Mash, E. J., & Wolfe, D. A. (2016). *Abnormal Child Psychology*. Boston: Cengage Learning.
- Masi, G., Mucci, M., & Millepiedi, S. (2001). Separation anxiety disorder in children and adolescents. *CNS drugs*, 15(2), 93-104. <https://doi.org/10.2165/00023210-200115020-00002>
- Mikelsteins, Z., & Ryan, T. G. (2018). Increasing Inclusion and Reducing the Stigma of Special Needs in Latvia: What Can We Learn from Other Countries? *International Journal of Educational Reform*, 27(4), 379-395. <https://doi.org/10.1177/105678791802700404>
- Mustikawati, N., Anggorowati, D., & Mugianingrum, O. E. (2015). Kemampuan sosialisasi anak retardasi mental [The socialization ability of mentally retarded children]. *Jurnal Ilmiah Kesehatan*, 8(2), 969-15.
- Nuckols, C. C., & Nuckols, C. C. (2013). *The diagnostic and statistical manual of mental disorders*, (DSM-5). Philadelphia: American Psychiatric Association.
- Odom, S. L., & Diamond, K. E. (2018). Inclusion of young children with special needs in early childhood education: The research base. *Early Childhood Research Quarterly*, 13(1), 3-25. [https://doi.org/10.1016/S0885-2006\(99\)80023-4](https://doi.org/10.1016/S0885-2006(99)80023-4)
- Olivia, S. (2015). *Deteksi Dini Psikologi* [Psychological Early Detection]. Elex Media Komputindo.
- Pardini, D., & Frick, P. J. (2013). Multiple developmental pathways to conduct disorder: Current conceptualizations and clinical implications. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 22(1), 20.
- Phares, V. (2020). *Understanding abnormal child psychology*. John Wiley & Sons.
- Porter, L. (2002). *Educating young children with special needs*. SAGE.
- Rahman, A. A. (2017). *Metode Penelitian Psikologi: langkah cerdas menyelesaikan skripsi* [Psychological Research Methods: smart steps to complete thesis]. PT Remaja Rosdakarya Offset-Bandung.
- Rowe, R., Costello, E. J., Angold, A., Copeland, W. E., & Maughan, B. (2010). Developmental pathways in oppositional defiant disorder and conduct disorder. *Journal of Abnormal Psychology*, 119(4), 726. <https://doi.org/10.1037/a0020798>
- Rief, S. F. (2015). *The ADHD book of lists: A practical guide for helping children and teens with attention deficit disorders*. John Wiley & Sons.
- Rinayati, R., Erawati, A. D., Wahyuning, S., & Harsono, H. (2021). Peningkatan Keterampilan Guru PAUD dalam Menstimulasi dan Deteksi Dini Perkembangan Balita [Improving the Skills of PAUD Teachers in Stimulating and Early Detection of Toddler Development]. *E-Dimas: Jurnal Pengabdian kepada Masyarakat*, 12(1), 25-31. <https://doi.org/10.26877/e-dimas.v12i1.4566>
- Santrock, J. W. (2007). *Child development*. New York: McGraw.
- Sapriani, R. (2019). Profesionalisme guru paud melati terpadu dalam meningkatkan Mutu pendidikan pada era revolusi industri 4.0 [Integrated early childhood teacher professionalism in improving the quality of education in the era of the industrial revolution 4.0]. In *Prosiding Seminar Nasional Program Pascasarjana Universitas PGRI Palembang* (Vol. 12, No. 01).

-
- Sattler, J. M. (2002). *Assessment of Children Behavioral and Clinical Application*. Fourth Edition. La Mesa California: Jerome M. Sattler Publisher, Inc.
- Sattler, J. M., & Hoge, R. D. (2006). *Assessment of children: Behavioral, social, and clinical foundations*. USA: Publisher Inc.
- Schalock, R. L., Borthwick-Duffy, S. A., Bradley, V. J., Buntinx, W. H., Coulter, D. L., Craig, E. M., ... & Yeager, M. H. (2010). *Intellectual disability: Definition, classification, and systems of supports*. Washington, DC: American Association on Intellectual and Developmental Disabilities.
- Suryana, D. (2016). *Pendidikan Anak Usia Dini: Stimulasi & Aspek Perkembangan Anak* [Early Childhood Education: Stimulation & Aspects of Child Development]. Prenada Media.
- Suryaningrum, C., Ingarianti, T. M., & Anwar, Z. A. (2016). Pengembangan model deteksi dini anak berkebutuhan khusus (ABK) pada tingkat pendidikan anak usia dini (PAUD) di kota Malang [Development of an early detection model for children with special needs at the level of early childhood education in the city of Malang]. *Jurnal Ilmiah Psikologi Terapan*, 4(1), 62-74. <https://doi.org/10.22219/jipt.v4i1.2878>
- Tassé, M. J., Schalock, R. L., Balboni, G., Bersani Jr, H., Borthwick-Duffy, S. A., Spreat, S., ... & Zhang, D. (2012). The construct of adaptive behavior: Its conceptualization, measurement, and use in the field of intellectual disability. *American Journal on Intellectual and Developmental Disabilities*, 117(4), 291-303. <https://doi.org/10.1352/1944-7558-117.4.291>
- Wetherby, A. M., & Prizant, B. M. (2000). *Autism spectrum disorders: a transactional developmental perspective*. Paul H Brookes Publishing.
- Yanuvianti, M., Supraptiningsih, E., Susandari, Hamdan, S.R. (2015). *Program Penanganan Siswa Berkebutuhan Khusus dengan Gangguan Atensi* [Program for Handling Students with Special Needs with Attention Disorders]. Laporan Pengabdian Kepada Masyarakat. Bandung : LPPM Unisba.