

The Level of Cognitive Ability among Learning Disabilities Children in Malacca Malaysia

Tajularipin Sulaiman, Ph.D & Roselan Baki, Ph.D

Faculty of Educational Studies, University Putra Malaysia, Malaysia

E-mail: tajulas@putra.upm.edu.my

Putri Zabariah Megat A. Rahman, Ph.D

Faculty of Education and Social Sciences, Universiti Tun Abdul Razak, Malaysia

Received: October 20, 2010

Accepted: December 28, 2010

doi:10.5539/ijps.v3n1p69

Abstract

The objective of the study is to examine the cognitive ability of children with learning disabilities (LD) who were involved in the PDKNet education program. The children involved in this study are made up of children with learning disabilities (LD). A total of 106 children from 7 Community Based Rehabilitation (CBR) Centre in Malacca took part in this study. The instrument used in this study is divided into 5 main basic categories which consisted of the ability to identify computer hardware, alphabets, words, colours and shapes. The findings of the study indicated that more than half of the children with learning disabilities (LD) were able to identify components of a computer such as monitor, keyboard and mouse. More than half of the LD children were also able to recognize and pronounce words and alphabets. However, they face difficulties in reading and writing the respected words as well as having difficulties in providing examples for the shapes asked. Therefore, teaching children especially children with learning disabilities should be given more attention to help them to read and to write.

Keywords: Cognitive ability, Learning disabilities, Children

1. Background of study

Children with learning disabilities have their own unique characteristics and different learning styles. Therefore, every child has the capability to succeed in their studies. Teachers are capable in monitoring their progress and implement various teaching strategies in the classroom. These students require special attention and are categorized as students with special need (Slavin, 2003). According to The National Joint Committee on Learning Disabilities (NJCLD) (2009), the term 'learning disability' is being defined as:

A heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to Central System Dysfunction.

Learning disability (LD) is also called learning disorder or learning difficulty. Learning disability is not related to a child's intelligence, therefore LD does not indicate the level of intelligence of a child. Learning disabilities are problems that affect the brain's ability to receive, process, analyze or store information (Lyness, 2007). There are many types of learning disabilities. Most of the time, a child will be diagnosed with more than one learning disabilities. Some learning disabilities will affect a person's ability to concentrate causing the mind to wander during lessons. Other learning disabilities will cause difficulties in reading, writing, spelling, or solving mathematical problems. However, generally learning disabilities are divided into two categories: verbal and nonverbal (Lyness, 2007). Children with verbal learning disabilities will face great challenge with spoken and written words, while those with nonverbal learning disabilities will have difficulties in processing and making sense of visual cues. Thus, they show an uneven pattern of development in all areas such as language, academic or physic.

A child having more than one kind of learning disability is referred to as comorbidity or co-occurrence of learning disabilities (LD Online, 2009). These learning disabilities include reading disability (dyslexia), writing

disability (dysphasia), math disability (dyscalculia), nonverbal learning disability, dyspraxia, disorder of speaking and listening and auditory processing disorder (LD Online, 2009). They also face difficulties in discriminating size, shape or colour, having difficulties with time concept, reversals in writing and reading, poor visual-motor coordination, slowness in completing work, easily confused by instructions, having difficulties with abstract reasoning or problem solving, disorganized thinking and poor short-term or long-term memory. Among the major disabilities are ADHD, ASD and DS. Attention deficit hyperactive disorder (ADHD) is a neurobehavioral developmental disorder affecting an estimated 8% to 10% of school children (Kingsley, 2009). Boys are about three times more likely than girls to be diagnosed with ADHD. Behavioral and emotional problems present a serious obstacle to the academic, social, and emotional development of children with ADHD and negatively affect their adjustment to adult life (Miranda, Soriano, Fernandez, & Melia, 2008). Generally, children diagnosed with ADHD will face problems with their ability in focusing, their level of impulsiveness and their motor activity. Students with ADHD are very easily distracted and often lose concentration. Students normally will have difficulties staying on track, as a result, may not complete assignments on time (Mulrine, Prater, & Jenkins, 2008). Therefore, teachers in the classroom will face great challenge in assisting these children to focus on their work.

Another major type of learning disability is Autism. Autism is one of a group of developmental disorders called Autism Spectrum Disorders (ASDs) (Friedlander, 2008). According to Wikipedia, Autism is a brain development disorder characterized by impaired social interaction and communication, and by restricted and repetitive behavior. ASD is a broad-based term under which there are five recognized types of Autism (Willis, 2009), where Asperger Syndrome which affects the cognitive and language development of a child and PDD-NOS are two of the examples. The term spectrum is used because the characteristics of the disorder occur along a continuum, with severe symptoms at one end and very mild behaviors at the other (Willis, 2009).

Each child diagnosed with ASD is unique and special and displays different degrees of symptomatic behavior, however, most of these children will have difficulties in communication and social relationships. Language is another area of difficulty. Although children with ASD may have adequate expressive language, sometimes beyond their years, receptive language may be compromised (Friedlander, 2008). Generally, children with ASD display in varying degrees some or all of the following behaviors: obsession with specific objects, such as collecting forks or having an attachment to a piece of cloth; prolonged interest in common occurrences; adherence to rituals; and repetitive behaviors like hand flapping (Willis, 2009).

A significant problem for many students who have ASD is transition from one activity to another or within the same activity (Peck & Scarpati, 2009). This is because, children with ASD tend to perform stereotypic behavior. According to Edelson (1995), stereotypic behavior is usually defined as a behavior carried out repeatedly and involving either movement of the child's body or movement of an object. Hence, routinization and rituals are common behaviors among children with ASD (Friedlander, 2008). Another reason for children with ASD to have difficulties in switching from one activity to another is because they are generally rigid in their thinking. They are not flexible in their thinking and thus will tend to develop their thinking within the confined of a particular concept that they are familiar with.

Another significant challenge for students with ASD and their teacher is managing stress in the classroom setting (Peck & Scarpati, 2009). Therefore, it is important to note that learning too many new skills without enough time for practice can be overwhelming, and the child may react with maladaptive behavior (Willis, 2009) due to the accumulation of stress from having to engage themselves in too many activities at the same time. However, decoding symbols, a visual and spatial task, is a unique strength for some children with Autism (Friedlander, 2009), so they respond better to real pictures than to line drawings (Willis, 2009).

Another type of learning disability is Down syndrome (DS) which is also called Trisomy 21. It is a chromosomal disorder caused by the presence of all or part of an extra 21st chromosome, named after John Langdon Down. DS is normally associated with delays or impairment in cognitive ability, physical growth and also facial appearance which affect about 1 in every 800 babies. Children diagnosed with DS frequently suffer from mental retardation and this could not be treated medically. Moreover, hypotonia, or low muscle tone which is present in many infants with DS, is likely to affect learning and development (Appl, 1998). Due to this, children with DS usually have problem tackling skills like writing.

The most distinctive difficulty associated with Down syndrome is in expressive language and many (though certainly not all) such children find it hard to articulate words and ideas clearly, and to communicate in complex syntax (Farrell & Elkins, 1994). Even though the expressive language of children with DS tends to be far below their mental age, and may have difficulty in spontaneous speech, they tend to be able to imitate words correctly

(Appl, 1998). The slow intellectual development of children with SD makes it harder for them to deal with content, concepts and tasks planned for their age peers in regular classroom (Farrell & Elkins, 1994).

In addition, children with DS have a shorter attention span and are less motivated compared to normal children of the same age. Shifting focus of attention is also one of the major problems faced by children with DS, and thus may provide fewer opportunities to attend to language (Harris et al., 1996). Children with DS also have difficulties in cognitive skills related to reading due to the impairment of their cognitive ability. Children with DS often have to deal with problems in reading such as differentiating meaning of words syntactically and semantically.

Since every child is unique and special, every child is entitled to a program tailored to his unique profile (Greenspan, 2000). Children with learning disabilities often experience difficulty in learning, and when teachers collaborate, they should identify the nature of their students' challenges and then plan supports that would enable these children to learn (Carter, Prater, Jackson & Marchant, 2009). Therefore, effective collaboration between special and general education teachers can facilitate the successful inclusion of children with disabilities who are in general classroom (Carter, Prater, Jackson & Marchant, 2009).

Therefore, the objective of the study is to examine the cognitive ability of children with learning disabilities (LD) who were involved in the PDKNet education program. These LD children involved in the study will be evaluated based on 5 categories listed as follow:

- a. Identify computer hardware
- b. Identify alphabets
- c. Identify colours
- d. Identify shapes
- e. Identify words

2. Methodology

This section of the paper discusses on the methods used to conduct the first phase of the research and the aspects being discussed include the research design, population, respondents, instruments, research procedures, research methods and procedures in data analysis.

This study had adopted a quantitative survey method in achieving the objectives of the study. A total of 106 children with learning disabilities (LD) from 7 selected Community Based Rehabilitation (CBR) Centre in Malacca were involved in the study. All the selected CBR were involved in the PDKNet education program.

PDKNet is a project initiated to enhance the development of the CBR community in treating children with learning disabilities (LD) through the use of multimedia technology and ICT. This program provides training to teachers on ways to use instructional materials and to conduct an interactive lesson with LD children. In addition, several modules had been developed under the PDKNet program. LD children will be exposed to these materials and at the end of the teaching session teachers will evaluate the performances of children based on their responses towards the materials.

The instrument used in this study was constructed by the researchers and had undergone the procedure of content validity as well as construct validity. A pilot study had also been conducted to test the reliability of the instrument in terms of language and content item. Adjustments were made in terms of language and content after reviewing findings of the pilot study.

The instrument being used is divided into a few categories based on the domain being studied. In terms of cognitive domain, the instrument is divided into 5 categories which consisted of the ability to identify computer hardwares, alphabets, colours, shapes and words. Teachers will evaluate students by questioning the LD children in their respected CBR and answering Yes or No at each item being asked. The data obtained will then be used to determine the level of mastery in the cognitive domain of the LD children.

Table 1 shows the names of seven Community Based Rehabilitation (CBR) Centre involved in this study. All of the CBR involved were originated from the state of Malacca and most of the respondents involved in this study were from CBR Malacca 1 (N = 21). A total number of 106 LD children respondents from all the CBR were involved in this study.

'Insert Table 1: Frequency and Percentage of Respondents in Each CBR'

Table 2 shows the number of LD children based on their ethnic who were involved in this research. Based on table 2, 93.4% of LD children involved in this study were Malays whereas, Indian and Chinese children were 4.7% and 1.9% respectively.

‘Insert Table 2: Ethnicity of Children’

Table 3 shows the number of LD children in CBR according to genders. Based on table 3, the LD children who were involved in the study made up of 40.6% male and 59.4% female.

‘Insert Table 3: Gender of Children’

Table 4 shows the types of disabilities diagnosed by the children in CBR involved in this study. Based on table 4, the findings shows that the number of LD children in CBR who suffered from cognitive disability was the highest (49.1%), followed by learning disability with the value of 25.5%. Other types of disabilities present among these children include cerebral palsy, Down syndrome and physical disability.

‘Insert Table 4: Types of Disabilities of LD Children’

The following discussion will be focused on the findings of the study based on three main domains utilized in this study. The domains include cognitive domain, psychomotor domain and affective domain. Other than that, the discussion will also be based on the four modules practiced by children of the LD in their teaching and learning courseware under the PDKNet program.

3. Findings of the Study

The discussion on the cognitive domain in Module 1 will be divided into five categories:

- a. Identify computer hardware
- b. Identify alphabets
- c. Identify colours
- d. Identify shapes
- e. Identify words

For the category of ‘Identify computer hardware’, the findings are shown in Table 5 below:

‘Insert Table 5: The Number and Percentage of LD Children’s Ability in Identifying Computer Hardware’

The findings of the study presented in Table 5 show that 57.5% of LD children were still unable to identify computer hardware such as the printer and CPU. Furthermore, it was found that 49.1% of LD children failed to identify the mouse, 48.1% failed to identify the keyboard and 40.6% of LD children failed to identify the computer monitor.

Table 6 shows the number and percentage of LD children in their ability to read, write and pronounce words starting with ‘G’.

‘Insert Table 6: The Number and Percentage of LD Children’s Ability in Identifying Alphabets’

The findings of the study shown in Table 6 indicate that there were significant differences between the ability of the LD children in reading alphabets and words. The study found that in the ability of identifying alphabets, 56.6% of LD children failed to read the alphabet ‘G’ and 71.1% failed to read the word ‘Galah’. Whereas for the writing ability of LD children, 61.3% failed to write the alphabet ‘G’ and 68.9% were unable to write the word ‘Galah’.

‘Insert Table 7: The Number and Percentage of LD Children’s Ability in Identifying Colours’

Table 7 shows the number and percentage of LD children’s ability in identifying colours. The findings of the study showed that 62.3% of LD children did not face any difficulties in identifying the colour ‘Merah’ and 59.4% of LD children were able to pronounce the word ‘Merah’. However, only 27.4% of LD children were able to spell the word ‘Merah’. This low performance of LD children also applies to their ability in spelling the word ‘Ungu’ (28.3%). On the other hand, 49.1% of LD children were able to identify the difference between the colour ‘Merah’ and the colour ‘Ungu’.

‘Insert Table 8: The Number and Percentage of LD Children’s Ability in Identifying Shapes’

According to Table 8, the number of LD children who were able to identify shapes and the number of LD children who failed to do so is almost similar. The highest number of LD children (58.5%) managed to identify the shape of a circle, followed by 52.8% of LD children who managed to identify the shape ‘square’. Next,

50.9% of LD children succeeded in identifying the shape of a triangle. For the ability in providing examples for the shapes mentioned, it was found that 53.8% of LD children failed to provide appropriate examples for a square object and 52.8% of LD children were unable to provide examples for a round object.

‘Insert Table 9: The Number and Percentage of LD Children’s Ability in Identifying Words’

Table 9 shows the ability of LD children in identifying words. Throughout the entire study, six words were used to examine the level of ability of the LD children. The findings of the research showed that 60.4% of the LD children could pronounce the word ‘harimau’ but only 23.6% of LD children could spell out the word. For the word ‘bunga raya’, 52.8% of LD children were able to identify the word, but only 26.5% could spell out the word. For the words ‘ibu’ and ‘bapa’, it was found that 67.9% of LD children could pronounce the word ‘ibu’ and 67.0% were able to pronounce the word ‘bapa’. However, only 25.5% could spell both words. 69.8% of LD children were also able to differentiate between the words ‘kakak’ and ‘abang’.

4. Conclusion and Discussion

This study examines the mastery of the cognitive domain among LD children through 5 predetermined categories. The questions to be answered by the LD children consisted of items related to their ability to identify computer hardware, alphabets, colours, shapes and words. The categories that LD children are being questioned are the basis of the teaching and learning process. It is important for LD children to be able to identify computer hardware as most materials under the PDKNet program are presented in the form of multimedia presentation. According to Burton-Radzely (1998) in Macarthur, Ferretti, Okolo & Cavalier (2001), based on a survey on 1,000 special educators, results showed that 85% use technology in literacy instruction and 97% believed that technology aid children in acquiring literacy skills. Indicating that most educators believed that technology played a fundamental role in improving the cognitive ability of children with learning disabilities which is also the principle of the materials in PDKNet program being presented in form of multimedia presentation. To ensure an effective instructional program to LD children, the use of supportive services such as technology should be considered as technological advances had proven to be able to improve intervention programming for children with learning disabilities (NJCLD, 2006). The concept of computer literacy includes a broad range of skills and sufficient expertise in the understanding of computers lay the basis for lifelong learning and empower children as well as LD children to use computers to express themselves creatively, reformulate knowledge attained, and to adapt to change (Shields & Behrman, 2000).

In terms of recognizing alphabets and words, the alphabet and word chosen is “G” and “Galah”. The alphabet “G” was randomly selected from alphabets A-Z. Based on the research findings, more than half of the LD children failed to write and read the alphabet “G”, however, they were able to pronounce the alphabet “G”. Similar with the ability to spell out the colour “Merah” where most of the LD children failed to spell out the word but they were capable of recognizing and utter out the name of the colour. It is proven that LD children often faced difficulties in reading and writing alphabets. Furthermore, reading deficit was found to be a common characteristics among children with learning disability (Kavale & Reese, 1992; Mcleskey, 1992). Researchers had estimated that 80 percent of children diagnosed with learning disability will face problem in reading or language-related skills which will influence their ability in reading and writing (Kavale & Reese, 1992). Children who failed to recognize alphabets or words may receive less practice in reading as they read less frequently and at a slower pace, resulting their inability in reading text or acquiring comprehension skills (Macarthur, Ferretti, Okolo & Cavalier, 2001). Therefore, when LD children failed to read alphabets or words being selected, eventually they will face difficulty in writing the respected word.

References

- Appl, D.J. (1998). Children with Down syndrome: Implication for adult-child interactions in inclusive settings. *Childhood Education*, 75(1), 39-43.
- Carter, N., Prater, M.A., Jackson, A., & Marchant, M. (2009). Educator’s perceptions of collaborative planning processes for students with disabilities. *Preventing School Failure*, Vol. 54(1), 60-70.
- Edelson, S. (2008). Stereotypic (self-stimulatory) behaviour. [Online] Available: <http://www.autism.com/families/problems/stim.htm> (September 4, 2009)
- Farrell, M., & Elkins, J. (1994). Literacy for all? The case of Down syndrome. *Journal of Reading*, 38(4), 270-280.
- Friedlander, D. (2008). Sam comes to school: Including students with Autism in your classroom. *The Clearing House*, Vol. 82(3), 141-144.

- Greenspan, S.I. (2000). When a child has mental delays. *Scholastic Parent & Child*, 7(6), 22-23.
- Harris, S., Kasari, C., & Sigman, M.D. (1996). Joint attention and language gains in children with Down syndrome. *American Journal of Mental Retardation*, 100, 608-619.
- Kavale, K. A., & Reese, J. H. (1992). The character of learning disabilities: An Iowa profile. *Learning Disability Quarterly*, 15(2), 74-94.
- Kingsley, R.S. (2008). What is ADHD? [Online] Available: <http://kidshealth.org/parent/medical/learning/adhd.html#> (August 12, 2009)
- LD Online. (2008). LD basics. [Online] Available: <http://www.ldonline.org/ldbasics> (August 12, 2009)
- MacArthur, C.A., Ferretti, R.P., Okolo, C.M., & Cavalier, A.R. (2001). Technology applications for students with literacy problems: A critical review. *The Elementary School Journal*, 101(3), Special Issue: Instructional Interventions for Students with Learning Disabilities, 273-301.
- McLeskey, J. (1992). Students with learning disabilities at primary, intermediate, and secondary grade levels: Identification and characteristics. *Learning Disabilities Quarterly*, 15(1), 13-20.
- Miranda, A., Soriano, M., Fernandez, I., & Melia, A. (2008). Emotional and behavioural problems in children with attention deficit hyperactivity. *Learning Disability Quarterly*, 31(4), 171-185.
- Mulrine, C.F., Prater, M.A., & Jenkins, A. (2008). The active classroom: Support students with attention deficit hyperactivity disorder through exercise. *Teaching Exceptional Children*, 40(5), 16-22.
- National Joint committee on Learning Disabilities. (2006). Learning disabilities and young children: Identification and intervention. *Learning Disability Quarterly*, 30(1), 63-72.
- National Institute of mental Health (NIMH). (2009). Attention deficit hyperactivity disorder (ADHD). [Online] Available: <http://www.nimh.nih.gov/health/publications/attention-deficit-hyperactivity-disorder/what-are-the-symptoms-of-adhd-in-children.shtml> (August 12, 2009)
- Peck, A., & Scarpatti, S. (2009). Addressing the needs of students with Autism spectrum disorders. *Teaching Exceptional Children*, 41(4), 4.
- Shields, M.K., & Behrman, R.E. (2000). Children and Computer Technology: Analysis and recommendations. *The Future of Children*, 10(2), 4-30.
- Slavin, R.E. (2003). *Educational Psychology: Theory and Practice* (7th ed.). Boston: Allyn and bacon.
- Willis, C. (2009). Young children with Autism spectrum disorder: Strategies that work. *YC Young Children*, 64(1), 81-89.

Table 1. Frequency and Percentage of Respondents in Each CBR

	Frequency	Percent	Valid Percent	Cumulative Percent
CBR Malacca 1	21	19,8	19,8	19,8
CBR Malacca 2	16	15,1	15,1	34,9
CBR Malacca 3	10	9,4	9,4	44,3
CBR Malacca 4	13	12,3	12,3	56,6
CBR Malacca 5	18	17,0	17,0	73,6
CBR Malacca 6	10	9,4	9,4	83,0
CBR Malacca 7	18	17,0	17,0	100,0
Total	106	100,0	100,0	

Table 2. Ethnicity of Children

	Frequency	Percent	Valid Percent	Cumulative Percent
Malay	99	93,4	93,4	93,4
Chinese	5	4,7	4,7	98,1
Indian	2	1,9	1,9	100,0
Total	106	100,0	100,0	

Table 3. Gender of Children

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	43	40,6	40,6	40,6
Female	63	59,4	59,4	100,0
Total	106	100,0	100,0	

Table 4. Types of Disabilities of LD Children

	Frequency	Percent	Valid Percent	Cumulative Percent
Learning Disability	27	25,5	25,5	25,5
Cerebral Palsy	6	5,7	5,7	31,1
Down Syndrome	5	4,7	4,7	35,8
Autism	59	55,7	55,7	91,5
Physical Disability	7	6,6	6,6	98,1
William Syndrome	1	,9	,9	99,1
Others	1	,9	,9	100,0
Total	106	100,0	100,0	

Table 5. The Number and Percentage of LD Children's Ability in Identifying Computer Hardware

No.	Statements	Yes	No	Mean	S.D
1	Able to identify the computer monitor	63 (59.4%)	43 (40.6%)	.59	.49
2	Able to identify the printer	45 (42.5%)	61 (57.5%)	.42	.50
3	Able to identify the printer	55 (51.9%)	51 (48.1%)	.52	.50
4	Able to identify the mouse	54 (50.9%)	52 (49.1%)	.51	.50
5	Able to identify the CPU	45 (42.5%)	61 (57.5%)	.42	.50

Table 6. The Number and Percentage of LD Children's Ability in Identifying Alphabets

No.	Statements	Yes	No	Mean	S.D
1.	Able to read the alphabet 'G'	46 (43.4%)	60 (56.6%)	.43	.50
2.	Able to write the alphabet 'G'	41 (38.7%)	65 (61.3%)	.39	.49
3.	Able to pronounce the word 'Galah'	52 (49.1%)	54 (50.9%)	.49	.50
4.	Able to read the word 'Galah'	29 (27.4%)	76 (71.7%)	.28	.45
5.	Able to write the word 'Galah'	33 (31.1%)	73 (68.9%)	.31	.47

Table 7. The Number and Percentage of LD Children's Ability in Identifying Colours

No.	Statements	Yes	No	Mean	S.D
1.	Able to identify the colour 'Merah'	66 (62.3%)	40 (37.7%)	.62	.49
2.	Able to pronounce the colour 'Merah'	63 (59.4%)	43 (40.6%)	.59	.49
3.	Able to spell the word 'Merah'	29 (27.4%)	77 (72.6%)	.27	.45
4.	Able to differentiate between the colour 'Merah' and 'Ungu'.	52 (49.1%)	54 (50.9%)	.49	.50
5.	Able to spell the word 'Ungu'	30 (28.3%)	75 (70.8%)	.29	.45

Table 8. The Number and Percentage of LD Children's Ability in Identifying Shapes

No.	Statements	Yes	No	Mean	S.D
1.	Able to identify the shape 'triangle'	54 (50.9%)	51 (48.1%)	.51	.50
2.	Able to identify the shape 'square'	56 (52.8%)	50 (47.2%)	.53	.50
3.	Able to identify the shape 'circle'	62 (58.5%)	44 (41.5%)	.58	.50
4.	Able to give an example of a 'square' object (e.g. book)	49 (46.2%)	57 (53.8%)	.46	.50
5.	Able to give an example of a round object (e.g. tyre)	50 (47.2%)	56 (52.8%)	.47	.50

Table 9. The Number and Percentage of LD Children's Ability in Identifying Words

No.	Statements	Yes	No	Mean	S.D
1.	Able to identify 'harimau'	72 (67.9%)	34 (32.1%)	.68	.47
2.	Able to pronounce the word 'harimau'	64 (60.4%)	42 (39.6%)	.60	.49
3.	Able to spell the word 'harimau'	25 (23.6%)	81 (76.4%)	.24	.43
4.	Able to identify the plant 'bunga raya'	56 (52.8%)	50 (47.2%)	.53	.50
5.	Able to spell the word 'bunga raya'	28 (26.5%)	78 (73.6%)	.26	.44
6.	Able to pronounce the word 'ibu'	72 (67.9%)	34 (32.1%)	.68	.47
7.	Able to spell the word 'ibu'	27 (25.5%)	79 (74.5%)	.25	.44
8.	Able to pronounce the word 'bapa'	71 (67.0%)	35 (33.0%)	.67	.47
9.	Able to spell the word 'bapa'	27 (25.5%)	79 (74.5%)	.25	.44
10.	Able to differentiate the words 'kakak' and 'abang'	74 (69.8%)	32 (30.2%)	.70	.46