
A NEXUS OF INTELLIGENCE ON THE READING ABILITY OF KINDERGARTEN STUDENTS

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ABSTRACT

Reading is a receptive written language skill. Reading skills are complex activities that involve a variety of skills. This study aims to determine the differences in reading skills of Kindergarten students Nurul Azizi Medan in the academic year 2005/2006 between those who have high intelligence and those with low intelligence. The sample of this study consisted of 20 children. The method used is a quasi-experimental 2x2 factorial design. The analysis technique used is the two-way analysis of variance (two-way ANOVA 2x2) with a level of $\alpha = 0.05$ using the F-test, further testing using the Tuckey test. The result is that there is a difference in the reading ability of Kindergarten students between those who have high intelligence is better than those who have low intelligence at the level of confidence $\alpha = 0.05$ with $F_h = 13.42 > F_T = 4.09$, using the Tuckey test obtained Q count = $4.58 > Q$ table = 3.96 . Overall, Kindergarten students who have high intelligence are better than those who have low intelligence.

Keywords: Intelligence, Reading Ability, Tuckey, Kindergarten.

ABSTRAK

Membaca merupakan keterampilan berbahasa tulis yang bersifat reseptif. Keterampilan membaca merupakan kegiatan kompleks yang melibatkan berbagai keterampilan. Penelitian ini bertujuan untuk mengetahui perbedaan keterampilan membaca siswa TK Nurul Azizi Medan tahun ajaran 2005/2006 antara yang memiliki kecerdasan tinggi dan yang memiliki kecerdasan rendah. Sampel penelitian ini berjumlah 20 anak. Metode yang digunakan adalah kuasi eksperimen dengan desain faktorial 2x2. Teknik analisis yang digunakan adalah analisis varians dua arah (two-way ANOVA 2x2) dengan taraf = 0,05 menggunakan uji F, selanjutnya pengujian menggunakan uji Tuckey. Hasilnya terdapat perbedaan kemampuan membaca siswa TK antara yang memiliki intelegensi tinggi lebih baik dari yang memiliki intelegensi rendah pada tingkat percaya diri = 0,05 dengan $F_h = 13,42 > F_T = 4,09$, menggunakan uji Tuckey diperoleh Q hitung = $4,58 > Q$ tabel = $3,96$. Secara keseluruhan, siswa TK yang memiliki kecerdasan tinggi lebih baik daripada siswa yang memiliki kecerdasan rendah.

Kata kunci: Kecerdasan, Kemampuan Membaca, Tuckey, TK.

INTRODUCTION

Reading is a receptive written language skill. Reading skills are complex activities that involve a variety of skills. So, reading activity is an integrated unit that includes several activities such as recognizing letters and words, connecting with sounds, their meanings, and drawing conclusions on the meaning of the reading.

Reading is a work process of human cognition closely related to one's intelligence (Yuliyati, 2019). Reading is a process to understand the meaning of the writing. The process experienced in reading is in the form of restatement and interpretation of activity

starting from recognizing letters, words, expressions, phrases, sentences, discourses and connecting them with sounds and meanings (Dhieni, 2005).

Letterforms can be introduced to children in games because these letter shapes will arouse children's curiosity. Mostly, if the letter's shape is made in large, colorful, and shaped media, that can attract children's attention. When children are introduced to letters, they will also be introduced to sounds. With this method, what is introduced to children will be stored in their memory (Kartika et al., 2013).

The world of children is a world of play, and every learning is done by playing or while playing, which involves all senses. Learning by playing provides opportunities for children to manipulate, repeat, discover for themselves, explore, practice, and get innumerable various concepts and understandings so that the learning process occurs (A., 2000). Likewise, when introducing words. As much as possible, introduce the words he often hears at home. For example, father, mother, brother, brother, what, eat, drink, milk, water, rice, porridge, etc. Stimulate; it is better if the word is introduced to the child, including a picture that supports the word. For example, the word "father" on it is made a picture of the child's father. Each child has a photo of his father made while learning to read the word "father." Likewise, in other words. Although it will be troublesome for kindergarten teachers and managers, the impact will be tremendous (Ramponi, 2013).

Reading is a tricky thing that involves many things, not only pronouncing the writing but also involving: visual, thinking psycholinguistic and metacognitive activities. A visual process, reading translates written symbols (letters) into spoken words thought process, reading includes both critical and creative understanding. A psycholinguistic process, reading will enable humans to acquire, use, and understand the reading. Meanwhile, as a metacognitive process, reading will control the cognitive domains, including memory, understanding, application, analysis, synthesis, and evaluation.

Reading is essential to growing in children as early as possible. If teachers and parents can cultivate a child's reading passion, they have laid the foundations to help children become lifelong learners or long-life-learners. Recognition of reading in children as early as possible will stimulate their memory to recognize letters and sounds. Recognition of reading must also be done with a playful approach and designing a situation and atmosphere that is as close as possible to the life he has experienced at home.

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while playing, which involves all senses. Mayke in Sudono (2000) explains that learning by playing provides opportunities for children to manipulate, repeat, discover for themselves, explore, practice, and get innumerable various concepts and understandings so that the learning process occurs. Although the opportunities given to students in introducing reading have been carried out optimally, the success of learning cannot be separated from the intelligence of each child (Rakimahwati, 2018). This study aims to determine the difference in Kindergarten students' reading ability between those with high intelligence and low intelligence.

Intelligence is a matter of extraordinary perceptual-motor skills, which are passed from one generation to the next. Since all information is obtained through the senses, the more sensitive and accurate a person's perception is, the more intelligent the person is. Added, intelligence is the ability to know problems and new conditions, the ability to think abstractly, the ability to work, the ability to master instructive behavior, and the ability to accept complex relationships (Atkinson, R. Richard, A., 1999).

Because intelligence is the born's ability, each child's abilities will inevitably not be the same because it will depend on both parents' intelligence factor. With high intelligence, abilities will quickly remember and understand something that is learned. In other words, intelligence is a person's ability to solve problems quickly and accurately (Istiyani, 2014).

Factors affecting intelligence, namely: 1) inherited factors, which are called hereditary factors or hereditary factors, namely the inheritance or biological transfer of individual characteristics from their parents, 2) environmental factors, which include all material and stimuli inside and outside the individual, both which are physiological, psychological and socio-cultural (Soemanto, 1983).

Their respective intelligence levels will influence children's reading levels. Some children are the same age, namely 5-6 years, but their ability to recognize letters is different. This is due to different levels of intelligence (IQ). Even though they are the

same age, one child has a higher IQ than the other. Measure the level person's IQ can be taken through tests, including 1) Binnet-Simon scales, 2) Wechsler scales, 3) Kaufman scales, and 4) Differential ability scales (Anastasi, A. Susana, 1997).

RESEARCH METHODS

This research was conducted in Nurul Azizi Kindergarten, Jalan STM / Suka Elok No. 10 Medan, Medan Johor District, Medan City, North Sumatra. This research was conducted in the first semester of the 2017/2018 school year from November to December 2017. The research method used was a quasi-experimental 2x2 factorial design. The analysis technique used is the two-way analysis of variance (two-way ANOVA 2 x 2) with a level of $\alpha = 0.05$ using the F-test, further testing using the Tuckey test.

RESULTS AND DISCUSSION

Reading Ability Kindergarten Students Who Are Given Learning Grid Media with High Intelligence

From the data obtained, it can be seen that the reading ability of Kindergarten students for learning treatment of letter plot media with high intelligence obtained the lowest score was 19, the highest score was 25, the average score (Mean) was 22.3 variance (S2) 3, 73 and standard deviation (sd) 1.93. Meanwhile, the mode value (Mo) is 23.3, and the median (Me) is 23.50. The following is presented in table 1 of the frequency distribution of the scores given by learning media with high intelligence letter plots.

Table 1. Reading Ability students are given learning high-intelligence lettering media

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	19-20	2	20
2	21-22	3	30
3	23-24	4	40
4	25-26	1	10
Total		10	100

The reading ability of Kindergarten students for learning treatment with letter plots media with high integrity from table 1 can be seen that 50% of the response score is below the average, while the ability to read the respondent's score is above average, while the ability to read the respondent's score above the average by 10%.

Reading Ability of Kindergarten Students Who Are Given Lattice Learning Media with Low Intelligence

From the data obtained, it can be seen that the reading ability test score of Kindergarten students for learning treatment of letter plot media with low intelligence obtained the lowest score of 10 and the highest score of 19, the average score (Mean) was 14.7; variance (S2) 5.74 and standard deviation (SD) 2.39. Meanwhile, the mode value (Mo) is 23.3, and the median (Me) is 23.50. The following table two is presented the distribution of the frequency of scores given learning media with low intelligence.

Table 2. Reading Ability of students who are given letter block media learning with low intelligence.

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	10-11	1	10
2	12-13	2	10
3	14-15	3	30
4	16-17	3	30
5	18-19	1	10
Total		10	100

Kindergarten students' reading ability for learning treatment with letter plots in terms of low intelligence from table 2. It can be seen that 30% of the respondents 'scores on the homepage are below the average, and 30% of the respondents' is average, while the ability read the respondent's score above the average of 40%.

Reading Ability Kindergarten Students Who Are Given Learning Letter Card Media with High Intelligence

Reading ability data of Kindergarten students for learning treatment of letter card

media with letter cards with high intelligence obtained the lowest score was 9, the highest was 17, the average score (Mean) was 14.45; variance (S²) 5.81 and standard deviation (SD) 2.42. While the mode value (Mo) is 15.167, and the median (Me) is 15.50. The following is presented in table 3 of the frequency distribution of scores given by learning media with high intelligence letter cards.

Table 3. Reading Ability of students who are given learning media letter cards with high intelligence

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	9-11	1	10
2	12-13	2	20
3	14-15	4	40
4	16-17	2	20
5	18-19	1	10
Total		10	100

Kindergarten students' reading ability for learning treatment with letter card media in terms of high intelligence from table 3 shows that 30% of the respondents' is below the average, while the ability to read the respondent's score is above the average of 30%.

Reading Ability Kindergarten Students Who Are Given Learning Letter Card Media with Low Intelligence

The reading ability data of kindergarten students for learning letter card media with low intelligence obtained the lowest score of 12 and the highest score of 20; the average score (Mean) was 16.45; variance (S²) 5.81 and standard deviation (SD) 2.42. While the mode value (Mo) is 15.167, and the median (Me) is 15.50. The following table 4 presents the distribution of frequency scores for which scores are given by learning media letter cards with low intelligence.

Table 4. Reading Ability of students given learning high-intelligence letter card media

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	11-13	1	10
2	14-15	2	20
3	16-17	4	40
4	18-19	2	20
5	20-21	1	10
Total		10	100

The reading ability of Kindergarten students for learning treatment with letter card media in terms of high intelligence from table 4, it can be seen that 30% of the respondents' scores are below the average, while the ability to read the respondents' scores is above the average of 40%.

Reading Ability of Kindergarten Students in terms of High Intelligence

Kindergarten students' reading ability data in terms of high intelligence obtained the lowest score was 9, and the highest score was 25, the average score (Mean) was 15.53; variance (S²) 7.23 and standard deviation (SD) 2.69. While the mode value (Mo) is 17.00, and the median (Me) is 16.17. The frequency distribution can be seen in Table 5.

Table 5. Students' Reading Ability in terms of high intelligence.

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	10-11	2	5
2	12-13	2	20
3	14-15	5	20
4	16-17	7	30
5	18-19	3	10
6	20-22	1	15
Total		20	100

The reading ability of Kindergarten students in terms of high intelligence with 20 respondents, from table 5 it can be seen that 45% of respondents' scores are below the average, and 30% of respondents' scores are on average, while the ability to read

respondents' scores is above the average is above 25%.

Reading Ability of Kindergarten Students in terms of Low Intelligence

Kindergarten students' reading ability data in terms of high intelligence obtained the lowest score was 9, and the highest score was 25, the average score (Mean) was 18.00; variance (S^2) 19.66 and standard deviation (SD) 4.44. While the mode value (Mo) is 17.00, and the median (Me) is 16.17. The frequency distribution can be seen in Table 6.

Table 6. Reading Ability of students in terms of low intelligence

No. Class	Class Intervals	F. Absolut	F. Relative (%)
1	9-11	1	10
2	12-14	4	10
3	15-17	4	25
4	18-20	6	35
5	22-23	2	15
6	24-26	3	5
Total		20	100

The reading ability of Kindergarten students in terms of high intelligence with 20 respondents, from table 6 it can be seen that 45% of respondents' scores are below the average, and 35% of respondents' scores are on average, while the ability to read respondents' scores is above the average is above 25%.

CONCLUSION

There is a difference in Kindergarten students' reading ability between those who have high intelligence and low intelligence. Kindergarten students who have high intelligence are faster to improve their reading skills than students with low intelligence. It is hoped that further research will use other methods in honing children's learning abilities in childhood.

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REFERENCES

A., S. (2000). *Sumber Belajar dan Alat Permainan untuk Pendidikan Usia Dini*. Grasindo.

Anastasi, A. Susana, U. (1997). *Tes Psikologi (Psychological Testing, 7e)* (). Edisi b). McMillan Publishing Co. Inc.

Atkinson, R. Richard, A., E. (1999). *Pengantar Psikologi jilid 2* ((Terjemaha). Erlangga.

Dhieni, N. (2005). *Metode Pengembangan Bahasa* (Buku Mater). Pusat Penerbitan Universitas Terbuka.

Istiyani, D. (2014). Model Pembelajaran Membaca Menulis Menghitung (Calistung) pada Anak Usia Dini Di Kabupaten Pekalongan. *Jurnal Penelitian*, 10(1). <https://doi.org/10.28918/jupe.v10i1.351>

Kartika, G., Utami, M. S. S., Kes, M., Utami, C. T., Psi, S., Mann, U., & Mann, A. U. (2013). *Kemampuan Membaca Permulaan Pada Anak Tk B Di Paud Terpadu Lab Belia Semarang*. 2(1), 5–8.

Rakimahwati, R. (2018). Pelatihan Pembuatan Boneka Jari Bergambar Dalam Meningkatkan Kemampuan Membaca Anak Usia Dini Di Kecamatan V Koto Kampung Dalam Kabupaten Padang Pariaman. *Early Childhood: Jurnal Pendidikan*, 2(2b), 1–11. <https://doi.org/10.35568/earlychildhood.v2i2b.292>

Ramponi, F. (2013). 濟無No Title No Title. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.

Soemanto, W. (1983). *Psikologi Pendidikan Landasan Kerja Pimpinan Pendidikan*. Rineka Cipta.

Yuliyati, A. M. dan. (2019). *Metode Al-Barqy Terhadap Kemampuan Membaca Huruf Hijaiyah Anak Tunarungu*. 1–16.