

## Research Article

# The Relationship Between Intelligence and Learning Motivation on Children's With Special Need in Inclusive Elementary School

**Komarudin**

University 'Aisyiyah Yogyakarta, Indonesia  
komarudin\_psi@unisayogya.ac.id

**Abstract:** The research aimed to find out the correlation between intelligence and learning motivation in children with special need in inclusion elementary school. The data collecting technique used the learning motivation scale and Slosson Full Range Intelligence Test (S-FRIT). The data were analyzed by used product moment correlation technique with SPSS 16. The data analysis result was correlation coefficient was 0.581 with a significance level of 0.000 ( $p < 0.05$ ). It meant there was positive correlation between intelligence and learning motivation. The higher level of intelligence, the learning motivation is also higher; conversely the lower level of intelligence, the learning motivation is also lower. The coefficient determination was 0.337 contributing intelligence to improvement learning motivation was 33.70%. This suggests that 66.30% learning motivation subjects influenced by other factors which not included in this research.

**Keywords:** intelligence; learning motivation; children with special need

GUIDENA: Jurnal Ilmu Pendidikan, Psikologi, Bimbingan dan Konseling  
website: <http://ojs.fkip.ummetro.ac.id/index.php/bk>

Received: 2017-05-02. Published: 2017-06-31.



This is an open access article distributed under the terms of the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/). The which permits unrestricted use, distribution, and reproduction in any medium, Provided the original work is properly cited.

## INTRODUCTION

Salamanca Declaration formally at the World Conference on Education disability in June 1994, explaining that the fundamental principle of inclusive education is (for possible) all children should learn together - the same regardless of any difficulties or differences that may exist between the child - the child. This is what inspired the Declaration of inclusive schools in Indonesia, According to Stainback (in the Divine, 2013), inclusive school is a school that caters to all students in the same class. This means that all children, including children with special needs (ABK) can be studied and incorporated in the school and general community life. ABK existence in Indonesia to study in regular schools or schools which are also known as guaranteed inclusion in Permendiknas No. 70 of 2009 Article 1, namely:

"The system of implementation of inclusive education provides the opportunity for all students who have the disorder and have intelligence and/or special talent to pursue an education or learning in an educational environment together - together with the learners in general".

Referring to this, the crew has equal opportunity to follow the regular school education process. Within the overall educational process at school, learning is the most basic activities. This means that success or failure of the achievement of educational goals much depends on how the learning process experienced by students as learners (Ahmadi and Supriyono in 2013). In the process of learning, motivation is a factor that is important for individuals to be successful in achieving the goal of education and learning (Jamaris, 2013). Further Djamarah (2008) also suggests that if individuals do not have the motivation to learn, it is unlikely that individual learning activities. Referring to this,

However, in reality, not all students and learners have a good motivation to learn. It is found from the results of interviews conducted by the researcher to teacher education coordinator for inclusion in the SD 3 Sedayu, that most students who appear to have a low learning motivation are that in the category of ABK. Of the 41 crew members on the SD 3 Sedayu, 30 of them had the motivation to learn

is low, such as lack of attention to the lesson, have the morale is low, when asked to do something to feel like carrying a heavy load, it is difficult to be independent when given the task, have dependencies to other people, willing to learn or do something when it is forced,

The thirty students who indicated having a low learning motivation falls into the category of slow learner students, ie students who have an IQ between 70 - 89. This means that the child has a score of intelligence under the child - the child of his age.

Referring to this, the study aims to determine the relationship between intelligence and motivation to learn the special needs children in elementary school inclusion.

Intelligence is defined as an individual's mental abilities based reasoning aspects of language (verbal reasoning), quantitative reasoning (quantitative reasoning), the reasoning given (short term memory), and abstract reasoning (abstract reasoning). Slosson (2006). According to Walgito (2002), intelligence has a role in the cycle of the individual self-motivation. With the involvement of the intelligence in the cycle of motivation, then driving the individual state can be triggered by thoughts or memories, That is the intelligence of the individual is able to move or encourage motivation in learning.

Motivation to learn is defined as a boost both from within and from outside the student who is able to give impetus and direction to perform an activity to learn to achieve the desired learning based on aspects of persistence in learning, resilient in the face of adversity, interest and alertness in learning, excel in learning, and self-learning (Arita, 2008).

One that affects students' motivation including the crew is the ability of the learner (Imron Siregar and Nara in 2011). Meanwhile, Somantri (2007) revealed that the ability of the learner ABK can be viewed from the components of physical, cognitive, emotional, social, and personality. According to Piaget (in Somantri, 2007), cognitive ability is also called the intelligence.

Based on the above, then the hypothesis proposed in this study is a positive relationship between intelligence and motivation to learn in children with special needs. That is, the higher the intelligence, the higher the level of learning motivation. Conversely, the lower the

intelligence, the level of learning motivation became.

## METHOD

The dependent variable in this study is the motivation to learn, while the independent variable in this study is intelligence. Motivation to learn is defined as a boost both from within and from outside the student who is able to give impetus and direction to perform an activity to learn to achieve the desired learning based on aspects of persistence in learning, resilient in the face of adversity, interest and alertness in learning, excel in learning, and self-learning (Arita, 2008). Motivation to learn is scaled to the motivation to learn arranged researcher based aspects - aspects of learning motivation presented by Arita (2008). The higher a person's score, the higher the learning motivation and the lower the score of a person,

While intelligence is defined as an individual's mental abilities based reasoning aspect of language (verbal reasoning), quantitative reasoning (quantitative reasoning), the reasoning was given (short term memory), and abstract reasoning (abstract reasoning) (Slosson, 2006). To be able to know a person's level of intelligence, can use intelligence tests (Walgito, 2002). Intelligence tests used in this study is the S-FRIT (Slosson Full - Range Intelligence Test). The higher a person's score, the higher the score the lower the intelligent and a person, the lower the intelligence.

Meanwhile in the sampling studies using saturation sampling technique, which is one type of non-probability sampling technique that makes all members of the population as the study sample. In this study, the characteristics of the subjects used were as follows:

### slow Learner

According to Slosson et al (2006), the slow learner students, ie students who have an IQ between 70 - 89. This means that the child has a score of intelligence under the child - the child of his age, so it is considered by Jamaris (2013) has the intelligence lapses. Meanwhile, Walgito (2002) revealed intelligence has a role in the cycle of the individual self-motivation.

### Over the age of 7-11 years

Chosen students who have entered the age of 7 years to 11 years because the child has entered the concrete operational stage of development. According to Piaget (in Somantri, 2007), a child who has entered the operational phase in the concrete have been able to think logically about things - things concrete. In this stage, children can also perform classification, grouping and setting problem so that the child should have been able to understand the importance of learning and have had the urge to learn. In addition, the concrete operational thinking skills can also assist students in responding or working scale of psychology in the study.

Furthermore, the data obtained in the study will be analyzed statistically. Analysis of the data using the technique of Pearson Product Moment Correlation to determine the relationship between the independent variables, namely the intelligence with variable depends, namely motivation to learn.

## RESULT AND DISCUSSION

The results of the data hypothetical Motivation Scale obtained the lowest score was 30 and the highest score is 120. The mean hypothetical amount of  $(1 \times 30) + (4 \times 30): 2 = 90$  with a standard deviation of  $(120-30): 6 = 15$ . Data Empirical Study of Motivation Scale 60 obtained the lowest score and the highest score of 108 with a mean empirical standard deviation of 91.23 and 12.16.

The results of the data refer to the hypothetical standard intelligence test score from Slosson Full - Range Intelligence Test (S-FRIT) compiled by Slosson et al used to measure an individual's mental abilities, which are the lowest IQ score was 40 and the highest is 180. When made hypothetical average is  $110$  with a standard deviation of  $(180-40): 6 = 23.33$ . The empirical data of the lowest IQ Tests Intelligence obtained the highest IQ 70 and 89 with a mean empirical 83.53 and a standard deviation of 5.38.

Results categorization score Motivation Study indicates that the study subjects who have high motivation to learn as much as 5 people (16.67%) had a score of Motivation was as many as 22 people (73.33%), and has a low

learning motivation as much as 3 people (10%). It is a portrait that the study subjects tend to have moderate learning motivation.

Results categorization score intelligence subjects showed that the study subjects who had a below average intelligence - average (low average) as many as 25 people (83.33%) and borderline Impaired or delayed by 5 votes (16.67%). This illustrates that the study subjects who have to note the Children with Special Needs (ABK) tend to have intelligence in the category below average - average (low average). The low average level of intelligence subjects and borderline impaired or delayed in the category of children with special needs the type of slow learner.

Results of correlation analysis obtained correlation coefficient of 0.581 with a significance level of 0.000 ( $p < 0.05$ ). It shows there is a positive correlation between intelligence and motivation to learn, meaning that the higher level of intelligence, the motivation to learn is also higher. Conversely, the lower the level of intelligence, then the motivation to learn is also lower. The coefficient of determination of 0.337 contributing to the improvement of intelligence variables of learning motivation of 33.70%, This suggests that the motivation to study subjects 66.30% influenced by other factors not included in this study.

Correlation refers to these results can be understood that motivation and intelligence are two things affect each other. Motivation plays an important role in the learning process. To achieve success, and success does not only require a strong motivation in learning, intelligence Pelikan also plays an important role in the success and the success of a person. This applies to all target learners, including children with special needs (ABK). In this research, the crew in question is a slow learner student, ie students who have the intelligence level below the average and borderline with IQ scores (70-89) in the S-FRIT score. Slow learner students considered to always be acyclical failure in completing the mainstream education (Shaw, 2010).

Intelligence is seen as an adaptive process that involves intellectual functioning (Piaget in Somantri, 2007). Meanwhile, Slosson et al (2006) suggested that intelligence is the mental ability of individuals based on aspects of

language reasoning (verbal reasoning), quantitative reasoning (quantitative reasoning), the reasoning was given (short term memory), and abstract reasoning (abstract reasoning). The formulation of the definition of intelligence is undergoing changes from time to time, but from the first never experienced a change of emphasis on cognitive aspects (Anwar, 2012).

According to the cognitive perspective, thinking students will guide the student's motivation. This perspective focuses on the ideas of internal motivation pupils to achieve something/attributions (perceptions of the causes of success and unsucess, especially the perception that the business is an important factor in achievement), and the belief that the student - the student can control their environment effectively ( Santrock, 2008). Further Walgito (2002) suggested that the pressure point in the cognitive aspects of intelligence include reasoning, memory, and perception. Furthermore, intelligence has a role in the cycle of the individual self-motivation. With the involvement of the intelligence in the cycle of motivation, then driving the individual state can be triggered by thoughts or memories. That is the intelligence of the individual is able to move or push the person's motivation in learning. This can be explained by the theory of motor cycle with the cognitive approach proposed by Deci (in Walgito, 2002).

This can be illustrated from the cycle of learning motivation cycle of research on the subject, namely the slow learner students ABK category. According to Slosson et al (2006), the slow learner students, ie students who have an IQ between 70 - 89. This means that the student has a score of intelligence under the child - the child of his age, so have a difficulty in almost any subject matter (Jamaris, 2013) , Illustrated a slow learner students with an IQ between 70-89've difficulty in solving math problems (as the input stimulus), then teacher gives the same matter at a later time and the student immediately thought that the problem is difficult (as awareness of the potential of dissatisfaction/motive state),

From the illustration above can be understood that when a slow learner students think that learning is difficult, so when faced with the same learning conditions, there will be aware of the potential for discontent in learning. Dissatisfied, then these students will

assume that learning is not a pleasant thing, so there would be a low learning motivation and ultimately the student is not learning the process. In this case, it appears that the greatest role is the factor of cognitive abilities or the student's way of thinking. Piaget's cognitive ability is viewed as intelligence. That is the level of intelligence a person is able to move his mental faculties that affect one's motivation. It is also in accordance with the opinion of Dimiyati and Mudjiono (2009), that motivation is the mental boost that drives and directs human behavior including learning behavior. This means that all mental processes (feelings, concerns, wishes, memories, and thoughts) dynamic will affect the motivation and learning behavior.

The above theory study in accordance with the results of this study. In this study, data showed that the coefficient of determination of 0.337 contributing to the improvement of intelligence variables of learning motivation of 33.70%. This suggests that the motivation to study subjects 66.30% influenced by other factors not included in this study. There are several other factors that are thought to affect students' motivation by Imron (in Siregar and Nara, 2011), the ideals of the factors, the ability of learners, learner conditions, environmental conditions learner, learner dynamic elements, the efforts of teachers in teaching learners.

Based on the above it can be seen that there is a positive correlation between intelligence and motivation to learn in children with special needs. That is, if the research subjects had a high intelligence level, then the learning motivation tends to be higher. Instead, the study subjects who had low intelligence level, it also tends to be low learning motivation. This suggests that the hypothesis is accepted.

## CONCLUSION

Based on the results and discussion, it can be concluded that there is a positive correlation between intelligence and motivation to learn in special needs children with a correlation coefficient of 0.581 ( $p < 0.05$ ). This shows that the study subjects who had a high level of intelligence, then the learning motivation tends to be higher. Instead, the

study subjects who had low intelligence level, it also tends to be low learning motivation. Donations intelligence on motivation to learn by 33.70%, 66.30% indicates that the motivation to learn the subject research is influenced by other factors not included in the study, such as ideas, the ability of the learner (physical, emotional, social, and personality), learners conditions, environmental conditions learner, learner dynamic elements,

Based on the research, further research should be developed by taking into account factors - other factors affecting learning motivation research subjects that are not assessed in this study, such as: the ideas, the ability of the learner (physical, emotional, social, and personality), the condition of the learner, environmental conditions of learners, learner dynamic elements, the efforts of teachers in teaching learners.

In order to obtain richer data and depth can be tested using a qualitative method of interviews and observations as the data collection method. This is done so revealed things - other things that could not fit into the scale that had been developed by researchers.

Research other than among children with special needs the type of slow learner needs to be done to enrich the empirical evidence on the relationship of intelligence with the motivation to learn.

## REFERENCES

- Ahmadi dan Supriyono, W. 2013. Psikologi Belajar. Jakarta: Rineka Cipta.
- Arikunto, S. 2013. Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: PT. Rineka Cipta.
- Aritonang, Keke T. 2008. "Minat dan Motivasi dalam Meningkatkan Hasil Belajar Siswa". Jurnal Pendidikan Penabur (Nomor 10 Tahun 7). Hlm 11-21.
- Asrori, M. 2009. Psikologi Pembelajaran. Bandung: CV Wacana Prima.
- Azwar, S. 2011. Pengantar Psikologi Intelligensi. Yogyakarta: Pustaka Pelajar.
- Dariyo, A. 2004. Psikologi Perkembangan Remaja. Bogor: Ghalia Indonesia

- Dimiyati dan Mudjiono. 2009. Belajar dan Pembelajaran. Jakarta: Rineka Cipta.
- Djamarah, S.B. 2008. Psikologi Belajar. Jakarta: Rineka Cipta.
- Hamalik, O. 2013. Kurikulum dan Pembelajaran. Jakarta: IKIP Jakarta.
- Jamaris, M. 2013. Orientasi Baru dalam Psikologi Pendidikan. Bogor: Ghalia Indonesia.
- Monks, F.J., A.M.P. Knoers., dan S.R. Haditono. 2006. Psikologi Perkembangan: Pengantar dalam Berbagai Bagiannya. Yogyakarta: Gajah Mada University Press.
- Nashar. 2004. Peranan Motivasi dan Kemampuan Awal dalam Kegiatan Pembelajaran. Jakarta: Dalia Press.
- Shaw, S.R. 2010. Rescuing students from the slow learner trap. Principal Leadership
- Salim, E. 2012. Hubungan Antara Inteligensi Dengan Motivasi Belajar Pada Siswa. Skripsi. Surakarta: Universitas Muhammadiyah Surakarta.
- Santrock., J.W. 2008. Psikologi Pendidikan (edisi kedua). Jakarta: Prenada Media Group
- Sardiman, A.M. 2007. Interaksi dan Motivasi Belajar. Jakarta: Rajagrafindo Persada.
- Siregar, E dan Nara, H. 2014. Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia
- Slameto. 2003. Belajar dan Faktor – Faktor Yang Mempengaruhinya. Jakarta: Rineka Cipta.
- Sugiyono. 2012. Metode Penelitian Kuantitatif dan Kualitatif dan R&D. Bandung: Alfabeta.
- Solso R.L, Maclin, O.H, Maclin, M.K 2002. Psikologi Kognitif. Jakarta: Penerbit Erlangga
- Slosson S.W., Vance H.R., Mann L, Eaves RC, dan Algozzine B. 2006. Slosson Full-Range Intelligence Test. New York: Slosson Educational Publications, inc
- Walgito, B. 2002. Pengantar Psikologi Umum. Yogyakarta: ANDI.