Original Research

THE RELATIONSHIP BETWEEN INTELLIGENCE LEVEL AND SOCIAL INTERACTION ABILITY IN MENTALLY RETARDED CHILDREN

Putri Ida Rahayu* and Feriana Ira Handian

Institute of Health Science Maharani Malang, East Java, Indonesia

ABSTRACT

Introduction: Children with mental retardation tend to have intellectual limitations than average and are along with impaired social adjustment abilities.Therefore, mentally retarded children experience social communication difficulties, even communication. This study aims to analyze the relationship between intelligence level and social interaction skills in mentally retarded children at SLB Idayu Pakis Malang.
Method: The design of this study was quantitative with a cross-sectional approach. The population in this study were Idayu Special School students with mental retardation with a sample size of 30 respondents. The sampling technique uses total sampling. The data collection was using a documentation sheet based on reports from teachers for IQ scores and checklist sheets adapted from Vineland-3. The analysis of the data used is a satirical test with a spearman correlation test.
Results: The results of the analysis obtained $p = 0.000$ with p value < 0.05 and (r) 0.648. This result showed a correlation between intelligence level and social interaction ability in mentally retarded children at SLB Idayu Pakis Malang.
Conclusions: This research is expected could be used as a reference in adding guidance to mentally retarded children in order to develop intellectual skills to improve their social interaction skills through play therapy activities.

Keyword: intelligence leve;, social interaction ability; mental retardation

1. INTRODUCTION

Mental retardation is an abnormality that characterizes intelligence. (Wade, Tavris, Garry, 2016). The fundamental problem for mental retardation children is usually pointed out by His behavior when doing activities together with normal children in general. For example, when they get along, they face a number of difficulties both in their activities. The study is both physical, psychological and social (Risnawati, 2010). In addition, the lack of low intellectual ability leads to the inability of individuals to learn and adapt to the demands of society for abilities considered normal (Soetjiningsih, 2012).

Of the several studies that have been conducted on child social isolation, children show that there is a significant difference in social isolation. It is often found to be rigid, irritable and when associated with his behavior shows that he is not forgiving and has no sensitivity to others. This suggests that such children have fundamental difficulties in social interaction and even communication. (Risnawati, 2010).

The prevalence of children aged 24-59 month with mental retardation at RISKESDAS in 2010 was 0.14% (Kemenkes RI, 2104). The prevalence of intellectual disability/intellectual developmental disorders (ID/IDD) is about 1-3%, and mental health disorders that occur about 40%, with persistent mental health around 30% (Munir & Society, 2016).

Mental retardation is a disorder characterized by deficits in intellectual capabilities and adaptive abilities. intelligence in this study is an individual characteristic and is usually defined as the ability to benefit from experience, gain knowledge, think abstractly, respond to goals, or adapt to changes in the environment (Wade, Tavris, Garry, 2016).

The underlying problem for mentally retarded children is usually indicated by their behavior when doing activities together with normal children in general. For example, when children with mental retardation played and participated in group activities, they encounter a number of difficulties in physical, psychological and social activities (Risnawati, 2010). Besides, the intellectual capability causes the individual's inability to learn and adapt to society's demands for abilities that are considered normal (Soetjiningsih, 2012).

In a preliminary study conducted in April 2019 at SLB Idayu Pakis Malang, there were 35 students with mental retardation starting from the Therapy Class, Elementary Special School (SDLB), Junior Special High School (SMPLB), Senior Special High School (SMALB). Based on the observations results, the abilities of mentally retarded children were different from one another. Especially in the context of the social interaction ability. There are some children that able to interact with their schoolmates and strangers, but there are also some children who unable to interact with friends and other people.

Based on these conditions and problems, it is important to conduct research on "The Relationship between Intelligence Levels and Social Interaction Skills for Mentally Retarded Children in Special Schools (SLB) Idayu Pakis Malang"

2. METHODS

In this research, researchers used quantitative research methods with a cross-sectional design. The research was conducted on students of Special School (SLB)Idayu 2 Pakis Malang totaling 30 respondents with research documentation of students who meet the inclusion and exclusion criteria.

The inclusion criteria of the study are as follows: Extraordinary school students (SDLB) with mental retardation, Teachers who take care of the child, Teachers who have worked in SLB for 5 years, Students who have documents on IQ and self-development have been taught.New and complete. The inclusion criteria of the study are as follows: documents that have not been returned to school and have not been signed by the beginningi students and principals.

The sampling method in this research uses total Sampling. The independent variable of this research is the intelligence level. The dependent variable of this research is the social interaction ability of mentally retarded children.

3. RESULTS

Based on Table 1, the results show that the majority of respondents are 11-20 years old, consisting of 20 children (66.7%). More than half of the respondents are female as many as 16 children (53.3%). Almost half of them have SMPLB education as many as 20 children (40%). Table 2 shows thatof 30 respondents, it was found that almost half of them had mild mental retardation as many as 11 children

(36.7%). Based on graphic 3 above, of 30 respondents, the results show the strongest social interaction with 19 children (63.3%). Based on graph 4, the results of the cross-tabulation test carried out showed that almost half of the 19 respondents (63.3%) had strong social interactions with almost half of them having mild intelligence levels as much as 9 (30%).

Based on table 5, the results of the Spearman correlation test analysis produce a Pearson correlation coefficient p-value of 0.000. p-value < (0.000 < 0.05) with (r) of 0.669, indicating that there is a strong relationship between the intelligence level and social interaction ability. Spearman correlation coefficient is 0.669 and is positive. The result indicated that there is a relationship between the level of intelligence and social interaction in positive or unidirectional. The result showed that the higher intelligence level score, the stronger the social interaction ability, and vice versa.

4. DISCUSSION

The Intelligence Level in Children with Mental Retardation
fresh when waking up (Astuti, et al 2021).

Factors that contribute to sleep disturbances include the duration of hemodialysis therapy, high urea and/or creatinine, pain, disability, malnutrition, muscle cramps, peripheral neuropathy, and somatic problems. In addition, several factors can cause sleep pattern disturbances, such as demographic factors (age & gender), lifestyle factors, psychological factors (anxiety & depression), biological factors (diseases causing chronic kidney failure), environmental factors and other factors. dialysis therapy (Nurhayati, et al., 2021).

Poor sleep quality in patients with chronic renal failure undergoing hemodialysis can have an impact on the patient's daily activities and affect the body both physiologically, psychologically, socially, and environmentally and can lead to a decrease in appearance such as cognitive and memory dysfunction, irritability, decreased alertness and concentration and aggravate the condition of the disease (Nurhayati, et al., 2021).
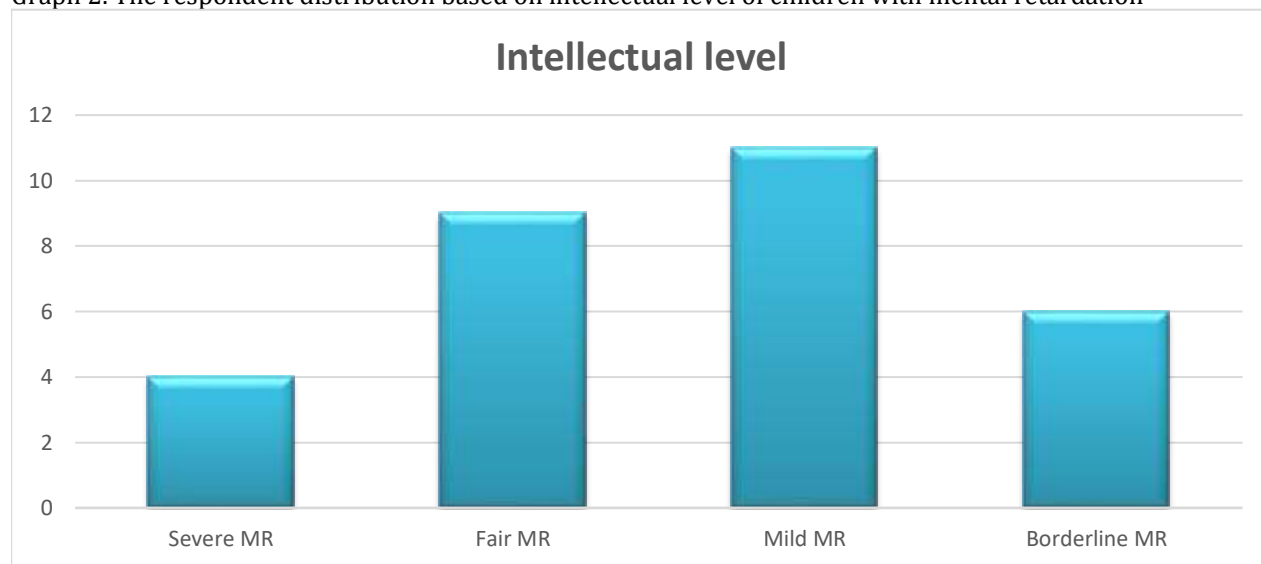
Quality of life in chronic renal failure patients undergoing hemodialysis
The results of the study based on table 2 show that most of the respondents, 27 respondents (75%) have poor quality of life. The quality of life in chronic kidney failure patients undergoing hemodialysis in four domains, namely physical, psychological, social and environmental, is basically lower than chronic kidney failure patients undergoing kidney transplantation (Mailani, 2015).

Table 1. Frequency distribution based on characteristics

Keterangan	Kategori	F	%
Usia	0-10	6	20.0
	11-20	20	66.7
	21-30	4	13.3
Total		**30**	**100**
Jenis kelamin	Laki-laki	14	46.7
	perempuan	16	53.3
Total		**30**	**100**
Pendidikan	Terapi	9	30
	SDLB	9	30
	SMPLB	12	40
Total		**30**	**100**

Graph 2. The respondent distribution based on intellectual level of children with mental retardation

Graph 3. Respondents' distribution based on social interaction ability
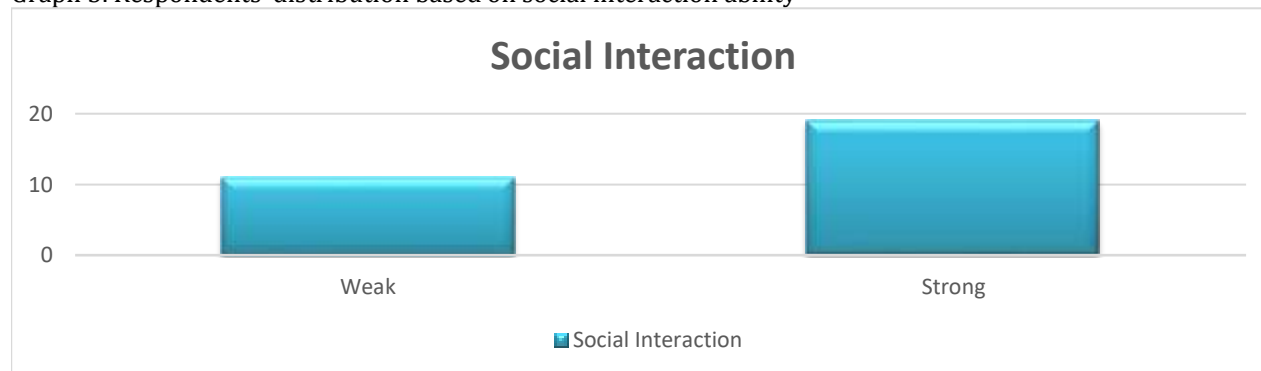
Chronic renal failure patients undergoing hemodialysis have a poor quality of life and tend to experience complications such as depression, malnutrition, and inflammation. Many of them suffer from cognitive disorders, such as memory loss, low concentration, physical, mental, and social disorders that will interfere with daily activities. Some researchers emphasize that improving quality of life will reduce complications associated with this disease (Mailani, 2015).

Factors that affect the quality of life of chronic kidney disease patients undergoing hemodialysis are socio-demographic factors such as gender, age, education level, marital status, employment status or economic status. Other factors are depression, severity/stage of kidney disease, presence of comorbidities, duration of hemodialysis, non-adherence to medication, high body mass index, social support, hemodialysis adequacy, and interdialytic weight gain (IDWG), urine output, interdialytic and hemoglobin values. (Mailani, 2015).

Tabel 4. Cross table of intelligence levels with social interaction ability

Intellectual Level	Social Interaction				Total	
	Weak	%	Strong	%	F	%
Severe MR	4	13.3	0	0	4	13.3
Fair MR	5	16.7	4	13.3	9	30
Mild MR	2	6.7	9	30	11	36.7
Borderline MR	0	0	6	20	6	20
Total	**11**	**36.7**	**19**	**63.3**	**30**	**100**

Table 5. Cross Table of Intelligence Levels with Social Interaction Ability

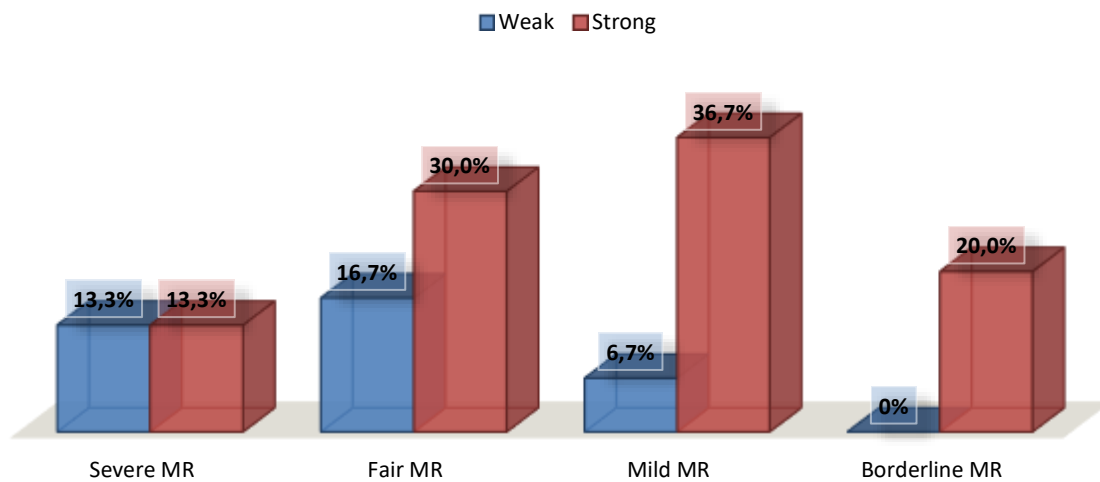THE RELATIONSHIP BETWEEN INTELLECTUAL LEVEL AND SOCIAL INTERACTION ABILITY

Table 6. The Spearman test result about Intellectual level and Social Interaction Ability of Children with mental Retardation

SpearmanTest	Social Interaction	
Intelectual Level	r	0.669
	p-value	0.000
	n	30
	α	0.05

The Intelligence Level in Children with Mental Retardation

Intelligence is a person characteristic, which is usually defined as the ability to take advantage of an experience, gain knowledge, think abstractly, perform on goals, or adapt to changes in the environment (Wade, et al 2016).

Based on this study results, of the 30 respondents studied, the results showed that most of the respondents had mild level of mental retardation (36.7%). According to researchers, children with mental retardationmild level intellectual abilitiesbelow average (IQ < 70). Children with mild level of mental retardation are also called moron or debil. Children with mild level of mental retardation can still read, write, and do simple arithmetic, are able to get along, adjust to an environment that is not limited to the family, are able to be independent in society, are able to do simple work and do it independently(Triyani, 2013).

Mental retardation can be caused by congenital diseases such as chromosomal abnormalities, genetic disorders, infections in the mother's womb during pregnancy, and metabolic disorders that affect cognitive abilities. X chromosome can affect intellectual ability (Lerhke, 1991).

Social Interaction Ability in Children with Mental Retardation

Social interaction is a dynamic social relationship between individuals and individuals, individuals with

groups, and groups with groups(Triyani, 2013). Based on the study results, most of the respondents, namely 19 respondents (63.3%) had strong social interactions.According to researchers, strong social interaction is influenced by social contact and equitably good communication for instance smiling, shaking hands, enjoining to know new people, being able to start conversations, besides that the special school environment also affects social interactions such as the support system from teachers and school friends.

According to researchers, with the assistance of special schools, students can gather together with other friends and manage social interactions at school. Students be able to socialize with peers and with other friends to establish communication and social connection with others. So, it can be concluded that special school has an important role in the social process of children with mental retardation which can function to improve the attitudes and behavior of children who are lacking and increase intelligence and social interaction skills of children with mental retardation in the school until they graduated (Triyani, 2013).

The Relationship between Intelligence Level and Social Interaction Ability in Children with Mental Retardation

Based on the results of the cross tabulation, it was found that 4 respondents (13.3%) had severe level of mental retardation with weak social interactions. According to prior study by Sunusi (2018),intellectual disorders cause children experience difficulty in adapting to their environment. Therefore, one of the difficulties encountered in the communication process is in the form ofthe delivery process (sender barriers). These barriers come from the communicator who has difficulty in conveying messages due to lack of language, education, and intellectual mastery.

Intelligence is a person characteristic, which is usually defined as the ability to take advantage of an experience, acquire knowledge, think abstractly, respond to goals, or adapt to changes in the environment(Wade, et al 2016).The social interaction is the acquisition of the ability to behave in accordance with social demands. The inability of children with mental retardation can be caused by intellectual limitations and environmental factors, the environment is not only the classroom and school environment but also the child himself, his family, and the surrounding community(Triyani, 2013).

5. CONCLUSSION

There is a strong correlation between the intelligence level and the social interaction ability in children with mental retardation. This relationship had a positive and unidirectional. The higher the intelligence level score, the stronger the social interaction ability, and vice versa.

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