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The Communication Skills Assessment Instrument Development for Mild Intellectual Disability Children in Special Needs School

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A B S T R A C T

This research talked about assessment instrument development which had purpose to assess the communication skills of mild intellectual disability children. Intellectual disability children are a special needs children who has restricted capability in their intellectual so that they are difficult to do daily activities such as: caring, taking care themselves, communicating, and using money. After doing an interview with the teachers of SLB BC Autis YBA Surakarta, it could be found that there isn't an assessment to assess the communication skills for mild intellectual disability children. The teachers told that they only had an assessment instrument for their individual needs in order to help them independent when they aren't with their parents. Whereas the communication skills is important because it is used to tell about desire and maintain the good relationship with surroundings. This research was a research development that using 3D design (define, design, develop). This development research made 15 statement points that used to assess the communication skills of mild intellectual disability children which had results as follow: (1) validity test got a result 0,97 that was declared as valid; (2) reliability test for subjects outside the small-scale subjects with a result 0,90 and for the small-scale subjects with a result 0,87; (3) practicallity test for the subjects outside the small-scale subject with a result 98% and for the small-scale subject with a result 88% that was categorized as very practical.

Keyword: *Communication Skills, Assessment Instrument Development, Mild Intellectual Disability*

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INTRODUCTION

Education is one of the most important aspects in human life. Through an education someone will transform from not knowing to knowing, not skilled to skilled. According to Shavkidinova et al. (2023) education is the most important factor to improve the individual's life quality, it is because the individual success is influenced by the individual education degree and what they have learned in school.

In Indonesia, all of the Indonesian citizen must attend the basic education starting the age of seven until the age of fifteen. So that, education is very important for individual life without difference. Whereas during the developmental phase, not everyone gets developmental phase optimally or it can be said the individual experiences obstacle in its development. It can be called as special needs children or disability children. In English, disability comes from an acronym named *differently abled people* or diffable. According to Gustiana (2024, p. 106) special needs children means the children who have special needs because physically, cognitive, social or emotional condition that is different from others so they need a special education.

One of the special needs children is intellectual disability or mentally retarded. Intellectual disability children are a condition of children who have limitations in their intellectual function. Shah et al. (2023) define intellectual disability children are the condition that marked by the restricted intellectual functions such as: reasoning, remembering, problem solving, and adaptive abilities. Furthermore, according to Karabıyık et al. (2023) the characteristic that distinguish the intellectual disability children and children without

disability is the cognitive characteristic and causing them to face difficulty when faced with focusing attention, memory, and motivation. So that, their restricted intellectual function makes them having low academic skills. Meanwhile, the Diagnostic and Statistical Manual of Manual Disorder 5th edition (DSM-5) is used as a reference to psychiatry diagnosis for intellectual disability children in United States. DSM-5 was published by American Psychiatric Association (APA) in 2013. DSM-5 defines the intellectual disability children are disorder which experienced by children during their developmental phase where they have limited the intellectual functioning in terms of social, practical, and conceptual. Those criteria found in intellectual disability children are: decreased intellectual function obtained from individual assessments and intelligence tests, decreased adaptive function related to failure in the development of independence and social responsibility, and the emergence of intellectual and adaptive deficits experienced during the developmental period.

The limitation that faced by intellectual disability in their daily life and also their social skills cause them to face discrimination. According to Mangku et al. (2022) discrimination could be faced not only for intellectual disability children but also the other special needs children. The discrimination can happen because of their limitation to adapt to the society. In order to minimize the discrimination, special needs children including intellectual disability children need a special education. Lubna et al. (2021, p. 98) the limitation could be minimized through the special program which designed for intellectual disability children named pengembangan diri or activity daily living.

Based on the interview with teacher in SLB BC Autis YBA Surakarta conducted on January 17th until 20th, it was found that the assessment instruments for activity daily living only focusing on self-care and self-management competency standards. Whereas there were not assessment instruments to assess the communication, adaptation, and using the free time skills of intellectual disability children. It happened because the teachers were focused more to improve their intellectual disability children's skills on self-care and self-management where it is more important to be taught when they are not together with their parents. Besides, the communication skills are also important to be assessed so the teacher can decide the best planning program to improve the communication skills of intellectual disability children correctly. The teacher conducted the communication skills program only by interacting with other students during the learning process inside the classroom. However, the interaction process that conducted is felt to be less effective by the teacher because of their passiveness. Intellectual disability children don't have the initiative because of the feeling of embarrassment to communicate. According to Rusilowati et al. (2020) the thing that causes mentally retarded children to not dare to speak is because they have difficulty producing words or speaking.

The difficulties that faced by the teachers when teaching intellectual disability children were time constraints, changes in intellectual disability children's mood that it had to be understood by the teachers when conducting the learning process. Similar to Diana et al. (2023) where the difficulties faced by the teacher who taught special needs children were inadequate facilites and infrasturucture and the changes in children's mood quickly. So that, assessment instrument of communication skills is not had by the teacher. Also, the teachers taught that assessment instrument was not a priority but the changes in behaviour was the most important aspect. According to Mujahid (2019) the teachers could not do the identification assessment seriously because they had done the identification assessment through the observed behaviour. To assess the communication skills, the teachers only asked to their parents and their previous teacher.

The importance of developing the communication skills assessment instrument for mild intellectual disability children will help the teachers to decide the capabilities, needs, and difficulties faced by the intellectual disability children when communicating. The assessment result can be used by teacher to arrange the appropriate program for intellectual disability children based on their capabilities. So that, the mild intellectual disability children can improve their communication skills. According to Diana et al. (2022) teacher also play an important role in developing and guiding intellectual disability children to develop their

potential. Also, Mujahid (2019) stated that the teachers ability to understand the conditions and abilities of children who they taught will have an impact to improve the learning quality in schools. According to Zashchirinskaia (2020) intellectual disability children should be able to assimilate or adapt to norms and learn to understand others.

The good comunnication skills of intellectual disability children will influence the society attitude in terms of acceptance so that intellectual disability children will not feel marginalized in society. In addition, communication skills also fulfill the 21st century learning skills, namely 6C in terms of communication. In addition, communication skills are also important for intellectual disability children to play a role in society so that they are not left behind or isolated. As expressed by Baart et al. (2023) that disabilities can play a role in international development since the existence of the Sustainable Development Goals which focus on the slogan "leaving no one behind" which means that anyone can contribute. To contribute to society, communication skills are needed.

Therefore, the problem found by the researcher during the interview was the absence of a self-assessment instrument for communication skills with others that was able to measure the communication skills of intellectual disability children. The assessment instrument for communication skills with others had competency standards, namely: communicating verbally, communicating non-verbally, and communicating through writing. Based on the problems found, the title of this study is "Development of a Self-Assessment Instrument for Communication Skills Development for Children with Mild Mental Retardation in Special Schools."

METHOD

This research was development research using 3D design. 3D design is a development research design which modifies the 4D design by Thiagarajan similar to that expressed by Setiawan et al. (2019) which consists of three steps, namely: define, design, and develop.

Respondents

This research involved three special education schools named: SLB CG YPPCG Bina Sejahtera Surakarta, SLB BC Autis YBA Surakarta, and SLB Panca Bakti Mulia Surakarta. Those three special schools were chosen because they had accepted and the learning program for intellectual disability children. The mild intellectual disability children who involved in this research were 34 started from 1st grade until 6th grade. For the teacher, this research involved 14 teachers who taught elementary school level. For the instrument and material validator involved four validators from: Universitas Negeri Semarang, Universitas Sebelas Maret, SLB Panca Bakti Mulia Surakarta, and SLB CG YPPCG Bina Sejahtera.

Instruments

This research had two instruments to validate the assessment instruments which was given to the four validators. The validity testing was divided into instrument and material aspects. For the practicality instrument was also made to know the perception of teacher as the assessment instrument user. The assessment instrument was used to collect data as a result from the teachers when assessed their mild intellectual children in classroom.

Procedures

This research had three procedures named: define, design, develop. For the define phase, the researcher looked for the research problem based on the interview result. It was found that the teachers in SLB BC Autis YBA Surakarta did not have an assessment instrument to assess the communication skills of mild intellectual disability children.

For the design phase, the researcher created an assessment instrument to assess the mild intellectual disability children communication skills. The results of communication skills assessment instrument had the examination blueprints, assessment sheets, and assessment rubrics.

For the development phase, the researcher gave the first draft of communication skills assessment instrument to the validators to validate the validity of instrument. On the

development phase, the researcher also did a revision of instrument based on the comment and suggestion from the validators.

Data analysis

This research was using the quantitative and qualitative data. The quantitative data was analysed by the V Aiken for the instrument validity, Cronbach Alpha for the reliability instrument, and practicality of instrument. The quantitative data were collected through the number given by the validators, the teachers, and the mild intellectual disability children's communication skills results.

The qualitative data were collected from the suggestions and comments on the instruments by the validators or the teachers. The data taken from interview were also included as the qualitative data.

FINDINGS AND DISCUSSION

This research had four purposes namely: developing instrument, testing the validity, reliability, and practicality of the instrument. The first finding was developing assessment instrument to assess the communication skills of mild intellectual disability children. To develop the instrument, the researcher did three phases namely: define, design, develop. For define phase, the researcher found that there was a problem where the teachers of SLB BC Autis YBA Surakarta did not have an assessment instrument to assess the communication skills of mild intellectual disability children. The design phase, the researcher designed an assessment instrument which contained: examination blueprint, assessment sheet, and assessment rubric. There were three aspects of communication skills for mild intellectual disability children: verbal, non-verbal, writings. Each aspect was given 5 statements so that the whole instrument contained 15 statements. The develop phase, the researcher tested the validity of instrument to the validator and did the research to the small-scale subjects.

The second finding was instrument validity. To examine the number of validities, the researcher used Aiken's V formula. The minimum index to be accepted or stated as a valid instrument for 4 validators, it needed to surpass the minimum index of Aiken's V. According to Nurjanah et al. (2023) if the validity result got below 0,92, so it had to be revised and it could not be said as a valid. So, the minimum index of Aiken's V for 4 validators is 0,92. This assessment instrument was given to the validators and they gave the value based on the rating scale 1 – 4. After being analysed using Aiken's V formula, the validity test got a result as 0,97 both for instrument and material aspects. So that, the assessment instrument to assess the communication skills of mild intellectual disability children was valid and could be continued to be tested to the small-scale subjects.

The third finding was instrument reliability. To examine the number of reliabilities, the researcher used Cronbach Alpha's formula. Cronbach Alpha's formula has the criteria to be said as a reliable instrument, the assessment instrument should fulfil the number 0,70 as the critical value to be accepted as a reliable instrument while 0,80 as the critical value to be said that instrument had a good reliability (Song et al., 2023). According to Ulfah et al. (2020) that the higher the coefficient value approaching 1.00 indicates the higher the level of agreement and vice versa if the coefficient value obtained is low and approaches 0 indicating a low level of agreement. According to Wo et al. (2025), a coefficient value approaching 1.00 indicates that the instrument is consistent and reliable for use during measurement. This instrument got a reliability result for the subjects outside the small-scale subjects 0,90. It could be said that the assessment instrument had a high reliability while the result for the small-scale subject testing, the assessment instrument got a result 0,87 which belonged to high reliability.

The fourth finding was analysing the practicality of the assessment instrument. The practicality was analysed using a formula stated by (Fadli et al., 2024). According to Fadli et al. (2024) the criteria for instrument could be said as practical if the instrument got the result 75% until 84% and very practical with the result 85% until 100%. To get the practicality, the respondents were given a questionnaire with four scale of answers. It could be analysed for the practicality score given by the respondents from subjects outside the small-scale subjects

was 98% which could be stated as very practical. Moreover, the practicality results for the small-scale subjects given was 88% which categorized as very practical. The categorization of very practical according to Sumarni et al. (2022) means the instrument users could maximize the performances.

CONCLUSIONS

This development research had purpose to develop an assessment instrument that could be used by the teacher to assess the communication skills of mild intellectual disability children. This development research used 3D design namely: define, design, develop. This research had a result an assessment instrument of mild intellectual disability children's communication skills containing: examination blueprints, assessment sheet, and assessment rubric which was valid, reliable, and practical to be used by the teacher or therapist. The validity of this instrument got the score 0,97 for the instrument and material aspects which it could be concluded the instrument was valid because it was surpassing the index of Aiken's Validity using 4 validators with a score 0,92. For the reliability test, this instrument got score 0,90 for the subject outside the small-scale subjects and 0,87 which categorized as this instrument had a high reliability. For the practicality of instruments, this instrument got 98% which categorized as very practical from the subject outside the small-scale subjects and got 88% for the small-scale subjects which categorized as practical. The implication was this instrument could be used to give new information for teachers or therapists to assess the communication skills of intellectual disability children. By using this instrument, they could make an individual planning program to improve the communication skills of intellectual disability children.

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