



# Attitudes Towards Disabilities and The Related Factors

Sunardi, Sugini, Mohammad Anwar, Tias Martika, Donni Prakosha

Sebelas Maret University

sunardi.ipuns@staff.uns.ac.id, sugini@staff.uns.ac.id,  
anwar@fkip.uns.ac.id, tiasmartika@staff.uns.ac.id,  
donni@staff.uns.ac.id

**Abstract.** The objective of this research is to investigate the attitudes of primary school teachers toward disabilities and inclusion. The subjects were 52 teachers in one supervisory area in the district of Boyolali, Central Java Indonesia. Their ages range from 24 to 58 with a means of 38 years, their working experiences range from 2 to 38 with means of 13 years. Data were collected using a four option Likert scale with seven factors: concept of disabilities, rights for education, inclusive preferences, admit heterogeneity, support disabilities friendly environment, appropriate expectation, and willingness to help. The results of the study shows that primary school teachers have positive attitudes towards disabled individuals (3.12). Their attitudes were positively related to their experiences with disabilities, with inclusive preferences as the lowest factors. Their attitudes were positively related to their general knowledge about disabilities and their knowledge of coping problem related with specific types disabilities. Surprisingly, their attitudes were negatively related to ages and their working experiences. These findings are expected to be used in planning intervention programs for primary schools teachers in preparing for inclusive education.

**Keywords:** inclusive education, attitudes, teachers.

## 1 Introduction

Education has long been internationally acknowledged as one of the most important needs and rights for everybody around the world. Ainscow [1] noted that in the last thirty years, the United Nations has organized significant international efforts to provide quality basic education for all learners through inclusive education. It began in 1990 with the Education for All (EFA) Declaration. All country members agreed to be proactive in identifying the barriers encountered some learners in to access educational opportunities. The more explicit agreement to implement inclusive education was stated in the 1994 World Conference on Special Needs Education, held in Salamanca, Spain. The conference itself was tended by more than 300 participants representing 92 governments and 25 international organizations. This fundamental policy mandated to promote the approach of inclusive education, i.e., enabling schools to serve all children, particularly those defined as having special educational needs. The 2000 World Education Forum meeting in Dakar reaffirmed the vision, which agreed that EFA must take

© The Author(s) 2023

M. Salimi et al. (eds.), *Proceedings of the 6th International Conference on Learning Innovation and Quality Education (ICLIQE 2022)*, Advances in Social Science, Education and Humanities Research 767,

[https://doi.org/10.2991/978-2-38476-114-2\\_115](https://doi.org/10.2991/978-2-38476-114-2_115)

particular account of the needs of the poor and the disadvantaged. The poor and the disadvantaged include working children, remote rural dwellers and nomads, and ethnic and linguistic minorities, children and young people affected by conflict, HIV/AIDS, hunger and poor health, and those with special learning needs.

Responding to the international movement in universal education, some important policies have been made by the Indonesian government, especially since 1970. Systematic programs in the provision of education for all children were included in the short and long terms of national development plan. Thousands of new primary schools were established and new teachers were recruited in the 1970s and 1980s. For children with special needs, in 1985, 250 new special schools were built in 250 districts in which there were no special schools before. At the same time, selected regular schools were mandated to also admit students with disabilities, specifically those with visual or physical impairments. After the inclusive education statement was internationally agreed in the 1994 World Congress of Special Needs Education, the Indonesian Ministry of Education instructed every district to make at least one inclusive general high school and one inclusive vocational high school, and every sub-district to have at least one inclusive primary school. It was in 2003. This policy has increased the enrollment of children with disabilities from 3% to almost 30% [2]. The most recent policy was released lately, allowing a student with disabilities to go to a school he / she wants, meaning that all schools should be prepared to become inclusive schools.

Based on their observation and experiences working in school improvement projects to promote inclusion in several European countries, Ainscow [1] proposes three inter-linked issues, within schools, between schools, and beyond schools. Within school issues include teaching process, students' engagement, classroom organization, personal support and social relation, response to diversity, and family and local community support. Between school issues include collaboration and communication among schools, access equality, school status acquisition, diversities within schools (no favorite or unfavorite schools). Beyond school issues include government policies, demographic, cultural and economic aspects of community, family participation and resources. This study focuses on within school issues, related to personal support and social relation, more specifically on teacher attitudes.

An attitude is an evaluation of an object of thought [3]. Attitude objects comprise anything a person may hold in mind, including things, people, groups, and ideas. In the context of this study, the objects were persons with disabilities, thus attitudes towards disabilities represent their cultures in relation with people with disabilities and inclusive education [2]. Some identified indicators of culture inclusiveness include appropriate understanding of concept of disabilities, acceptance of rights for education, inclusive preferences, admit heterogeneity, support disabilities friendly environment, appropriate expectation, and willingness to help and cooperate.

Attitudes toward disability are defined as the cognitive and behavioral processes that involve judgment and favorable/unfavorable reactions to aspects of disability [4]. Favorable reactions are known as positive attitudes, and unfavorable reactions are known as negative attitudes. In the context of children with disabilities, negative public attitudes foster low expectations, discriminatory behaviors, and marginalization of these children. In a broader context, they can lead to lack of opportunities and work, low self-

esteem, and isolation, and consequently to marginalization, stigmatization, and recurring negative health outcomes that prolong the discomfort of people with disabilities [5]. Whereas positive attitudes lead to acceptance of these children and promote their integration into society.

In an intensive literature review conducted by Yada, Leskinen, Savolainen and Schwab [6], it is concluded that teachers' negative attitudes toward inclusion or disabilities can be a barrier to implementing an inclusive education, because they can be associated with their behavior that could influence children's educational experience in inclusive classrooms; attitudes are relatively stable over time, which may be difficult to change; teachers' attitudes toward inclusive education are highly influenced by their cultural and demographical factors, and it is necessary to take those factors into account when developing interventions for teachers.

Another important factor that contributes to the development of attitudes is self-efficacy, i.e. one's belief about his or her capability to conduct a particular course of performance successfully. In the same intensive review of literature, Yada, Leskinen, Savolainen and Schwab [6], state that previous research findings of the relationship between teachers' self-efficacy and attitudes in inclusive education were not consistent. However, more recent research findings, using cross-lagged longitudinal designs, suggested that teachers' self-efficacy beliefs affect their attitudes toward inclusion. In their meta-analysis of 41 studies, they described a positive correlation between teachers' self-efficacy and attitudes in inclusive education. This correlation was not affected by working places (regular classes, special classes, or special schools), culture (individualism or collectivism), working experiences, and student variables (types of disabilities, severity).

Kazanowski and Żyta [7] investigated factors that are related to acceptance of disabilities. The subjects of the study were 313 people living in south-eastern Poland, consisting of 156 women (49.84%) and 157 men (50.16%). The Disability Acceptance Scale was used to measure attitudes. This scale consisted of three factors, namely the acceptance of (1) support given to people with disabilities; (2) people with disabilities in the institutions of social life; (3) people with disabilities to function in social roles. The results indicated no differences in attitudes between males and females. Social relations with people with disabilities, having a family member with a disability and having contact with a student with a disability at school were found to be significant factors affecting social acceptance.

Teachers trainees' attitudes towards inclusion in Qatar were investigated by Hamid and Mohamed [8]. The subjects were 40 students (18 males and 22 females) of the College of Education at Qatar University in a variety of primary and secondary teacher education programs, including Arabic studies, Islamic studies, English language, social studies, mathematics, and science sections. The Questionnaire of Attitudes towards Inclusion (QAI) was used to measure student attitudes. This instrument consists of two parts. Part 1 consists of 9 yes / no items revealing the agreement level to teach special children from the categories ID, ASD, HI, VI, EBD, GT, PD, LD, and ADHD. Part 2 was a 13 items Likert scale, measuring attitudes to inclusive education. The result indicated a positive attitude concerning with inclusive education. However, this attitude

varies depending on the severity of disability and the nature. Mild special children, such as those with learning disabilities, were their preference to teach.

A study on the impact of teacher preparation on preservice teachers' attitudes toward inclusive education in Qatar was conducted by Hassanein, Alshaboul and Ibrahim [9]. The subjects of the study consisted of 98 preservice teachers from primary and secondary teacher education programs in the College of Education at Qatar University in Doha. These students took an inclusion-centered course, combined with an 18-hr practicum. Data were collected before and after the course using the Multidimensional Attitudes toward Inclusive Education Scale (MATIES), an 18 item Likert scale consisting of three domains: cognitive (6 items), affective (6 items), and behavioral (6 items). The results showed that the teacher pre service preparation program for inclusion, that consisted of an inclusion course combined with a 18 hour practicum, was significantly effective in improving attitudes towards inclusive education. The improvement was observed in the three domains, cognitive, affective, and behavioral. In addition, there was no significant difference in attitudes between primary and secondary teacher education students.

Magyar, Kraus, Kapas, and Habok [10] investigated the perception of inclusive education of special educational need students among Hungarian teachers. The subjects were 121 primary and secondary school teachers. A scale, called Audit of provision for students with special educational needs was used to collect data. Data about background variables were collected in this research, including university course in SEN education and the use of ICT for SEN students in their university course. The results indicated that teachers who acquire comprehensive knowledge in their university education courses on teaching SEN students possess more profound skills to deal with them. Similarly, experience using ICT for SEN education in their university education significantly improved their skills in working with SEN students in schools.

A study on the attitudes of primary school teachers in Nigeria was conducted by Odo, Onah, Ujoatuonu, Okafor, Chukwu, Nwufu, Karatu and Mefoh [11]. A sample of 196 teachers (27-51 years of age, and 2-9 years of working experience) were randomly selected from 6 primary schools. The Multidimensional Attitude towards Inclusive Education Scale (MATIES) was used to measure attitudes toward inclusive education, the same instrument used by Hassanein, Alshaboul and Ibrahim (2021) in their study in Qatar. The results showed that the demographic variables – age and gender, were not associated with teachers' attitude towards inclusive education. The stronger predictor of attitudes towards inclusive education was work experience.

The roles of school leaders in shaping attitudes towards inclusive education in Estonia were investigated by Pedaste, Leijen, Kivirand, Nelis & Malva, [12]. The subjects were 301 school leaders, 8% of them worked in special schools, 52% had no course nor short training in special education, 82% had experience working in inclusive schools. A 38 item Likert scale questionnaire was used in data collection, containing four factors: vision, differentiation, practice, and support. Path analyses were used to analyze data. The results showed that school leaders in Estonia have slightly positive attitudes towards vision and practice of inclusive education but extremely negative attitudes towards adequacy of support. Surprisingly, school leaders working in a special school

and those who had participated in in-service courses focusing on inclusive education had more negative attitudes towards inclusive education practice.

Szumski, Smogorzewska, and Grygiel [13] conducted a cross sectional study to 1525 students without disabilities in Poland, to investigate through attitudes towards people with disabilities. A number of 909 of them were studying in traditional settings without disabled students, whereas 606 were in inclusive settings. Multidimensional Attitudes Scale Toward Persons with Disabilities was used to measure attitudes, and Commitment to Ethical Goodness Scale was used to measure moral identity. Data were analyzed using a regression technique. The result showed that attitudes toward people with disabilities were positively related to moral identify and experiences with disabled people.

The context of this study was primary schools in which, for a long time in the past, students with disabilities were educated in segregated special schools. Along with the movement toward inclusive schooling, the government is urging that all schools be prepared to admit students with disabilities and a variety of preparation programs are facilitated by the government.

## 2 Method

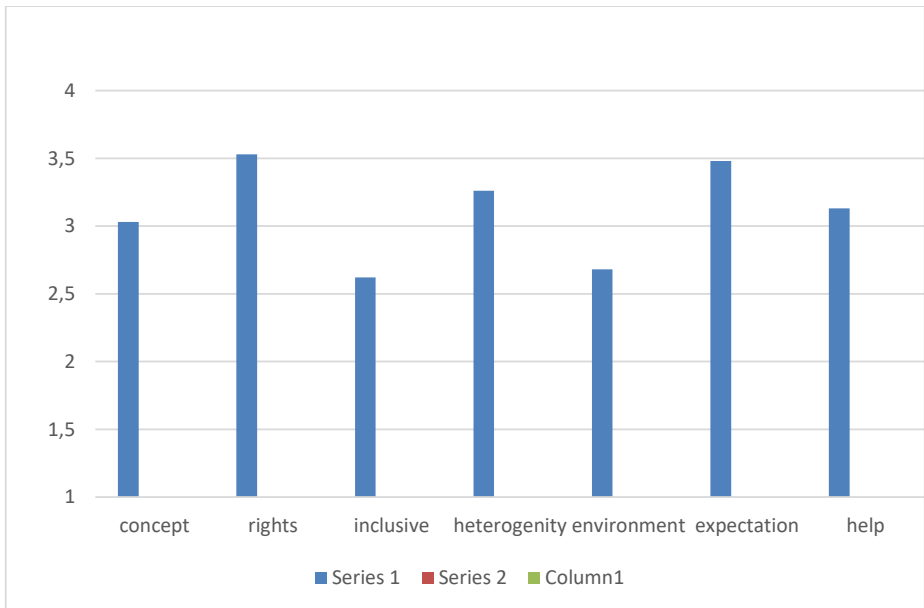
This is an experimental study. The experimenter's interest in the effect of environmental change, referred to as "treatments," demanded designs using standardized procedures to hold all conditions constant except the independent (experimental) variable. This standardization ensured high internal validity (experimental control) in comparing the experimental group to the control group on the dependent or "outcome" variable [14]. There are some types of experimental study and one of them is quasi experimental design. Oftentimes in educational studies, it is neither practical nor feasible to assign subjects randomly to treatments. Such is especially likely to occur in school-based research, where classes are formed at the start of the year. These circumstances preclude true-experimental designs, while allowing the quasi-experiment as an option [14]. Therefore, this study used quasi experimental design.

The subjects of the study consisted of 52 primary school teachers in the Boyolali supervisory area, District of Boyolali, Central Java. This was a heterogeneous group related to ages and working experiences. Their ages range from 24 to 58 years (means 38 years) and their working experiences range from 2 to 38 years (means 13 years). It was conducted from April until June 2022. Data were collected using a questionnaire consisting of two parts. The first part contained questions related to ages, working experiences, experience with disabilities (having disabled family members, having disabled students, short training in special education, taking courses in special education), general understanding of disabilities (definition, classification), understanding of specific needs and services of disabilities (visual impairments, hearing impairments, intellectual disabilities, physical disabilities, speech problems, behavioral problems, autism, gifted). The second part was a four option Likert scale with seven factors: concept of disabilities (5 items), rights for education (6 items), inclusive preferences (4 items),

admit heterogeneity (6 items), support disabilities friendly environment (4 items), appropriate expectation (4 items), and willingness to help (4 items). A try out of the scale to 32 university lecturers showed a split half reliability of 0,538.

### 3 Results and Discussion

In general, the primary teachers' experiences and understanding of disabilities were low. The means score for experiences is 1.5 (scale 1 to 5), most of them had no experiences with disabilities, only a few has disabled family members, or disabled students, or training related to disabilities, or courses in special education. Their score for general understanding of disability is 2,71 (scale 1-4), they felt that they had poor understanding of concepts and classification of disabilities. They also admitted their poor competence related to the specific needs and services for different types of disabilities (means 2.51, scale 1-4), including visual impairments, hearing impairments, intellectual disabilities, physical disabilities, speech problems, behavioral problems, autism, gifted. The overall attitude means score is 3.12 (scale 1-4), and data were broken down by factors, the scorers are presented in figure 1.



**Fig. 1.** Attitude Scores by Factors

As shown in figure 1, primary school teachers had positive perceptions in relation with concepts of disabilities (3,03), rights of disabilities for education (3,53), heterogeneous society (3.26), expectation (3,48), and willingness to help (3,13). However, they tended to show negative scores related or inclusion placement (2,62) and disability friendly environment (2,68).

**Table 1.** Factors related to attitudes

Factors	r	Level of significance
Experiences with disabilities	0.6062	p<0.01
General understanding of disabilities	0.4009	P<0.01
Understanding specific needs and services for different types of disabilities	0.3802	P<0.01
Working experiences	-0.4806	P<0.01
Ages	-0.403	P<0/01

Attitudes towards disabilities were positively related to experiences with disabilities ( $r=0,6062$ ;  $p<0,01$ ), general understanding of disabilities ( $r=0,4009$ ;  $p<0.01$ ), and understanding of specific needs and services for diferent types of disabilities ( $r=0,3802$ ;  $p<0,01$ ). These results support the previous studies by Hassanein, Alshaboul and Ibrahim (2021), that experiences with people with disabilities, here a course with practicum in soecial education, improve attitudes, by Kazanowski and Żyta [7] that having a family member with a disability and having contact with a student with a disability at school are associated with positive attitudes, by Szumski, Smogorzewska, and Grygiel [13] that experiences with disabled people were positively related to attitudes, and by Odo, Onah, Ujoatuonu, Okafor, Chukwu, Nwufo, Karatu and Mefoh [11] that stronger predictor of attitudes towards inclusive education was work experience. It makes sense that the more someone understands the concepts of, the needs of, and the specific services for individuals with disabilities, the more positive attitudes he would show. The same logic for someone who has experiences interacting with people with disabilities, either having disabled family members, or having disabled students in his class, or taking a course with practicum in special education.

Surprisingly, attitudes towards disabilities were negatively related to working experiences ( $r=-0,4806$ ;  $p<0.01$ ) and ages ( $p=-0,4603$ ;  $p<0.01$ ). In the previous study by Odo, Onah, Ujoatuonu, Okafor, Chukwu, Nwufo, Karatu and Mefoh [11], age was not a factor for attitudes, and the other studies, working experiences were positive indicators of attitudes. In this study, it showed that the older and the longer working experience a teacher has, the more negative attitudes he has towards inclusive education. This finding might be related to the schooling system in Indonesia. For a long time, children with disabilities were educated in segregated special schools, using special curriculum, with special teachers. Regular primary school teachers taught non-disabled students in regular schools, and they enjoyed this system. Inclusive education will change their teaching habits, they will have disabled students in their class, and they are not happy with this, a condition that is different from the one they experience for a long time. In

the previous studies by Szumski, Smogorzewska, and Grygiel [13], Odo, Onah, Ujoat-uonu, Okafor, Chukwu, Nwufu, Karatu and Mefoh [11], Magyar, Kraus, Kapas, and Habok [10], working experiences contribute to positive attitudes, these are experiences in inclusive schools, whereas in the Indonesia context, these are working experiences in segregated settings. The teachers might feel that they did not have the competence teaching disabled students, or known as self efficacy [6].

## 4 Conclusion.

This study investigated the attitudes of primary school teachers towards disabled students and inclusive education. The results indicated positive perceptions in relation with concepts of disabilities, rights of disabilities for education, heterogeneous society, expectation, and willingness to help. However, they tended to show negative scores related or inclusion placement and disability friendly environment.

Data were then further analyzed using correlation techniques. The results showed that attitudes towards disabilities were positively related to experiences with disabilities, general understanding of disabilities, and understanding of specific needs and services for different types of disabilities. However, teachers' ages and working experiences were negatively related to their attitudes.

The results of this study might be taken into consideration in making policies for the enhancement of inclusive education. Training might be planned for these teachers, by including concepts of disabilities, concepts of inclusive education, concepts and practicum teaching inclusive classes. It is also important to take into consideration the ages of the teachers in the assignment of teachers in inclusive classes.

## Acknowledgements

This research was funded by the Competitive Research Grant from the University of Sebelas Maret 2022. We express our sincere gratitude to the university.

## References

1. Ainscow, M (2020). Promoting inclusion and equity in education: lessons from international experiences. *NORDIC JOURNAL OF STUDIES IN EDUCATIONAL POLICY*. 2020, VOL. 6, NO. 1, 7–16. <https://doi.org/10.1080/20020317.2020.1729587>.
2. Sunardi, Sugini, Martika, T., and Prakosha, D. (2020). The Development of an Inclusion Metric for Indonesia Higher Education Institutions. *Proceedings, ICLIQE 2020*, September 5, 2020, Surakarta, Indonesia. ACM Publishing. <https://doi.org/10.1145/3452144.3453774>.
3. Bohner, G. & Dickel, N. (2011) Attitudes and Attitude Change. *Annual Review of Psychology* · January 2011. DOI: 10.1146/annurev.psych.121208.131609 ·
4. Tsakiridou, H, & Polyzopoulou, K.. “Generic preschool and primary university students in Greece and their attitudes towards inclusion”. *European Journal of Special Education Research*. Vol.6 no.1. 2019. Available on-line at: [www.oapub.org/edu](http://www.oapub.org/edu)



5. Zheng, Q., Tian, Q., Hao, C., Gu, J., Tao, J., Liang, Z., Chen, X., Jiqian Fangl, Ruan, J., and people with disability among caregivers, the public, and people with disability: findings from a cross-sectional survey. *BMC Public Health* (16) 1024. DOI 10.1186/s12889-016-3670-0
6. Yada, A., Leskinen, M., Savolainen, H. & Schwab, S. (2022), Meta-analysis of the relationship between teachers' self-efficacy and attitudes toward inclusive education. *Teaching and Teacher Education*, 109 (2022) 103521, 1-15. <https://doi.org/10.1016/j.tate.2021.103521>
7. Kazanowski, Z. & Zyta, A. (2021). Socio-pedagogical determinants of social acceptance of people with disabilities. *International Journal of Special Education*, 36 (1) 35-48. DOI:<https://doi.org/10.52291/ijse.2021.36.4>.
8. Hamid, M. S., & Mohamed, N. I. A., (2021). Empirical investigation into teachers' attitudes towards inclusive education: A study of future faculty of Qatari schools. *Cypriot Journal of Educational Science*. 16(2), 580-593. <https://doi.org/10.18844/cjes.v16i2.5636>
9. Hassanein, E.E.A., Alshaboul, Y.M., and Ibrahim, S. (2021). The impact of teacher preparation on preservice teachers' attitudes toward inclusive education in Qatar. *Heliyon* 7 (2021) e07925. <https://doi.org/10.1016/j.heliyon.2021.e07925>
10. Magyar, A., Krausz, A., Kapas, I.D., and Habok, A. (2020). Exploring Hungarian teachers' perceptions of inclusive education of SEN students. *Heliyon*. 6 (2020) e03851. <https://doi.org/10.1016/j.heliyon.2020.e03851>
11. Odo, V.O., Onah, E.N., Ujoatuonu, I.V., Okafor, A.E., Chukwu, A.N., Nwifo, J.N., Karatu, B.A. and Philip C. Mefoh, P.C, (2021) Attitude of Primary School Teachers Towards Inclusive Education in Nigeria: Contributions of Personality and Work Experience. *INTERNATIONAL JOURNAL of SPECIAL EDUCATION*, 36 (1) 5-12. DOI: <https://doi.org/10.52291/ijse.2021.36.1>
12. Pedaste, M., Leijen, A, Kivirand, T., Nelis, P. & Malva, L. (2021) School leaders' vision is the strongest predictor of their attitudes towards inclusive education practice. *International Journal of Inclusive Education*. DOI: 10.1080/13603116.2021.1994661
13. Szumskia, G., Smogorzewskaa, J., Grygielb, P. (2020). Attitudes of students toward people with disabilities, moral identity and inclusive education—A two-level analysis. *Research in Developmental Disabilities* 102 (2020) 103685. <https://doi.org/10.1016/j.ridd.2020.103685>
14. Ross, S. & Morrison, G. 2013. *Experimental Research Methods*. Routledge.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

