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The perspectives of mainstream secondary school Japanese teachers towards inclusion

by

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To whom it may concern,

I hereby declare that I language edited the mini-dissertation of Ms Michelle Krüger titled: ***The perspectives of mainstream secondary school Japanese teachers towards inclusion***

All aspects of this mini-dissertation were looked at carefully, corrections made and suggestions given with regards to certain wording and sentence structure. The layout and presentation as well as the referencing of this mini-dissertation were edited as per the referencing and technical/style template/guide provided by the client. Final acceptance of all proposed corrections and/or comments is at the discretion of the author.

Kind regards

Janine Ellis



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ABSTRACT

Background: Disability is still a controversial topic in many nations, in part because of ongoing stigma. People with disabilities have been stigmatised throughout history as being morally unacceptable or unwell and in need of help. Before the establishment of the modern educational system in Japan in the late 19th century, people with disabilities were stigmatised as ‘useless’ and shunned by society. Since then, significant progress has been made in Japan's educational laws, most notably with the signing of the United Nation’s Convention on the Rights of Persons with Disabilities (CRPD) in 2008 and its adoption in 2013. Although Japan strives to establish a more inclusive educational system, the reality of implementation is significantly different from what is desired on paper. Therefore, this study aims to investigate the perspectives of mainstream Japanese secondary teachers toward inclusion.

Methods: This study followed a quantitative non-experimental descriptive design by employing online surveys via Qualtrics. A total of 42 teachers working at three secondary schools in the Fukushima prefecture in Japan participated in the study. The perception of teachers regarding inclusion in mainstream classrooms were explored using biographic questions (both open- and closed-ended questions) and the published Teachers’ Attitudes toward Inclusion Scale (TAIS), a 5-point Likert scale. This scale was identified following a scoping review. Data from the surveys were downloaded into Excel and were then transcribed using descriptive analysis. The data were furthermore analysed using inferential statistics, that is, the t-test and an Analysis of Covariance (ANOVA) and an f-test to determine if more than two sets of cofactors were significantly different from each other.

Results: The results indicated that Japanese teachers in the Fukushima prefecture were generally not positive and were not in favour of inclusion. The majority of participants were men, held an undergraduate degree, and taught at a suburban school. Only some participants were knowledgeable regarding the inclusive education policies which Japan is trying to implement. Overall, teachers were hesitant to include children with disability in their classrooms. Teachers of an older age and with more teaching experience were the most negative with regards to inclusion.

Conclusions: Even though Japan has made strides with regards to inclusive education, there is still a lot of room left for improvement of the implementation of educational policies in mainstream classrooms. Furthermore, teachers need more training at university level as well as during their pre-service years as a means to be more tolerant and accepting of children with disabilities in their classrooms. More studies need to be conducted in Asian countries especially



in Japan, in order to understand the social stigma associated with disability and why teachers generally have a negative view toward inclusion compared to Western countries.

Keywords: Attitudes, children, disability, inclusion, Japan, perspectives, teachers



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LIST OF ABBREVIATIONS

ADHD	Attention Deficit/Hyperactive Disorder
ANOVA	Analysis of Covariance
CRPD	Convention on the Rights of Persons with Disabilities
PIO	Population, Intervention, and Outcome
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta Analyses
TAIS	Teachers' Attitudes Towards Inclusion Scale



1. PROBLEM STATEMENT AND LITERATURE REVIEW

In many countries disability remains a controversial topic, partially due to the persistent stigma (Kayama & Haight, 2014). Throughout history, persons with disabilities have been stigmatised as morally unacceptable or unhealthy and in need of assistance (Kayama & Haight, 2014; Komeda et al., 2015; Numano, 2012). In Japan, prior to the formation of the modern education system in the late 19th century, persons with disabilities were labelled as ‘useless’ and ostracised from society (MEXT, n.d.-a). Therefore, due to the difficulties Japan has had with implementing a new formal system of special education for children with developmental disabilities, Japan offers an interesting cultural context, for studying stigma and disability (Kayama & Haight, 2014).

While the modern education system in Japan has been adapted to accommodate children with disabilities and seeks to provide them with an education equal to that received by those without disabilities, historically, this was not the case. The Educational System, which became the foundation of Japan’s public education system, was enacted in 1872. It advocated for universal education to improve citizens’ capacities and build national power. It contains a clause that governs “schools for handicapped children” (p.2) in a passive manner called *Haijin Gakko* (MEXT, n.d.-b; Yamada, 2013). These schools, also referred to as “schools for the wasted” [sic] (Numano, 2012, p.2) as they were called, referred to schools that accommodated children with vision, hearing, intellectual, physical/motor, or other disabilities, based on the widespread use of the word at the time. Despite the regulation of “schools for the wasted” for children with disability, education for these children was never offered under the educational principle of the period, which was to promote national wealth and power (Kayama & Haight, 2014; Yamada, 2013).

Prior to the Meiji Restoration period (1603–1867), communities primarily supplied the foundation of life and skill training for individuals with disabilities. It was only in 1878 during a period of rapid societal upheaval, a private philanthropist, Tashiro Furukawa, founded Japan's first private school, *Kyoto Moain* (Kyoto Blind-Mute Institute) for the deaf, and children that are unable to speak (Hall, 1905). Following that, a few private schools for deaf and mute children were formed, which later became public schools. In the Second Revised Elementary School Ordinance called *Gakusei* of 1890, schools for deaf and mute children were governed as schools that aligned with elementary schools, and regulations were established.

The provision of the Third Revised Elementary School Ordinance made elementary school education mandatory in 1900. Simultaneously, it was mandated that children with



disabilities be exempted from attending elementary school or be given a postponement (Hall, 1905; Yamada, 2013). The first private institutions for children with intellectual disabilities opened in 1906, while the first private institution for children with physical/motor disabilities opened in 1921. Children with disabilities were not included in the framework of the education system at the time, which had the purpose of developing “national prosperity and defence” (Numano, 2012, p.3). However, because of the efforts of interested parties, a demand for compulsory and public education for children with disabilities had grown. As a result, corresponding sections in the Elementary School Ordinance were separated and expanded on, and the Schools for Blind, Deaf, and Mute Ordinance were enacted in 1923. Despite the fact that the decree was limited to schools for blind, deaf, and mute children at the time, it sparked the transformation of such schools from charitable social services to public education systems (Yamada, 2013).

Following the Second World War, the Fundamental Law of Education and the School Education Law were enacted in 1947 to replace the nationalistic laws that had previously existed. It established the idea of equal opportunity in education, and the School Education Law identified three types of special schools as institutions. These schools included special schools for the blind; special schools for the deaf; and schools for children with disabilities. Education had then been made compulsory for children who attend Special Schools for the Blind and Deaf. The special needs education division of the previous Ministry of Education's elementary and secondary education bureau was established in 1952 with the purpose of promoting these schools and special classes for children with disabilities (National Institute of Special Needs Education, 2021; Numano, 2012). More recently, however, the School Education Law of 2013 was largely revised to cope with children with numerous disabilities, and the prior school system was transformed into a “Schools for Special Needs Education” system that can accept a variety of disabilities, which was enacted in 2007 (MEXT, n.d.-b). Furthermore, regulations were enacted to allow special classes to be established in mainstream elementary, middle, and high schools for children who would have difficulty learning in mainstream educational classes (MEXT, n.d.-b; Yamada, 2013). These regulations are part of the larger trend towards inclusive education. The idea that all children should have equal opportunities and be respected as equal members of their schooling community serves as the foundation for the practise of inclusion (Johnson & Muzata, 2019).

In Japan, inclusive education refers to a system in which children with and without disabilities learn together in a general education system in their local communities (Forlin et al., 2015). In 2012 Japan embarked on an initiative to create an inclusive education system in



order to establish a more harmonious society (Numano, 2012) as mainstream school children typically had little contact with children with disabilities as they progress through elementary school (Hayashi & Kimura, 2004) leading to bias and stigmatisation of these children (Kayama & Haight, 2014). Persons with disabilities who were once considered welfare beneficiaries are today recognised as rights holders under international law, with a claim to the non-progressive right to education, free of discrimination and on the basis of equal opportunity (United Nations, 2016). This process began in Japan on 28 September 2007, when the government signed the United Nation's Convention on the Rights of Persons with Disabilities of 2006 (CRPD) (United Nations, 2006) and in March 2008 began the process of ratification. On 4 December 2013, the Japanese parliament unanimously adopted the CRPD, ushering in a wave of disability policy reform also with regard to education as reflected in Japan's national legislation (Yamada, 2013). The school determination system for children with disabilities had been further altered in light of to a partial amendment to the Cabinet Order for Enforcement of the School Education Law issued in 2014 (Forlin et al., 2015; MEXT, 2014). According to Article 24.1 of the CRPD, all parties must acknowledge that individuals with disabilities have the right to an equal education and must offer inclusive education in their institution at all stages of education. Furthermore, Article 24.2 states that persons with disability cannot be refused access to education in mainstream schools on the grounds of their disability, particularly in situations where education is free and compulsory in either primary or secondary schools (United Nations, 2016).

The inclusion of children with special educational needs in mainstream public schools in Japan is loosely based on three articles of the Japanese Constitution of 3 May 1947, namely Articles 13, 14, and 26 (Forlin et al., 2015). Article 13 guarantees the right to life, liberty, and the pursuit of happiness (even though this law does not mention disability), whereas Article 14 bars discrimination in political, economic, or social relations based on race, creed, sex, social status, or family origin (and again, there is no mention of disability) (Forlin et al., 2015). Article 26 (the basic national educational policy) of 3rd May 1947, the only article which loosely includes disability states that,

“All people shall have the right to receive an equal education correspondent to their ability, as provided by law. All people shall be obligated to have all boys and girls under their protection receive ordinary education as provided for by law. Such compulsory education shall be free (Prime Minister of Japan and His Cabinet, 1947, p.7)”.

The CRPD also states that inclusive education for all children is a basic human right which cannot be denied (United Nations, 2016).



When the *Shogaishakihonho* (Basic Law for Persons with Disabilities) was revised in 2011, a regulation requiring clause to educate children with and without disabilities together as much as what is feasible was added (Kaneko, 2006). As a result of the new regulations introduced by the Japanese government, special needs education for children with learning disabilities, is now also available in mainstream classes (Moberg et al., 2020). Parents of children with disabilities who were previously forced to enrol their child in special schools now have more options available to them (Forlin et al., 2015; MEXT, 2014). Due to cultural beliefs regarding the necessity of education (Donohue & Bornman, 2014), many parents choose to enrol their children in mainstream schools as opposed to special education school (Kaneko, 2006; National Institute of Special Needs Education, 2021), creating a situation where children with special needs may be present in classrooms with neurotypical children, and teachers are not equipped to work with them.

During the 1970's and 1980's in Japan, an estimated 1% of all children with severe or moderate disabilities received special education services in special schools or resource rooms within mainstream schools (Moberg et al., 2020). In modern-day Japan, children with a disability diagnosis can receive special needs services in mainstream classes or opt for special classes and special schools – these choices are now more freely available than before. In 2021, there were 116 633 elementary school children receiving special needs services in resource rooms at elementary schools, 16 765 children at lower secondary schools, and 787 children at upper secondary schools across national, public, and private institutions in Japan, where children are receiving special needs services in resource rooms (National Institute of Special Needs Education, 2021). Furthermore, as of 1 May 2019, Japan has 36 353 special classes and 1 146 special schools with the number of special classes and special schools increasing every year (Yada & Savolainen, 2017). Due to the 24 488 regular schools with established classes for special needs education that exist across national, public, and private institutions in Japan, the need for special education training for teachers has also increased.

In order to obtain a special education teaching certificate in Japan, teachers must first obtain a “regular teacher certificate” (p319) from each division to teach children (kindergarten, elementary, middle, or high school) to demonstrate their basic competence as teachers (Forlin et al., 2015; MEXT, 2014). In principle, teachers in kindergarten, primary school, junior high school, and senior high school are required to have a teacher's license for each type of school. Depending on which area(s) they wish to teach in, they must then obtain credits from the categories of basic theories of special education, curricula, and teaching methods for children with visual impairments, deaf/hard of hearing, intellectual disabilities, physical disabilities,

and/or weak constitution (a person in poor health due to lack of nutrition in utero) (Forlin et al., 2015).

University students who are studying towards a general education degree can take special education courses, (e.g., focused on teaching children with learning disabilities), but these are not compulsory. However, as of 1 May 2010, a total of 51 (out of 82) national universities (created or managed by the government), two (out of 78) public universities (funded and run by a local government), and 63 (out of 576) private institutions provide authorised programmes for obtaining a special-needs schoolteacher certificate (Numano, 2012). Teachers at special needs schools must have both a special needs school teacher certificate as well as a certificate corresponding to each division they wish to teach at, according to the Education Personnel Certification Act (MEXT, n.d.-b, 2013; Numano, 2012). However, the qualifier ‘for the time being’, that was added by supplemental clause 16, undermines this requirement, and teachers in special needs schools are not mandated to have the special needs school teaching credential. (Forlin et al., 2015). Furthermore, education students are expected to complete a minimum of two-weeks practical teaching-practice for each type of school and academic area in addition to their regular course work (Forlin et al., 2015).

Even though education students can acquire a certificate in all disability categories, they are only allowed to complete one teaching practice in order to obtain the special education teaching certificate (Forlin et al., 2015; MEXT, 2014). Data shows that only 70% of teachers teaching at a special needs school in Japan have a special needs schoolteacher certificate (Numano, 2012). According to the CRPD, schools must also make the appropriate efforts to hire and educate their teachers and staff at all levels of education so that they can engage with children who have a variety of impairments including training in sign language proficiency and learning to read Braille (United Nations, 2016). Unfortunately, this is not the case in Japan as there are currently no inclusive education courses available.

One of the most important factors in ensuring the successful implementation of inclusive education in Japan will be if teachers are appropriately prepared for the changes in schooling and embrace a more inclusive worldview (Forlin et al., 2015). This is especially important in light of the proposed new role of special education teachers who will be expected to assist mainstream teachers in transitioning to a more inclusive approach (Forlin et al., 2015). According to the Convention on the Rights of the Child, schools must hire teachers who are qualified and licenced in order to teach children to the best of their abilities because education is not only an investment in the future but also a chance for enjoyable activities, a setting for practising respect for others, participation, and goal achievement (United Nations, 2013).



According to Forlin (2013), in order to successfully execute the inclusive approach, teachers must have confidence in their own knowledge, skills, and capacities in conducting inclusive education and although there is a considerable amount of research on teachers' self-efficacy in Western countries, there is a lack of research in non-Western countries, including Japan (Yada & Savolainen, 2017). Schools, communities, and nations should work to create an inclusive educational environment where children are welcomed and their potential for growth will be fostered (Hollings, 2021). This will ensure that children's rights are not violated and that they are treated as equal members of their schooling environment. Human dignity and the enjoyment and exercise of human rights depend on inclusion and involvement which is evident in the creation of policies aimed at achieving true fairness and equality in the world of teaching (UNESCO, 1994). Therefore, this study will aim to investigate the perspectives of mainstream Japanese secondary school teachers towards inclusion and understand their holistic views on inclusion as a whole, based on the premise of inclusion as a human right.



2. METHODOLOGY

2.1 Aims

The following section will discuss the main aim and subaims of the study.

2.1.1 *Main aim*

The main aim of this research is to describe the perspectives of mainstream Japanese secondary school teachers towards inclusion.

2.1.2 *Subaims*

To address the main aim of the study, four subaims were created:

- i) To describe the perspectives of mainstream Japanese secondary school teachers on the expected outcomes of inclusion and its implementation in their classrooms.
- ii) To describe the perspectives of mainstream Japanese secondary school teachers toward educating children with and without disabilities together in a classroom.
- iii) To describe the perspectives of mainstream Japanese secondary school teachers with regards to the education of children with disabilities as a fundamental human right.
- iv) To describe Japanese secondary school teachers' perspectives on their preparation and workload when working with children with disabilities in inclusive classrooms.

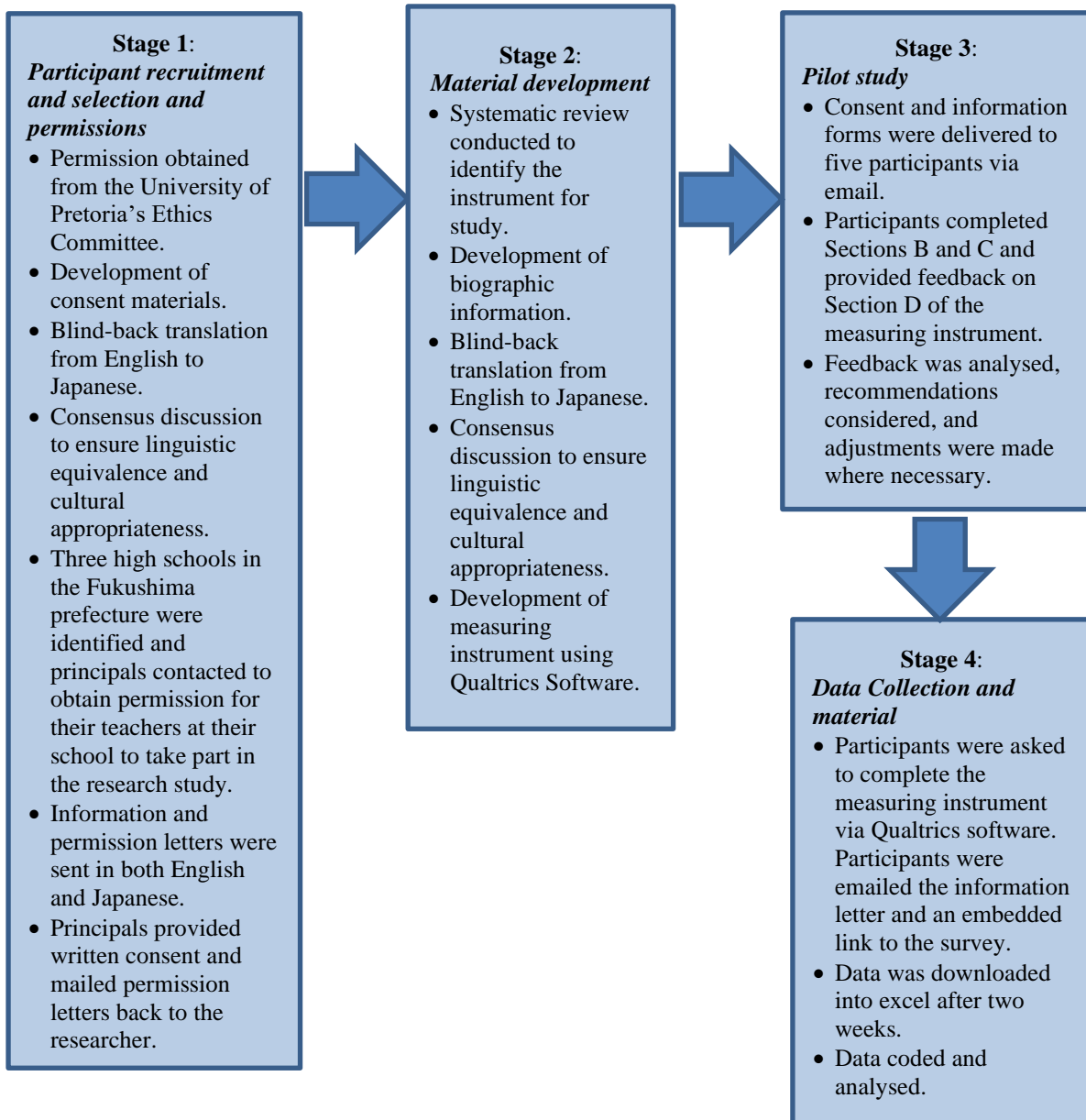
2.2 Research design and phases

A quantitative non-experimental descriptive research design (McMillan & Schumacher, 2014) was employed to examine the perspectives of mainstream Japanese secondary school teachers regarding inclusion. Descriptive designs are used to summarise a situation's current or previous state (McCusker & Gunaydin, 2015). A quantitative research design involves a systemic analysis of phenomena through the collection of quantifiable data and statistical procedures in order to establish relationships between variables (Guetterman et al., 2015). This type of study focuses on the perspectives of a single group (McMillan & Schumacher, 2014), namely Japanese secondary school teachers. Since fewer variables and specific numbers are used in quantitative designs, it can aid in removing biases from the study to improve its reliability. Another advantage is that it can aid in gather data from bigger sample sizes (Grimes & Schulz, 2002; Rahman, 2016). This has the benefit of allowing the results to be generalised to the other populations with similar participants (i.e., other Japanese secondary teachers) and making the use of statistical tools such as SPSS to analyse data faster. As a

consequence, the process of gathering data is objective. Figure 1 sets out the four stages of the present study.

Figure 1

Stages of the study



2.3 Recruitment and sampling

A pilot study was conducted at a private international school in the Tokyo prefecture, comparable to the schools selected for the main study to ensure that the proposed procedures

and materials are appropriate for the main study (McMillan & Schumacher, 2014), after permission from the University of Pretoria's Ethics Committee was obtained (Appendix A).

The main aim of the pilot study was to determine whether the Japanese version of the information letter, informed consent slip and instructions were clear; whether the questions were culturally appropriate and acceptable, and to ensure that the Japanese-English translation of the measuring instrument was appropriate and accurate as it would be presented in both English and Japanese to the main study participants. The pilot study was also used to verify that the online format of the survey was easy to follow, whether the links worked effectively, and how long it took participants, on average, to complete the measuring instrument.

The participants who were included in the pilot study consisted of five teachers who met the same selection criteria as proposed for the main study, except that they were from a different but comparable prefecture. Of the five pilot study participants, three were bilingual and could speak, read, and write both English and Japanese at native level. Two of the participants were basic level proficient at Japanese. Participants were sent an email with instructions (Appendix B1), an embedded link to the pilot study survey, and given a deadline to complete the pilot study.

Participants were asked to select 'yes, I consent' on Section A: Informed consent of the measuring instrument to partake in the pilot study. Thereafter the link would direct them to Section B: Biographic information as if they were a part of the main study. The participants were instructed to answer all questions as if they were a part of the main study. After the biographic information section of the measuring instrument was completed, the participants answered Section C: Teachers' Attitudes towards Inclusion Scale (TAIS) and completed Section D: Feedback, which would help the researcher determine whether any changes were needed for the main study.

Table 1 provides an overview of the aims of the pilot study, the materials and procedures used, the results, and the subsequent recommendations.



Table 1

Pilot study aims, materials, procedures, results, and recommendations

Aim	Materials	Methods	Results	Recommendations
To determine if the information provided in the consent letters and requested in the measuring instrument were clear.	Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the questionnaire that focused on feedback of Sections A, B, and C.	Participants reported that information and consent forms were clear – no questions for clarification were asked and hence no adjustments needed.	Maintain the consent letter and measuring instrument in its current form for the main study but remove Section D that was specifically added for the purpose of the pilot.
To determine if the instructions for the completion of the measuring instrument were clear and easy to follow.	Email to participants that contains the instructions (Appendix B1). Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the measuring instrument that focused on feedback of Sections A, B, and C which will be sent to the main study participants.	The feedback obtained from Section D indicated that the participants found the instructions for the completion of the measuring instrument clear and easy to follow.	No changes are required for the main study regarding the instructions.
To determine if all the questions asked were clear and whether any question should be added or removed from the biographic information section.	Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the measuring instrument to solicit feedback on the questions included in Sections A, B, and C.	From the participant responses it could be deduced that all questions were clear. However, some recommendations that were made by participants are as follows: <ul style="list-style-type: none"> • One participant added that teachers should indicate in which country they had received their teacher training and qualification. • One participant added that years of teaching experience could contribute to the research. • One participant suggested that there should be a question as to whether there is support offered by the government for schools. 	Apart from removing Section D which was specifically added for the purposes of the pilot study, two questions will be added to Section B (biographic questions). <ol style="list-style-type: none"> 1. Please indicate how many years of teaching experience you have. 2. Please indicate in which country you received your teacher training. The third suggestion will not be added, as it is covered by the inclusion criteria of whether teachers are aware of any policies toward inclusion in Japan.



Aim	Materials	Methods	Results	Recommendations
To establish whether all the questions were suitable to determine Japanese teachers' perspectives on inclusive education and whether they were culturally appropriate for the Japanese school context.	Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the measuring instrument that focused on feedback of Sections A, B, and C.	Participants indicated that they felt all questions were suitable to the Japanese context and culturally appropriate, since all questions were displayed in both English and Japanese.	No changes will be made.
To ensure whether the English to Japanese translations were appropriate.	Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the measuring instrument that focused on feedback of Sections A, B, and C.	One of the five participants suggested a change in language to the third option ('prefer not to say') in response to Q1 asking about gender. The initial question 言えんな translates closer to 'can't say' as opposed to どちらにも当てはまらない refers to 'neither of these apply to me', which is more inclusive.	Section B (Biographic information): Question 1 will be changed from 言えんな / 'prefer not to say' どちらにも当てはまらない / 'neither of these apply to me'.
To determine whether the layout and structure of the measuring instrument was easy to follow.	Measuring instrument including the feedback questionnaire (Appendix B2).	Section D was added to the bottom of the measuring instrument that focused on feedback of Sections A, B, and C.	Participants reported that the layout was easy to follow. The ease of the layout also contributed to the fact that there were no missing data.	No changes to the layout of the measuring instrument was needed for the main study, and hence it can be retained in its current form.
To determine if the links of the survey were easily accessible through email.	Email with instructions to participants (Appendix B1) Measuring instrument including the feedback questionnaire. (Appendix B2)	Section D was added to the bottom of the measuring instrument that focused on feedback of Sections A, B, and C.	Participants indicated that the embedded link was easily accessible, and that no problems were found accessing the survey. Two of the participants answered the measuring instrument on their mobile phones, while three completed it by using Google Chrome on their personal computers.	The link to access the measuring instrument will be maintained as is.



Aim	Materials	Methods	Results	Recommendations
To determine how long the measuring instrument will take participants to complete.	Measuring instrument including the feedback questionnaire. (Appendix B2)	Section D was added to the bottom of the questionnaire that focused on feedback of Sections A, B, and C.	Participants indicated that it took between 5–15 minutes to complete the measuring instrument.	In the informed consent/info letters it will be added that it is expected that it would take between 10 and 15 minutes to complete the measuring instrument

Table 1 provides an overview of the objectives, procedures, outcomes, and recommendations which were adjusted and incorporated into the main study.



2.4 Materials and Equipment

Firstly, the participants will be described according to the selection criteria and their biographic information. Thereafter the material and equipment, which includes the measuring instrument, systematic review, and its selection processes will be described. Lastly, the translation processes and development of the measuring instrument will be described.

2.4.1 *Participants*

The proposed population included teachers from three mainstream Japanese secondary schools (teachers teaching grades 10 – 12 / students which are 15 – 18 years old) in the Fukushima prefecture (equivalent to that of a metropolitan municipality in South Africa) who were asked to participate in the study through means of purposive and convenience sampling (McMillan & Schumacher, 2014), as the researcher lived in the Fukushima prefecture at the time of data collection. Non-probability purposive sampling that entails selecting participants who the researcher considers to be ‘representative’ of the group for a specific purpose and who reflect a range of viewpoints on the specific topic being researched was used (Leedy & Ormrod, 2021a). Potential participants received the letter of informed consent as well as the link to the survey from the school principals who gave permission for the study to be conducted at their schools.

No data collection commenced before ethics approval from the University of Pretoria’s Ethics Committee was obtained.

2.4.2 *Selection criteria*

The participant selection criteria are presented in Table 2.

Table 2

Participant selection criteria

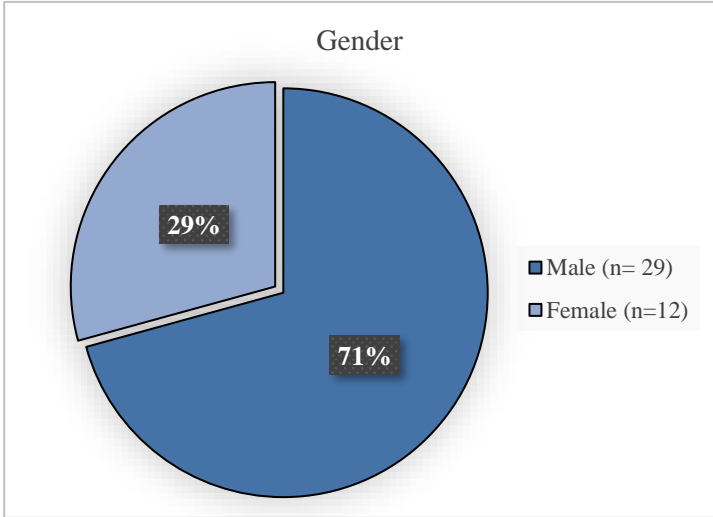
Criterion	Justification	Measure used
Participants should be Japanese secondary school teachers with a valid teaching license (教員免許 - Kyoumennkyou) issued by their prefectural board of education.	While national legislation establishes baseline standards for teacher certification, prefectural boards of education may impose additional requirements. Thus, graduating from a university is not sufficient for appointment to a teaching position, regardless of the person's academic background (Forlin et al., 2015; Yada & Savolainen, 2017). Japanese teachers acquire their teaching license (教員免許 - Kyoumennkyou) after one year of service.	Participants to provide the last three digits of their registration number on their prefectural teaching license (教員免許 - Kyoumennkyou) on the measuring instrument.
Participants should be secondary school teachers working in mainstream schools.	Mainstream teachers are not trained the same way as special needs teachers at a tertiary level (Forlin et al., 2015; Yada & Savolainen, 2017).	Participants self-report their teaching qualification obtained at university on the measuring instrument.

2.4.3 Participant description

Data was recorded from 42 participants; however, one response was incomplete for more than 70% of the questions and was therefore discarded and not included in the analysis, resulting in 41 participants. Table 3 describes the participants' biographic information as answered in Section 1 of the online measuring instrument.

Table 3

Biographic description of participants

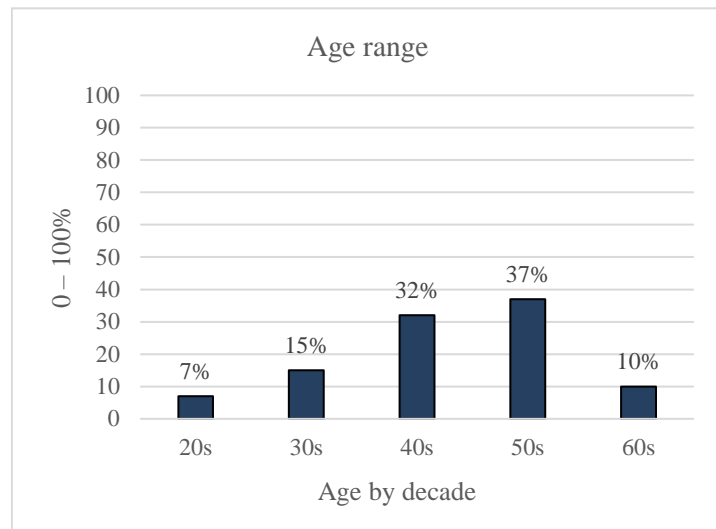
Participant description	Participant responses (N=41)
<p>Gender Most participants were male (71%) with a male: female ratio of 29 men and 12 women participating. This data correlates with 2019 data retrieved from the Organisation of Economic Co-operation and Development [OECD], (2019), which indicates 63.2% of teachers in Japan are men and 36.8% are women.</p>	 <p>A pie chart titled "Gender" showing the distribution of participants by gender. The chart is divided into two segments: a larger dark blue segment representing 71% (Male, n=29) and a smaller light blue segment representing 29% (Female, n=12). A legend to the right of the chart identifies the colors: dark blue for Male (n=29) and light blue for Female (n=12).</p>

Participant description

Participant responses (N=41)

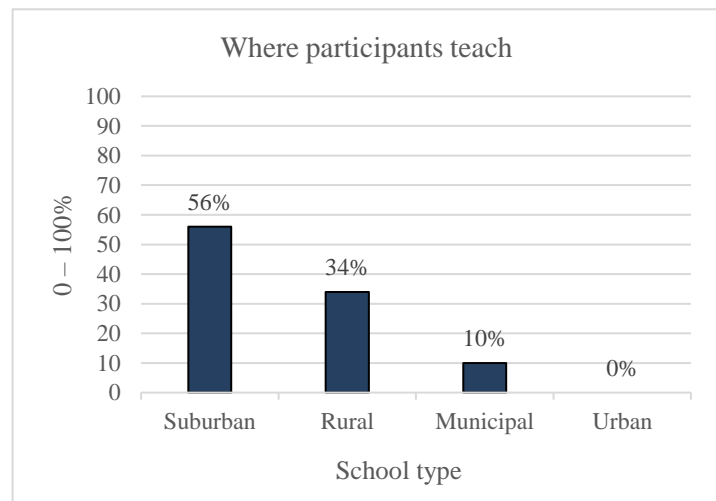
Age range

Participants' ages ranged from 23 years to 67 years old, with an average age of 47.2 years and a median age of 48.5 years. Most participants were in their forties and fifties. Once again, the ages correlate with the Japanese cohort of secondary school teachers. According to OECD (2019), the largest age groups of Japanese teachers are those who are 50 years and older (35%) with the second group who are 40–49 years of age (26,3%). A mere 15.2% of secondary school teachers are 30 years and younger with 23.5% between the ages of 30–39 years of age.



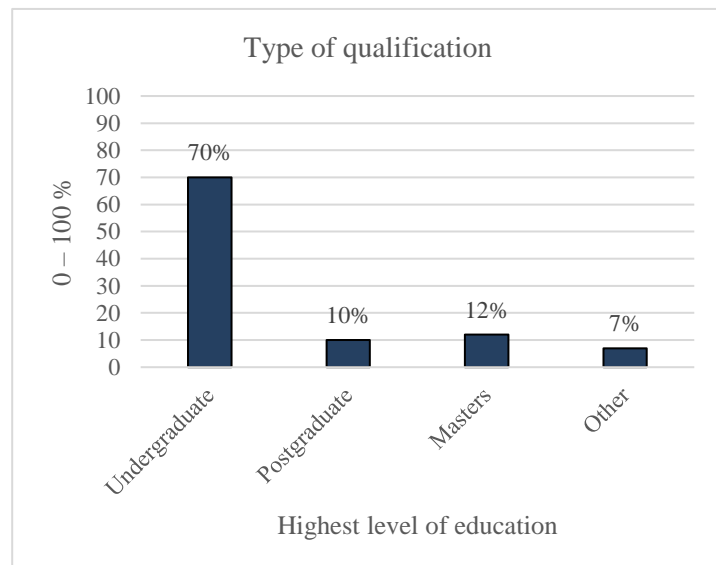
Type of school where participants teach

Most participants (56%) indicated that they work in a suburban school followed by 34% who teach in a rural school. Suburban schools are usually characterised by their location on the outskirts of a major city, where the families of the children had relocated from either a rural or urban setting into a bigger region. The smallest percentage indicated that they work in a municipal school (10%). Municipal schools are schools where boundaries include more than 50% of the municipality or territory and are often governed by the local community (Japan's Constitution, 1946). There were no participants who worked in an urban school setting.



Type of qualification held by participants

Of the 41 participants, the majority had an undergraduate degree (70%). The second-most common qualification was a master's degree (12%), followed by a postgraduate diploma (10%) and 'other' (7%) respectively. However, it was not specified to which qualification 'other' might correspond.

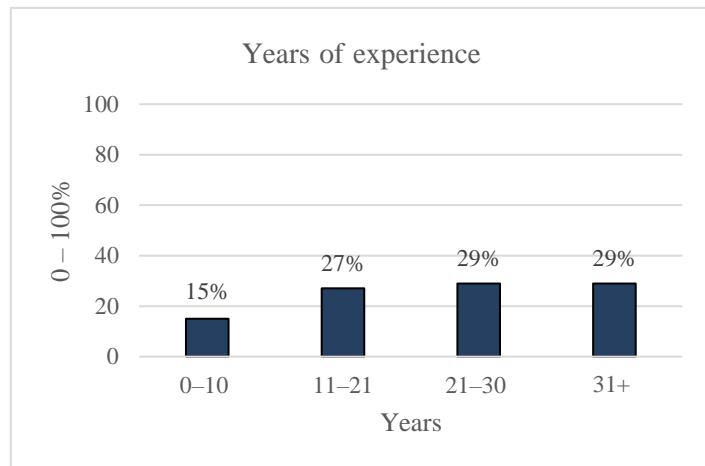


Participant description

Participant responses (N=41)

Years of teaching experience

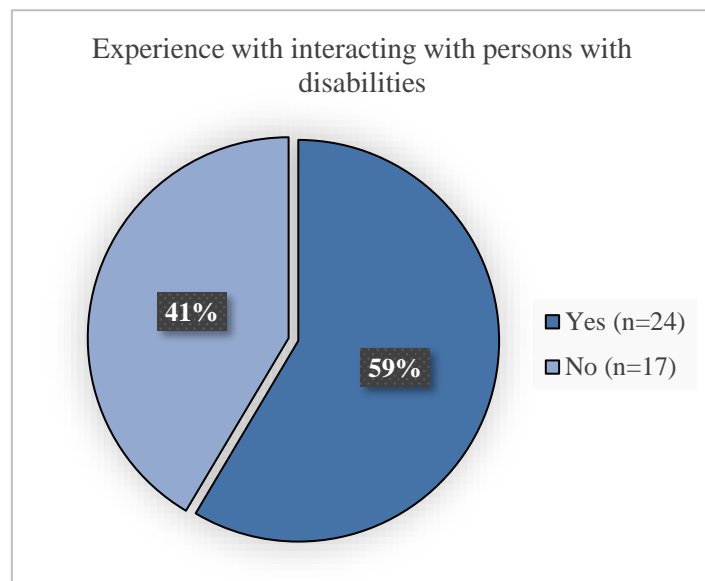
Teaching experience is represented in intervals of 10 years. The minimum years of teaching experience is 1 year whereas the maximum experience is 45 years, with an average of 22.9 years, and a median of 23 years. The distribution between the groups who had 11- or more years of experience was relatively equal per decade.



Experience with interacting with persons with disabilities

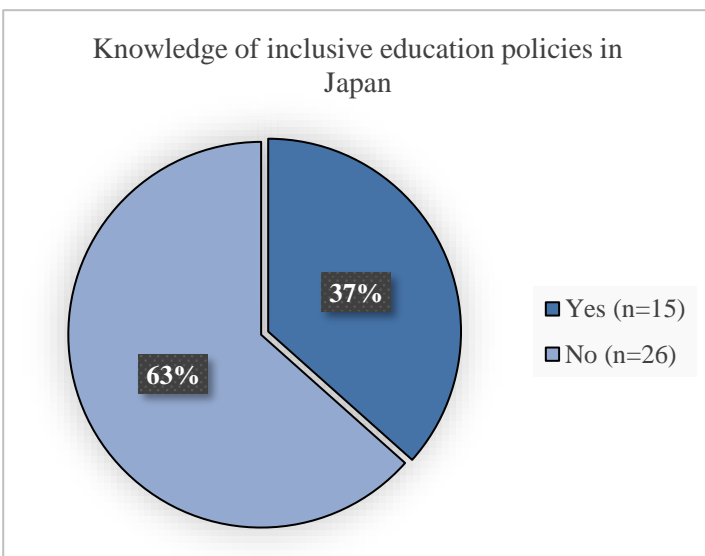
In total, 59% of the participants indicated that they have had some experience interacting with persons with disabilities, while 41% had no previous experiences with persons with disability either in their professional or in their private lives.

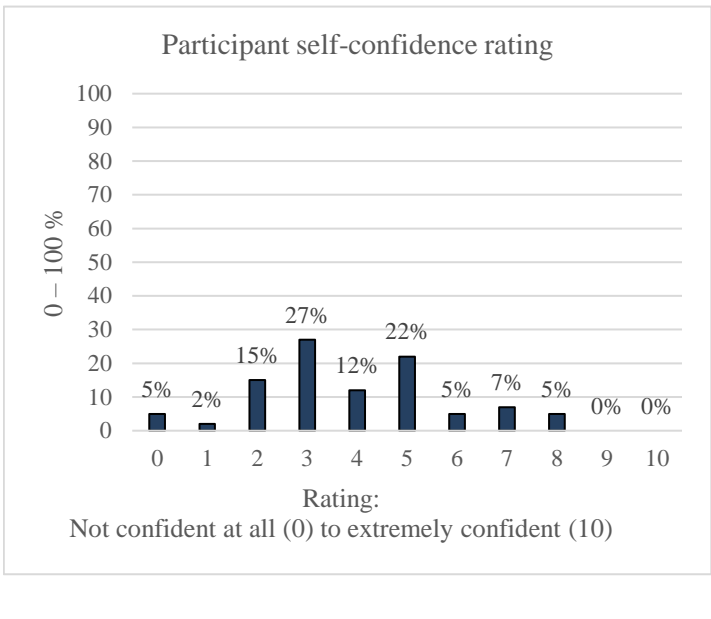
Only 17% indicated that they know someone (child, spouse, sibling etc.), or a close friend with a disability. Most participants (80%) indicated that they had not received any training to work with children with disabilities although 34% stated that they have experience with teaching children with disabilities.



Knowledge of inclusive education policies in Japan.

A mere 37% of the participants had indicated that they know of inclusive education policies in Japan.



Participant description	Participant responses (N=41)																								
<p>Self-reported confidence in working with children with disabilities A 10-point Likert-scale (a unidimensional scale that researchers employ to gather the attitudes and opinions of respondents McMillan & Schumacher, 2014)). was used with 0=not confident at all and 10=extremely confident for participants to self-report their confidence in working with children with disabilities. Generally, the self-reported confidence levels were low – 5 points or less (83%). The highest rating selected was an 8 and the lowest rating selected was a 0, with an average of 3.9 and standard deviation of 1.92. Only 17% gave a self-reported confidence rating of 6 or above.</p>	 <table border="1"> <caption>Participant self-confidence rating</caption> <thead> <tr> <th>Rating</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>0</td><td>5%</td></tr> <tr><td>1</td><td>2%</td></tr> <tr><td>2</td><td>15%</td></tr> <tr><td>3</td><td>27%</td></tr> <tr><td>4</td><td>12%</td></tr> <tr><td>5</td><td>22%</td></tr> <tr><td>6</td><td>5%</td></tr> <tr><td>7</td><td>7%</td></tr> <tr><td>8</td><td>5%</td></tr> <tr><td>9</td><td>0%</td></tr> <tr><td>10</td><td>0%</td></tr> </tbody> </table>	Rating	Percentage	0	5%	1	2%	2	15%	3	27%	4	12%	5	22%	6	5%	7	7%	8	5%	9	0%	10	0%
Rating	Percentage																								
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3	27%																								
4	12%																								
5	22%																								
6	5%																								
7	7%																								
8	5%																								
9	0%																								
10	0%																								

From Table 3, it is evident that most of the participants were male and held an undergraduate degree. They were also mostly older with the majority falling into the category of 50–59 years (n=15). More than half of the participants had been teaching between 21–30 years as well as 31 years or more (29% respectively) as was expected with the older age group. Most participants also worked at a suburban school located on the outskirts of a major city.

2.5 Piloting

Firstly, the material related to the informed consent procedure is described, namely the information letters, permission, and consent forms. Thereafter the measuring instrument used for data collection is described, namely the TAIS (Saloviita, 2019). The TAIS was selected based on the results of a scoping review which aimed to identify a reliable and valid teacher attitude scale/questionnaire towards inclusion to be used in the current study (see Section 2.5.3 for more information).

2.5.1 Materials used for providing information and obtaining consent

Following ethics approval from the University of Pretoria’s Ethics Committee of the Faculty of Humanities (Appendix A), University of Pretoria permission letter (Appendix C1 and C2), and permissions slip (Appendix D1 and D2) were emailed to the respective principals at the identified schools, in order to obtain their written permission that teachers from their respective schools may partake in the study. These letters contained detailed information

related to the study, privacy, anonymity, confidentiality concerns, and data security in both English and Japanese. The principals printed and signed the permission slip and emailed them back to the researcher (Appendix E1, E2, and E3). Principals were informed that they would receive an email with the measuring instrument to forward to their teachers once data collection commences.

An introductory paragraph was included in the email sent to the participants of the study (Appendix F1 and F2) via the school principals, explaining the goal and purpose as well as what would be expected from them, and the amount of time required to complete the measuring instrument. The letter of informed consent attached as a PDF (Appendix F1 and F2), included the purpose of the study, and whether the participants granted consent to participate in the study. This email also included one embedded link directing participants to the measuring instrument and permission slip (Appendix G1 and G2), once participants consented by clicking ‘はい/yes’, the questionnaire opened, and the same information which was in the email, was displayed on the participants’ screens. Upon consent on Qualtrics, the online Japanese-English measuring instrument (Appendix H) opened, and participants could start completing it.

The same back-translation method used for the translation of the measuring instrument (Bornman & Louw, 2021) was used for the translation of the information letter and permission slips. Please see Section 2.5.5 for the full description of this process. The researcher and translators met via a Zoom conference and discussed any discrepancies found. Some words were translated into singular when translated from Japanese to English, since Japanese do not have plural nouns. After a consensus was reached the letters were finalised and drafted.

2.5.2 *Material related to the measuring instrument*

A questionnaire was used to collect data from a sample of the population in order to get information on the broader population (McMillan & Schumacher, 2014; Minnaar & Heystek, 2016; Woodfield & Iphofen, 2017). This step commenced with identifying an accurate and consistent existing questionnaire/scale from the literature before further development and customisation to address the specific needs of the current study.

2.5.3 *Identification and development of the measuring instrument*

First, a scoping review was conducted to assist in identifying an applicable, frequently used teacher attitude scale/questionnaire towards inclusion as documented in published literature and that has good reliability and validity scores. A scoping review was deemed

applicable as these types of reviews assess broader topics (Arksey & O’Malley, 2005), cover a body of literature on a certain issue, and can provide an indication of the number of materials and research available while providing a deep overview of the specific topic's focus (Munn et al., 2018; Pham et al., 2014).

The scoping review was based on Arksey and O’Malley's (2005) framework and the review had five main phases: (1) determining the research question; (2) locating relevant studies; (3) study selection; (4) data charting; and (5) compiling, summarising, and reporting the findings (Pham et al., 2014).

The research question for this scoping review was identified through the Population, Intervention, and Outcome (PIO) framework: (Population – teacher; Intervention – teacher attitude scale toward inclusion instruments; Outcomes – attitudes/inclusion) (De Miranda et al., 2019): *Which reliable instruments are used to measure teachers’ attitudes towards inclusion?* Thereafter, the multiple electronic databases relevant to the topic were identified, namely Ebscohost: ERIC, APA PsycInfo, Academic Search Complete; and ProQuest: ERIC and SCOPUS. An experienced librarian from the University of Pretoria supported the researcher in identifying relevant keywords related to the PICO question that was employed in the keyword search. BOOLEAN operators (AND and OR) were used in the search strings as well as truncation. Table 4 presents the criteria used to select the relevant studies for this scoping review.

Table 4

Studies selection criteria

Selection Criteria	Inclusion Criteria (with synonyms)	Exclusion Criteria	Theoretical Justification
Population	Teachers Educators Paraeducators Pre-service teachers	Non-educators (e.g., therapists at school, support staff, parents, administrative staff, school nurses)	Selecting the population group increases the likelihood of producing reliable and reproducible results (Patino & Ferreira, 2018), as the study focuses on the educational context.
Type of publication	Academic articles and peer reviewed articles that described a scale/questionnaire	Newspaper clips, opinion pieces, books, conference papers, citations, dissertations, handbooks, reports, reviews, trade magazines/journals, comments to reviewers	Because of the rigorous peer-review process, scholarly journals are the most reliable sources available. They were prepared by experts who have spent years studying this subject and have been reviewed by others with similar backgrounds. They are well-researched, and often the article's bibliography can be used for alternative sources that might be relevant for the study (Bachand & Sawallis, 2003; Ware, 2011).



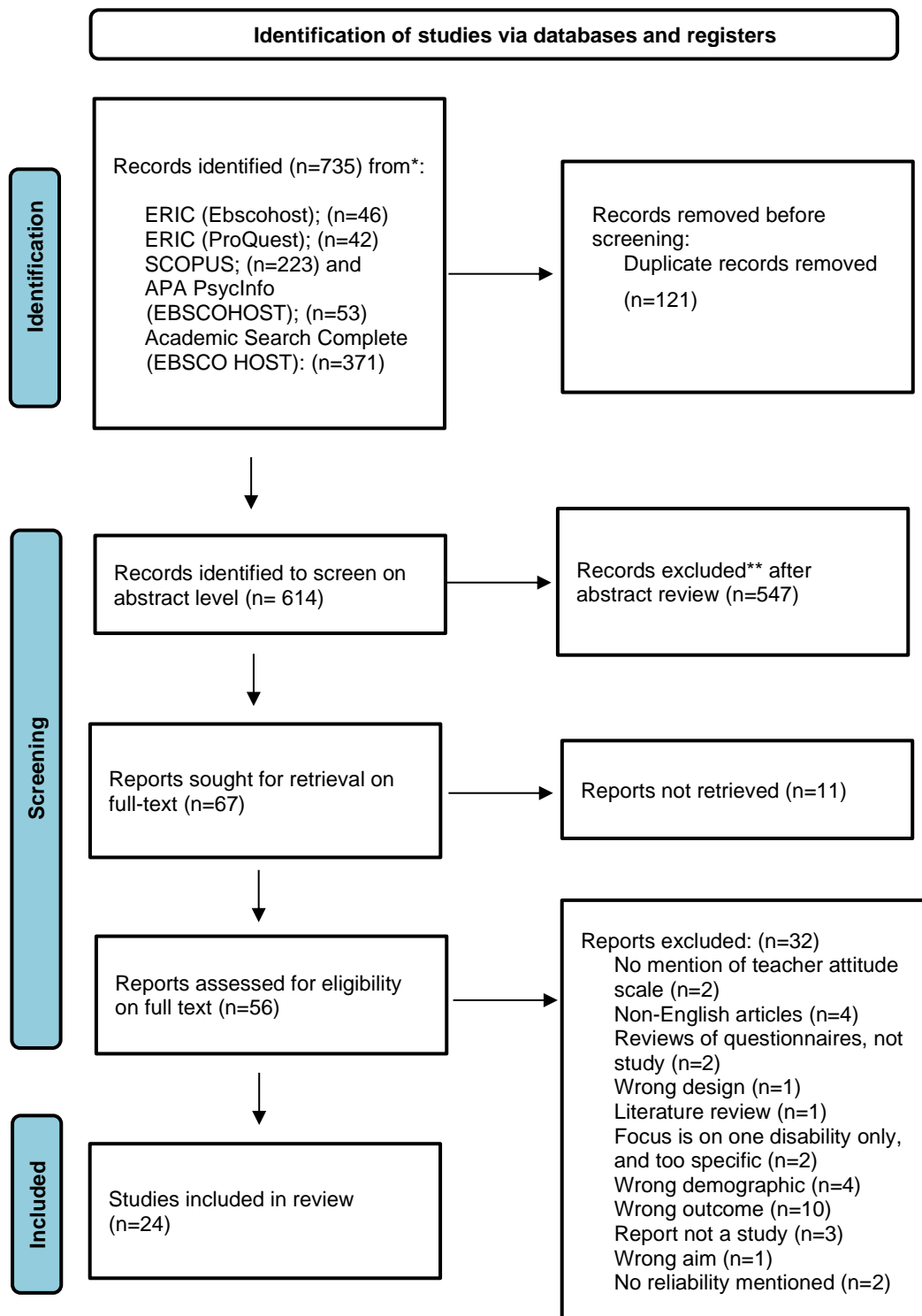
Selection Criteria	Inclusion Criteria (with synonyms)	Exclusion Criteria	Theoretical Justification
Measuring instrument	Only teacher attitude scales toward inclusion with published reliability and validity scores will be included	If no mention is made of measuring teachers' attitudes toward inclusion, articles will automatically be excluded, and if no reliability and validity scores are provided, the scale/questionnaire will automatically be excluded	The main aim of the study is to measure teachers' perspectives towards inclusive education. Scales need to adhere to a specific standard of reliability in order for it to be considered in the study. If studies do not mention a scale nor its reliability, it cannot be included in the study. The aim of the review was therefore to identify a reliable measuring instrument.
Research design and features	All research designs will be included	No specific design will be excluded	To provide a wide range of coverage, a broad approach is used (Arksey & O'Malley, 2005).
Language	Articles published in English	Non-English publications	Translations can be time consuming and costly (Hendrickson et al., 2013).
Year of publication	2015 – present (December 2021)	Articles pre-2015	Ewing et al. (2018) found that between 1995 and 2015 very few measuring instruments were developed to measure teachers' attitudes towards inclusive education.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 flow diagram for new systematic reviews (Page et al., 2021), was used to indicate the selected studies.

Figure 2 portrays the process followed to identify articles for inclusion and includes the searches of databases as well as articles included and excluded in the study.

Figure 2

Preferred reporting items for systematic reviews and meta-analyses





i) Identification

With help from the University of Pretoria's librarian, six search engines and databases were identified for records identification. Search terms selected for this systematic review consisted of: (teacher* OR educat#r* OR "preservice teacher*" OR paraeducat#r) AND TX (perspective* OR attitude* OR view* OR knowledge OR Behavio#r) AND TX ('inclusive education' OR 'special education') AND TX (TAIS OR 'teacher attitude* toward*'). These terms were combined in various ways with the BOOLEAN operators 'AND', and 'OR' commands in the effort to obtain the most narrowly defined appropriate articles. Some of the search terms included truncation (*), as well as the hash symbol (#) to include various word endings and spellings. The same search string was used in all databases.

After the various databases were perused, all files in RIS format to EndNote were exported as a reference manager. Figure 2 shows that the search yielded a total of 735 records, and after the 121 duplicates were removed using the EndNote automation tool, a total of 614 studies remained for screening on abstract level.

ii) Screening

All records were uploaded to Rayyan, a free web-tool used to speed up the process of screening and selecting papers for academics working on systematic reviews, scoping reviews, and other knowledge synthesis tasks (Johnson & Phillips, 2018).

The researcher and interrater (a mathematics and science teacher who holds a PhD in Engineering science, unrelated to the study) read all (n=614) studies on title and abstract level independently using Rayyan's 'blind on' method, using the inclusion- and exclusion criteria. Only the title and abstract of studies were assessed at the first level of screening to avoid wasting resources on papers that did not match the basic inclusion requirements. A YES to the inclusion criteria meant that the study was included for full text retrieval. A NO meant that the study was excluded. An 81% (496/614) interrater agreement was reached. Thereafter, the researcher and interrater had discussions regarding the 19% (121/614) of studies without a clear consensus, to decide if these studies fit the inclusion criteria. A concession discussion was held until a 100% agreement was reached.

Because some phrases included in the search algorithm also corresponded to other study designs (educational subject specific content), many citations were eliminated after being screened at the title and abstract level. Studies that generally described teachers' attitudes toward inclusive education were eligible for inclusion. Studies published in languages other



than English were excluded due to a lack of translation resources (Hendrickson et al., 2013). From the 614, studies, 547 were excluded on abstract level.

iii) Studies included

The remaining 67 studies were sought for retrieval on full text. However, 11 studies could not be retrieved or accessed via the university's library. As such, both the researcher and interrater reviewed the available 56 studies on full text level. The same criteria applied as per abstract and title level were used on full text level. Upon completion of the full text review, a total of 32 studies were excluded as they did not meet the study selection criteria. The remaining 24 studies which met the inclusion criteria (see Tables 5 & 7) were included for data extraction. The goal of data extraction was to sort, chart, and organise data according to major issues and themes connected to the study aims and subaims in order to synthesise and understand the data (Arksey & O'Malley, 2005).

iv) Results and discussion of the scoping review

Table 5 provides an overview of the studies included by focusing on the descriptive characteristics thereof, such as the author, date, country, material used, aim of study, and design.



Table 5

Descriptive information

Number	Author	Date	Country	Aim of Study	Design	Material	Measuring Instrument Used
1	Agaveleyan et al.	2020	Kazakhstan	To investigate teachers' attitudes regarding inclusive education in Kazakhstan as well as the elements that influence their positive attitude toward inclusion.	Quantitative: Survey Likert-type scale	Survey	Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale (SACIE-R)
2	AlMahdi & Bukamal	2019	Bahrain	To investigate pre-service teachers' opinions regarding inclusive education in Bahraini public schools while they are studying at Bahrain Teachers College.	Quantitative	Self-report questionnaire	Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale (SACIE-R)
3	Alnahdi et al.	2019	Saudi Arabia Finland	To determine if there were any significant differences between Saudi Arabian and Finnish pre-service teachers' perspectives on inclusion. To examine if there were any significant differences between the two samples in pre-service teachers' attitudes regarding inclusion.	Descriptive statistics and inferential analysis Mixed method-design	Questionnaires	Teachers' Attitude toward Inclusion Scale (TAIS)
4	Börnert-Ringleb et al.	2020	Germany	To determine the links between attitudes toward inclusiveness and views about teaching and learning.	Quantitative Likert-type scale	Online survey	Professionsunabhängige Einstellungsskala zum Inklusiven Schulsystem (PREIS)
5	Chhabra et al.	2018	Botswana	To investigate the perspectives of early childhood teachers and the inclusion of special needs children in inclusive early childhood educational settings.	Qualitative	Questionnaires and structured observation	Scale of Teachers' Attitudes Toward Inclusive Classrooms (STATIC)
6	Ćwirynkało et al.	2017	Poland Croatia	To explore the attitudes of Croatian and Polish elementary school teachers towards the inclusion of children with special educational needs.	Quantitative Descriptive	Cross-sectional Survey questionnaires	The Teacher Attitudes Toward Inclusion Scale (TATIS)
7	Dorji et al.	2021	Bhutan	To examine the attitudes of Bhutanese school teachers towards inclusive education.	Quantitative: Survey Likert-type scale	Online survey (Qualtrics)	Bhutanese Attitude Towards Inclusive Education - Educators (BATIE-E)



Number	Author	Date	Country	Aim of Study	Design	Material	Measuring Instrument Used
8	Frumos	2018	Romania	To examine Romanian primary school teachers' attitudes toward inclusive education.	Quantitative: Likert-type scale	Questionnaires	Multidimensional Attitudes towards Inclusive Education Scale (MATIES)
9	Gigante & Gilmore	2020	Australia	To explore preservice teachers' attitudes and efficacy for teaching in inclusive classrooms.	Quantitative: Likert-type scale	Survey and Questionnaires	Teachers' Attitudes towards Inclusion Scale: Adapted (TAISA)
10	Hamid & Mohamed	2021	Qatar	To investigate the attitudes of future (preservice) teachers toward inclusive education.	Quantitative	Self-administered survey	Questionnaire of Attitudes towards Inclusion (QAI)
11	Hoskin et al.	2015	Australia	To investigate factors that contribute to the formation of positive attitudes toward inclusive education during pre-service training of pre-school teachers.	Quantitative Likert-type scale	Survey (four pages)	Teacher Attitudes towards Inclusion Scale: Adapted (TAISA).
12	Martin et al.	2021	Chile	To determine Chilean in-service teachers' views regarding inclusion, self-efficacy for inclusive behaviours, and intention to teach in inclusive classrooms.	Quantitative Likert-type scale	Online questionnaire via email	Attitudes towards Inclusion Scale (AIS)
13	Nagase et al.	2021	Japan	To investigate the link between teacher efficacy, teachers' views toward inclusive education, and middle school teachers' emotional discomfort in Japan.	Quantitative Likert-type scale	Survey	Opinions Relative to Integration of Children with Disabilities Scale (ORI)
14	Pappas et al.	2018	Greece	To outline the current situation in Greece regarding inclusive education.	Quantitative Likert-type scale	Survey via email	Teachers' Beliefs and Attitudes toward Inclusive Education
15	Rakap et al.	2016	Turkey United States	To investigate and compare the views of Turkish and American pre-service preschool instructors regarding including young children with disability.	Quantitative	Survey and Questionnaire	Opinions Relative to the Inclusion of Children with Disabilities Scale (ORI)
16	Saloviita	2019	Finland	To describe teachers' attitudes on inclusiveness	Quantitative Likert-type scale	Survey via email	Teachers' Attitudes towards Inclusion Scale (TAIS)
17	Saloviita	2020 (a)	Finland	To evaluate the views of Finnish basic schoolteachers to assess their intellectual preparation for inclusive education.	Quantitative Likert-type scale	Survey	Teachers' Attitudes towards Inclusion Scale (TAIS)



Number	Author	Date	Country	Aim of Study	Design	Material	Measuring Instrument Used
18	Saloviita	2020 (b)	Finland	To investigate attitudes of Finnish classroom, subject, resource room, and special education teachers regarding inclusive education.	Quantitative Likert-type scale	Survey via email	Attitudes towards Inclusive Education – short form (TAIS-SF)
19	Saloviita & Consegnati	2019	Italy	To poll Italian teachers using a standardised measure of inclusion attitudes to make valid cross-national comparisons such as the (Sharma et al., 2018) study that compared Italy and Australia.	Quantitative Likert-type scale	Survey via email	Teachers' Attitudes towards Inclusion Scale (TAIS)
20	Saloviita & Schaffus	2016	Finland Brandenburg, Germany	To compare teacher attitudes towards inclusive education.	Quantitative Likert-type scale	Survey via email	Teachers' Attitude toward Inclusion Scale (TAIS)
21	Štemberger & Kiswarday	2018	Slovenia	To identify how Slovenian preschool and primary school teachers feel about inclusion.	Qualitative Descriptive	Questionnaire	Slovenian version: Multidimensional Attitudes toward Inclusive Education Scale (MATIES)
22	Subban & Mahlo	2017	Australia South Africa	To investigate pre-service teachers' attitudes toward inclusive education at two universities, one in Melbourne, Australia (University A) and the other in Pretoria, Gauteng (University B).	Quantitative Likert-type scale	Survey	Attitudes towards Inclusive Education Scale
23	Vaz et al.	2015	Australia	To measure teachers' attitudes and efficacy toward integration of children with disabilities in mainstream classes.	Quantitative Descriptive	Cross-sectional survey questionnaires (paper and pencil)	Opinions Relative to Integration of Children with Disabilities Scale (ORI)
24	Yada & Savolainen	2017	Japan	To investigate Japanese teachers' attitudes on inclusive education and their self-efficacy for implementing inclusive practices.	Quantitative Descriptive	Survey	Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) scale

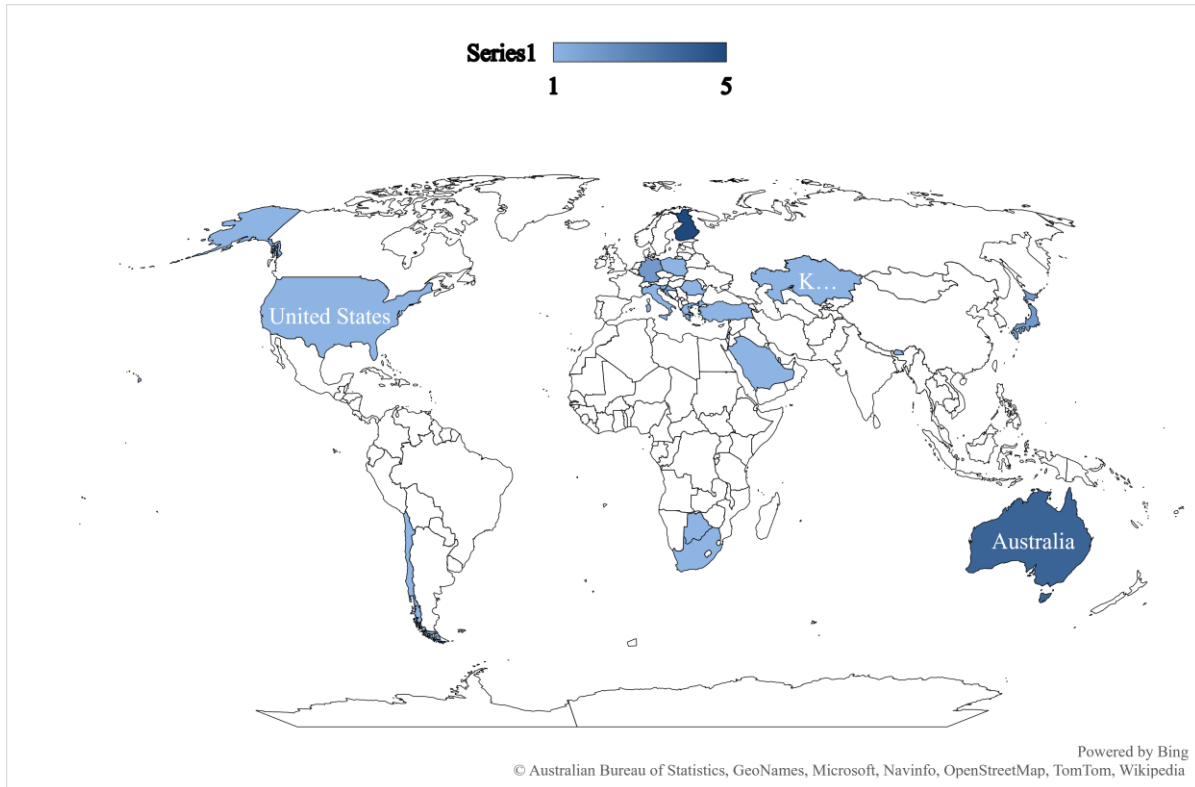
(Alphabetical according to author names) (*N*=24)

Table 5 shows that studies on teachers' attitudes toward inclusion were conducted in 22 countries and that 14 measuring instruments were used. These measuring instruments are further investigated and described in Table 6 on page 29.

Figure 3 provides a visual representation of the world map and of the countries where the included studies have been conducted.

Figure 3

Countries where included studies were conducted



It was found that most of the studies were conducted between 2018–2021 (four studies for each year, respectively), the second most in 2017 (n=3), and the third most in 2016 and 2015 respectively (n=2). Finland yielded five studies on attitudes toward inclusion; followed by Australia having conducted four studies on attitudes toward inclusion; Japan and Germany both conducted two studies; Bahrain, Bhutan, Botswana, Chile, Croatia, Greece, Italy, Kazakhstan, Korea, Poland, Qatar, Romania, Saudi Arabia, South Africa, Slovenia, Turkey, and the United States all having conducted only one study. The majority of studies included in the review were Quantitative (n=21), followed by Qualitative designs (n=2), and Mixed method design, including descriptive statistics and inferential analysis (n=1).

Table 6 provides a summary of the 14 different measuring instruments that were used to measure teacher attitudes toward inclusion in the included studies. Scales with different variations are also shaded in Table 6.

Table 6

Measuring instruments identified in scoping review

Name of Scale (In alphabetical order) (<i>n=14</i>)	Frequency
Attitudes towards Inclusion Scale (AIS)	1
Attitudes towards Inclusive Education – short form (TAIS-SF)	1
Attitudes towards Inclusive Education Scale	1
Bhutanese Attitude Towards Inclusive Education – Educators (BATIE-E)	1
Multidimensional Attitudes towards Inclusive Education Scale (MATIES)	2
Opinions Relative to Integration of Children with Disabilities Scale (ORI)	3
Professionsunabhängige Einstellungsskala zum Inklusiven Schulsystem (PREIS)	1
Questionnaire of Attitudes towards Inclusion (QAI)	1
Scale of Teachers' Attitudes Toward Inclusive Classrooms (STATIC)	1
Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale (SACIE-R)	3
Teacher Attitudes Towards Inclusion Scale: Adapted (TAISA)	2
Teachers' Attitudes towards Inclusion Scale (TAIS)	5
Teachers' Beliefs and Attitudes toward Inclusive Education	1
The Teacher Attitudes Toward Inclusion Scale (TATIS)	1

Table 6 shows that the Teachers' Attitude toward Inclusion Scale (TAIS) by Saloviita, (2015) has been used five times in the different studies (shaded in grey). Variations where the TAIS had been adapted were called TAISA (shaded in blue) and Attitudes towards inclusive education – short form (TAIS-SF) (shaded in green).

Table 7 reflects the data extracted from the 24 studies, namely the population (specifically the number and type of participants), the specific measuring instrument (the scale/questionnaire) that was used to collect the data and its reliability as well as the study outcomes. The reliability of the scales are measured by the Cronbach's alpha coefficient (α) – where higher values ($\alpha = 0.70$ – 0.74 [above average]; $\alpha = 0,75$ – 0.79 [good]; $\alpha = 0.80$ – 0.89 [high]; $\alpha > 0.90$ [very high]) show that participants' answers were consistent throughout the collection of questions presented, and lower values ($\alpha < 0.70$) show that the questions or items presented were neither consistent nor did they give an accurate measure (Taber, 2018).



Table 7

Data illustration

	N	Participant type	Measuring Instrument	Reliability	Outcomes
1	n=416	Mainstream secondary school teachers	Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale (SACIE-R)	Cronbach alpha = 0.75 (good)	Neutral attitude towards inclusive education. Teachers concerned about the lack of necessary knowledge and skills to teach children with disability and the difficulty of distributing attention to all children in an inclusive classroom.
2	n=138	Pre-service teachers in preparation programme	Sentiments, Attitudes, and Concerns about Inclusive Education–Revised (SACIE-R)	Cronbach’s alpha = 0.83 (high)	No significant difference in attitudes, concerns, or sentiments about inclusion based on academic year or expertise.
3	n=492	Pre-service teachers: 186 = Finland 306 = Saudi Arabia	Teachers’ Attitudes towards Inclusive Education Scale (TAIS)	Cronbach’s alpha: Finnish = 0.81 (high) Saudi Arabian= 0.69 (below average)	While pre-service teachers' sentiments regarding inclusion as a value were relatively similar, the Saudi Arabian participants were less likely to accommodate children with disabilities in their classrooms than their Finnish counterparts.
4	n=197	Pre-service teachers	Professionsunabhängige Einstellungsskala zum Inklusiven Schulsystem (PREIS)	Cronbach’s alpha = 0.89 (high)	No significant connections between explicit beliefs and automatic evaluations regarding teaching and learning. Possibly attributable to social desirability bias.
5	n=128	Early childhood teachers	Scale of Teachers' Attitudes Toward Inclusive Classrooms (STATIC)	Cronbach’s alpha = 0.88 (high)	Early childhood education teachers had a favourable attitude toward working with, and including children with disability. Participants' attitudes had a significant link with their age and training.
6	n=98	Primary school teachers: 50 = Croatia 48 = Poland	Teacher Attitudes Toward Inclusion Scale (TATIS)	Cronbach’s alpha: English version = 0.84 (high) Croatian version = 0.741 (above average) Polish version = 0.78 (good)	Teachers viewed children with special educational needs as a challenge as they were not competently trained to work with them.



N	Participant type	Measuring Instrument	Reliability	Outcomes
7	n=145 Lower secondary, middle and high school teachers across Bhutan. Male = 70 Female = 75	Bhutanese Attitude Towards Inclusive Education – Educators (BATIE-E)	Cronbach’s alpha = 0.78 (good)	No statistically significant effect of educational environment-related characteristics such as school and location on teachers’ views toward inclusive education.
8	n=126 Primary school teachers	Multidimensional Attitudes towards Inclusive Education Scale (MATIES)	Cronbach’s alpha = 0.77; 0.78, and 0.91 respectively (good, good, and very high)	Teachers were in favour of inclusion.
9	n=163 Pre-service teachers (2 nd year Bachelor of Edu. students)	Teachers’ Attitudes Towards Inclusion Scale Adjusted (TAISA)	Cronbach’s alpha = 0.74 (above average)	Preservice teachers were generally positive toward inclusion. Participants who selected a topic related to disability or inclusive education reported higher positive views than those who did not.
10	n=46 Pre-service teachers (Bachelor of Edu. Students)	Questionnaire of Attitudes towards Inclusion (QAI)	Part 1: Cronbach’s alpha = 0.52 (satisfactory) Part 2: Cronbach’s alpha = 0.79 (good)	Teachers preferred to work with groups of children who require minor special attention, such as giftedness or learning problems, rather than with children with severe disabilities.
11	n=680 Pre-service early education teachers (Bachelor and Masters of Edu. Students)	Teacher Attitudes Towards Inclusion Scale: Adapted (TAISA)	Cronbach’s alpha = 0.81 (high)	Mixed outcomes that both backed up and contradicted earlier studies. Generally, the pre-service pre-school teachers had favourable attitudes toward inclusive education in general.
12	n=569 In-service Chilean teachers	Attitudes towards Inclusion Scale (AIS)	Cronbach’s alpha 0.78 (good)	Teachers continued to have a negative outlook toward children with severe disabilities and problematic behaviours being included in mainstream classrooms.
13	n=95 Middle school teachers in Japan	Opinions Relative to Integration of Students with Disabilities scale (ORI)	Cronbach’s alpha = 0.79 (good)	Junior high school teachers played a significant role in lining good attitudes about integrated classroom management and emotional distress. When teachers struggled to manage an inclusive classroom, they were unable to focus on teaching their specialty subject and improving the academic performance of children with or without disability.



N	Participant type	Measuring Instrument	Reliability	Outcomes
14 n=234	Teachers attending the SSEICT seminar	Teachers' beliefs and attitudes toward Inclusive Education	Cronbach's alpha = 0.93 (very high)	Participants were eager to include children with mobility issues or specific learning disabilities, however, they were wary about including children with intellectual disability.
15 n=123	Teachers 60 = USA 63 = Turkey	Opinions Relative to Integration of Students with Disabilities scale (ORI)	Turkish version: Cronbach's alpha = 0.76 (good) USA version: Cronbach's alpha = 0.76 (good)	Turkey had a slightly more positive outcome than the USA for including children with disabilities in mainstream classrooms.
16 n=1456	Primary school teachers	Teachers' Attitudes towards Inclusive Education Scale (TAIS)	Overall reliability was not indicated, however, each of the five items of the scale's reliability presented. (1) 'I am willing to accept in my classroom a student (with a specified SEN)' (Cronbach's alpha: = 0.80 (high)) (2) 'A student (with a specified SEN) causes extra work for the teacher' (Cronbach's alpha: = 0.81 (high)) (3) 'I believe I can get enough extra support if I have a student (with a specified SEN) in my classroom' (Cronbach's alpha: = 0.78 (good)) (4) 'I have adequate skills to instruct the child (with a specified SEN)' (Cronbach's alpha = 0.74 (above average)) (5) 'A special-education classroom is the best place for a student (with a specified SEN)' (Cronbach's alpha: = 0.69 (below average))	Teachers' attitudes regarding inclusion depended on the type of special educational need a child had. They were less willing to accept children in their class if it meant that their workload would increase. They were more positive toward inclusion if it meant that they received outside support.
17 n=1764	Teachers: 824 = regular classroom 575 = subject teachers 365 = special-education teachers	Teachers' Attitudes towards Inclusion Scale (TAIS)	Cronbach's alpha between = 0.81–0.90 in various samples (high to very high)	Finland's inclusive education policies results in attitudinal barriers among teachers, particularly in the upper grades of basic school, which are taught by subject teachers. However, a small group of teachers enthusiastically supported inclusion. A small percentage of all teachers agreed that children with disability may be taught well in mainstream classrooms, showing potential for inclusive changes in Finnish schools.



N	Participant type	Measuring Instrument	Reliability	Outcomes
18	n=4567 Finnish classroom, subject, resource room, and special education class teachers	Attitudes towards inclusive education – short form (TAIS-SF)	Cronbach’s alpha = 0.82 (high)	Adequate assistance was more frequently available in special education classrooms than in general education classrooms. Providing extra support for these mainstream classrooms would help to change negative teacher attitudes regarding inclusion.
19	n=153 Mainstream teachers	Teachers’ Attitudes towards Inclusion Scale (TAIS)	Cronbach’s alpha = 0.75 (good)	Teachers' attitudes toward inclusive education were likely influenced by the perceived availability of extra support to reduce the projected workload increase when a child with special educational needs is placed in a mainstream classroom.
20	n=461 Teacher 289 = Finland 163 = Germany	Teachers’ Attitudes towards Inclusive Education Scale (TAIS)	Cronbach’s alpha: German version = 0.83 (high) Finnish version = 0.89 (high)	Discrepancies between the countries. German teachers were far more concerned than Finnish teachers regarding the potential for additional workload because of inclusion. German teachers were more doubtful than Finnish teachers that inclusion may have beneficial impacts and they viewed special classroom placement as a child’s right more frequently.
21	n=261 Preschool and primary school teachers	Slovenian version: The Multidimensional Attitudes toward Inclusive Education Scale (MATIES)	Cronbach’s alpha = 0.91 (very high)	Slovenian preschool and primary school teachers had a positive attitude toward inclusion on all three levels: cognitive; affective; and behavioural. Most participants understood inclusion and were generally unaffected by it.
22	n=127 Pre-service teachers in South Africa (n=64) and Australia (n=63)	Attitudes towards Inclusive Education Scale	Cronbach’s alpha: University A = 0.78 (good) University B = 0.82 (high)	Teacher’s opinions toward inclusive education were overwhelmingly positive.
23	n=74 Mainstream primary school teachers	Opinions Relative to Integration of Students with Disabilities scale (ORI)	Cronbach’s alpha = 0.92 (very high)	Teachers' ability to adapt their teaching approaches were influenced by content knowledge, pedagogical knowledge, and pedagogical material knowledge. Prior training on types of disabilities was linked to positive views toward inclusion.



N	Participant type	Measuring Instrument	Reliability	Outcomes
24 n=359	Primary and secondary school teachers (public & private schools)	Sentiments, Attitudes, and Concerns about Inclusive Education Revised Scale (SACIE-R)	Cronbach's alpha: Scale 1: 0.75 (good) Scale 2: 0.93 (very high)	The general opinions of Japanese teachers toward inclusive education were somewhat higher than the neutral middle of the scale, showing that they did not hold extreme views for or against inclusive education.

Note: SSEICT = Specialisation in Special Education and Information & Communication Technologies seminar; USA = United States of America



Based on the scoping review and findings as illustrated in Table 7, potential scales which could be used include both the TAIS and the SACIE-R. The SACIE-R has a high reliability ($\alpha = 0.75 - 0.93$) and has been used in Bahrain in 2019, Kazakhstan in 2020 and Japan in 2017. In contrast, the TAIS scale or variations thereof, has been used six times in five countries, namely, Australia (Hoskin et al., 2015), Finland (Alnahdi et al., 2019; Saloviita, 2019, 2020a; Saloviita & Schaffus, 2016), Germany (Saloviita & Schaffus, 2016), Italy (Saloviita & Consegna, 2019), and Saudi Arabia (Alnahdi et al., 2019). Overall the TAIS has shown consistent reliability of $\alpha \Rightarrow 0.7$ (above average, good, high or very high) with the exception of the study conducted by Alnahdi et al. (2019) where the reliability of Saudi Arabian translation of the TAIS was below average ($\alpha=0.69$). Additionally, the TAIS has less items on the scale than the SACIE-R and would be less time consuming for participants to answer. Finally, there has not been any study conducted in Japan using the TAIS scale, and therefore it could serve as a relevant cross-culture measure when looking at Japanese teachers' attitudes towards inclusion. Furthermore, it was also felt that the scale could be beneficial in comparison and intervention research in the field of inclusive education, such as developing teacher education at universities or supporting inclusive education in schools (Alnahdi et al., 2019; Saloviita, 2015). Therefore, the TAIS scale will be used as part of the measuring instrument in the current study.

2.5.4 Measuring instrument

After identification of the teacher attitude scale/questionnaire, the final measuring instrument for the main study (Appendix H) was developed and customised by expanding it to include two separate sections. Section 1 focused on the biographic information of the participants, while Section 2 entailed the TAIS (Saloviita, 2015) which was selected following a scoping review as previously described.

i) Section 1: Biographic information

Table 8 shows the 16 biographic questions that were included in Section 1 of the measuring instrument as based on the recommendations from the pilot study. These questions focused on the background information of the participants and open-ended questions including participants' experience and interaction with people with disabilities as well as knowledge on inclusive policies in Japan.



Table 8

Development of the biographic information

No	Aspect	Question	Type of Question	Reason for Inclusion	Theoretical Justification
1	Gender	Please select your gender.	Closed-ended with two options	To determine the gender of participants.	Gender and cultural differences can play a role in how people respond to certain questions posed (Leedy & Ormrod, 2021b). Younger teachers might have a more positive attitude toward children with special educational needs (Bornman & Donohue, 2013; Donohue & Bornman, 2015; Yada & Savolainen, 2017).
2	Age	Please fill in your age.	Open-ended	To determine the age of the teacher.	
3	Teaching licence number	Please fill out the last three digits of your teaching license as supplied by your local prefectural board of education.	Open-ended	To determine whether participants are currently registered with their prefectural board of education.	Teachers need to be active in the teaching field and cannot teach without a valid teaching licence (Forlin et al., 2015; Yada & Savolainen, 2017).
4	School type	Please indicate your school type (rural, urban, suburban, municipal).	Close-ended	To determine the type of school participants, teach at (demographic location).	According to various research, teachers training regarding inclusion should be expanded in Japan to better equip teachers to implement it (Yada & Savolainen, 2017).
5	Educational background	Please indicate your highest level of education.	Close-ended	To determine the highest level of education of the participants partaking in the survey.	Special training in teaching children with disabilities might influence attitudes toward inclusion (Someki et al., 2018; Song, 2016; Yada & Savolainen, 2017).
6	Experience in teaching	Please indicate how many years of teaching experience you have.	Open-ended	To determine how many years of teaching experience participants have.	Younger teachers might have a more positive attitude toward children with special educational needs (Bornman & Donohue, 2013; Donohue & Bornman, 2015; Yada & Savolainen, 2017).
7	Country where teacher training education was obtained.	Please indicate in which country you received your teacher training.	Open-ended	To determine whether participants received their training in Japan or another country.	Teachers receiving training in different countries can have different perspectives toward inclusion (Moberg et al., 2020; Saloviita & Schaffus, 2016; Subban & Mahlo, 2017).



No	Aspect	Question	Type of Question	Reason for Inclusion	Theoretical Justification
8	Which school and grade level they are teaching at.	At which school level (primary, secondary, or high school) are you currently teaching?	Close-ended	To determine the grade that they teach at and whether they have the relevant knowledge implement inclusion.	Senior high school teachers (grades 10–12) were recruited as per the inclusion criteria. Schools were selected using purposive and convenience sampling (Leedy & Ormrod, 2021a). Due to a greater emphasis on the curriculum and a lesser emphasis on individual differences, teachers' perspectives toward inclusion may be less favourable in high schools (Gigante & Gilmore, 2020).
9	Experience interacting with persons with disability.	Have you any experience with interacting with persons with disabilities?	Open-ended	To determine whether Japanese teachers have experience interacting with persons with disability.	Prior research found that teachers with more teaching experience had more negative attitudes regarding inclusive education (Yada & Savolainen, 2017).
10	Experience of family member or friend(s) with disability.	Do you have any family members (child, spouse, sibling, parents, etc.) or close friends who have a disability? If yes, please elaborate...	Open-ended	To determine whether there is a difference in attitudes of teacher who have and who do not have a family member / friend with a disability.	Teachers who know someone with a disability are generally more accepting of inclusion in the classroom (Parasuram, 2006).
11	Training received to work with children with disabilities.	Do you have any training to work with children with disabilities?	Open-ended	To determine whether the teacher had received any specialised training to work with children with disabilities.	In their teacher education programmes, younger teachers have had more possibilities for inclusion instruction (Yada & Savolainen, 2017). Additional training impacts attitude (Bornman & Donohue, 2013).
12	Experience teaching children with disabilities.	Do you have any experience in teaching children with disabilities?	Open-ended	To determine whether the participants have any prior experience teaching children with disabilities.	Japanese teachers have limited expertise in inclusion due to a lack of suitable teacher training (Committee of Elementary and Lower Secondary Education in the Central Council for Education, 2020; Yada & Savolainen, 2017).



No	Aspect	Question	Type of Question	Reason for Inclusion	Theoretical Justification
13	Knowledge on educational policies in Japan.	Do you know of any inclusive education policies in Japan? If yes, please specify...	Open-ended	To determine Japanese teachers' knowledge on educational policies in Japan	Global developments in educational policies have impacted inclusive education in Japan (Yada et al., 2019), however, policy-practice gaps are seen as teachers struggle to implement inclusion (Committee of Elementary and Lower Secondary Education in the Central Council for Education, 2020; Yada & Savolainen, 2017; Yamada, 2013).
14	Rating confidence level of working with children with disability.	On a scale of 0–10, please indicate your level of confidence to work with children with disabilities. 0 being not confident at all, and 10 being extremely confident.	Closed-ended	To determine participants' confidence levels working with children with disability.	Yada and Savolainen (2017) found that Teachers' self-efficacy for inclusive practices are extremely low in Japan, particularly when it comes to handling children with challenging behaviour.
15	Defining disability.	What does the term disability mean to you? Disability is ...	Open-ended	To understand how Japanese teachers define the term 'disability'.	Japanese pre-service teachers had concerns regarding the increase in workload as a result of children with disability being included in their future classrooms (Yada & Savolainen, 2017).
16	Defining inclusion.	What does the term 'inclusion' mean to you? Inclusion is ...	Open-ended	To understand how Japanese teachers define the term 'inclusion'.	Yada and Savolainen (2017) found that Japanese teachers' views on integrating children with disabilities in mainstream classes were ambiguous.

ii) Section 2: Teacher Attitude towards Inclusion Scale (Saloviita, 2015)

Section 2 of the measuring instrument included the TAIS. After the TAIS had been identified as the most appropriate measuring instrument in the scoping review, permission was obtained from the developer who also holds the intellectual property. Professor Saloviita at the University of Jyväskylä in Finland, granted the researcher permission to use the TAIS in the current study (Appendix I). The TAIS comprises of 10 items with a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree', with a neutral mid-point in order to determine response set (McMillan & Schumacher, 2014; Saloviita, 2015; Saloviita & Tolvanen, 2017).



The scale's 10 items focus on four components which include inclusiveness as a value, expected outcomes, children's rights, and teacher workload, enhancing the instrument's construct validity. Table 9 shows the 10 items of the TAIS.

Table 9

TAIS scale

No	TAIS Item	Component	5-point Likert scale				
			1 Strongly disagree	2 Agree	3 Neither agree or disagree	4 Disagree	5 Strongly disagree
1* (R)	Children with special educational needs learn best in their own special education classes where they have specially trained teachers.	Expected outcomes	1	2	3	4	5
2	Children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support.	Inclusion as a value	1	2	3	4	5
3* (R)	It is the right of a child with special educational needs to be placed in a special education classroom.	Rights of the child	1	2	3	4	5
4	Children with attention deficit/hyperactive disorder (ADHD) should be admitted into mainstream classrooms with adequate support.	Inclusion as a value	1	2	3	4	5
5* (R)	Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms.	Workload of the teacher	1	2	3	4	5
6* (R)	The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her. R (expected outcomes)	Expected outcomes	1	2	3	4	5
7	Children with special educational needs should be educated in mainstream	Inclusion as a value	1	2	3	4	5



No	TAIS Item	Component	5-point Likert scale				
			1 Strongly disagree	2 Agree	3 Neither agree or disagree	4 Disagree	5 Strongly disagree
	classrooms as much as possible.						
8* (R)	Integrated children with special educational needs create extra work for teachers in mainstream classrooms.	Workload of the teacher	1	2	3	4	5
9.	A child with special educational needs should be transferred to a special education classroom in order not to violate his/her rights. R (rights of the child)	Rights of the child	1	2	3	4	5
10.	The learning of children with special educational needs can be effectively supported in mainstream classrooms as well (expected outcomes).	Expected outcomes	1	2	3	4	5

(English Version) (Saloviita, 2015)

Note: *The scoring of items marked with (R) were reverse scored

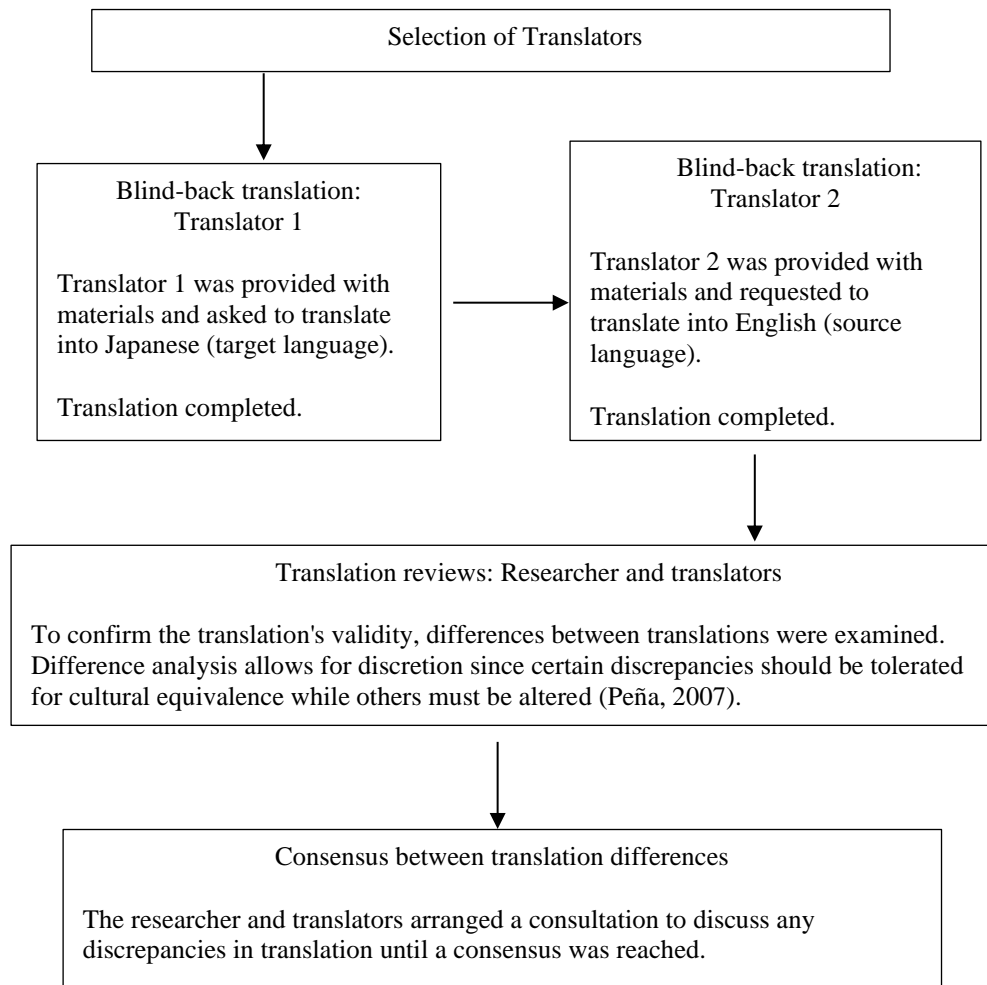
All 10 items of the TAIS were included in the measuring instrument, and the original 5-point Likert scale supported by the authors who developed the TAIS was used.

2.5.5 Translation

The complete measuring instrument (Section 1 and 2) was translated into Japanese using a blind back-translation method (Bornman & Louw, 2021). The source language (English) was translated into the target language (Japanese), by a bilingual Japanese translator who is also fluent in English. The translator produced a word-for-word translation. A second bilingual translator (also a Japanese translator, who is fluent in English) who had not seen the measure in its original source, reversed the translation from the target language (Japanese) back to the source language (English). To see if there were any inconsistencies/or incorrect translations, this back-translated version was compared to the original version. All differences were then discussed by the researcher and the two translators via Zoom to get consensus with regards to the version of the Japanese measuring instrument (Bornman & Donohue, 2013; McMillan & Schumacher, 2014; Peña, 2007) (see Figure 4).

Figure 4

Translation process



Several discrepancies arose between the English and Japanese translations of the complete measuring instrument and the TAIS scale, owing to the use of multiple syllabaries in the Japanese language. For example, in the case of ‘inclusion’, there was some indecision about using the katakana form of the word インクルージョン or 社会参画 which translates more closely to ‘social participation’ as opposed to ‘inclusion’. It was decided to use the katakana form as this is becoming an increasingly common usage and would be more familiar for Japanese teachers. Following this consensus meeting, a final Japanese version of the measuring instrument was agreed upon.

2.5.6 Format

Following the translation of the measuring instrument, a decision had to be made regarding the format in which the measuring instrument would be distributed. An online

questionnaire (as opposed to a paper-based format) was selected. The main advantages of an online questionnaire are self-evident: lower costs and time; quick response; easy follow-up; and the ability to survey a large number of people from different geographical locations such as Japan's multiple prefectures (Dahlin, 2021; McMillan & Schumacher, 2014; Woodfield & Iphofen, 2017).

For this study, Qualtrics, a survey software that can manage questionnaires (Carpenter et al., 2019), was selected for the online survey platform. Qualtrics allows the researcher to create an online questionnaire, publish it, gather data, and allow participants to complete it online using either their computer or mobile phone from any location rather than requiring in-person participation (Carpenter et al., 2019; Snow, 2011). Students at the University of Pretoria have access to Qualtrics and do not require any additional licensing. Upon providing consent, participants were provided with a link via email which allows access to the online questionnaire. The final Japanese/English version of the measuring instrument which was used in the main study is shown in Appendix H.

2.5.7 Information- and permission letters

Following ethics approval from the Ethics Committee of the Faculty of Humanities, University of Pretoria (Appendix A), a permission letter (Appendix C1 and C2) and permission slips (Appendices D1 and D2) were emailed to the respective principals at the identified schools, to obtain their written permission. The permission letter contained detailed information related to the study, privacy, anonymity, confidentiality concerns, and data security in both English and Japanese. The principals printed out and signed either the English or Japanese permission slip (Appendix D1 and D2), emailing them back to the researcher. Principals were informed that they would receive an email with the survey to forward to their teachers once data collection commenced.

An introductory paragraph was included in the email sent to the participants of the study (Appendix F1 and F2) via the school principals, explaining the goal and purpose as well as what would be expected of them, and the amount of time required to complete the measuring instrument. The letter of informed consent, attached as a PDF (Appendix F1 and F2), included the purpose of the study, and whether the participants were granted consent to participate in the study. This email also included an embedded link directing participants to the measuring instrument and permission slip (Appendix G1 and G2). Once participants consented by clicking 'はい \yes', the questionnaire opened and the same information which was in the email, was



displayed on their screens. Upon consent on Qualtrics, the online Japanese-English measuring instrument (Appendix H) opened, and participants could start completing it.

Participants were given 14 days to complete the questionnaire via Qualtrics and principals were sent reminders after five, eight- and 10-days asking participants to complete the questionnaires. All questionnaires were checked for incompleteness. From all of the submitted responses (n=42), one was found to be incomplete (recorded as a partial response) and was thus not included in the main study.

2.6 Data analysis

Data from the questionnaires were downloaded via Qualtrics onto an Excel spreadsheet and prepared for statistical analysis. Descriptive statistics were used to analyse and describe Section 1 of the measuring instrument, namely the biographic questionnaire. For the purpose of data analysis, the 5-point Likert scale of the TAIS (Section 2) was reduced to a 3-point scale with a “4” or “5” indicating that participants were in favour (were positive) of inclusion in mainstream classes, and a “1” or “2” indicating that participants had a more negative attitude toward inclusion of these children in mainstream classes regarding questions 2, 4, 7, and 10. By answering with a “3” indicated a neutral response. Questions 1, 3, 5, 6, 8, and 9 were reverse scored therefore answering a “4” or “5” indicated that participants were not in favour of inclusion (negative), whereas a “1” or “2” indicated a more positive attitude towards inclusion. Again, a “3” indicated a neutral response. Each participant was asked to answer 10 biographic information questions (Table 8) which were then tested for statistical significance using the following methodology:

Biographic variables that have only two outcomes (e.g., confidence rating and gender) were tested for statistical significance using a standard t-test to determine if two sets of cofactors are significantly different from each other (McMillan & Schumacher, 2014).

- i. Given that the samples are drawn from the same population, they are assumed to have equal variance.
- ii. The null hypothesis is assumed, that is that the two outcomes do not have a statistically significant difference.
- iii. The null hypothesis is rejected on the 95% confidence interval, that is $p < 0.05$.

The following steps paragraph describes the steps used.

1. Null Hypothesis, ($u_1 = u_2$),



2. T value,

$$T_{value} = \frac{\bar{x}_1 - \bar{x}_2}{s_p \cdot \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

With s_p

$$s_p = \sqrt{\frac{(n_1 - 1)S_{X1}^2 + (n_2 - 1)S_{X2}^2}{n_1 + n_2 - 2}}$$

Where s_p is the pooled standard deviation, \bar{x}_1 and \bar{x}_2 are the average of the first and second samples respectively, S_{X1}^2 and S_{X2}^2 are the standard deviations of the first and second samples respectively: n_1 and n_2 is the size of the samples respectively.

3. Acceptance criteria $p (T_{value}) > 0.05$,
4. Rejection criteria $p (T_{value}) < 0.05$.

Biographic variables that had more than two outcomes (e.g., years of experience, age) were tested for statistical significance using the analysis of variance (ANOVA) f-test to determine if more than two sets of cofactors are significantly different from each other (McMillan & Schumacher, 2014).

- i. Given that the samples are drawn from the same population, they are assumed to have equal variance.
- ii. The null hypothesis is assumed, that is that the two outcomes do not have a statistically significant difference.
- iii. The null hypothesis is rejected on the 95% confidence interval, that is $p < 0.05$

The following steps paragraph describes the steps.

1. Null Hypothesis, ($u_1 = u_2 = \dots \dots u_k$),
2. F value,

Table 10 shows how the f-value is calculated.

Table 10

Calculation of f-value

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares (MS)	F-value
Within	$SS_w = \sum_{j=i}^p \sum_{i=1}^{n_j} (x_{ij} - \bar{x}_j)^2$	$df_w = p - 1$	$MS_w = \frac{SS_w}{df_w}$	$F = MS_w / MS_b$
Between	$SS_b = \sum_{j=i}^p n_j (\bar{x}_j - \bar{x})^2$	$df_b = n - 1$	$MS_b = \frac{SS_b}{df_b}$	
Total	$SS_T = \sum_{j=i}^p n_j (\bar{x}_{ij} - \bar{x})^2$			

where n is the total observations, p is the number of outcomes

5. Acceptance criteria $p (F_{value}) > 0.05$,
6. Rejection criteria $p (F_{value}) < 0.05$.

2.7 Reliability and validity

The validity of the current research was strengthened through the use of the published and peer-reviewed scale, TAIS (Saloviita, 2015). The scale was appropriate for using within the Japanese context when measuring teachers' perspectives toward inclusion.

Face validity was established when the participants of the pilot study confirmed that the questionnaire that was to be used was appropriate for use in the Japanese context. There were no threats to the internal validity of the study, as participants that were working in a special educational setting were eliminated through the selection criteria for participants. Furthermore, all participants adhered to the inclusion criteria set out by the researcher.

2.8 Ethical consideration

Ethics approval was sought from the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria (Appendix A). To ensure conformity with the mandated and suggested ethics standards, privacy, informed consent, rights of participants, risks and benefits of participation, and data security of the participants had to be considered (Woodfield & Iphofen, 2017). As a guide to the procedures that were employed in this study, the Belmont Report on Ethical Principles and Guidelines for the Protection of Human Subjects of Research was used (National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1974). Another guideline which was followed is the

Ethical Guidelines for Medical and Health Research Involving Human Subjects in Japan (Ministry of Health Labour and Welfare, 2015).

2.8.1 Confidentiality

To ensure confidentiality, no names or personal identifying information was asked in the questionnaire. Participants were informed that only participant numbers would be used and were only asked to provide the last three digits of their teaching accreditation for verification of qualification. No identifying information which was provided on the biographic questionnaire (such as teaching licence number) was presented in the study.

2.8.2 Informed consent

A letter of informed consent (Appendix C1 and C2) was sent to the participants explaining the study's goals and nature as well as the confidentiality of the data. The letter contained all aspects of the study (rationale; what will be expected of the participants; their rights as participants; who will have access to the study; and risks and benefits of participation) that may have influenced their willingness to participate (Committee & Office, 1973). The participants were provided with a URL link to participate in the survey which led them to a webpage that contained the participant information sheet and explained the study's aim. At the bottom of the information sheet, responders were given the option to 'click to accept' as a method to indicate their consent for participation.

2.8.3 Rights of participants, risks, and benefits of participation

Participants were informed that their participation in the study was entirely voluntary, and should they feel uncomfortable, they could withdraw at any given moment without being penalised and all recorded information would be discarded.

Participants were furthermore informed that they would not receive any compensation for their participation – participation was on a voluntary basis.

Lastly, participants were informed that there were no risks of harm associated with this study. The survey did not contain any potentially uncomfortable questions and it was not aimed at testing knowledge. Participants could complete the survey at any time after receiving the URL link, including outside of school hours, so as not to disrupt their work or job performance.



2.8.4 *Privacy and confidentiality*

To ensure that the participants' trust and vulnerability were not jeopardised, a confidentiality agreement was adopted. The survey was developed using the Qualtrics survey development software and participants were not requested to provide any identifying personal information, as anonymity refers to the fact that the information acquired does not allow the researcher to identify the participants (McMillan & Schumacher, 2014; Republic of South Africa, 2013). Participants were only required to submit the last three digits of their teacher license number as verification of qualification. Personal information gathered during the course of the research, such as participants teaching license number was not used for purposes other than those for which the participants have provided prior permission (Ministry of Health Labour and Welfare, 2015; Republic of South Africa, 2013). No identifying information will be disclosed in any of the study's publications (Ministry of Health Labour and Welfare, 2015; National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1974).

2.8.5 *Data security*

Data security involves assessing the security and vulnerability of the data and the likelihood of it being tampered with by internet threats after it has been collected (Sexton et al., 2011). Therefore, the data will be stored in a de-identified manner (Republic of South Africa, 2013) and kept secure on a password-protected online platform (Qualtrics). Only the researcher and her two supervisors will have access to the data. This will guarantee that the confidentiality agreement is followed and that no participant data or information is released without their permission. The data will be securely stored at the Centre for Augmentative and Alternative Communication at the University of Pretoria for a period of 15 years for archival purposes or for possible use in future research.



3. RESULTS

3.1 Presentation of results

The results are presented and discussed according to the study’s subaims, with each subaim referring to a specific subscale of the TAIS scale. The results also investigated how the different biographic variables impacted on the answers provided on the TAIS scale. Firstly, the desired outcome for each subscale is presented whereafter the result for each subscale is displayed, lastly a breakdown of biographic variable per subscale is presented and discussed.

Table 11 shows the average, standard deviation, minimum selection, maximum selection, and acceptable range for each of the four subscales respectively.

Table 11

Statistical analysis and acceptable range of each subscale of the TAIS

		Subscale 1 (expected outcomes)	Subscale 2 (inclusion as value)	Subscale 3 (rights of the child)	Subscale 4 (workload of the teacher)
Variable	Questions	1, 6, 10	2, 4, 7	3, 9	5, 8
	Average	3.59	3.42	3.5	3.22
	Standard Deviation	0.95	0.89	1.21	1.07
	Min	1	1	1	1
	Max	5	5	5	5
Acceptable range	Average + 1.96* σ	5	5	5	5
	Average - 1.96* σ	1.73	1.67	1.12	1.12

From Table 11, it is clear that for all four subscales the answers ranged from the minimum to the maximum range of the scale (i.e., 1–5), with averages ranging from 3.22 (Subscale 4) to 3.59 (Subscale 1), and standard deviations of 0.89–1.21. All participants answered within the acceptable range and there were no deviations where a participant’s answer influenced the subscales in a significant way.

3.1.1 Perspectives on the implementation and expected outcomes of inclusion in their classrooms

The first subaim was captured in Subscale 1 of the TAIS scale, and refers to Questions 1, 6, and 10 of which questions 1 and 6 were reverse scored. The results are shown in Table 12.

Table 12

Participants' responses regarding expected outcomes of inclusion

Subscale 1: Expected outcomes (Questions 1, 6, and 10)						
Question	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree	Reverse Scoring
1. Children with special educational needs learn best in their own special education classes where they have specially trained teachers.	2.4% (n=1)	7.31% (n=3)	29.3% (n=12)	43.9% (n=18)	17.1% (n=7)	Yes
6. The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her.	0% (n=0)	4.9% (n=2)	26.8% (n=11)	46.3% (n=19)	22% (n=9)	Yes
10. The learning of children with special educational needs can be effectively supported in mainstream classrooms as well.	4.9% (n=2)	17.1% (n=7)	34.1% (n=14)	34.1% (n=14)	9.8% (n=4)	No

(N=41)

Table 12 shows that for Question 1 many participants (43,9%) agreed with the comment that children with special educational needs learn best within their own special education classes where they have access to specially trained teachers. This implies that participants generally did not believe that inclusion was the most appropriate option. However, 9.8% of the participants did not agree with this statement. This was confirmed by Question 6 which showed that an overwhelming majority (68.3%) agreed or strongly agreed that children with special educational needs are best placed in a special educational classroom that best suits them, indicating that participants had a negative perception toward inclusion. Question 10's specific aim was to evaluate participants' outlook toward inclusion in mainstream classes where a large percentage was neutral (34.1%), although more were positive toward mainstream inclusion with adequate support (43.9%) compared to the 22% who were negative.



Next, an f-test was performed to determine if any of the biographic variables had an influence on Subscale 1 of the TAIS. The results are shown in Table 13. All participants answered within the acceptable range for Subscale 1 and there were no deviations on how each participants' answer influenced this subscale.

Table 13

Biographic variable influence on questions that make up Subscale 1

Biographic variable	1. Children with special educational needs learn best in their own special education classes where they have specially trained teachers	6. The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her	10. The learning of children with special educational needs can be effectively supported in mainstream classrooms as well	Overall influence on Subscale 1
	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value
1: School type	0.44	0.44	0.81	0.28
2: Level of education	0.43	0.96	0.20	0.34
3: Years of experience	0.01*	0.04*	0.19	0.12
4: Experience interacting with persons with disability	0.95	0.08	0.44	0.12
5: Has a family member or close friend with disability	0.11	0.33	0.73	0.07
6: Has training to work with children with disability	0.35	0.58	0.28	0.65
7: Experience teaching children with disability	0.79	0.24	0.18	0.65
8: Has knowledge of inclusive educational policies in Japan	0.70	0.28	0.35	0.78
9: Confidence rating to work with children with disability	0.11	0.63	0.21	0.69
10: Gender	0.75	0.61	0.36	0.89
11: Age	0.28	0.72	0.74	0.86

Note: * significance at the 5% level of confidence ($p \leq 0.05$) evident that none of the biographic variables had a statistically significant impact on any of the three questions included in Subscale 1

From Table 13, it is clear that the biographic variable *years of experience* had a statistically significant impact on two of the three questions that make up Subscale 1, namely Question 1 ($p=0.01$) and Question 6 ($p=0.04$). This shows that teachers' years of experience

influenced their attitudes regarding the outcomes of inclusion. This biographic variable is further explained and investigated using a 4 x 3 contingency table in Tables 14 and 15.

Table 14

Years of teachers' experience vs teachers' perspectives

Variable	Parameter	1. Children with special educational needs learn best in their own special education classes where they have specially trained teachers		
		Positive	Neutral	Negative
Years of experience	1<x<10 (n=6)	1	1	4
	11<x<20 (n=11)	0	3	8
	21<x<30 (n=12)	3	6	3
	31+ (n=12)	0	2	10

Table 14 shows that most of the participants with 1–10 years of experience (n=4) answered negatively to Question 1, a reverse score question, indicating that they were not in favour of inclusion whereas a smaller set (n=1) indicated that they were in favour of inclusion, and one participant remained neutral. The same pattern can be seen for the group 11–20 years of experience where the majority (n=8) also indicated that they were not in favour of inclusion by answering negatively, and three participants remained neutral.

A slight change in perspective can be seen in the third group with 21–30 years of experience where most of participants (n=6) answered neutral, and the same number (n=3) answered positively as well as negatively. This implies that the group was split with regards to inclusion.

Most of the final group of participants with more than 31 years of experience (n=10) answered negatively to Question 1, indicating that they were not in favour of inclusion, whereas two participants remained neutral.



Table 15

Years of teachers' experience vs their perspectives on special education placement for a child with special educational needs

Variable	Parameter	6. The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her		
		Positive	Neutral	Negative
Years of experience	1<x<10 (n=6)	0	0	6
	11<x<20 (n=11)	0	3	8
	21<x<30 (n=12)	2	3	7
	31+ (n=12)	0	5	7

Table 15 shows that most of the participants with 1–10 years of experience (n=6) indicated that they believe a child with special educational needs will learn best if they are placed within a special educational classroom that suit their needs. This implies that participants were not in favour of inclusion. A similar trend was seen with the participants that had 11–20 years of experience where the majority (n=8) agreed with the question indicating that they were not in favour of inclusion. A smaller group of participants (n=3) remained neutral.

Even though the majority (n=7) of participants with 21–30 years of experience were still not in favour of inclusion, a smaller group (n=3) remained neutral whereas the smallest group (n=2) indicated that they were in favour of inclusion. As such, a slight shift in this group's perspectives can be seen.

The final group of 12 participants with more than 31 years of experience showed the same trend as the first two groups. Most of participants (n=7) answered negatively implying that they were not in favour of inclusion whereas five participants remained neutral.

3.1.2 Perspectives toward educating children with and without disabilities together in a classroom

The second subaim was captured in Subscale 2 of the TAIS and includes Questions 2, 4, and 7. None of these three questions were reversed scored. These results are shown in Table 16.



Table 16

Participants' responses regarding inclusion as a value

Subscale 2: Inclusion as a value (Questions 2, 4 and 7)						
Question	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree	Reverse Scoring
2. The children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support.	2.4% (n=1)	2.4% (n=1)	43.9% (n=18)	41.5% (n=17)	9.8% (n=4)	No
4. Children with attention deficit/hyperactive disorder (ADHD) should be admitted in mainstream classrooms with adequate support.	2.4% (n=1)	2.4% (n=1)	29.3% (n=12)	53.7% (n=22)	12.2% (n=5)	No
7. The children with special educational needs should be educated in mainstream classrooms as much as possible.	7.3% (n=3)	19.5% (n=8)	36.6% (n=15)	36.6% (n=15)	0% (n=0)	No

(N=41)

Table 16 shows that for Question 2 more than half of the participants (51.3%) held positive responses towards educating children with emotional or behavioural problems in a mainstream classroom, although a large percentage (43.9%) were neutral and only a small percentage (4.8%) opposed. This same general tendency was noted in Question 4 which focused on children with ADHD, but with a greater percentage of responses being positive (65.9%) and a smaller percentage being neutral (29.3%). The same percentage (4.8%) as with Question 2, remained negative. However, the same tendency did not prevail in Question 7 which focused on children with special educational needs and whether they should be educated in mainstream classrooms. Here a large percentage were negative (26.8%) and neutral (36.6%). In total, 36.6% (which is smaller than for questions 2 and 4) of the participants were positive towards the inclusion of children with special educational needs.

Next, a f-test was performed to determine if any of the biographic variables had a statistically significant influence on the three questions included in Subscale 2. These results are shown in Table 17.

Table 17

Biographic variable influence on questions that make up Subscale 2

Biographic variable	2. The children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support	4. Children with attention deficit/hyperactive disorder (ADHD) should be admitted in mainstream classrooms with adequate support	7. The children with special educational needs should be educated in mainstream classrooms as much as possible	Overall influence on Subscale 3 Questions 2, 4, 7
	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value
1: School type	0.84	0.45	0.91	0.67
2: Level of education	0.99	0.99	0.99	0.97
3: Years of experience	0.67	0.77	0.37	0.58
4: Experience interacting with persons with disability	0.23	0.02*	0.89	0.15
5: Has a family member or close friend with disability	0.53	0.60	0.61	0.83
6: Has training to work with children with disability	0.54	0.75	0.74	0.83
7: Experience teaching children with disability	0.84	0.66	0.64	0.91
8: Has knowledge of inclusive educational policies in Japan	0.99	0.35	0.21	0.36
9: Confidence rating to work with children with disability	0.03*	0.30	0.94	0.23
10: Gender	0.548	0.30	0.18	0.44
11: Age	0.822	0.54	0.81	0.88

Note: * significance at the 5% level of confidence ($p \leq 0.05$) therefore, none of the biographic variables had a statistically significant impact on Subscale 2 of the TAIS, despite the impact on individual questions

From Table 17, it is clear that two biographic variables had statistically significant influences on Subscale 2 of the TAIS. Firstly, *experience interacting with persons with disability* had a statistically significant impact with Question 4 ($p=0.02$), indicating that this experience had an influence on the participants attitude towards children with ADHD (but not towards children with emotional and behaviour problems or towards children with special education needs). Secondly, the biographic variable *self-reported confidence rating* had a statistically significant impact on Question 2 ($p=0.03$), (i.e., how positive they felt about the inclusion of children with emotional and behaviour problems), but not towards children with ADHD and children with special educational needs. These two statistically significant

biographic variables were further investigated using the standard f-test and presented in Tables 18 and 19.

Table 18

Influence of experience interacting with persons with disabilities on admitting children with ADHD into mainstream classrooms

Variable	Parameter	4. Children with ADHD should be admitted into mainstream classrooms with adequate support		
		Positive	Neutral	Negative
Experience with interacting with persons with disabilities	Yes (n=24)	18	6	0
	No (n=17)	9	6	2

Table 18 shows that most participants indicated they had experience interacting with persons with a disability (n=24). The majority answered positively to Question 4 (n=18), implying that they felt positively towards a child with ADHD being admitted into a mainstream classroom. A smaller set (n=6) remained neutral, and no participants indicated a negative attitude toward the inclusion of children with ADHD.

On the other hand, those who indicated that they had not interacted with persons with disabilities (n=17), the same tendency prevailed with most holding a positive view (n=9), although a comparatively large number were neutral (n=6) while only two were negative towards the inclusion of children with ADHD.

Next the nature of the interaction between self-reported confidence and the inclusion of children with emotional and behavioural problems are shown in Table 19.

Table 19

Self-reported confidence and inclusion of children with emotional and behavioural problems

Variable	Parameter	2. The children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support		
		Positive	Neutral	Negative
Self-reported level of confidence to work with	Less than 5 on the confidence scale (n=34)	15	17	2
	More than five on the confidence scale (n=7)	6	1	0

Table 19 shows that most participants (n=17) who rated their confidence level as lower than 5 on the 10-point confidence scale (indicating that they did not feel confident) were neutral towards inclusion, even with adequate support for children with disability. However, 15 of the participants who had a self-reported confidence level below 5 were positive towards including children with disabilities, while only two were negative. The small group (n=7) of participants who rated their confidence level above 5 on the 10-point confidence scale, were generally positive towards the inclusion of children with emotional and behavioural problems, with only one participant being neutral. This shows that neither self-reported confidence rating nor experience interacting with persons with disability had an overall impact on participants' perceptions regarding the outcomes of inclusion on Subscale 2.

3.1.3 *Perspectives regarding inclusion of children with disabilities as a human right*

The third subaim was captured in Subscale 3 of the TAIS and includes Questions 3 and 9 of which both questions were reverse scored. The results are shown in Table 20.

Table 20

Participants' responses regarding inclusion as a human right

Subscale 3: The Rights of the Child (Questions 3 and 9)						
Question	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree	Reverse Scoring
3. It is the right of a child with special educational needs to be placed in a special education classroom	0% (n=0)	0% (n=0)	9.8% (n=4)	46.3% (n=19)	43.9% (n=18)	Yes
9. A child with special educational needs should be transferred to a special education classroom in order not to violate his/her rights	14.6% (n=6)	29.3% (n=12)	36.6% (n=15)	14.6% (n=6)	4.9% (n=2)	Yes

(n=41)

Table 20 shows that for Question 3, an overwhelming majority of participants' (90.2%) thought that it was the right of the child with special education needs to be placed in a special education classroom (i.e., not mainstream inclusion). No participants held the opposite view, while 9.8% remained neutral. This sentiment, however, was reversed with Question 9 where 43.9% of participants disagreed with the statement that a child with special educational needs

should be transferred to a special educational classroom (i.e., showing a positive attitude towards inclusion). However, 36.6% of the participants were neutral and 19.5% believed that a child should be moved to a special educational classroom as to not violate their rights.

Next a f-test was performed to determine if any of the biographic variables had an influence on Subscale 3. The results are shown in Table 21.

Table 21

Biographic variable influence on questions that make up Subscale 3

Biographic variable	3. It is the right of a child with special educational needs to be placed in a special education classroom	9. A child with special educational needs should be transferred to a special education classroom in order not to violate his/her rights	Overall influence on Subscale 3 Questions 3, 9
	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value
1: School type	0.70	0.50	0.43
2: Level of education	0.68	0.20	0.14
3: Years of experience	0.01*	0.30	0.01*
4: Experience interacting with persons with disability	0.07	0.73	0.20
5: Has a family member or close friend with disability	0.81	0.54	0.51
6: Has training to work with children with disability	0.18	0.64	0.75
7: Experience teaching children with disability	0.55	0.05	0.18
8: Has knowledge of inclusive educational policies in Japan	0.67	0.07	0.19
9: Confidence rating to work with children with disability	0.20	0.82	0.51
10: Gender	0.13	0.12	0.58
11: Age	0.02*	0.20	0.62

Note: * significance at the 5% level of confidence ($p \leq 0.05$) therefore *years of experience* had a statistically significant impact Subscale 3.

Table 21 shows that two biographic variables impacted on Question 3, namely *years of experience* ($p=0.01$) indicating that the amount of time a teacher has been teaching or the teachers' age could have influenced whether they see inclusion of children with special education needs as a human right or not.

However, none of the 11 biographic variables had a statistically significant impact on Question 9. Age was investigated further in Table 22 using a 5 x 3 contingency table.

Table 22

Influence of age on the right of a child with special educational needs to be placed in a special educational classroom

Variable	Parameter	3. It is the right of a child with special educational needs to be placed in a special education classroom		
		Positive	Neutral	Negative
Age	20<x<29 (n=3)	0	1	2
	30<x<39 (n=6)	0	0	6
	40<x<49 (n=13)	0	0	13
	50<x<59 (n=15)	0	3	12
	60+ (n=4)	0	0	4

Table 22 demonstrates the statistically significant influence of age on Question 3. Most participants between the ages of 20–29 (n=2) indicated a negative perception toward inclusion, believing that a child with special educational needs has a right to a specialised educational classroom, while one remained neutral. Similarly, participants between the ages 30–39, 40–49 and 60+ shared negative perceptions toward inclusion. Likewise, the majority (n=12) of participants in the 50–59 age range had negative perceptions toward inclusion, however, a minority set (n=3) indicated a neutral response. Across all age groups, not a single participant indicated a belief that children with special educational needs have the right to be placed in the mainstream classroom.

Years of experience was further investigated in Table 23, using a 3 x 3 contingency table.

Table 23

Influence of years of experience on the right of a child with special educational needs to be placed in a special educational classroom

Variable	Parameter	3. It is the right of a child with special educational needs to be placed in a special education classroom		
		Positive	Neutral	Negative
Years of experience	1<x<10 (n=6)	0	1	5
	11<x<20 (n=11)	0	0	11
	21<x<30 (n=12)	0	1	11
	31+ (n=12)	0	2	10



Table 23 demonstrates the statistically significant influence of years of experience on Question 3. Most of participants with 1–10 years of experience (n=5) answered negatively, whereas one participant remained neutral, and none answered positively, believing that a child with special needs has a right to a specialised educational classroom. Similarly, participants with 11–20 years of experience (n=11) all answered negatively. Participants with 21–30 years of experience followed the same pattern as participants with 1–10 years of experience, where the majority (n=11) answered negatively, and one participant remained neutral. Most (n=10) of the participants with 31+ years of experience answered negatively, with two participants remaining neutral. Across all age groups, no participants (n=0) indicated a belief that children with special educational needs have the right to be placed in the mainstream classroom.

3.1.4 *Perspectives on teachers’ preparation and workload when working with children with disabilities in inclusive classrooms*

The fourth subaim was captured in Subscale 4 of the TAIS scale and refers to Questions 5 and 8 of which only Question 5 was reverse scored. The results are shown in Table 24.

Table 24

Participants’ responses regarding workload of the teacher

Subscale 4: Workload of the teacher (Questions 5 and 8)						
Question	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree	Reverse Scoring
5. Teachers’ workload should not be increased by compelling them to accept children with special educational needs in their classrooms	4.9% (n=2)	19.5% (n=8)	34.1% (n=14)	31.7% (n=13)	9.8% (n=4)	Yes
8. Integrated children with special educational needs create extra work for teachers in mainstream classrooms	4.9% (n=2)	26.8% (n=11)	22% (n=9)	34.1% (n=14)	12.2% (n=5)	No

(N=41)

Table 24 shows that for Question 5, many participants (41.5%) indicated an opposition to increasing the workload of teachers by compelling them to include students with special educational needs in their classrooms - a sentiment, which was supported by the results of Question 8, where again 46.3% of respondents expressed the belief that children with special



educational needs create extra work for mainstream teachers. In response to question 8, 31.7% of those surveyed stated that children with special educational needs do not create extra work for teachers, and therefore should be included in mainstream classrooms, as reflected by the similar 24.4% disagreement with the statement of question 5. In both questions, approximately 22-34% of respondents remained neutral..

Next an f-test was performed to determine if any of the biographic variables had an influence on the two questions included in Subscale 4. The results are shown in Table 25.

Table 25

Biographic variable influence on questions that make up Subscale 4

Biographic variable	5. Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms	8. Integrated children with special educational needs create extra work for teachers in mainstream classrooms	Overall influence on Subscale 4 Questions 5, 8
	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value
1: School type	0.52	0.98	0.71
2: Level of education	0.97	0.78	0.06
3: Years of experience	0.17	0.41	0.37
4: Experience interacting with persons with disability	0.83	0.73	0.93
5: Has a family member or close friend with disability	0.32	0.58	0.37
6: Has training to work with children with disability	0.30	0.67	0.75
7: Experience teaching children with disability	0.20	0.98	0.47
8: Has knowledge of inclusive educational policies in Japan	0.69	0.72	0.66
9: Confidence rating to work with children with disability	0.32	0.85	0.50
10: Gender	0.03*	0.68	0.34
11: Age	0.70	0.06	0.23

Note: * significance at the 5% level of confidence ($p \leq 0.05$) therefore none of the biographic variables had a statistically significant impact Subscale 4

Table 25 shows that only one of the 11 biographic variables, namely *gender* had a statistically significant impact on Question 5 ($p=0.03$) which is further explained in Table 26 by means of a t-test.



Table 26

Influence of gender on the increase of teachers' workload by accepting children with special educational needs into their classrooms

Variable	Parameter	5. Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms		
		Positive	Neutral	Negative
Gender	Male (n=29)	4	10	15
	Female (n=12)	6	4	2

Table 26 shows that for Question 5, responses were split along gender lines. Among the 29 male participants, most (n=15) did not agree with the statement that workload should increase when including children with special educational needs into their classrooms, 10 (n=10) were neutral, while the smallest set (n=4) agreed with the statement. A reverse pattern was seen for the 12 female participants. Most female participants (n=6) answered positively, agreeing that workload should increase, whereas four (n=4) remained neutral, and the smallest set (n=2) indicated that workload should not increase.



4. DISCUSSION

This study aimed to investigate the perspectives of Japanese secondary teachers toward inclusion. The results of the study indicate that the attitudes of Japanese secondary school teachers in the Fukushima prefecture toward inclusion were generally not positive. This is in contrast to studies conducted in countries such as South Africa (Bornman & Donohue, 2013) and Australia (Gigante & Gilmore, 2020), where different measuring instruments were used as well as studies in countries such as Finland (Alnahdi et al., 2019; Saloviita, 2019, 2020; Saloviita & Schaffus, 2016), Germany (Saloviita & Schaffus, 2016), Italy (Saloviita & Consegna, 2019), and Saudi Arabia (Alnahdi et al., 2019) where the same TAIS instrument was used. All these studies found that teachers' attitudes toward inclusion were more positive. The general negative attitude found in the study at hand is in line with another study conducted in Japan in which Maeda et al. (2021) reported that Japanese school teachers who play a key role in the implementation of the Japanese education system, are sceptical about the practicality of adopting inclusive education, even though they believe it is desirable. The responses of Japanese schoolteachers in the current study are also similar to the findings of Saloviita (2020a) and Song (2016), who reported that teachers' attitudes became more positive if they have had experience interacting with persons with disabilities.

The current study found that teachers' confidence in teaching children with disabilities influenced their attitudes and how they answered on the TAIS. It found that teachers were more positive and inclined towards inclusion if they had experience interacting with persons with disabilities or knew a friend or close family member with a disability. For example, a male participant in his sixties answered that he has a younger brother with a disability; a female in her fifties indicated that she has a childhood friend who now works at a bakery for persons with disability. Furthermore, some male participants indicated they had a close family member with a disability but did not elaborate further. Another male participant in his sixties indicated that he has a friend with a child with a disability but answered 'no' on the question of interaction with someone with a disability. As stated above, the attitudes toward inclusion amongst these respondents were generally (slightly more) positive. Regrettably, participants who indicated they interacted with persons with disability were not asked to elaborate on the kind of interaction they had but rather clarified that they had a family member or friend with a disability.



Even teachers who indicated that they did not have any experience interacting with persons with disability, indicated a willingness to include a child with special educational needs into their classrooms. Not only these teachers, but also those with a higher confidence rating tended to be more accepting of children with ADHD in their classroom and therefore displaying a positive attitude towards inclusion. Forlin (2013) as well as Maeda et al. (2021), drew similar conclusions and found that Japanese teachers were more enthusiastic about including children with attention or social skills challenges (such as ADHD) in their classrooms rather than children with other disabilities or emotional and severe behavioural challenges. Similarly, Saloviita (2019) found that teachers' readiness to accept a child with special educational needs into their classrooms was linked to the degree of the child's disability or the challenge the child poses to classroom instruction.

Other studies had the same findings. For example, in a Singaporean study it was also found that teachers indicated that they believe that only children with moderate disabilities should be included in general education programmes (Yeo et al., 2016). This is further strengthened by Yada and Savolainen's (2017) study where teachers' attitudes for interacting with people with disability were overall positive, however, attitudes toward involving children with disabilities in their own classrooms were largely negative, or they displayed hesitancy.

The study at hand found that the amount of teaching experience had an overall influence on teachers' attitudes and how they answered on the TAIS with regards to inclusion in mainstream classrooms versus special educational classes. The present study found that teachers with more years of experience were less inclined to involve children with special educational needs in their classes. Saloviita and Consegna (2019) drew the same conclusion where it was found that teachers with more than 10 years of experience were not in favour of inclusion compared to teachers with less experience. In the current study, teachers with 21 to 30 years of experience were quite balanced with regards to inclusion and those with 31 years or more experience were not in favour of inclusion. This is again supported by a study conducted in Italy which found that teachers with more teaching experience (10 years or more) were more likely to have a negative view toward inclusion (Saloviita & Consegna, 2019). One study, however, contradicts these findings, where it was found that teachers in both the youngest and oldest age groups were more positive toward inclusion (Rakap et al., 2016). This can tie in with knowledge/lack of knowledge of local legislation and educational courses available to university students when studying their teaching course.

As mentioned above, Japan has already made great strides with regards to inclusive education reform, however, there are still significant gaps between the theoretical knowledge



and practical implementation thereof. Additionally, results from the current study indicated that Japanese teachers' knowledge of local legislation and policy related to inclusive education had no effect on their attitudes which is similar to an Australian study which found that teachers' perspectives toward inclusion were unaffected by whether they had knowledge of legislation or not (Gigante & Gilmore, 2020). However, this is in contrast to the study performed by Yada and Savolainen (2017) with Japanese teachers (from various prefectures including the Tokyo metropolitan area and the prefectures of Kanagawa, Yamaguchi, Kagoshima, Chiba, Saitama, Kochi, Miyazaki, and Fukui) which found that teachers' attitudes were more positive if they had at least some knowledge of local legislation or policy. Given the fact that Japanese university students enrolled in an education course are not required to take classes on special education, nor have any experience teaching children with learning disabilities during their teaching practical time, it is not surprising that such a small group of teachers in the current study had knowledge on legislation (Forlin, 2013; Forlin et al., 2015).

Although the Japanese government advocates inclusive education (Forlin, 2013), the results of the present study indicate that teachers' increased understanding of disability did not seem to improve their perception of, nor their efficacy in teaching in inclusive classrooms. It could also be speculated that because of a lack of training during their years at university, newly qualified teachers have high anxiety with regards to the workload increase once they enter the teaching profession and accept children with special educational needs into their classes. This might explain why teachers are hesitant to accept such children into their classes. This was also confirmed by Johnson and Muzata (2019) who found that teachers without special educational training are more likely to be wary and critical of inclusive education because they lack the skills to accommodate children with special educational needs in their classrooms and find it difficult to manage said children. These findings help understand the situation teachers are facing and offer suggestions for improving teacher training at university level on inclusive education. Furthermore, Article 24.12.d of the CRPD states that,

“all teachers and other staff receive the education and training they need to give them the core values and competencies to accommodate inclusive learning environments, which include teachers with disabilities. An inclusive culture provides an accessible and supportive environment that encourages working through collaboration, interaction and problem-solving” (United Nations, 2016, p.4).

Given the results of the current study, it is evident that not all teachers received specialised training nor feel supported when having to deal with children with special educational needs in their classes.



Overall, results of the current study indicate that most teachers believed that if they accept a child with special educational needs into their classrooms, their workload will and should be increased and only a small group of teachers disagreed. This might offer one explanation as to why teachers are generally hesitant to accept such children into their classes. This is further due to the higher demands or the stronger tendency for humility among Japanese teachers feeling that it is their duty to include children with disability and take on additional work. Japanese teachers, however, are currently overworked (Maeda et al., 2021), with secondary school teachers averaging more than 511 teaching hours a year (OECD, 2019). It is therefore no surprise that teachers are resistant to inclusion if it means more work added to their already heavy workload. These findings were in stark contrast to that of a Thai study which found teachers' perspectives toward inclusive classrooms were more favourable if they reported having higher working hours (Jamsai, 2019). It was said that teachers who reported a higher workload may have worked with children with disabilities more frequently and that this close relationship accounted for the more favourable views rather than the number of hours of burden (Jamsai, 2019).

The results of this study also indicate that it is critical to take steps to modify Japanese teachers' attitudes, particularly regarding inclusive education, as it is believed that effective teachers is expected to have favourable attitudes towards inclusive education (Saloviita & Schaffus, 2016). Courses targeted at a complete understanding of disability, inclusion, and behaviour management should be introduced early into teacher education programmes and into in-service training and should ideally include concrete practical sessions for pre-service teachers (Maeda et al., 2021; Yada & Savolainen, 2017). Providing opportunities for teachers to obtain successful experience in working with children with a variety of educational needs is likely to improve their efficacy and attitudes and influence their views toward inclusive education as a whole (Maeda et al., 2021; MEXT, 2013; Yada & Savolainen, 2017).

It is also suggested that, while the inclusion of children with disability is more common than ever before on a worldwide scale, (especially in Western countries), it is worth mentioning that it may be more challenging to execute inclusion in East Asian countries such as Japan, where legislation and inclusive education policies are fairly new. Article 24 of the CRPD states that in order for inclusive education to prosper, changes in culture, legislation and all spheres of education needs to undergo transformation in order to accommodate the needs to children with disability (United Nations, 2016). Even though Japan has made significant progress in educational reformation with regards to inclusive policies, it appears that both in-service and preservice teachers lack the necessary understanding of inclusion, providing only rudimentary



support for children with various types of special educational needs (Forlin, 2013; Yamada, 2013; Yoshitoshi, 2014) and that more significant policy transformation is required to catch up to Western nations.



5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of main findings

The current study found that Japanese secondary school teachers in the Fukushima prefecture did not hold a positive view toward inclusion. Some factors including years of experience, age, knowledge on local policies, interaction with persons with disability or having a family member with disability all played a role in how the teachers answered on the measuring instrument. Teachers were also more concerned with the degree of disability on whether to include these children into their classrooms, with older teachers being generally more negative than younger teachers and teachers with less experience. Given that inclusion and inclusive educational policies are still a relatively new concept for many Japanese teachers, it is not surprising that teachers were not positive or hesitant when asked to include children into their classrooms. Furthermore, since education is a basic human right for all children, it is imperative that teachers receive inclusive education training during their preservice years in order to ensure quality and equal education for all. This may also help to change the perspectives of teachers to a more positive mindset so that no child is excluded for any reason.

The findings could imply that even while policies for inclusion are in place, these policies may still restrict children's involvement in school because of negative views and outside pressures. These policies include a lack of direct assistance for the children as well as a lack of indirect support for the teacher from the institution and the broader education system. Professional training, a reduction in the current high workload, and support are among the services that are necessary and required in order to ensure successful inclusion in classrooms.

5.2 Implications for practice

The findings confirm that, despite all the policies that have been implemented in Japan, teacher's training regarding inclusion may be lacking or failing (e.g., teachers may not be trained adequately on what these inclusive education policies entail, or on how to implement the policies in their classrooms). Therefore, it is important that teachers receive adequate training related to inclusion while at university (i.e., the so called preservice teacher training) as well as during their teaching career (i.e., in-service training). Such training will ensure that all teachers are more receptive and knowledgeable with regards to inclusion and disabilities, which in turn will also increase their self-confidence in teaching children with disability in inclusive classrooms.

When it comes to addressing the needs of children with disabilities in schools, teachers are sometimes left in isolation in the classroom with no internal or external support. Teachers may never realise these children's full potential if they do not receive adequate and focussed training regarding inclusive education practices that address the affective, behavioural and cognitive components of attitudinal training and behaviour modification regarding including children with disabilities in mainstream classrooms. In the longer term, this will also impact on teacher's expectations of children with disability. The needs of children with disabilities might start to be met as teacher's expectations increase. A deeper understanding of teacher's current perceptions, as reported in the current study may lead to the offering of more thorough and focussed teacher training focussed on inclusion in conjunction with policy changes and implementation as well as professional development and in-service training of teachers.

5.3 Critical evaluation of the study

The study's critical evaluations will be reviewed in terms of its strengths and limitations.

5.3.1 Strengths

Although there have been other studies conducted in Japan regarding the attitudes toward inclusion of Japanese schoolteachers in public schools (see for example Maeda et al., 2021; Song, 2016; Yada & Savolainen, 2017), this is the first known study where the measuring instrument was presented in both English and Japanese measure teachers' attitudes toward inclusion in the Fukushima prefecture, Japan, using a standardised measuring instrument. The teachers who participated in this study represented both rural and urban areas in the prefecture giving a broader overview of the teachers' perspectives toward inclusion in the Fukushima prefecture.

Another strength included the diligent and careful translation process of the TAIS (Saloviita, 2019) and biographic information using a blind-back translation method which is currently regarded as the gold standard for translation. Furthermore, according to the success of the pilot study, both the content of the questionnaire and its online format seemed appropriate given the context and the teachers could complete it without any difficulty. However, the TAIS was provided to teachers in both English and Japanese, and thus it cannot be assumed that teacher's only used the Japanese version to answer the questions Therefore, a future study can be done with another cohort of Japanese teachers which only makes use of the Japanese translation.



A diligent scoping review also gave strength to the study, as careful and deliberate care was taken to comb through various studies in order to find a measuring instrument with good reliability that would be applicable to the Japanese context, resulting in the selection of the TAIS (Saloviita, 2019).

Self-report of participants' answers on the measuring instrument also contributed to the overall strength of the study. Since the measuring instrument was anonymous and participants did not observe others while completing it, they could be more open to describing their own experiences, thoughts, and feelings in a way that is free of bias and pressure to conform to an expected answer.

5.3.2 Limitations

The methodological limitation of this study was that the sample size was smaller than planned. Japanese teachers' period of hand-over and changing of schools is typically at the end of April which unfortunately coincided with data collection. The small sample size could be a direct result of teachers' hand-over period and moving to new schools – meaning that they did not have adequate time and focus to participate in the study. This is something which can be avoided in future studies if data collection is avoided during this handover time of the year.

A second limitation is that using a standardised measuring instrument such as the TAIS (Saloviita, 2019) did not allow for further in-depth probing of answers, nor confirmation or follow-up questions and as such could restrict and implicate results. As this study was an initial investigation, a different form of data collection (e.g. focus groups) may have provided richer and more descriptive results

A third limitation was the fact that this study only focussed on senior high schools; therefore, the findings of this study cannot be used to draw generalisations for Japanese teachers as a whole.

Finally, although the translation of the questionnaire could be seen as a strength, it can also be regarded as a limitation. Even though a blind-back translation process was followed, the possibility that some meaning, or wording might have been lost in translation, or were simply not understood well enough, cannot be disregarded.

5.4 Recommendations for further studies

Further studies should focus more on the reasons behind teachers' attitudes toward inclusion and why they hold the belief they have. This could include qualitative studies that make use of focus groups, interviews and in-depth question probing. Another possible solution



to understanding inclusion in Japan and Japanese teachers' perspectives toward inclusion could involve university collaboration with both municipal and prefectural board of educations in order to do in-class observations for teachers in training as well as teaching assistant students. The lack of English publications also leaves room for further research and collaborations with inclusive education programmes in Japanese universities.



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Appendix A Ethics Approval



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo



15 October 2021

Dear Miss M Krüger

Project Title:	The perspectives of mainstream Japanese teachers towards inclusion
Researcher:	Miss M Krüger
Supervisor(s):	Prof JJ Bomman Dr E Johnson
Department:	CAAC
Reference number:	12007669 (HUM051/0821)
Degree:	Masters

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 30 September 2021. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely,

Prof Karen Harris
Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: tracey.andrew@up.ac.za



Appendix B1

Email to Pilot Study Participants



Gmail

Michelle Krüger <[REDACTED]>

Pilot Study

1 message

Michelle Krüger <kruger[REDACTED]>

11 March 2022 at 07:10

To: michelle[REDACTED]

Dear Pilot Participant

Thank you for your time and willingness to assist with the evaluation of this questionnaire as part of the pilot study for the current research.

In the main study, the survey will be sent to mainstream Japanese teachers in Fukushima prefecture. Teachers will receive the survey in both English and Japanese.

Your input is intended to assist me to ensure that this questionnaire is complete, accurate, and appropriate. Any recommendations from this pilot study will be taken into account before the main study is conducted.

The survey in the link below consists of four sections namely, Section A, B & C that will be a part of the main study. Section D is an additional section for you as pilot participant to give input with regards to the letter of informed consent (Section A) the Biographical questionnaire (Section B) and Section C that entails specific questions related to teachers' perspectives towards inclusive education.

Please answer all the questions in the questionnaire in Sections A, B & C and please provide feedback of all three sections, in Section D on the questionnaire.

By clicking [here](#) you will be able to access the survey, thus consenting to participate in the pilot study. Please inform me should you have any difficulty accessing the link above.

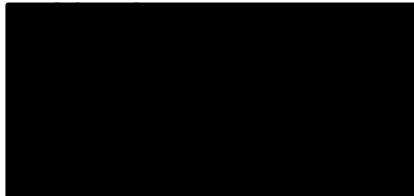
It will be appreciated if you could complete this survey by Monday 14 March, 2022.

Thank you for your time and participation.

—

Best Regards

Ms. Michelle Krüger





Appendix B2

Pilot Study – Measure instrument and feedback form

部分A: 個人情報について / Section A: Informed Consent

私、はここに、

- 上記の調査研修に参加することに同意します。
- 照合作業のために私の教員免許証の下三桁を証明として提出することに同意します。
- 。
- 私は調査研修中いかなる安全にかかわる事態や不快感を及ぼす状況にさらされることがないことを理解しています。
- 私はこの研究からの辞退を望む時、いかなる釈明や不利益を被るような同意をすることなく、にいかなる理由によっても辞退することができる権利があることに同意します。
- この研究から辞退する時、私が提供したすべての情報は削除されることを理解しています。
- データの内容は機密に扱われ、研究の目的、学会発表での学部への報告、雑誌記事にのみ使用されることを理解しています。
- データは記録保管の目的から個人が特定されない方法でプレトリア大学、CAACの安全な場所に15年間保存される事を理解しています。
- 情報は機密に扱われることを理解しています。

英語：

By clicking 'Yes' below I hereby:

- Provide consent to participate in the research study as outlined above
- Agree to submit proof of the last three digits of my teaching accreditation for verification purposes
- Understand that I will at no stage during the research process be exposed to any harmful or uncomfortable situations
- Agree that I have the right to withdraw from this study should I wish to do so for any reason whatsoever without providing any explanation and without any negative consequences
- Understand that should I withdraw from this study, all information that I had provided will be discarded
- Understand that the content of the data will be handled with confidentiality and used for research purposes, report to Faculty; conference presentations, journal articles only
- Understand that the data will be stored in a de-identified manner for a period of 15 years in a safe place at the CAAC, University Pretoria for archival purposes and future research



- Understand that information will be treated confidentially.

- 同意する / Yes, I consent
- 同意しない / No, I do not consent

The Questions that follow are for the main study.

Please answer all of the questions in this questionnaire.

- Next

部分B: 個人情報について / Section C: Biographical Information

1. あなたの性別を選択してください。 / Please select your gender.

- 男 / Male
- 女 / Female
- 言えんな / Prefer not to say

2. あなたの年齢を記入してください。 / Please fill in your age.

3. 都道府県の教育委員会が発行する教員免許証の下3桁を記入してください。 / Please fill out the last three digits of your teaching licence as supplied by your local prefectural board of education.

4. 私立や公立など、あなたが務めている学校のタイプを教えてください。 / Please indicate your school type (rural, urban, suburban, municipal).

- 田舎 / Rural
- 都会 / Urban
- 郊外 / Suburban
- 市立 / municipal

5. あなたの最終学歴をお答えください。 / Please indicate your highest level of education.

- 大学学士課程 / 学士号 / Undergraduate / Bachelor degree
- 大学院修士課程 / Postgraduate



- 修士号 / Masters
- 博士号 / PhD
- その他 以下を指定してください。 / Other, please explain below:

6. 教職歴は何年ですか。 / Please indicate how many years of teaching experience you have:

7. どの国で教職訓練をしましたか。 / Please indicate in which country you received your teacher training.

- 日本 / Japan
- その他 以下を指定してください。 / Other, please explain below:

8. あなたは現在どの学校段階（初等教育、中等教育、高等教育）で指導していますか。 / At which school level (primary, secondary or higher education) are you currently teaching?

- 初等教 / Elementary School
- 中等教 / Junior High School
- 高等教育 / High School

9. 障がい者との交流の経験はありますか。 / Have you any experience with interacting with persons with disabilities?

- はい。 / Yes
- いいえ。 / No

10. 障害をもった家族（子供、配偶者、兄弟姉妹、親など）や親しい友人はいいますか？「はい」を選択した方はその方について具体的に教えてください。 / Do you have any family members (child, spouse, sibling, parents, etc.) or close friends who have a disability? If yes, please elaborate... /

- はい, を選択した方はその方について具体的に教えてください。 / If yes, please elaborate ...



○ いいえ。 / No

11. 障害のある学習者と一緒に働くためのトレーニングを受けたことがありますか。 / Do you have any training to work with children with disabilities?

○ はい。 / Yes

○ いいえ。 / No

12. 障害のある学習者を教えた経験はありますか。 / Do you have any experience in teaching children with disabilities?

○ はい。「はい」を選択した方はその方について具体的に教えてください。 / Yes, please specify ...

○ いいえ。 / No

13. 日本のインクルーシブ政策について知っていることはありますか? 「はい」と回答した方は具体的にどのようなことを知っているか記入してください。 / Do you know of any inclusive education policies in Japan? If yes, please specify...

○ はい, を選択した方はその方について具体的に教えてください / If yes, please specify ...

○ いいえ / No

14. 0~10の中から、障がいのある学習者と協力する自信のレベルを示してください。 0はまったく自信がない状況、10は非常に自信がある状況です。 / On a scale of 0-10, please indicate your level of confidence to work with children with disabilities. 0 being not confident at all, and 10 being extremely confident.

0 1 2 3 4 5 6 7 8 9 10

15. 「障害」という言葉についてどのような考えをもっていますか? 障害とは...
What does the term disability mean to you? Disability is ...



16. 「インクルージョン(包括)」という言葉についてあなたはどうか考えになりますか。 インクルージョンは。。。 / What does the term ‘inclusion’ mean to you? Inclusion is ...

部分 C: インクルージョンに対する考え方 / Section C: Teachers' perspectives toward inclusion.

次の質問を1~5でランク付けしてください。 1 =まったく同意しない、同意する 5 = 強く同意する。 Please rank the following questions on a Scale of 1 - 5, where 1 = strongly disagree and agree, 5 = strongly agree.

	Question	1 = 全くそう思わない。 1 = Strongly disagree	2 = そう思わない。 2 = Disagree	3 = 賛成でも反対でもない。 3 = neither agree nor disagree	4 = そう思う。 4 = Agree	5 = 非常にそう思う。 5 = Strongly agree
1.	特別支援教育が必要な児童にとっては、専門教員がいる特別支援学級が学びに最適な場所である。 / Children with special educational needs learn best in their own special education classes where they have specially trained teachers.	1	2	3	4	5
2.	情緒、行動障害が見られる児童は適切な支援の下、普通学級で教育を受けるべきである。 / The children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support.	1	2	3	4	5
3.	特別支援学級で教育を受けることは、特別支	1	2	3	4	5



	援教育が必要な児童の権利である。 / It is the right of a child with special educational needs to be placed in a special education classroom.					
4.	注意欠陥・多動性障害（ADHD）の症状を持った児童は適切な支援の下、普通学級に入ることを認められるべきである。 / Children with attention deficit/hyperactive disorder (ADHD) should be admitted in mainstream classrooms with adequate support.	1	2	3	4	5
5.	特別支援教育が必要な児童を教室に受け入れることを教師に強いることで、教師の仕事を増やすべきではない。 / Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms.	1	2	3	4	5
6.	特別支援教育が必要な児童一人一人が彼らに最も適した特別支援学級で教育を受けることによって、最良の結果が得られる。 / The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her.	1	2	3	4	5
7.	特別支援教育が必要な生徒は可能な限り普通	1	2	3	4	5



	学級で教育されるべきである。 / The children with special educational needs should be educated in mainstream classrooms as much as possible.					
8.	特別支援教育が必要な児童が統合されている普通学級を受け持つ先生は余分な仕事をしなければならぬ。 / Integrated children with special educational needs create extra work for teachers in mainstream classrooms. R (workload of the teacher)	1	2	3	4	5
9.	特別支援教育が必要な児童は彼らの権利を侵害しないために特別支援学級に移されるべきである。 / A child with special educational needs should be transferred to a special education classroom in order not to violate his/her rights.	1	2	3	4	5
10.	特別支援教育が必要な児童の学びは普通学級においても効果的に支援され得る。 / The learning of children with special educational needs can be effectively supported in mainstream classrooms as well.	1	2	3	4	5

部分 D: フィードバック / Section D: Feedback - Pilot participants

Thank you for your time and willingness to assist with the evaluation of this questionnaire.
Please complete the information by clicking 'next' and see further instructions for evaluation.



内容をご覧になり、適切なご意見をいただければ幸いです。

- Next

1. Was the information provided in the informed consent letter that accompanied this questionnaire clear?

- Yes
- No, please specify: _____

2. Were the instructions for the completion of the questionnaire clear and easy to follow?

- Yes
- No, please specify: _____

3. Were all of the questions clear?

- Yes
- No, please specify: _____

4. Considering the Biographical Questionnaire (Section B), do you think any other information is needed from participants?

5. Was the layout and structure of the questionnaire easy to follow?

- Yes
- No, please specify: _____

6. In your opinion, do you think that all the questions were suitable to determine Japanese teachers' perspectives of on inclusive education?

- Yes
- No, please specify: _____

7. In your opinion, do you think that all the questions were culturally appropriate for the Japanese context?

- Yes



- No, please specify: _____

8. How long (in minutes) did it take you to complete Section B and Section C of the questionnaire?

9. Was the hyperlink to the questionnaire provided in the email easily accessible?

- Yes
- No

10. Do you have any recommendation or comments on the Japanese language translation?

- Yes, please specify: _____
- No

11. Do you have any other comments that may improve the questionnaire?



Appendix C1

Permission Letter to Principals - English version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Centre for Augmentative and Alternative Communication



The Principal

Date:

Dear Sir

PERMISSION TO CONDUCT RESEARCH STUDY AT YOUR SCHOOL

My name is Michelle Krüger. I am a student at the University of Pretoria, South Africa, enrolled in a Master's degree in Augmentative and Alternative Communication (AAC) at the Centre for AAC. As part of the requirements for this degree, I am required to complete a research study and I would like to kindly request your participation in my research.

The title of my study is *'The perspectives of mainstream Japanese teachers toward inclusion'*. The aim of the research is therefore to investigate and understand teachers who teach in mainstream schools' perspectives regarding inclusive education in Japan.

I would be much obliged if you would give permission to recruit teachers from your school to participate in this research.

Rationale for the study

This study aims to investigate the perspectives of Japanese teachers who teach in mainstream schools, on the inclusive education of learners with special educational needs in mainstream classrooms. Studies show that an estimated 6.3% of learners in mainstream classrooms in Japan have a developmental condition such as learning disabilities, Attention Deficit and/or Hyperactivity Disorder (ADHD) or autism spectrum disorder (ASD) and that teachers are not trained to work with learners who require special educational provisions.

What will be expected of the school?

The teachers at your school will be requested to individually complete a survey of 10-15 minutes regarding their perspectives towards inclusion in mainstream classrooms. The survey will be conducted entirely online via a URL link which will be forwarded to the teachers who consented to participate. The teachers can complete the questionnaire during their free time, and hence no teaching time would be lost. For confidentiality purposes, participants will be asked to only submit proof of the last three digits of their teaching accreditation for verification of qualification.

The following ethical considerations will be upheld in this study:

Approval has been sought from the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria before the research could be conducted.

- Consent will be obtained from all participants prior to their completion of the survey.
- All participants will be made aware of their right to not participate or to withdraw at any time without any negative consequences.
- All identifying information will be kept confidential from those external to the study, and no information will be reported that could link the results to the participants in any way.
- Any identifying information will be removed from the survey (e.g., last digits of teaching licence) and will not be mentioned in the data published.

Who will have access to the results of the study?

Only the researcher and her two supervisors will have access to the information provided. The data will be stored in a de-identified manner and kept secure on a password-protected online platform. The information gathered will be securely stored at the University of Pretoria for a period of 15 years for archival purposes and possible use in future research.

What are the risks and benefits?

There are no risks of harm associated with this study. The survey does not contain any potentially uncomfortable questions and it is not aimed at testing knowledge. Questions will be purely based on teacher's perceptions of inclusion and will therefore not pose any threat or harm to them.

Please feel free to contact me or my supervisors should you have any questions about this study.

I look forward to receiving your response.

Kind Regards

Michelle Krüger

Email: Kruger.michelle93@gmail.com
Cell: (+81) 070 2432 0759

Date:

Professor Juan Borman

Centre for Augmentative and Alternative Communication
Email: juan.borman@up.ac.za
Office Tel: (+27) 012 420 2001

Date:

Dr Ensa Johnson

Centre for Augmentative and Alternative Communication
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Appendix C2

Permission Letter to Principals - Japanese version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Centre for Augmentative and Alternative Communication



貴校での調査実施の許諾について

私はミッシェル・クルーガーと申します。私は南アフリカ共和国のプレトリア大学に所属している学生です。私はMaster's degree in Augmentative and Alternative Communication (AAC)に所属しています。この学位に属する必要条件の一つとして、私は調査研究を完成させる運びとなりました。そして先生に私の調査のご協力をいただきたいと思います。心からお願ひしたくメールを送らせていただきました。私の研究の題は「日本の教師のインクルージョンへの主流な考え方」です。この研究の目的は、日本の主流な学校で生徒にインクルーシブ教育という考え方を教える立場である先生方について調査をし、理解を深める事です。この研究に参加するために、あなたの学校の教職を募集することを許可していただければ幸いです。

研究の理論的根拠

この研究は日本の主流な学校の、特別な教育を受けたいと考えている生徒立ちへのインクルーシブ教育をなさっている先生方のインクルーシブ教育への考え方を調査することが目的です。ある調査によると、日本の主流な学校の教室にいる学習者のうちの6.3パーセントは学習障がい、注意欠如・多動症 (ADHD)、自閉症スペクトラム (ASD) といった、発達上の状態にあり、教師の方々はこのような特別な学習を必要としている生徒との授業に異して、あまり訓練されていないという現状があります。

貴校でしていただきたいこと

あなたの学校の先生方には、教室でのインクルージョンに対する考え方について、10〜15分程度のアンケートに個別に回答していただけます。調査はすべてオンラインで行われ、参加に同意していただいた先生方には、URLのリンクが転送されます。先生方は空いた時間にアンケートに答えることができますので、授業時間が失われることはありません。機密保持のため、参加者には資格確認のために教員免許証の下3桁の証明書のみを提出していただきます。

参加者としての権利

- 研究を実施するにあたり、プレトリア大学人文科学部の研究倫理委員会の承認を得ています。
- 調査の実施にあたっては、参加者全員から同意を得ることになっています。
- すべての参加者は、いつでも不利益を被ることなく、参加しない、または参加を取りやめる権利があることを知らされます。
- すべての識別情報は、研究の外部からは秘密にされ、結果と参加者を何らかの形で結びつけるような情報は報告されません。
- 識別可能な情報は調査前から削除され (例: 教員免許証の下3桁)、公開されたデータには記載されません。

調査結果の質について

提供された情報にアクセスできるのは、研究者とその2人の監督者のみとなります。調査データは非識別化された形で保存され、パスワードで保護されたオンラインプラットフォームで安全に保管されます。収集された情報は、アーカイブ目的および将来の研究に使用される可能性があるため、15年間、プレトリア大学に安全に保管されます。

調査に参加された場合の利益と負担について

この調査に関連する利益はありません。このアンケートは不快感を与えるような質問は含まれておらず、知識を試すことを目的としていません。質問は純粋に、あなたのインクルージョンに対する認識に基づいて行われます。ご質問やご不明な点がございましたら、下記の連絡先までお気軽にお問い合わせください。

ご返信をお待ちしております。

よろしくお願ひいたします。

Michelle Krüger
クルーガーミッシェル
Email: Kruger.michelle93@gmail.com
Cell: (+81) 070 2432 0759

Date:

Professor Juan Bernman
Centre for Augmentative and Alternative
Communication
Email: juan.bernman@up.ac.za
Office Tel: (+27) 012 420 2001

Date:

Dr Ensa Johnson
Centre for Augmentative and Alternative Communication
Email: ensa.johnson@up.ac.za
Office Tel: (+27) 012 420 2001

Date:

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Appendix D1

Principal Permission Slip – English version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo

**Centre for Augmentative and
Alternative Communication**



Reply slip: Permission letter

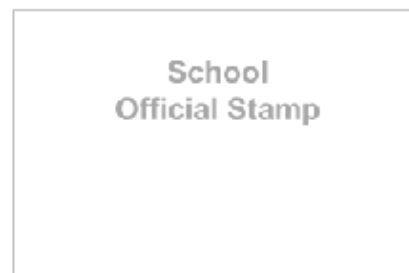
I hereby grant permission / do not grant permission to Michelle Krüger to conduct research with
the title:

“The perspectives of mainstream Japanese teachers toward inclusion”

To recruit teachers at _____ to participate in this research.

School principal

Name of school





Appendix D2

Principal Reply Slip – Japanese version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

**Centre for Augmentative and
Alternative Communication**



同意書

私はここに Michelle Krüger が以下のタイトルの調査を行うことを 許可します。 /
許可しません。

"The perspectives of mainstream Japanese teachers toward inclusion"
「日本の普通学級の教師の社会参画に対する考え方」

_____の先生方にこの調査に参加していただくために

学校長

学校名

学校印



Appendix E2

Principal Reply Slip – School B



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo

Centre for Augmentative and
Alternative Communication



Reply slip: Permission letter

I hereby grant permission/ do not grant permission to Michelle Krüger to conduct research with
the title:
"The perspectives of mainstream Japanese teachers toward inclusion"
To recruit teachers at S [redacted] participate in this research.

S [redacted]

School principal

Name of school [redacted]

School
Official Stamp





Appendix E3

Principal Reply Slip – School C



Faculty of Humanities

Fakulteit Geesteswetenskappe
Letapha la Bontsotso

**Centre for Augmentative and
Alternative Communication**



Reply slip: Permission letter

I hereby grant permission / do not grant permission to Michelle Krüger to conduct research with
the title:

"The perspectives of mainstream Japanese teachers toward inclusion"

To recruit teachers [redacted] to participate in this research.

[redacted]
School principal 聖光学院高等学校
Name of school [redacted]





Appendix F1

Participant Information Letter – English version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Centre for Augmentative and Alternative Communication



Dear Teacher

Date:

PARTICIPATION IN RESEARCH STUDY

My name is Michelle Krüger. I am a student at the University of Pretoria, South Africa, enrolled in a Master's degree in Augmentative and Alternative Communication (AAC) at the Centre for AAC. As part of the requirements for this degree, I am required to complete a research study and I would like to kindly request your participation in my research.

The title of my study is "The perspectives of mainstream Japanese teachers toward inclusion". The aim of the research is therefore to investigate and understand teachers who teach in mainstream schools' perspectives regarding inclusive education in Japan.

I have been granted permission by the head of your school to contact teachers at your school and request your individual voluntary participation in my research. Please see attached copy of this permission letter.

Rationale for the study

This study aims to investigate the perspectives of Japanese teachers who teach in mainstream schools, on the inclusive education of learners with special educational needs in mainstream classrooms. Studies show that an estimated 6.3% of learners in mainstream classrooms in Japan have a developmental condition such as learning disabilities, Attention Deficit and/or Hyperactivity Disorder (ADHD) or autism spectrum disorder (ASD) and that teachers are not trained to work with learners who require special educational provisions.

What will be expected of me should I participate?

Participation will require you to complete an online survey that will take approximately 10-15 minutes to complete. The survey will be conducted entirely online via a URL link which will be forwarded to you if you consent to participate. You will be able to complete the questionnaire during your free time, and hence no teaching time would be lost. For confidentiality purposes, you will only be asked to submit proof of the last three digits of your teaching accreditation for verification of qualification.

What are my rights as a participant?

The following ethical considerations will apply: Your participation in the completion of this survey is completely voluntary. You will not receive any compensation in return for your participation. If at any point during the survey you feel uncomfortable, you may withdraw without any negative consequences – if this should occur, any information that you had provided will be discarded. All information provided during the survey will be kept confidential and no identifiable information will be reported in any dissertation, publication or presentation that could link the data back to you. Your data will be de-identified and only participant numbers will be used.

Who will have access to the results of the study?

Only the researcher and her two supervisors will have access to the information provided. The data will be stored in a de-identified manner and kept secure on a password-protected online platform. The information gathered will be securely stored at the University of Pretoria for a period of 15 years for archival purposes and possible use in future research.

What are the risks and benefits of participating?

There are no risks of harm associated with this study. The survey does not contain any potentially uncomfortable questions and it is not aimed at testing knowledge. Questions will be purely based on your perceptions of inclusion.

I would be grateful if you could assist me with this research by partaking in this study. Should you have any questions or concerns please do not hesitate to contact me or my supervisors using the details below.

Kind Regards

Michelle Krüger

Email: Kruger_michelle93@gmail.com

Cell: (+81) 070 2432 0759

Date:

Professor Juan Boraman

Centre for Augmentative and Alternative Communication

Email: juan.boraman@up.ac.za

Office Tel: (+27) 012 420 2001

Date:

Dr Ensa Johnson

Centre for Augmentative and Alternative Communication

Email: ensa.johnson@up.ac.za

Office Tel: (+27) 012 420 2001

Date:

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Email: saak@up.ac.za | Web address: www.caac.up.ac.za



Appendix F2

Participant Information Letter – Japanese version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomoetho

Centre for Augmentative and Alternative Communication



先生へ

研究調査への参加について

私はミカエール・クルーガーと申します。私は南アフリカ共和国のプレトリア大学に所属している学生です。私は Master's degree in Augmentative and Alternative Communication (AAC) に所属しています。この学位に関する必要条件の一つとして、私は調査研究を完成させる運びとなりました。そして先生に私の調査にご協力をお願いしたいと、心からお願いしたくメールを送らせていただきました。私の研究の題は「日本の教師のインクルージョンへの主流な考え方」です。この研究の目的は、日本の主流な学校で生徒にインクルーシブ教育という考え方を教える立場である先生方について調査をし、理解を深める事です。私は今回、貴学の校長先生に、校内の先生方にコンタクトをとる許可と、先生個人に私の調査の協力をお願いする許可をいただきました。添付されている調書のコピーをご覧ください。

研究の理論的根拠

この研究は日本の主流な学校の、特別な教育を受けたいと考えている生徒立ちへのインクルーシブ教育をなさっていらっしゃる先生方のインクルーシブ教育への考え方を調査することが目的です。ある調査によると、日本の主流な学校の教室にいる学習者のうちの 6.3 パーセントは学習障がい、注意欠如・多動症 (ADHD)、自閉症スペクトラム (ASD) といった、発達上の状態にあり、教師の方々はこのような特別な学習を必要としている生徒との授業に属して、あまり訓練されていないという現状があります。

今回の参加でいただきたいこと

調査へ参加していただける場合、10-15 分ほどかかるアンケートをオンライン上で記入していただくことになります。この調査はすべてオンラインで行われ、参加に同意された場合には URL のリンクをお送りします。この調査は先生の空き時間に回答できるようなものになっているため、授業時間を妨害することはありません。また、機密保持のため、資格確認のために教員免許証の写しを提出していただきます。

参加者としての権利

この調査には、以下のような倫理的配慮が必要となります。

- ・ この調査への参加は完全に任意です。参加の見返りとして、いかなる報酬も受け取ることはありません。
- ・ 調査中に不安や不快を感じた場合は、何の罰もなく調査を中止することができます。しかし、その場合、提供された情報は放棄されます。
- ・ 調査中に提供されたすべての情報は機密情報として扱われ、論文、出版物、プレゼンテーションなどでデータを特定できるような情報が報告されることはありません。
- ・ あなたのデータと特定することが出来るような表現は避けられ、参加者番号のみが使用されます。

調査結果の質について

提供された情報にアクセスできるのは、研究者とその 2 人の監督者のみとなります。調査データは匿名化された形で保存され、パスワードで保護されたオンラインプラットフォームで安全に保管されます。収集された情報は、アーカイブ目的および将来の研究に使用される可能性があるため、15 年間、プレトリア大学に安全に保管されます。

調査に参加した場合の利益と負担について

この調査に関連する利益はありません。このアンケートは不快感を与えるような質問は含まれておらず、知識を試すことを目的としていません。質問は純粋に、あなたのインクルージョンに対する態度に基づいて行われます。

この研究に参加することで、私の研究を支援していただければ幸いです。
ご質問やご不明な点がございましたら、下記の連絡先までお気軽にお問い合わせください。

よろしくお願いたします。

Michelle Krüger
クルーガー・ミカエール
Email: Krueger_michelle93@gmail.com
Cell: (+81) 070 2432 0759

Date:

Professor Juan Bernman
Centre for Augmentative and Alternative
Communication
Email: juan.bernman@up.ac.za
Office Tel: (+27) 012 420 2001

Date:

Dr Ensa Johnson
Centre for Augmentative and Alternative Communication
Email: ensa.johnson@up.ac.za

Date:

Centre for Augmentative and Alternative Communication
Communication Pathology Building
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Email: saaki@up.ac.za | Web address: www.caac.up.ac.za



Appendix G1

Participant Reply Slip – English version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomothe

Centre for Augmentative and
Alternative Communication



Reply slip: Informed consent

INFORMED CONSENT: Participant reply slip.

Name of Participant:			
Project title:	<i>'The perspectives of mainstream Japanese teachers toward inclusion</i>		
Researcher:	Miss Michelle Krüger, Master's candidate, Centre for AAC	Supervisor(s):	Professor Juan Borman Doctor Ensa Johnson

I, _____, (full names and surname) hereby:

- Provide consent to participate in the research study as outlined above;
- Agree to submit proof of the last three digits of my teaching accreditation for verification purposes;
- Understand that I will at no stage during the research process be exposed to any harmful or uncomfortable situations;
- Agree that I have the right to withdraw from this study should I wish to do so for any reason whatsoever without providing any explanation and without any negative consequences;
- Understand that should I withdraw from this study, all information that I had provided will be discarded;
- Understand that the content of the data will be handled with confidentiality and used for research purposes, report to Faculty; conference presentations, journal articles only;
- Understand that the data will be stored in a de-identified manner for a period of 15 years in a safe place at the CAAC, University Pretoria for archival purposes and future research;
- Understand that information will be treated confidentially.

(Please tick appropriate block)

I give consent	<input type="checkbox"/>	I do not give consent	<input type="checkbox"/>
----------------	--------------------------	-----------------------	--------------------------

Signature of participant

Date



Appendix G2

Participant Reply Slip – Japanese version



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo

Centre for Augmentative and
Alternative Communication



同意書：説明同意文章

説明同意文章：参加同意書

参加者名：			
企画名：	' <i>The perspectives of mainstream Japanese teachers toward inclusion</i> 日本の普通学級の教師の社会参画に対する考え方		
研究者：	Miss Michelle Krüger, Master's candidate, Centre for AAC	指導者：	Professor Juan Bornman Doctor Ensa Johnson

私、 _____ ，（フルネーム）はここに、

- 上記の調査研修に参加することに同意します。
- 照合作業のために私の教員免許証の下三桁を証明として提出することに同意します。
- 私は調査研修中いかなる安全にかかわる事態や不快感を及ぼす状況にさらされることのないことを理解しています。
- 私はこの研究からの辞退を望む時、いかなる釈明や不利益を被るような同意をすることなく、いかなる理由によっても辞退することができる権利があることに同意します。
- この研究から辞退する時、私が提供したすべての情報は削除されることを理解しています。
- データの内容は機密に扱われ、研究の目的、学会発表での学部への報告、雑誌記事にのみ使用されることを理解しています。
- データは記録保管の目的から個人が特定されない方法でプレトリア大学、CAAC の安全な場所に15年間保存される事を理解しています。
- 情報は機密に扱われることを理解しています。

（該当するチェックボックスにチェックを付けてください。）

同意する	<input type="checkbox"/>	同意しない	<input type="checkbox"/>
------	--------------------------	-------	--------------------------

参加者の署名 _____

日付 _____



Appendix H

Final Measure Instrument – Main study

部分1: 個人情報について / Section 1: Biographic Information

1. あなたの性別を選択してください。 / Please select your gender.

- 男 / Male
- 女 / Female
- どちらにも当てはまらない / Neither of these apply to me.

2. あなたの年齢を記入してください。 / Please fill in your age.

3. 都道府県の教育委員会が発行する教員免許証の下3桁を記入してください。 / Please fill out the last three digits of your teaching licence as supplied by your local prefectural board of education.

4. 私立や公立など、あなたが務めている学校のタイプを教えてください。 / Please indicate your school type (rural, urban, suburban, municipal).

- 田舎 / Rural
- 都会 / Urban
- 郊外 / Suburban
- 市立 / municipal

5. あなたの最終学歴をお答えください。 / Please indicate your highest level of education.

- 大学学士課程 / 学士号 / Undergraduate / Bachelor degree
- 大学院修士課程 / Postgraduate
- 修士号 / Masters
- 博士号 / PhD
- その他 以下を指定してください。 / Other, please explain below:



6. 教職歴は何年ですか。 Please indicate how many years of teaching experience you have:

7. どの国で教職訓練をしましたか。 Please indicate in which country you received your teacher training.

- 日本 / Japan
- その他 以下を指定してください。 / Other, please explain below:

8. あなたは現在どの学校段階（初等教育、中等教育、高等教育）で指導していますか。 / At which school level (primary, secondary or higher education) are you currently teaching?

- 初等教 / Elementary School
- 中等教 / Junior High School
- 高等教育 / High School

9. 障がい者との交流の経験はありますか。 / Have you any experience with interacting with persons with disabilities?

- はい。 / Yes
- いいえ。 / No

10. 障害をもった家族（子供、配偶者、兄弟姉妹、親など）や親しい友人はいいますか？「はい」を選択した方はその方について具体的に教えてください。 / Do you have any family members (child, spouse, sibling, parents, etc.) or close friends who have a disability? If yes, please elaborate... /

- はい, を選択した方はその方について具体的に教えてください。 / If yes, please elaborate ...

- いいえ。 / No

11. 障害のある学習者と一緒に働くためのトレーニングを受けたことがありますか。 / Do you have any training to work with children with disabilities?



○ はい。 / Yes

○ いいえ。 / No

12. 障害のある学習者を教えた経験はありますか。 / Do you have any experience in teaching children with disabilities?

○ はい。「はい」を選択した方はその方について具体的に教えてください。 / Yes, please specify ...

○ いいえ。 / No

13. 日本のインクルーシブ政策について知っていることはありますか? 「はい」

と回答した方は具体的にどのようなことを知っているか記入してください。 /

Do you know of any inclusive education policies in Japan? If yes, please specify...

○ はい, を選択した方はその方について具体的に教えてください / If yes, please specify ...

○ いいえ / No

14. 0~10の中から、障がいのある学習者と協力する自信のレベルを示してください

い。 0はまったく自信がない状況、10は非常に自信がある状況です。 / On a scale of 0-10, please indicate your level of confidence to work with children with disabilities. 0 being not confident at all, and 10 being extremely confident.

0 1 2 3 4 5 6 7 8 9 10

15. 「障害」という言葉についてどのような考えをもっていますか? 障害とは...

What does the term disability mean to you? Disability is ...

16. 「インクルージョン(包括)」という言葉についてあなたはどうお考えになりますか。 インクルージョンは。。。 / What does the term 'inclusion' mean to you? Inclusion is ...

What does the term 'inclusion' mean to you? Inclusion is ...



部分 2: インクルージョンに対する考え方 / Section 2: Teachers' perspectives toward inclusion.

次の質問を1~5でランク付けしてください。1 =まったく同意しない、同意する 5 =強く同意する。 Please rank the following questions on a Scale of 1-5, where 1 = strongly disagree and agree, 5 = strongly agree.

	Question	1 = 全くそう思わない。 1 = Strongly disagree	2 = そう思わない。 2 = Disagree	3 = 賛成でも反対でもない。 3 = neither agree nor disagree	4 = そう思う。 4 = Agree	5 = 非常にそう思う。 5 = Strongly agree
1.	特別支援教育が必要な児童にとっては、専門教員がいる特別支援学級が学びに最適な場所である。 / Children with special educational needs learn best in their own special education classes where they have specially trained teachers.	1	2	3	4	5
2.	情緒、行動障害が見られる児童は適切な支援の下、普通学級で教育を受けるべきである。 / The children with emotional and behavioural problems should be educated in mainstream classrooms, with the provision of adequate support.	1	2	3	4	5
3.	特別支援学級で教育を受けることは、特別支援教育が必要な児童の権利である。 / It is the right of a child with special educational needs to be placed in a special education classroom.	1	2	3	4	5



4.	注意欠陥・多動性障害 (ADHD) の症状を持った児童は適切な支援の下、普通学級に入ることを認められるべきである。 / Children with attention deficit/hyperactive disorder (ADHD) should be admitted in mainstream classrooms with adequate support.	1	2	3	4	5
5.	特別支援教育が必要な児童を教室に受け入れることを教師に強いることで、教師の仕事を増やすべきではない。 / Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms.	1	2	3	4	5
6.	特別支援教育が必要な児童一人一人が彼らに最も適した特別支援学級で教育を受けることによって、最良の結果が得られる。 / The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her.	1	2	3	4	5
7.	特別支援教育が必要な生徒は可能な限り普通学級で教育されるべきである。 / The children with special educational needs should be educated in mainstream classrooms as much as possible.	1	2	3	4	5



8.	特別支援教育が必要な 児童が統合されている 普通学級を受け持つ先 生は余分な仕事をしな ければならない。 / Integrated children with special educational needs create extra work for teachers in mainstream classrooms. R (workload of the teacher)	1	2	3	4	5
9.	特別支援教育が必要な 児童は彼らの権利を侵 害しないために特別支 援学級に移されるべき である。 / A child with special educational needs should be transferred to a special education classroom in order not to violate his/her rights.	1	2	3	4	5
10.	特別支援教育が必要な 児童の学びは普通学級 においても効果的に支 援され得る。 / The learning of children with special educational needs can be effectively supported in mainstream classrooms as well.	1	2	3	4	5



Appendix I

Permission from TAIS Developer

03/09/2021, 18:38

Gmail - TAIS Measure



Michelle Krüger [REDACTED]

TAIS Measure

6 messages

Michelle Krüger [REDACTED]

17 August 2021 at 08:25

To: timo.s [REDACTED]

Good day Professor Saloviita,

I hope this email finds you well.

My name is Michelle Krüger. I am a student at the University of Pretoria, South Africa, enrolled in a Master's degree in Augmentative and Alternative Communication (AAC) at the Centre for AAC at the University of Pretoria. I currently reside in Japan.

The title of my study is "The perspectives of mainstream Japanese teachers toward inclusion". The aim of the study is the understanding of mainstream Japanese teachers' perspectives regarding inclusive education in Japan. This will help the researcher to gain a better understanding of the situation regarding Japanese teachers' perspectives regarding inclusion in mainstream schools.

My supervisor came across the TAIS measuring instrument and asked me to look into it, with the hopes that we might use it instead of MTAS for my research. I believe that since TAIS is generally shorter, and created to assess and develop pre-service teachers' perspectives on inclusion and teachers' knowledge regarding inclusion, it is the best instrument for my research to use in Japan.

I would like to inquire whether it is possible to request a copy of the TAIS measure in order to use it for my research.

I appreciate the time and look forward to hearing from you.

Thank you.
Best Regards

Ms. Michelle Krüger
English Teacher



Saloviita, Timo <[REDACTED]>

22 August 2021 at 02:25

To: Michelle Krüger [REDACTED]

Dear Michelle Krüger

Surely, you are free to use the TAIS scale in your studies. Please see the attachments.

Best wishes

Timo Saloviita

Lähetetty: Mich [REDACTED]

Lähetetty: tiista [REDACTED]

Vastaanottaja: [REDACTED]

Aihe: TAIS Measure