Are Positive Teachers' Attitudes Crucial for the Achievement of Successful Inclusive Education?

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Master's Thesis in Education Spring Term 2020 Faculty of Education and Psychology University of Jyväskylä

ABSTRACT

Wong Sato, Aisa. 2020. Are Positive Teachers' Attitudes Crucial for the Achievement of Successful Inclusive Education?. Master's Thesis in Education. University of Jyväskylä. Department of Education and Psychology.

Teachers' positive attitudes towards inclusive education are seen as one of the main components to the successful inclusion of special educational needs (SEN) students in mainstream schools, therefore, many studies have focused on this phenomena. However, not much research can be found from the student perspective on how teachers' attitudes affect their well-being. The aim of this study was to explore at what level teachers' attitudes are able to significantly impact the success of inclusive education. In this case, the success was defined by the social well-being of students in inclusive classrooms according their own perception of their relationships with their peers and teachers.

Data for this research were taken from a larger Finnish study, ProKoulu, This study analysed teacher and student data. The teacher data consists of the responses of 403 teachers on their attitudes and concerns towards inclusive education and their perception of classroom diversity (number of SEN students per classroom). Student data were aggregated from 455 classrooms to obtain a mean value of students' social well-being per classroom.

The results showed that teachers' attitudes have a very minor role in the success of inclusive education, at least when evaluated through the social well-being of Finnish students. Attitudes displayed a small moderation effect, making it unclear how relevant positive teachers' attitudes are for inclusive education, especially in the Finnish context.

Keywords: Teachers' attitudes, student social well-being, Finnish education system, inclusive education

ACKNOWLEDGEMENTS

First of all, I would like to thank my supervisor, Hannu Savolainen, without his guidance and help I would not have been able to accomplish this task, thank you for being the best mentor I could have asked for. I would also like to express my eternal gratitude to Priyanka Patel, thank you for guiding me through the world of statistics and sharing your knowledge with me.

Thank you to my friends, old and the new, your many words of encouragement have made me overcome many obstacles, even the ones I create for myself.

Last but foremost, I would like to my family, the Wongs, the Satos and the Hashimotos, especially my mum and dad, for supporting me in every possible way; my brother, the PhD, for being a source of inspiration, watching you accomplish your goals is one of the reasons I am motivated to follow my own; and my dog, Kuri, for reminding me that the best things in life are often the most overlooked, like a nice walk in the park.

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1 INTRODUCTION

UNESCO's (1994) Salamanca Statement opened the doors for the implementation of inclusive policies all around the world. The inclusion of students with special educational needs (SEN) in mainstream schools is now an integral part of educational policies in many countries, Finland is no exception. Driven by the principle of equity (Finnish National Agency for Education, 2018), the Finnish education system has developed many policies and practices that favour inclusion.

Section C of the Salamanca Statement (United Nations Educational, Scientific and Cultural Organization, 1994): Recruitment and training of educational personnel, highlights the importance of teacher training towards an inclusive culture to ensure equity in education. It is imperative to change the perception teachers have of disability from the medical to the social constructive model, in which SEN students are not segregated but viewed as equals to 'regular' students. Inclusion supposes the restructuration of education systems (Avramidis & Norwich, 2002), where mainstream schools and teachers are able to welcome and support all students, making them feel part of their community. However, the change in this perception is a gradual process, as pointed out by Paju, Räty, Pirttimaa and Kontu (2016), many in-service teachers were trained when the medical model of disability was still dominant in the teacher education field.

The role of teachers in implementing inclusive education practices and transforming mainstream classrooms into inclusive spaces is essential (Savolainen, Engelbrecht, Nel, & Malinen, 2012; Yada, et al., 2019). Ewing, Monsen and Kielblock (2018) believe that in order to have a successful inclusive schools, teachers have to accept inclusive policies and be willing to make any necessary changes in mainstream schools that would support inclusive practices. It is important to study whether teachers' attitudes towards inclusive education affect their behaviour and the way they support inclusive policies, consequently, if this attitude affects how teachers are able to establish adequate and positive relationships with their students and how students establish relationships with their peers.

Previous research has focused on describing the factors and variables that can affect teachers to take a stand, either positive or negative, towards inclusive education (for literature reviews on this topic see Avramidis & Norwich, 2002; de Boer, Pijl & Minnaert, 2011). A common topic is the variables concerning the SEN students' condition, adequate teacher training and experience in inclusive education and the support the school environment is able to provide (Avramidis & Norwich, 2002; Yada & Savolainen, 2017; Yada, Tolvanen, & Savolainen, 2018; Yada, et al., 2019), whilst other research has centred on pointing out how positive attitudes towards inclusion are imperative for the successful implementation of inclusive policies and practices (Saloviita, 2020; de Boer, et al., 2011; Forlin, García Cedillo, Romero-Contreras, Fletcher, & Rodríguez Hernández, 2010). However, not much research has been done to find if these attitudes have a direct effect on teachers' behaviour and students' social outcomes (de Boer, et al., 2011). Teachers' tasks are not limited to increasing students' academic knowledge, they are supposed to support students' well-being as a whole. Thus, the aim of this study is to explore if the social well-being of students in mainstream inclusive classrooms can be influenced by teachers' attitudes towards inclusion. Tehrefore exploring whether positive attitudes truly are essential for successful inclusive education.

2 THEORETICAL FRAMEWORK

2.1 Inclusive Education in Finland

UNESCO's (1994) Salamanca Statement reaffirms the right of every child to education, emphasising equity in the treatment of persons with disabilities and the need of education systems to support Special Educational Needs (SEN) students' inclusion by being aware of the diverse abilities and learning needs of their students and accordingly, provide the necessary support. This study will use the term inclusive education to reference the inclusion of SEN students in mainstream classrooms in the Finnish education system.

In accordance to The Salamanca Statement, one of the most important principles of the Finnish education system is equity (Finnish National Agency for Education, 2018). Equity is understood as the right of every child, despite of their nationality, or cultural, social, economic, medical background, to have access to high-quality education and educational support in order to exploit their abilities and talent, with the objective of providing all students with the same educational opportunities. This principle is reflected throughout the Finnish society, in their welfare system and most importantly, their education, as attention to students with difficulties or special needs is considerably payed (Yoon & Järvinen, 2016)

The alarming increase of students being referred and segregated to special schools (in 2006 it reached 8% of all students) prompted the Ministry of Education to propose a new special education strategy in 2007 (Thuneberg, et al., 2014), which was recognised 3 years later by parliament in sections 16, 17 and 30 of the Basic Education Act (2010). This reform introduced a three-tiered support model that centred on early intervention, pedagogical approach and resource management. This model places all students within three tiers of support: general, intensified and special. Support is provided in all tiers, however, the intensity increases towards the special support level. Therefore, if the support provided in tier is not sufficient, the student can be moved to the next level of support after

going through the respective assessments and / or evaluations (Vainikainen, Thuneberg, Greiffb, & Hautamäki, 2015).

General support, tier 1, is offered to every student. Finnish mainstream schools have been designed to tailor to the needs of heterogeneous groups of students as it provides different forms of support, such as: differentiated learning, flexible grouping and co-teaching. Intensified support, tier 2, provides students with a learning plan which specifies their needs and the support they are receiving. Students in this tier might be incorporated to part-time special classes to reinforce different subjects and content without being excluded or stigmatized from the mainstream. Special support, tier 3, requires students to have an individual education plan (IEP) which defines their learning goals and the different kinds of support they are going to receive (Thuneberg, et al., 2013) IEPs are a very important and useful tool, as they are a referral document for all those involved in the education of SEN students.

Teachers are recognised as being a key element to achieving quality basic education (Savolainen, 2009; Malinen, Väisänen, & Savolainen, 2012; Välijärvi, et al., 2002; Sahlberg, Paradoxes of education improvement: The Finnish experience, 2011), therefore, they play a big part of this educational reform. In Finland, special attention is paid in teacher education programmes, as it is believed that emphasis in its high-quality is correlated to successful educational outcomes, and as the inclusion of students with special education needs (SEN) in mainstream classrooms is now an essential part of a successful education system, big emphasis is put in training pre-service and in-service teachers to competently work in diverse classrooms (Sahlberg, 2007).

2.2 Teachers' Attitudes Towards Inclusive Education

There is no clear and unified definition for the concept of attitudes. Already back in 1935, Allport (1935), considered that this concept was already widely researched, overly defined and used in a different variety of approaches, such as personal dispositions or cultural patterns. Mahzarin and Heiphetz (2010) found

that more than 13000 scientific articles were written between 1995 and 2010 on this topic. Within the pool of definitions for this concept, I chose to work with Eagly and Chaiken's definition as it suits the purpose of this research. They describe attitude as a *psychological tendency that is expressed by evaluating a particular entity with some degree of favour and disfavour* (1998, p. 269). According to this definition, teachers' attitudes towards inclusive education (IE) would refer to whether teachers favour or disfavour the inclusion of SEN students in mainstream classrooms.

Teachers' roles in the implementation and development of IE are seen as crucial (Savolainen, 2009; de Boer, et al., 2011; Savolainen, et al., 2012). Moreover, some studies claim positive attitudes are essential in order for teachers to achieve successful inclusion, while authors like Ajzen (1991) believe attitudes are a only a component that determines teacher's behaviour, therefore, cannot define by itself the success of IE.

The first group of research has centred on the importance of teachers' attitudes towards IE and how "positive teacher attitudes are essential for success when children with special educational needs (SEN) are placed into mainstream classrooms" (Saloviita, 2020, p. 270). Positive attitudes have been attributed the ability of positively and effectively responding to diversity (Saloviita, 2020; EADSNE, 2003; Forlin, et al., 2010). Furthermore, teachers with positive attitudes towards IE are believed to influence other members of the school) community to adopt positive attitudes towards inclusion, in other words, lead, inspire and guide others to demonstrate positive behaviour towards SEN students and inclusion (Savolainen, et al. 2012; Forlin, et al., 2010).

Through a literature review on attitudes towards IE, Avramidis and Norwich (2002) found three factors that affect teachers' attitudes: child-related variables, teacher-related variables and educational environment-related variables. Child-related variables are seen as the most influential factor in teachers' attitudes (Avramidis & Norwich, 2002; de Boer, et al., 2011). These variables refer to the child's own characteristics, in this case, the nature and severity of the student's disability. Studies (de Boer, et al., 2011; Avramidis, Bayliss, & Burden,

2000) have shown less positive attitudes towards the inclusion of children with ADHD, learning disabilities and emotional-behavioural difficulties (EBD) than children with physical or sensory impairments. Avramidis and Norwich conclude that "the more severe learning needs and behavioural difficulties, teachers hold negative attitudes to the implementation of inclusion" (2002, p. 142), in other words, the hardest teachers find to manage and support the student, the more sceptical they are of their inclusion.

Teacher related variables refer to the teachers' own characteristics and how those influence their attitudes towards inclusive education. This factor can be related to Bandura's self-efficacy theory (1977; 1982). Teachers who have a high sense of efficacy on their competences and knowledge of inclusion will be able to motivate their students' development through positive and encouraging attitudes. On the other hand, teachers with low sense of efficacy mostly turn to negative attitudes. Furthermore, self-efficacy is influenced by proper training in the educational needs of the different kind of SEN students and having previous positive experiences with them (MacFarlane & Woolfson, 2013; Avramidis & Norwich, 2002; de Boer, et al., 2011; EADSNE, 2003).

Educational environment-related variables refer to the specific context in which the inclusion of SEN students takes place. The number of SEN students in the classroom is an important variable in this factor. The number of SEN children has substantially increased in recent years, therefore, making classroom more diverse and challenging for the teacher. Support is an essential variable of this factor. If appropriate support is not provided, teachers might feel overwhelmed, and unprepared to manage an inclusive classroom, therefore developing negative feelings and attitudes towards SEN students and inclusive education (Ewing, et al., 2018). It is sensible to believe that teachers' attitudes improve when they receive the necessary support and resources (human and material) from the school, the community, and other institutions from their close environment.

The information stated above supports a correlation between teachers' positive attitudes towards IE and the successful implementation IE. However, ac-

cording to Ajzen's theory of planned behaviour (TPB), attitudes alone cannot determine teachers' actual behaviour towards SEN students and inclusion, therefore, guarantee a successful implementation. Ajzen (1991, p. 179) claims on actual behaviour is the following:

Intentions to perform behaviors of different kinds can be predicted with high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control; and these intentions, together with perceptions of behavioral control, account for considerable variance in actual behaviour.

TPB does not dismiss the importance of attitudes but recognises the significance of two other independent factors, significant norm and perceived behavioural control, to determine the intent to perform an actual behaviour. Significant form is described as "an individual's perception of how significant others will rate their behaviour" (MacFarlane & Woolfson, 2013, p. 47), in other words, it implies that regardless of their attitude, teachers feel pressure from their social environment to behave in a certain manner and are conscious that others, such as the school principals, other teachers, students, parents and other members of the school community will approve of their actions or lack thereof concerning, in this case, the inclusion of SEN students. Perceived behavioural control represents the degree of difficulty one finds in performing a behaviour. This factor brings Bandura's (1977; 1982) self-efficacy concept into the picture once again, as teachers reflect on their knowledge and ability to be able to include SEN students in mainstream classrooms. However, within the TPB frame, self-efficacy directly affects the intention of a behaviour instead of influencing a person's attitudes. If these factors are all favourable TPB foresees higher probabilities of behaviour to be performed.

2.3 Students' Social Well-Being

Well-being has been conventionally presented through both a clinical and a psychological perspective, the first one conceptualises it as the lack of negative cir-

cumstances. On the other hand, the psychological perspective presents well-being as the high incidence of positive self-attributes (Fraillon, 2004). This research will work according to the psychological perspective.

King' and Datu's (2017, p. 126) study on well-being found that:

Student well-being is a social and not just an individual phenomenon. This recognition has key implications for educational practice. To the extent that school policy or classroom practices increase the happiness of one student, they may have cascade effects on others.

This statement implies that psychological states, behaviours, and emotions can be spread. Individual student well-being can have an effect in its peers well-being, therefore, influencing the whole classroom well-being and climate.

Furthermore, Fraillon contextualises student well-being within the environment of the school community, where students are able to develop and be part of a cohesive group and defines it as "the degree to which a student is functioning effectively in the school community" (2004, p. 24), emphasizing the significant effect environment has on individual well-being, in this case, the impact of school on the students' development (Yoon & Järvinen, 2016).

Through a systematic literature review on well-being, Pollard and Lee (2003) alleged that well-being can also be defined and operationalised within a specific domain, their study outlined five domains of well-being in the school context: physical, economic, psychological, cognitive and social. This research will centre on the social domain of student well-being. We are centred in this particular domain to be able to explore well-being through socialisation in the midst of diversity and inclusion. Socialisation is seen as one of the main motivators to include SEN students into mainstream classrooms and it is considered an essential factor in the successful implementation of inclusive education (de Boer, et al., 2011; Bossaert, Colpin, Pijl, & Petry, 2013; de Boer, Pijl, Post, & Minnaert, 2013).

In this study, the social domain of student well-being is analysed through an interpersonal dimension, students' relationships. On this topic Graham, Powell and Truscott (2016, p. 367) stated:

Schools are essentially relational places. Relationships in this context may directly affect student well-being, either positively or negatively, such as when teachers or friends are

 $kind\ or\ supportive,$ or if children experience bullying, exclusion from friendship groups or conflict with teachers.

Relationships play a key role supporting student well-being, students-peer relations and student-teacher relations are found to be the most critical. We will be exploring these relations within the context of inclusion, in diverse classrooms that promote relations between SEN students and their peers and teachers.

Student-teacher relationships can be essential for student motivation and success (Savolainen, et al., 2012). Positive relations might encourage teachers to put more effort on the support they offer their students, therefore improving the social, emotional and academic outcomes of students at risk. Contrarily, negative relations can be linked to student's low motivation, low self-esteem and inadequate behaviour. Kiuru, et al.'s (2015) study reinforces teachers' position as role models, as they serve as the prime example in the classroom on how to treat others, thus, it stresses how teachers' actions have the capacity to improve or hinder peer relations. Teachers have the power to promote healthy and appropriate interactions between their students as well as respect and acceptance, creating a better environment for positive student-peer relations.

Graham, et al. (2016) identified through their study different aspects of peer relationship that benefit students' well-being such as support, trust, companionship and reciprocity. On the other hand, they also found acts that hinder students' well-being, such as segregation and mockery, more well known as acts of bullying, SEN students are considered as a vulnerable group and are more likely to experience these type of acts. Multiple studies (de Boer, et al., 2011; 2013; Bossaert, et al., 2013) have shown that it is more difficult for SEN students to be accepted by their peers, they are considered as less popular individuals in their classrooms, therefore, it is more difficult for them to make and maintain friendships. SEN students' well-being is significantly more vulnerable than their regular peers', they require more support from teachers and peers in order to feel a sense of belonging.

3 THE PRESENT STUDY / METHODOLOGY

3.1 Research Aims

The aim of this study is to investigate teachers' attitudes and its relationship with students' social well-being within the school environment. According to the theory of planned behaviour (MacFarlane & Woolfson, 2013), attitudes are only one of the dimensions that affect behaviour. Through this analysis, we can measure whether attitudes and concerns have direct or indirect impact on students' well-being, in which degree and in which circumstances. Furthermore, this research will also explore if classroom diversity has an effect on students' social well-being and if teachers' attitudes and concerns mediate this relationship. Based on the aims of this research, the research questions are the following:

- 1. Do teachers' attitudes and concerns towards inclusive education predict students' social well-being?
- 2. Is classroom diversity related to students' social well-being?
- 3. Do teachers' attitude and concerns towards inclusive education moderate the relationship between classroom diversity and students' social well-being?

3.2 Participants

The participants for this research were taken from a larger study on a Finnish model of school wide positive behaviour support in 2013, ProKoulu. The Ministry of Education and Culture funded the experimental study carried out in collaboration with the University of Eastern Finland, the University of Jyväskylä and the Niilo Mäki Institute. The data is taken from the base-line phase and includes the responses of 403 teachers on their attitudes and concerns towards in-

clusive education and classroom diversity (number of SEN students per classroom). Student data was aggregated at the classroom level and represents thus the mean value of student ratings (data from 455 classrooms) of their well-being.

Data were collected from a large Eastern Finland region. Schools included in the sample were primary schools (1^{st} - 6^{th} grade), lower secondary comprehensive schools (7^{th} - 9^{th} grade) or unified comprehensive schools (1^{st} - 9^{th} grade), but data included students from grades 2-6 only. Many of the schools had special classes for SEN students, however, no special schools were present in the sample.

Classroom diversity information was provided by the teachers' own perception of the number of students in their classrooms they considered had ADHD, learning disabilities (LD) and / or received intensified support (IS) or special support (SE). Thus, one student could contribute to more than one index of diversity. This information was used to create an index of diversity per classroom.

TABLE 1. Categories of diversity per classroom

Diversity Items	No Presence (%)	Low Presence (%)	Medium Presence (%)	High Presence (%)	Total Class- rooms (%)
ADHD	49 (14)	74 (21.1)	151 (43)	77 (21.9)	351 (100)
LD	44 (12.5)	80 (22.7)	146 (41.4)	83 (23.5)	353 (100)
IS	110 (30.3)	159 (43.8)	-	94 (25.9)	363 (100)
SE	222 (60.7)	82 (22.4)	-	62 (16.9)	366 (100)

The diversity items were categorized according to the proportion of SEN students in the classroom (See Table 1 for categories). ADHD and learning disabilities were categorized into three groups: no diversity (no SEN students in the classroom), low diversity (classrooms with 0 to 25% of SEN students), medium diversity (classrooms with more than 25% to 75% of SEN students) and high diversity(classrooms with more than 75% of SEN students). While intensive support and special education items are divided only into three categories due to the large number of students present in the no diversity category: no diversity (no SEN students in the classroom), low diversity (1 or 2 SEN students in the classroom), high diversity (more than 2 SEN students in the classroom).

3.3 Measures

3.3.1 Sentiments, Attitudes and Concerns about Inclusive Education Revised scale (SACIE-R)

Teachers' attitudes and concerns towards inclusive education was measured through the SACIE-R scale (Forlin C., Earle, Loreman, & Sharma, 2011). The original scale consists of 15 items of which 2 were removed as they were found to be problematic for the model (Savolainen et al., 2012). The 13 items are contained within three sub-scales: Sentiments, Attitudes and Concerns, these were measured through a four-point Likert-type scale with responses ranging from 1 (strongly disagree) to 4 (strongly agree). The reliability of this scale was examined in previous studies, Cronbach's alpha score was .75 (Savolainen et al., 2012).

This study will only consider the sub-scales of Attitudes and Concerns. The Attitudes sub-scale assessed teachers' general attitudes towards inclusion and SEN students using statements such as: "Students who have difficulty expressing their thoughts verbally should be in regular classes", "Students who are inattentive should be in regular classes". The Concerns sub-scale assessed teacher's personal concerns on inclusion in their own classroom with statements such as: "I am concerned that students with disabilities will not be accepted by the rest of the class", "I am concerned that I do not have knowledge and skills required to teach students with disabilities". Thus, large number in attitudes subscale refer to positive attitudes and small numbers on concerns refer to positive attitudes.

3.3.2 Health Behaviour in School-Aged Children (HBSC)

A Finnish modification of the HBSC questionnaire (Currie, et al., 2009) was used as base to measure student well-being across six dimensions (commitment to school, feeling of justice in school, student-parent relationship, student relationship in school, student-teacher relationship in school, and workload in school) through 17 variables. The student well-being dimensions used a Likert 5-point, resulting on an average value that ranges between 1 to 5. Higher values represent

a more positive response to each of the dimensions used in this study (Kämppi, ym., 2012). For this research, we will explore 2 of the dimensions of well-being as portrayed in the ProKoulu study: student-peer relationships in school and student-teacher relationships in school. The student data does not represent the individual perception of each student regarding these items, it is a composition of the average perception in a classroom.

The student relationship in school dimension was measured through statements such as: "Most of the students in my class are friendly and helpful", "Other students accept me as I am". Moreover, the student-teacher relationship in school dimension included items such as: "Teachers encourage me to express my own opinion in lessons", "I get extra help when I need it".

The reliability of this scale was examined in previous studies, Cronbach's alpha score was .73 for student relationship in school and .70 for student-teacher relationship in school (Kämppi, ym., 2012).

3.4 Ethical Considerations

This study has followed the guidelines of the Finnish National Board of Research Integrity – TENK (2012) maintaining a responsible conduct of research. The project were the data is form got ethical approval by the Ethical Board of University of Eastern Finland.

3.5 Data Analysis

The data analysis was conducted through IBM SPSS software version 24. Prior to the start of the analysis the data was assessed for normality. Skewness and kurtosis values all indicated a normal distribution. General linear models (GLM) were used in order to analyse the relationship between teachers' attitudes and concerns towards IE, the variables related to students' social well-being and classroom diversity.

4 RESULTS

4.1 Relationship Between Teachers' Attitudes Towards Inclusive Education and Students' Social Well-Being

A GLM was calculated to predict students' social well-being based on teachers reported attitudes and concerns towards inclusive education. Students' social well-being was represented by the student-peer (S-P) relationship and student-teacher (S-T) relationship dimensions from the HBSC scale. Teachers' attitudes and concerns towards IE were used as covariates.

The results show no significant relationship between teachers' attitudes towards IE and students' social well-being (F (2, 399) = 1.95, p=.34; Wilks' Λ = .995, partial η^2 = .005); nor a significant relationship between teacher's concerns towards IE and students' social well-being (F (2, 399) = 1.72, p= .18; Wilks' Λ = .991, partial η^2 = .009). (See Table 1 for model parameter estimates).

Follow-up ANOVAS confirmed the absence of a significant relationship between teachers' attitudes on student-peer relationship and student-teacher relationship and teachers' concerns on student-peer relationship and student-teacher relationship.

4.2 Relation Between Classroom Diversity and Students' Social Well-Being

A one-way multivariate analysis of variance (MANOVA) was performed to study the relation between the categorised classroom diversity items and students' social well-being.

Classroom diversity (means and SD given in Table 2) items were categorized as described in the participants section of the thesis. Each item of diversity: ADHD, learning disabilities (LD), intensive support (IS) and special education (SE) was analysed with two dependent variables representing students' social

well-being: student-peer (S-P) relationship and student-teacher (S-T) relationship.

TABLE 2. Means and Standard Deviations (SD) of the Relationship Between Classroom Diversity and Student Social Well-Being.

Diver-	Well-being	Diversity Categories Mean (SD)					
sity Items		No Pres- ence	Low Pres- ence	Medium Presence	High Pres- ence		
4 DIID	S-P	4.05 (.32)	4.06 (.32)	4.00 (.29)	3.95 (.40)		
ADHD	S-T	3.75 (.29)	3.80 (.30)	3.74 (.32)	3.78 (.34)		
T.D.	S-P	4.00 (.34)	4.08 (.33)	3.99 (.30)	3.96 (.37)		
LD	S-T	3.67 (.25)	3.81 (.34)	3.75 (.32)	3.77 (.40)		
T 0	S-P	4.03 (.39)	4.00 (.30)	_	4.00 (.30)		
IS	S-T	3.82 (.36)	3.75 (.32)	_	3.75 (.35)		
0.F	S-P	4.03 (.32)	4.00 (.29)	_	3.93 (.40)		
SE	S-T	3.76 (.31)	3.74 (.31)	-	3.80 (.45)		

There was a statistically significant difference in student well-being based on the presence of students in special education in the classroom (F (4, 724) = 2.96, p = .02; Wilks' Λ = .968, partial η^2 = .016).

However, follow-up univariate analysis of variances (ANOVA) of the dependent variables were considered but revealed non-significant differences between the number of students in special education in the classroom and student-peer relationships or the number of students in special education in the classroom student-teacher relationship. (See Table 3 for parameters).

								Partial
Dependent	Parameter		Std.					Eta
Variable	(SE students)	В	Error	t	p	95%	CI	Squared
S-P	No Presence	.104	.047	2.12	.03	.012	.197	.13
Relationship	Low Presence	.073	.055	1.31	.19	036	.181	.005
Relationship	High Presence	Oa	•		•	•	•	
S-T	No Presence	036	.049	74	.46	132	.059	.002
Relationship	Low Presence	062	.057	-1.10	.27	174	.050	.003
retactonship	High Presence	0ª	•					

TABLE 3. Parameter Estimates on the Presence of Special Education Students in the Classroom and Students' Social Well-Being.

The analysis also showed no significant result in relation to students' social well-being and the number of students with ADHD (F (6, 692) = 1.46, p > .10; Wilks' Λ = .975, partial η 2 = .012); learning disabilities (F (6, 696) = 1.56, p > .10; Wilks' Λ = .974, partial η 2 = .013); or intensive support (F (4, 718) = .94, p > .10; Wilks' Λ = .990, partial η 2 = .005).

4.3 Teachers' Attitudes Towards Inclusive Education Moderate the Relationship Between Classroom Diversity and Students' Social Well-Being

Despite the result of the first research question, which showed no direct relationship between teacher's attitudes and concerns and students' social well-being, we proceeded to analyse if teachers' attitudes and concerns can moderate the relationship between the classroom diversity categories and students' social well-being. A two-way MANOVA was used to analyse the moderation of attitudes and concerns on the relationship between variants in the classroom diversity and social student well-being.

To assess this research question, the results of the SACIE-R questionnaire were categorised. The attitudes dimension was divided into teachers with negative (n = 87), neutral (n = 261) and positive (n = 55) attitudes towards inclusive education; the concerns dimension was categorized into low (n = 141), neutral (n = 159) and high (n = 103) concerns.

a. This parameter is set to zero because it is redundant.

A statistically significant interaction was found between teacher's concerns and the number of students with learning disabilities on students' social well-being (F(12, 674) = 2.17, p = .012; Wilks' Λ = .927, partial η^2 = .037) (See Table 4 for means and SD). Separate univariate ANOVAs of the dependent variables were considered and revealed a significant treatment effects on both student relationships (p < .05, partial η^2 = .036) and teacher-student relationships (p < .05, partial η^2 = .038). (See Figures 1 and 2). No statistically significant interactions were found between teachers' concerns towards inclusive education and ADHD F(12, 670) = 1.49, p > .10; Wilks' Λ = .949, partial η^2 = .026); intensive support (F(8, 700) = 1.62, p > .10; Wilks' Λ = .964, partial η^2 = .018); nor special education (F(8, 706) = .83, p > .10; Wilks' Λ = .981, partial η^2 = .009); and student well-being.

TABLE 4. Means and Standard Deviations (SD) of the Mediation of Teachers' Concerns on the Relationship Between Students with Learning Disabilities in the Classroom and Student Social Well-Being.

Students with Learning Disabil- ities in the	Level of Teacher's Concern	Student-Peer Relationship	Student-Teacher Relationship		
Classroom	towards IE	Mean (SD)	Mean (SD)		
	High	3.95 (.53)	3.62 (.26)		
No Presence	Neutral	3.96 (.29)	3.60 (.26)		
	Low	4.14 (.18)	3.76 (.19)		
	High	4.25 (.33)	3.81 (.39)		
Low Presence	Neutral	3.97 (.32)	3.77 (.34)		
	Low	4.21 (.29)	3.88 (.32)		
	High	3.97 (.25)	3.74 (.30)		
Medium Presence	Neutral	3.97 (.29)	3.75 (.32)		
	Low	4.03 (.36)	3.77 (.35)		
	High	3.95 (.44)	3.88 (.35)		
High Presence	Neutral	4.01 (.32)	3.79 (.41)		
	Low	3.89 (.32)	3.54 (.39)		

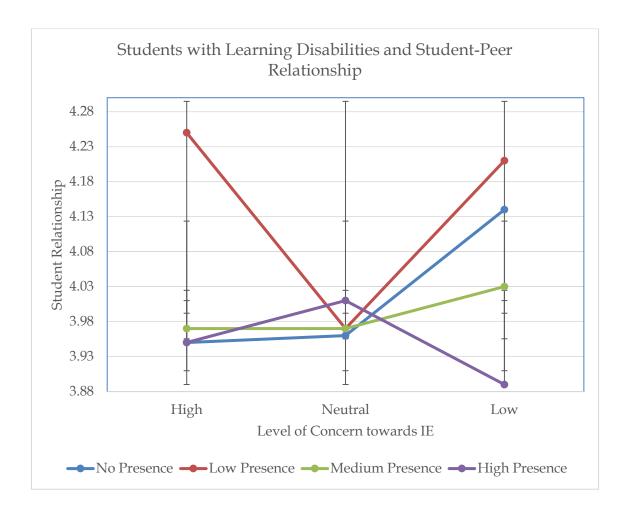


FIGURE 1. Teacher's concern moderates the relationship between the number of students with learning disabilities and student-peer relationship in the classroom.

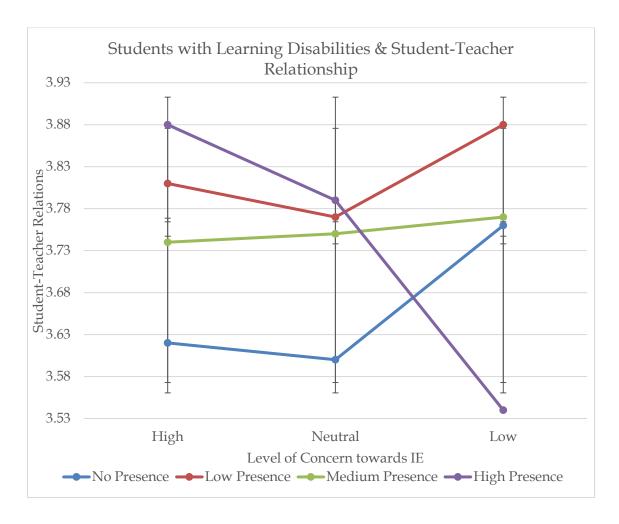


FIGURE 2. Teachers' concern moderates the relationship between the number of students with learning disabilities and student-teacher relationship.

Furthermore, there were no statistically significant interaction between teachers' attitudes towards inclusive education and ADHD (F(12, 670) = 1.25, p > .10; Wilks' Λ = .957, partial η 2 = .022); learning disabilities (F(12, 674) = .61, p > .10; Wilks' Λ = .979, partial η 2 = .011); intensive support (F(8, 700) = .80, p > .10; Wilks' Λ = .982, partial η 2 = .009); nor special education (F(8, 700) = .80, p > .10; Wilks' Λ = .954, partial η 2 = .023); and student well-being.

5 DISCUSSION

As the implementation of inclusive education continues being a major concern for education systems around the world, teachers' attitudes towards inclusive education have been considered to *play a considerable role in implementing this* educational change successfully (de Boer et al., 2011, p. 331). The aim of the present study was to examine if teacher's attitudes are in fact a predominant factor in effective inclusive education. de Boer et al. (2011) conducted a literature review on teachers' attitudes towards inclusive education and did not find any data on the effect of teachers' attitudes and student social participation and relationships. The goal of the research questions presented in this study were set to evaluate the previous statements through the relationship between teachers' attitudes towards inclusive education and the social dimension of well-being of Finnish students through a series of general linear model analysis. The main result of this study is that teachers' attitudes do not have a key role in affecting the social wellbeing of students. This raises the following questions: how important are teachers' attitudes in ensuring successful inclusive education at least from the student's perspective? How significant are the cultural values in the implementation and support of inclusive policies?

5.1 Summary of the Results

The first research question attends on the matters of whether teachers' attitudes towards inclusive education have a direct impact on students' social well-being. Data on teachers' attitudes were collected through the SACIE-R questionnaire, which provided a mean score of teachers' general attitudes towards inclusive education (attitudes sub-scale) and teachers' specific attitudes towards inclusion in the teacher's own context (concerns sub-scale). This study also features students'

own perception of their social well-being through their evaluation of their relationships with their peers and teachers. These data were gathered through the HBSC questionnaire, data on students' relationships were analysed as the classroom aggregate level, not per individual student. Due to previous research highlighting positive teacher attitudes as essential in the success of inclusive education (see Saloviita, 2020; de Boer et al., 2011; Forlin et al., 2010; 2011; Avramidis & Norwich, 2002), and the importance placed in the social dimension of student well-being to ensure the inclusion of SEN students (Bossaert, et al., 2013; de Boer, et al., 2013), the hypothesis believed the analysis to this question would reveal the level of significance of this interaction. However, the results astoundingly demonstrated that teachers' general attitudes and personal concerns have no significant connection to the social dimension of well-being of students in mainstream inclusive classrooms. Data show that teachers' attitudes do not seem to influence students' relationships with their peers and classroom teachers. Previous research has shown that these relations are crucial for any student to develop a true sense of belonging in the school, but it is especially crucial for the inclusion of SEN students (Fraillon, 2004; Kiuru, et al., 2015; Graham, et al., 2016).

The second research question analysed if the presence of diversity in the classroom would affect students' social well-being. To be able to create a diversity index per classroom, teachers identified the number of students in their classrooms with ADHD, learning disabilities, students receiving intensified support and students in special education. As a student could belong to more than one of the groups, four items of diversity were created. Only one of the four conducted MANOVAs that analysed the relationship between classroom diversity and student social well-being showed a significant relationship, yet, the effect-size of this relationship is small and when the variables of social well-being (student-peer relationships and student-teachers relationships) were analysed individually, the results showed no significant connection. This finding could suggest that the presence of diversity in the classroom generally does not affect the students' relations with their peers and teachers, therefore, students' sense of belonging. This

could be due to the fact that Finnish society strongly beliefs and supports universal welfare (Yoon & Järvinen, 2016), this is translated in their education system and its policies to favour, promote and support the integration and, most importantly, the inclusion of SEN students in mainstream schools. By adopting these inclusive policies, Finnish students, teachers and other members of the school community have had the opportunity to develop in a diverse environment. Thus, the presence of diversity no longer presents an issue when assessing how students relate to their peers and teachers.

Despite finding no relation between teachers' attitudes towards inclusive education and students' social well-being, the third and last research question assessed whether the attitudes moderate the relationship between classroom diversity and social well-being. The analysis for this research question revealed a small moderation effect, as only one of the eight moderation groups (four for general attitudes and four for concerns) that were analysed showed a significant interaction between teachers' attitudes and its effect on inclusive education. The only significant relationship was found when teachers' concerns towards inclusive education moderated the relationship between the number of students with learning disabilities in the classroom and students' social well-being. The relationships were found significant even when they were analysed independently. Figures 1 and 2 show that when teachers' concerns remain neutral, the relationships between students, its peers and teachers are similar in all classrooms with presence of students with learning disabilities. Moreover, both figures also displayed improvement in the relationships when teachers show lower levels of concern except in classrooms with a high number of students with learning disabilities, in these cases, relationships significantly deteriorate. An assumption of this relationship can be made, though without theoretical evidence, that when teachers with a lower level of concern towards inclusion in their own context are faced with a classroom with a high number of SEN students (in this case with learning disabilities), their lack of concern is demonstrated though lack of motivation and care, allowing relationships in the classroom to worsen. This relationship should be further explored.

Besides this finding, the results of this last research question confirms the result of the first research question, as the role of attitudes in actual teacher behaviour remain uncertain. This finding can be supported theoretically when considering Ajzen's theory of planned behaviour (1991), which states that attitudes alone cannot predict actual behaviour. According to this theory, even if class-room teachers hold negative attitudes towards the inclusion of SEN students in mainstream classrooms, this does not mean they will act upon those attitudes because there are two other independent factors that affect the decision to perform a behaviour: subjective norm and perceived behavioural control. Moreover, as those two other factors were not included in this study, it remains uncertain which role attitudes partake in influencing teacher behaviour.

5.2 Limitations

The study is limited in some aspects. First of all, even though the sample size helps improve the credibility of the research, generalisations could only be made, cautiously, within the Finnish context and countries with similar education systems, given that the data was solely collected in schools from one part of Finland. The Finnish education system reflects a society concerned with the welfare of its citizens, and as described in the theoretical framework, has developed inclusive policies and practices that provide support to every student in the mainstream level, allowing SEN students to be included and not segregated.

Secondly, the data used for this research was gathered using two questionnaires: SACIE-R and HBSC. Even if their reliability was confirmed through Cronbach's alpha, it is important to highlight that in questionnaires such as SACIE-R that measure topics related to inclusion, there is a possibility that participants could answer according to what they believe is politically correct. As noted by Avramidis and Norwich (2002, p. 143):

Given the fact that 'integration' and, more recently, 'inclusion' are politically correct ideas, there is always the danger of the respondents giving socially desirable answers that have little or no correspondence with their everyday behaviour.

Another limitation encountered with these questionnaires is that they were not made in Finland, therefore, have been developed in different languages and contexts. According to Savolainen et al. (2012, p. 66) the *translations proved to be a difficult exercise*, especially phrases which used the term 'disabled', as it is not a term used in the Finnish education system.

Another limitation was encountered with the design of the research. The analysis used to evaluate the relationships between the variables was designed to identify the effect of attitudes on the average level of social well-being in the classroom, therefore, it does not allow us to detect any individual effect of teachers' attitudes to particular individuals, for example, SEN students. We do not know whether SEN or 'regular' students have better social well-being scores in the classroom, thus, have more positive relationships and a better sense of belonging.

5.3 Conclusions and Further Research

This study aimed to identify the relevance of teachers' attitudes in inclusive education through the scope of how students perceive the social dimension of their well-being, more specifically through their perception of their main relationships in the Finnish school community: student-peer relations and student-teacher relations. It was important to evaluate attitudes through these relationships because, if positive, they are regarded as essential for the students' development and sense of belonging, especially for students at risk, such as SEN students. Thus, these relationships are vital in the process of inclusion. Based on a quantitative analysis of teachers' attitudes, classroom diversity and student social well-being, positive attitudes do not seem to guarantee inclusive education's success, contradicting numerous studies that affirm that *inclusion largely depends on teachers' attitudes towards learners with SEN* (EADSNE, 2003, p. 15). The results show no perceivable significant effect of attitudes on teachers' actual behaviour in mainstream inclusive classrooms, therefore, the role of attitudes is still inconclusive.

To better understand the implications of the results, future studies should include an analysis that considers attitudes as a component of behaviour, as suggested by the theory of planned behaviour (Ajzen, 1991), analysing the interaction between attitudes and self-efficacy. As it was highlighted, data were collected solely from Finland, to make the results more transferable, similar studies could be replicated in countries where policies and practices are not as supportive of the inclusion or even integration of SEN students in mainstream schools. It would also be interesting to conduct similar studies through a mixed method approach to contrast quantitative and qualitative data to not rely merely in data from questionnaires.

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