Attitudes and Teacher Efficacy among Italian and Austrian Teachers: a Comparative Study Gli Atteggiamenti e la *Teacher Efficacy* dei docenti Italiani e Austriaci: uno Studio Comparativo

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ABSTRACT

The need to face complexity in today's school contexts requires the identification of variables that influence teacher agency and which contribute to the success of inclusion.

To this aim an exploratory and comparative research was conducted with the goal of investigating attitudes towards inclusion and the perceptions of efficacy of 364 student-teachers, 221 of which were Italian whereas 143 were Austrian, following a teacher education course. Furthermore, the comparative study aided in shedding light on how factors such as the educational system and culture can influence the variables considered.

Results show that in both groups attitudes and teacher efficacy are both above the mean, yet the Italian sample had higher scores. Within an ecological perspective, this could be also due to factors related to context and cultural dimensions.

This research is part of a wider project involving a network of researchers investigating such variables through the use of scales that have been specifically designed to measure some predictive determinants of success of inclusion.

La necessità di fronteggiare la complessità degli odierni contesti scolastici richiede alla ricerca educativa di individuare le variabili che influenzano l'agentività del docente e che contribuiscono al successo dell'inclusione.

Con tale finalità è stato condotto uno studio esplorativo e comparativo finalizzato ad indagare sugli atteggiamenti verso l'inclusione e sulle percezioni di autoefficacia di 364 futuri docenti in formazione (221 italiani e 143 di nazionalità austriaca). La comparazione ha consentito di far luce, inoltre, su quanto fattori, quali il sistema di istruzione e la cultura, possano esercitare la loro influenza sulle variabili considerate. I risultati mostrano che in entrambi i gruppi gli atteggiamenti e la teacher selfefficacy sono al di sopra della media. Tuttavia, il campione italiano presenta punteggi più alti; lasciando ipotizzare che, in una prospettiva ecologica, ciò possa dipendere anche da fattori legati a dimensioni contestuali e culturali.

La ricerca si inserisce in un progetto più ampio in cui è coinvolta una rete di ricercatori europei impegnata ad indagare su alcuni dei fattori predittivi del successo dell'inclusione.

KEYWORDS

Attitudes; secondary schools; teacher efficacy, Theory of Planned Behaviour, TEIP. Atteggiamenti; Scala TEIP; Scuola Secondaria; teacher efficacy, Teoria del Comportamento Pianificato.

1. Introduction¹

The importance given to the implementation of inclusive education, as a value to be pursued to celebrate the heterogeneity among students, requires more than a restructuring of the school organisation to accommodate all children. It involves instilling a culture which gives meaning to teaching actions that are based on positive sentiments, attitudes and self-efficacy beliefs towards the implementation of inclusive practices.

To reach this aim, what seems to be fundamental is the adoption of a teacher training model that makes future educators aware of the variables influencing their agency (Rivoltella & Rossi, 2012; Margiotta, 2015; Aiello, Sharma & Sibilio, 2016). Taking into consideration the dynamic and challenging classrooms teachers work in today, an ecological view of agency needs to be considered. In line with the definition provided by Biesta, Priestley and Robinson (2015), citing Biesta and Tedder (2007):

"[t]his concept of agency highlights that actors always act by means of their environment rather than simply in their environment so that the achievement of agency will always result from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations (p. 626)."

Looking into agentic theories from other research fields such as Bandura's (1986) Social Cognitive Theory (SCT) and Ajzen's (2005) Theory of Planned Behaviour (TPB), cultural and contextual factors are also taken into consideration when identifying the variables that impinge on people's decision to act in a certain manner. In both models a plethora of predictive factors are at play, including attitudes and self-perceptions of efficacy. Starting from this theoretical framework, the research aimed at exploring the similarities and differences in attitudes and efficacy beliefs among secondary school student-teachers undergoing their phase of training in two completely different educational contexts, as are Italy and Austria. Indeed, in Italy, the process of embracing and adopting full inclusion started more than 20 years ago and has now been completely phased in, whereas in Austria the Ministry of Education is currently providing a National Activity plan until 2020 that aims to reduce the number of special educational needs institutions as far as possible in compliance with the UN Convention of 2006.

The work presented in this paper is one of the initial stepping stones of a wider project involving a network of researchers investigating such variables through the use of scales that have been specifically designed to measure an array of determinants on the adoption of inclusive classroom practices (Sharma & Desai, 2002; Sharma, Loreman & Forlin, 2011; Sharma & Jacobs, 2016). The aim of this network is that of fostering the European-wide intentions and efforts to provide an effective inclusive educational system through the sharing of ideas, practices and experiences based on theoretical models. Among its initiatives, the network is currently carrying out a comparative analysis on inclusive education and teacher training in different countries that will serve as the basis for a joint re-

1 Petra Hecht is the author of the paper; Paola Aiello is the co-author of the paper; Erika Marie Pace is the author of the paragraph "Methodology" and collaborated in the data inputting and analysis; Maurizio Sibilio is the scientific coordinator of the research. search using quantitative and qualitative data that allows a common and comparable perspective among the participating countries.

Before combining and establishing the diverse endeavours on an international level this study was aimed at exploring the feasibility in two regions (South Italy and West Austria). It is the result of a positive collaboration between the Department of Humanities, Philosophy and Education of the University of Salerno, Italy and the University College Pädagogische Hochschule Vorarlberg, Austria. The two higher education institutions offer teacher education courses and share the same vision with regards to the importance of such training to foster the necessary attitudes, beliefs and efficacy to augment teachers' willingness to implement inclusive practices. For this reason it was decided to promote a visiting professorship exchange to study the different school systems in further depth and start a research collaboration focused on the factors that play an important role in fostering the European-wide intentions and efforts to provide an inclusive educational system.

This exploratory study focused on secondary school student-teachers' attitudes towards inclusive education and their self-efficacy beliefs toward inclusion in terms of efficacy in collaboration, in classroom management and inclusive instruction.

2. Teachers' attitudes and self-efficacy beliefs towards inclusion

Attitudes can be defined as "a disposition to respond favourably or unfavourably to an object, person, institution or event" (Ajzen, 2005, p. 5). In his analysis, Ajzen categorises attitudes in three different subgroups: cognitive responses such as beliefs and convictions; affective responses represented by sentiments, prejudices and stereotypes; and conative responses that encompass intentions or commitment and actions towards reaching an objective (Ajzen, 2005). As Ajzen (2005) postulates "attitudes towards a behavior are found to correlate well with the corresponding behavior, and because they can be assessed ahead of time, they can be used to predict behavioural performance" (p. 96). Therefore investigating teachers attitudes towards the implementation of inclusive classroom practices has become a valuable concept to explore (Ahmmed, Sharma & Deppeler, 2013; Pace & Aiello, 2016).

However, in Ajzen's TPB model, attitudes represent only one of the antecedents to behaviour and these influence behavioural intention rather than the behaviour itself. Two other factors impinging on behaviour are *Subjective Norm* and *Perceived Behavioural Control (PBC)*, where the former referes to normative beliefs and the motivation to comply to these social influences and the latter "provides information about the potential constraints on action as perceived by the actor, and is held to explain why intentions do not always predict behaviour" (Armitage & Conner, 2001, p. 472). In fact, according to this model, one's PBC does not only influence behavioural intention, but can influence behaviour directly.

The construct of self-efficacy can be defined as "what you believe you can do with what you have under a variety of circumstances" (Bandura, 1986, p. 37). This does not depend on the competencies one has acquired but whether or not one believes that resorting to such competencies will lead to the desired outcomes. Research conducted by Armitage and Conner (2001) provided evidence that both PBC and self-efficacy are useful predictors for both intention and behaviour.

Considering that, according to the researchers, the construct of self-efficacy has been better operationalised and is more clearly defined, measuring the latter "may be the preferred measure of 'perceived control' within the TPB" (p. 488). This assumption has been strongly sustained through an array of studies on teachers' perceptions of efficacy in relation to attitudes which indicated that the "intention to teach in inclusive classrooms is significantly and positively influenced by efficacy and attitudes scores" (Sharma & Jacobs, 2016, p. 88).

2.1. Influencing background factors

Meanwhile, the flourishing research on the variables influencing teachers' intentions and willingness to adopt inclusive practices has also been taken into consideration. Besides *personal factors*, a number of other background variables, mainly conceptualised by Ajzen (2005) such as *social factors* or *knowledge* influence PBC processes, were found to influence attitudes and self-efficacy beliefs towards inclusion. From this point of view it becomes obvious that norms within historical traditions in dealing with inclusion and legislation as well as ideological stances, may be of influence on attitudes and efficacy beliefs to implement inclusive practices (Ajzen, 2005). Different kinds of influencing factors resulting from the social context, such as cultural differences, and knowledge transmission, due to diverse educational systems between countries, could already be identified (Beuse, Merz-Atalik & O Brien, 2016; Sharma & Jacobs, 2016).

With regards to *personal* background variables, such as age or teaching experience, the data available provides contrasting views on how these influence attitudes towards inclusion. Some research showed evidence for student-teachers having more positive attitudes than experienced teachers who had been teaching for more than 20 years (Burke & Sutherland, 2004; Dessemontet, Benoit & Bless, 2011). These findings are in accordance with other studies (de Boer, Pijl & Minnaert 2011; Dessemontet et al., 2011). Also intentions to teach in inclusive classrooms could be identified as significantly influencing factors on self-efficacy and attitudes toward implementing inclusion (Sharma & Jacobs, 2016).

As regards the background factors resulting from the cultural context, recent literature has provided data on the differences between countries outlining the diverse traditional strands within teacher training courses and their impact on the variables of interest. A comparitive study between Germany (Ludwigsburg) and the USA (North Carolina), two countries with diverse policies related to special education and in dealing with inclusive processes, revealed significant differences between the attitudes and self-efficacy beliefs of the two cohorts. German students showed slightly higher, yet significant, levels of negative sentiments and concerns. In addition, US students showed higher efficacy-beliefs with regards to using Inclusive Instruction or to Collaboration with other stakeholders (Beuse et al., 2016). Similarly, a study on German and Austrian student-teachers' attitudes showed that the Austrians had higher attitude scores than their German counterparts (Hellmich, Görel & Schwab, 2016). This finding is quite surprising, as both countries are German speaking and closely connected geographically as well. According to the authors, this could be due to the amount of practicum phases with regard to experiences in inclusive classrooms during the teacher training course as well as experiences from the biographical background. In other words, the level of integration in Austria is higher than that in Germany and student-teachers could have had prior experiences of inclusion.

By explaining student-teachers' attitudes towards inclusion, recent findings

show empirical evidence e.g. for the importance of self-efficacy beliefs in teaching inclusive classrooms and inclusive experiences due to inclusive teaching during practicum phases (Hellmich et al., 2016).

For this research the different teacher educational systems e.g. its models and amount of coursework and knowledge about inclusive education should be considered as an impact factor as well. Empirical evidence indicates a rise in positive attitudes towards inclusion of student-teachers through training courses with topics on inclusion (Kopp, 2009). Findings indicate the importance of merging courses during teacher training (Kim, 2011) instead of offering additional and isolated coursework. Morover, it was found that meta-analysis subject knowledge or school practicum in inclusive classrooms may lead to changes of attitudes as well (de Boer et al., 2011). Meanwhile, however, no correlation between previous training on inclusive education and teachers attitudes have been found by Ahmmed, Sharma & Deppeler (2012). Further research on attitudes and efficacy-beliefs with respect to teacher training models e.g. differences between diverse teachers professions as general vs. special educational needs teachers (SEN), is less consistent. Some studies revealed differences between general and SEN teachers (Kuhl, Moser, Schäfer & Redlich, 2013; Dlugosch, 2014; Feyerer et al., 2014; Aiello et al., 2016), while some others could not affirm general or SEN teachers having different attitudes (Gebhardt, Schwab, Nusser & Hessels, 2015; Schwab & Seifert, 2014).

As the teacher training system between Italy and Austria is different so far – Austria has offered teacher trainings for SEN Schools until 2015 – diverse attitudes and self-efficacy beliefs towards inclusive education are expected.

3. The Italian and the Austrian Educational and Teacher Training Contexts

The initial foundations of the current Italian system that endorses full inclusion, irrespective of the type of disability or special educational need, can be traced back to the late 70s with Law 517/77. Although previous legislative milestones were noteworthy for the abolishment of special schools and classes, this law was fundamental as it highlighted the need for drawing up individualised educational plans for students with disability and introduced the role of the learning support teacher; stating that these professionals be adequately trained to be able to support the whole classroom. Since 1992, with Law 104, Learning Support Teachers are provided in classes where students certified with a disability are present. These students are guaranteed free transportation to and from school and access to all services. Recent statistics have shown that less than 1% of students with a disability do not attend mainstream schools (EADSNE, 2012) and in the scholastic year 2014/2015 2.7% (234,788) of the total student population were students certified with a disability (MIUR, 2015).

Besides providing the due attention to these students' needs, the Ministry of Education, University and Research, has also enacted a Law for students with Specific Learning Difficulties (Law 170/2010), which envisages that students with dyslexia, dysgraphia, dyscalculia and dysorthography are provided with the necessary compensatory tools and are dispensed from specific tasks. In 2012, a Ministerial Decree entitled "Strumenti d'intervento per alunni con bisogni educative speciali e organizzazione territoriale per l'inclusione scolastica" (Intervention tools for pupils with special educational needs and the territorial organisation for school inclusion) and the subsequent Circular dated 6th March, 2013 provided the framework and guidelines for an inclusive approach. The Decree established

that the students with Special Educational Needs could fall within three groups or categories: students with a disability, students with specific developmental disorders, and students with socio-economic, linguistic and/or cultural disadvantage. For the latter two groups, a Learning Support Teacher is not envisaged.

As a result of this succession of provisions, teacher education course structures and programmes have undergone a number of amendments to be able to prepare teachers for this complex scenario. Currently, a 5-year single-cycle programme prepares students to become nursery or primary school teachers. In this course, 31ECTS² are dedicated to themes related to the teaching of students with special educational needs, with the aim of preparing future teachers to manage inclusive classrooms successfully. As regards secondary school teachers, prospective teachers need to first obtain a Masters degree in the subject they wish to teach and then follow a one-year course to obtain their teachers' warrant. All courses include theory and on-site teaching practice and a lot of importance is given to pedagogy, didactics and special and inclusive education. Those wishing to become Learning Support Teachers have to follow an additional 750-hour specialization course (60 ECTS). As regards in-service teachers, a number of continuous professional development courses are offered by the Ministry through the universities to promote lifelong learning. In these courses, the theme of inclusive education and innovative teaching strategies useful to support inclusion are central.

Whereas in Italy inclusive education has by now been solidly established, the current school system in Austria is undergoing a big change. According to the national activity plan 2012-2020 (BMASK, 2016), so called "model regions" are intended to be gradually organised in getting first experiences by implementing an inclusive school system (BMBF, 2015). In addition, universities and teacher training university colleges since 2015 are no more offering courses for diverse school types, e.g. primary school, secondary school, grammar school or special educational needs schools (BGBI. I 124/2013³). The courses are now structured on an age-orientated system; that means a dual track system for primary and secondary school teaching degrees. Hence, this new teacher training system in Austria includes the elimination of a special educational need teaching degree. Therefore, the new curriculum encompasses knowledge and skills for inclusive teaching in general teacher training courses, as the humanities or general educational sciences, as well as teacher training practicing phases in classrooms that already offer an inclusive teaching scenario. The courses in the Bachelor degree encompass different topics about the management and instruction of heterogeneous students groups, eg. individualised learning (7,5 ECTS), courses with focus on disabilities, attesting and diagnosis of special education needs (5ECTS), and courses of further different diversity aspects like migration, religious and multilingual aspects (2,5 ECTS). In sum, undergraduates will obtain 15 ECTS encompassing basic knowledge within the first 4 semesters.

In addition, beginning from the fifth semester students can choose between

² In addition to these modules, the Ministerial programme envisages 24ECTS in special didactics and pedagogy and makes reference to the importance of including modules on intercultural pedagogy and teaching Italian as a second language, although the number of credits is not specified (Ministerial Directive, n.249 of 10/09/2010).

³ This Federal Law on the implementation of a new education for pedagogues is the base for anchoring inclusive education in the teacher training course for all teachers.

different core topics to get a deeper specialization, knowledge and skills within the special educational needs field – between a minimum of 30 ECTS and a maximum of 60 ECTS. For those who are looking for further specialisation in inclusive education, a master degree will qualify for teaching in special educational needs centres and/or coaching teachers in mainstream schools.

Overall research findings from Austria strengthen assumptions that positive attitudes towards inclusion have been on the increase during the last decades. Due to the fact that integrated classrooms were established in Austrian schools for the first time in the 90s, the consequences of inclusive education are seen more positive than in the 80s (Schwab et al., 2012). However, on an international level with reference to literature reviewed by de Boer et al. (2011), concerning inclusive education in teachers own classrooms, the attitudes should still be considered as neutral-negative.

4. Research objectives and hypotheses

On the basis of TPB theory and in line with recent research conducted on this theme, this study was conducted among secondary school student-teachers who were still in training or who had only a few years of teaching experience. The samples were from two countries with distinct traditional cultures as regards the educational system and the way inclusive education is dealt with. Therefore the investigation focuses on different background variables playing a central role in TPB: (1) personal factors such as attitudes and levels of perceived self efficacy towards inclusion, (2) relationships between personal factors and age and teaching experience of the participants and (3) eventual differences between the two groups caused by contextual factors like the educational systems with its different traditions. The research questions were the following:

RQ1: What are the attitudes of secondary school student-teachers towards inclusive education and what is their perceived capability to teach in an inclusive setting?

RQ2: Is there a correlation between the student-teachers' attitudes, their perceived capabilities and their age or experience to teach in an inclusive setting?

RQ3: What similarities and differences are there between the attitudes and perceived levels of efficacy between the Austrian and the Italian student-teachers?

5. Methodology

5.1. Data collection and participants

Campania (Italy): Following approval from the Director of the Department of Humanities, Philosophy and Education at the University of Salerno, all studentteachers following a specialisation course to obtain the warrant as secondary school teachers were invited to respond to the online survey. The response rate was nearly 60% (N=221), the majority of which were female and had no prior teaching experience.

Vorarlberg (Austria): Prior to data collection approval was sought from the centre for educational research at the Teacher Training University College in Vorarlberg, from the regional general educational department and from the department of special educational needs. Data collection was a census with paper pen-

cil elicitation conducted at the University Training College Vorarlberg where all student-teachers from the first until the last year of their training courses in primary and secondary took part. In addition, with support from the education authority in Vorarlberg the data of in-service teachers finishing their first or second year of teaching was collected. Hence, the principals of their schools recveived a survey package to distribute to each teacher, inviting them to send their questionnaires back. The response rate was nearly 40% – out of 157 teachers who were invited to participate in the survey, 62 sent the questionnaire back. In sum 310 teachers took part in the survey, however in this comparative study only 143 of these were included with the aim of creating a comparable group with the Italian sample. Even if the proportion shows an imbalance with nearly 60% from Campania and 40% from Vorarlberg, this helped in creating homogeneity between the two samples.

Therefore, in total the sample analysed in this reseach is composed of 364 respondents. Table 1 provides a detailed breakdown of the demographics of the two samples. The sample as a whole is characterized by a high percentage of female teachers with 69% vs. 31% of male teachers. The majority of the respondents (60%) were younger than 30, followed by respondents whose age varied from 30 to 39 (31) and 9% of the participants were older than 40. Seventy-two percent of the respondents had no experience in teaching.

Analysing the two samples separately, there is an overload of female participants in the Austrian sample and in the age range from 20 to 29 years there is nearly a 30% difference between the Italian and Austrian samples. Considering the level of experience, also the percentage of non-experienced teachers shows an overload due to the fact that most of the Austrian participants were still secondary school student-teachers at the time and only a small percentage had already started to teach. These several differences between and within the groups should be taken carefully into account when interpreting the following research findings.

		Italy	Austria
Gender (% female)		64,7	74,8
Age (%)	from 20 to 29	44,8	75,5
	from 30 to 39	44,8	17,5
	from 40 to 49	10,4	6,3
	from 50 to 59	0	0,7
Experience (%)	no experience	60,3	83,8
	less than two years	13,7	8,5
	from 2 to 4 years	24,2	6,3
	from 5 to 8	1,8	1,4

ATT: Attitudes; EMB: Efficacy in Managing Behaviour; EC: Efficacy in Collaboration; EII: Efficacy in Using Inclusive Instruction

Table 1. Demographics of the Italian (n= 221) and Austrian (n= 143) samples

5.2. Instrumentation

The questionnaire included three main sections. The first two parts were the Sentiments, Attitudes and Concerns about Inclusive Education Scale –Revised (SACIE-R) (Forlin, Earle, Loreman & Sharma, 2011) and the Teacher Efficacy for Inclusive Practice Scale (TEIP) (Sharma, Loreman & Forlin, 2011), translated in the respective languages with permission from the authors. The third section included questions in order to gather information on the respondents' demographic data.

The original SACIE-R scale (Sentiments, Attitudes and Concerns about Inclusive Education – Scale-Revised; Forlin et al., 2011) was conceptualized to cover three dimensions (*Sentiments, Attitudes* and *Concerns*) with 15 items. Respondents were asked to answer on a 4 point-Likert scale with anchors from (1) "totally agree" to (4) "totally disagree".

For this study the reliability of all dimensions for each country were calculated separately. Reliability of the questionnaires were assessed by calculating Cronbachs Alpha, as the Confirmatory Factor Analyses to validate the translated questionnaires (from English into Italian and into German) has already been presented elsewhere (Feyerer et al., 2014; Aiello et al., 2016). On the basis of these findings, only the 5 items covering the attitudes subscale from the SACIE-R scale were taken into consideration since this subscale showed appropriate Cronbach Alpha Values (Table 2) for both countries and can therefore be accepted for further analysis (Gable and Wolf, 1993).

With regards to the TEIP scale, this is composed of 18 items and taps on three latent factors: *Efficacy in Managing Behaviour, Efficacy in Collaboration* and *Efficacy in Inclusive Instruction*. In this case, the Likert scale has 6 anchors from (1) strongly disagree to (6) strongly agree. The reliability analyses showed very similar Cronbachs Alpha Values for all three TEIP dimensions for both countries (Table 2). The recalculation of the TEIP scales showed Cronbachs Alpha values ranging from .71 to .86 (Table 2). These are not so high as the reliability coefficients reported in the original scale which cover values from .85 to .93 (Sharma et al., 2011), but can still be considered as acceptable.

5.3. Analysis strategy

All procedures in this study were conducted using SPSS Statistics. Proof of normality was found to be not normally distributed by Kolmogorov-Smirnov. However, according to visual verification, due to the Central Limit Theorem (CLT) with a total number of 364 participants examining data by ANOVA – one-way betweengroups analyses of variance – could be performed. Correlations between the variables of interest were investigated using Pearson product-moment correlation coefficient.

6. Results

RQ1: Starting with the first research question regarding the respondents' attitudes and what their perceived capability to teach in an inclusive setting is, the following results can be reported. Participants from both countries show levels of attitudes above the theoretical mean with a standard deviation varying from .44 and .58. Likewise, similar results were registered for the dimensions related to

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self-efficacy beliefs towards education with differing values ranging from 4.14 to 4.73 over all the dimensions. (Table 2). The standard deviation for self-efficacy beliefs towards inclusion ranged from .44 to .71.

scales	country	N	Mean	SD	Min.	Max.	Cronbachs Alpha
ATT 4 items	Italy	221	3,44	0,44	2,00	4,00	.76
	Austria	142	2,97	0,58	1,60	4,00	.78
EMB 6 items	Italy	221	4,14	0,63	2,17	6,00	.86
	Austria	143	4,63	0,64	1,00	5,83	.83
EC 6 items	Italy	221	4,47	0,63	2,17	6,00	.80
	Austria	143	4,26	0,71	1,50	5,50	.77
EII 6 items	Italy	221	4,73	0,59	2,67	6,00	.79
	Austria	143	4,70	0,59	1,50	5,83	.72

Table 2. Descriptive data for Attitudes and the three dimensions of the TEIP scale

RQ2: In relation to the second research question regarding the relationship between the teachers' background factors as age range or experience as well as the teachers attitudes and their perceived capabilities to teach in an inclusive setting, when conducting Pearson correlation coefficient, results indicate a slight negative correlation between age range and *Efficacy in Managing Behaviour* dimension. The experience in teaching as further interesting background variable is not significantly associated with all self-efficacy dimensions. Hence attitudes towards inclusion dimension shows a significant association with two self-efficacy dimensions: *Efficacy in Collaboration* and *Efficacy in Inclusive Instruction*. Table 3 illustrates the results.

	EMB	EC	EII		
Age Range	-,112 [*]	0,069	0,034		
Experience	0,001	0,088	0,023		
ATT	0,012	,366**	,247**		
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 3. Pearsons correlation between background variables, attitudes and self-efficacy dimensions

RQ3: In order to investigate whether there are significant differences or similarities between participants attitudes and self-efficacy beliefs towards inclusive education, one-way between groups ANOVA was executed. The results show a significant difference within the three dimensions (Table 4).

	F	df	Sig.	Cohens d
ATT	78,66	1	0,000	0.94
ЕМВ	51,91	1	0,000	0.76
EC	8,53	1	0,004	0.31
EII	0,29	1	0,594	.0

Table 4. Analysis of variance between secondary teachers from Italy and Austria

In attitude scores the actual mean scores between the groups show significant differences as well as for two self-efficacy dimensions; in particular, for *Efficacy in Managing Behaviour* and *Efficacy in Inclusive Instruction (higher attitude scores for the Italian sample, higher Efficacy in Managing Behaviour scores for the Austrian sample)*. In addition, the effect sizes calculated by using Cohens d show high effects for attitudes towards inclusive education score, midsize effects for *Efficacy in Managing Behaviour* and small ones for *Efficacy in Collaboration*.

7. Discussion of Results

Due to the fact that the attitudes and perceived self efficacy scores towards inclusion of the participants are for both countries above the theoretical mean, the data can be interpreted as a sign of a strong endorsement of an inclusive educational system for both groups of participants. The findings regarding the attitudes scores are, however, not in line with the research conducted by de Boer et al. (2011) which reported that teachers held rather neutral-negative attitudes towards inclusion concerning the implementation in their own classroom. However, this can be acknowledged and stated with regards to the Italian participants. As in Italy inclusive education is almost 100% established, the participants may have well referred the questionnaire to their own situation in class. For the Austrian counterparts the findings may be necessarily modified because for the Austrian participants still the option exists to transfer disabled students into special educational needs schools. This could be due to the fact that the latter sample, more likely gave a normative statement than the participants from Italy.

The findings with regard to the relationship between age, experience in teaching inclusively and the self-efficacy beliefs towards inclusive education reveals expected and unexpected findings. As the only background factor, the age range shows a significant negative correlation with the Efficacy in Managing Behaviour, whereas the experiences in teaching inclusively seems to have no impact on the self-efficacy dimension towards inclusion. This result cannot be interpreted easily. Unsurprisingly, significant correlations between attitude scores and self-efficacy dimensions could be identified with restriction for the Efficacy in Managing Behaviour dimension. This result underlines the importance of student-teachers to perceive themselves as ready to teach in inclusive settings with regards to positive attitudes towards inclusive education and vice versa. Hence, this finding does not completely correspond with the results of a recent study conducted by Loreman, Sharma & Forlin (2013), as their research couldn t reveal the age of pre-service teachers as influencing efficacy beliefs towards inclusion (against the total scale). By contrast to the finding of this study previous teaching experiences showed a significant relationship with all three efficacy dimensions. With regards to the third research question, which envisaged an analysis in the similarities and differences in attitudes and perceived levels of efficacy between the Austrian and Italian samples, significant differences emerged with regards to attitudes, Efficacy in Managing Behaviour and Efficacy in Inclusive Instruction. Nevertheless, as previously outlined for the first two research questions, the student-teachers' attitudes and perceived self efficacy in both countries predict quite a promosing scenario in terms of their willingness to implement inclusive practices, with the Italian sample maybe slightly more inclined to adopt such a behaviour.

Conclusions

Therefore the strength of the study lies in its explorative character. As a first step into a broader European-wide context the data of the study revealed evidence for paying attention on the attitudes and self-efficacy beliefs of student-teachers to foster inclusive education. The findings with regards to the background variables provide an indication to go on conducting further research based on TPB theory including not only personal but also contextual background variables as traditional and cultural strands with its different educational systems.

Hence, to get evidence-based proof of the impact of the background variables investigated in this study further research needs to be conducted in other educational contexts and cultural backgrounds. A future direction should be made with respect to the limitations of this study that must be considered. First, future research should focus on further data which is more structured and controlled with respect to the sample and analyse in detail the teacher education programmes and coursework, e.g. practicum phases during the teacher training courses and seminars or mentoring. Even if the sample of this study included secondary school student-teachers only, it should be ensured in the future to control for variables such as differences in the mentioned variables that might have an impact. Secondly, to guarantee no cultural bias from different comprehension of inclusion and its implementation, future analyses and findings could be underlined by a deeper analysis of the attitudes and self-efficacy dimensions by using models such as Confirmatory Factor Analysis. As this study is based on quantitative data only, in the future a qualitative approach could reveal similarities and differences with regards to the perception of inclusive education. Due to the fact that research on efficacy in inclusive education is still scarce (Forlin, Sharma & Loreman, 2014), a qualitative study may also be of interest in order to focus on sources enhancing self-efficacy beliefs during the teacher training course. Hence the findings of this study show that the prospective network, by joining their endeavours in research on the factors influencing teacher agency, can be considered as worthy and fruitful.

References

Ahmmed, M., Sharma, U. & Deppeler, J. (2012). Variables affecting teachers attitudes towards inclusive education in Bangladesh. *Journal for Research in Special Educational Needs*, *12*, 132-140.

Ahmmed, M., Sharma, U. & Deppeler, J. (2013). Variables affecting teachers' intentions to include students with disabilities in regular primary schools in Bangladesh. *Disability and Society*, May 2013. doi:10.1080/09687599.2013.796878.

- Aiello, P., Sharma, U., & Sibilio, M. (2016). La centralità delle percezioni del docente nell'agire didattico inclusivo: perché una formazione docente in chiave semplessa? *Italian Journal of Educational Research*, 9 (16), 17-27.
- Aiello, P., Sharma, U., Dimitrov, D.M., Di Gennaro, D.C., Pace, E.M., Zollo, I., & Sibilio, M. (2016). Indagine sulle percezioni del livello di efficacia dei docenti e sui loro atteggiamenti nei confronti dell'inclusione. *L'Integrazione Scolastica e Sociale*, 15(1), 64-87.
- Ajzen, I. (2005). Attitudes, Personality and Behaviour. Berkshire: Open University Press.
- Armitage, C.J. & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice Hall.
- Beuse, K., Merz-Atalik, K. & O Brien (2016). Sentiments, concerns and attitudes towards inclusive education – A comparison between teacher education students at the University of North Carolina (Charlotte, USA) and the University of Education (Ludwigsburg, Germany). Zeitschrift für Inklusion.
- BGBI. I Nr.124/2013. Bundesrahmengesetz zur Einführung einer neuen Ausbildung für Pädagoginnen und Pädagogen
- Biesta, G. J. J. & Tedder, M. (2007). Agency and learning in the lifecourse: Towards an ecological perspective. *Studies in the Education of Adults*, 39, 132–149.
- Biesta, G., Priestley, M. & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching. Theory and Practice*, 21(6), 624-640. doi:10.1080/13540602.2015.1044325.
- BMASK (2012-2020). Nationaler Aktionsplan Behinderung. Strategie der österreichischen Bundesregierung zur Umsetzung der UN-Behindertenrechtskonvention.
- BMBF (2015). Verbindliche Richtlinien zur Entwicklung inklusiver Modellregionen. Beilage zum Schreiben des BMBF 36.153/008/I/5/2015.
- Burke, K. & Sutherland, C. (2004). Attitudes towards Inclusion: Knowledge vs. Experience. *Education*, *125*(2), 163-172.
- de Boer, A., Pijl, S.J. & Minnaert, A. (2011). Regular primary schoolteachers attitudes towards inclusive education. *Journal for Inclusive Education*, *15*(3), 331-353.
- Dessemontet, R.S., Benoit, V. & Bless, G. (2011). Schulische Integration von Kindern mit einer geistigen Behinderung – Untersuchung der Entwicklung der Schulleistungen und der adaptiven Fähigkeiten, der Wirkung auf die Lernentwicklung der Mitschüler sowie der Lehrereinstellungen zur Integration. *Empirische Sonderpädagogik*, 3(4), 291-307.
- Dlugosch, A. (2014). "... weil es eben jeden treffen kann". *Erziehung und Unterricht, 164*(3-4), 236-245.
- European Agency for Development in Special Needs Education (2012). *Profile of Inclusive Teachers*, Odense, Denmark: Author.
- Feyerer, E., Dlugosch, A., Niedermair, C., Reibnegger, H., Hecht, P. & Prammer-Semmler, E. (2014). Einstellungen und Kompetenzen von LehramtsstudentInnen und LehrerInnen für die Umsetzung inklusiver Bildung. Forschungsprojekt BMUKK-20.040/0011-I/7/2011. Endbericht.
- Forlin C., Earle, C., Loreman T. & Sharma, U. (2011). The Sentiments, Attitudes and Concerns about Inclusive Education Revised (SACIE-R) scale for measuring teachers' perceptions about inclusion. *Exceptionality Education International*, 21(3), 50-65.
- Forlin, C., Sharma, U. & Loreman, T. (2014). Predictors of improved teaching efficacy following basic training for inclusion in Hong Kong, *International Journal of Inclusive Education*, 18(7), 718-730.
- Gable, R. K. & Wolf, M. B. (1993). Instrument Development in the Affective Domain: Measuring Attitudes and Values in Corporate and School Settings. New York: Kluwer Academic Publishers.
- Gebhardt, M., Schwab, S., Nusser, L. & Hessels, M. (2015). Einstellungen und Selbstwirksamkeit von Lehrerinnen und Lehrern zur schulischen Inklusion in Deutschland – eine Analyse mit Daten des nationalen Bildungspanels Deutschlands (NEPS). *Empirische Pädagogik, 29*(2), 211-229.
- Hellmich, F., Görel, G. & Schwab, S. (2016). Einstellungen und Motivation von Lehramtsstudentinnen und –studenten in Bezug auf den inklusiven Unterricht in der Grundschule

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- Kim, J.-R. (2011). Influence of teacher preparation programmes on preservice teachers' attitudes toward inclusion. *International Journal of Inclusive Education*, *15*(3), 355-377.
- Kopp, B. (2009). Inklusive überzeugungen und Selbstwirksamkeit im Umgang mit Heterogenität – Wie denken Studierende des Lehramts für Grundschulen? *Empirische Sonderpädagogik*, 1 (1), 5-24.
- Kuhl, J., Moser, V., Schäfer L. & Redlich, H. (2013). Zur empirischen Erfassung von Beliefs von Förderschullehrerinnen und –lehrern. *Empirische Sonderpädagogik 5*(1), 3-24.
- Loreman, T., Sharma, U. & Forlin, C. (2013). Do Pre-service Teachers Feel Ready to Teach in Inclusive Classrooms? A four Country Study of Teaching Self-Efficacy. *Australian Journal for Teacher Education*, 38 (1), 26-44.
- Margiotta, U. (2015). *Teoria della formazione. Ricostruire la pedagogia.* Roma: Carocci Editore.
- Ministero dell'Istruzione, Università e Ricerca Ufficio di Statistica (2015), L'integrazione scolastica degli alunni con disabilità a.s. 2014/2015, Author, 2015,
- Pace, E.M. & Aiello, P. (2016). Deciding to act: Teachers' willingness to implement inclusive practices. *Education Sciences and Society*, *1*, 138-160.
- Rivoltella, P. C. & Rossi, P. G. (2012). Introduzione. In P. C. Rivoltella & P. G. Rossi (Eds.), *L'agire didattico. Manuale per l'insegnante* (pp. 7-22). Brescia: La Scuola Editrice.
- Schwab, S. & Seifert, S. (2014). Einstellungen von Lehramtsstudierenden und Pädagogikstudierenden zur schulischen Inklusion – Ergebnisse einer quantitativen Untersuchung. *Zeitschrift für Bildungsforschung*, *5*(1), 73-87.
- Schwab, S., Gebhardt, M., Tretter, T., Rossmann, P., Reicher, H., Ellmeier, B. et al. (2012). Auswirkungen schulischer Integration auf Kinder ohne Behinderung – ein empirische Analyse von LehrerInneneinschätzungen. *Heilpädagogische Forschung*, 38(2), 54-65.
- Sharma U. & Desai I. (2002). Measuring concerns about integrated education in India. *Asia & Pacific Journal on Disability*, 5(1), 2-14.
- Sharma, U. & Jacobs, K. (2016). Predicting in-service educators intentions to teach in inclusive classrooms in India and Australia. *Teaching and Teacher Education*, *55*, 13-23.
- Sharma, U., Loreman, T. & Forlin, C. (2011). Measuring teacher efficacy to implement inclusive practices. *Journal for Research in Special Educational Needs*. 12(1), 12-21.