Improving intentions to teach in inclusive classrooms: the impact of teacher education courses on future Learning Support Teachers

Promuovere l'intenzionalità ad agire in favore dell'inclusione: l'impatto della formazione sugli insegnanti specializzati per il sostegno

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Abstract

Educational research is giving much attention to implicit variables such as teachers’ attitudes, self-percepts of efficacy, concerns and intentions for the successful implementation of inclusive classroom practices, thus becoming core targets in course programme planning. This study was conducted to assess the possible impact of a teacher education course for future Learning Support Teachers (LSTs) on the variables involved in planning intentional behaviour aimed at fostering school inclusion. Using the Theory of Planned Behaviour as the guiding framework, it was hypothesised that LSTs with lower degree of concerns, higher levels of teaching efficacy, and favourable attitudes are likelier to have positive intentions to implement inclusive practices. Results show that the course may have influenced these variables positively. The authors conclude that further research needs to be conducted on the teaching strategies to be used in these courses.

Keywords: inclusive education; intentions; self-efficacy; attitudes.

Abstract

La ricerca educativa ha già da tempo focalizzato l’attenzione sullo studio delle variabili implicite che influenzano l’agire didattico dei docenti, come gli atteggiamenti, le percezioni di auto-efficacia, le preoccupazioni e le intenzioni ad implementare pratiche didattiche inclusive. In questo filone di ricerche si inserisce il presente studio che ha come obiettivo la valutazione del possibile impatto di un corso di formazione rivolto a futuri insegnanti specializzati per le attività di sostegno sulle variabili che intervengono nella pianificazione di comportamenti intenzionalmente volti a promuovere l’inclusione scolastica. Assumendo la Teoria del Comportamento Pianificato come framework teorico di riferimento, l’ipotesi da cui muove lo studio è che gli insegnanti che mostrano minori preoccupazioni, livelli più elevati di auto-efficacia e atteggiamenti favorevoli, rivelino un’intenzionalità maggiore nell’attuazione di pratiche inclusive. I risultati evidenziano che l’attività di formazione potrebbe aver influenzato positivamente queste variabili, invitando ad ulteriori approfondimenti circa le strategie didattiche da impiegare nei percorsi formativi.

Parole chiave: educazione inclusiva; intenzionalità; auto-efficacia; atteggiamenti.

1 Paola Aiello is the author of the article and the corresponding author. Umesh Sharma coordinated the research and analysed the data.
1. Introduction

In the past few decades, the shift towards inclusion as a paradigm of reference underpinning education policies has generated the rethinking of teacher education course programmes. Among other aspects especially related to programme content, reflection has also been stimulated on all those variables which implicitly or explicitly impinge on teachers’ intentions to act in such a way that all students, irrespective of their needs, may succeed in school. Italy was considered one of the pioneer countries to have initiated such a process both on a policy and cultural level. Special schools and remedial classes were abolished in the 70s and, today practically all students are taught in mainstream schools. Law n. 517 of 1977 and Circular n. 199 of 1979 paved the way for further reform to create a support system for students with disability. Among the provisions related to school reform, the profession of the Learning Support Teacher (LST) was introduced. Since then, their role has always been that of supporting the mainstream teacher in the day-to-day activities in cases where a student with a disability is present (Aiello, Corona & Sibilio, 2014). Subsequent laws and decrees continued to highlight the relevance of the LSTs, extending their contribution to all levels of schooling and delegating to them specific responsibilities related to the promotion of school integration and inclusion. As a result of the need of a broader competence portfolio, state-funded professional development courses have also been provided over the years. Currently, future LSTs first need to have acquired a teachers’ warrant for which you need a Masters’ degree and, subsequently, attend an intensive 750-hour course. As from 2019, according to the new reform (Law n. 107/2015) those wishing to become LSTs will need to have completed a five-year Masters’ course in primary education or their subject of interest, have acquired 24ECTS in pedagogy and didactics if they wish to work in lower and upper secondary schools and then follow a three-year course which is mainly based on onsite-teaching practice in the last two years.

Nevertheless, in many cases, the original intentions did not produce the hoped effects. LSTs have often been considered by other staff members as distinct and special members of staff, hence not recognised professionally (Ianes, 2015; Ianes, Demo & Zambotti, 2014). This in turn generated phenomena of micro-exclusion that increased also due to the LSTs’ feelings of inefficacy, marginalisation and frustration (Ianes, 2014). With such a professional experience driven by several self-representations (Bortolotti, 2012) and by a technical vision that hindered the collaboration with mainstream teachers, a part of Italian pedagogical research was dedicated to highlight the need for change. They advocated for equal professional recognition and teacher identity within the classroom of both the mainstream and learning support teacher. In Italy, the field of special pedagogy has been keeping the scientific debate on the role of LSTs in schools and classrooms alive2. Scholars in this field advance the hypothesis of renewing and redesigning the role of support teachers by revisiting and clarifying their roles and responsibilities and the professional rapport among staff members within the school itself (D’Alonzo, 2014; Aiello et al., 2014). According to the research results conducted in Italy, this does not seem to have been sufficient (Associazione TreeLLLLe, Caritas Italiana & Fondazione G. Agnelli, 2011; Ianes, Demo & Zambotti, 2011) and for this reason, new forms of pre-service and in-service learning support teacher education is required.

International literature on the theme has confirmed such a position. In fact, it is argued that “[t]he changes in policies at national level have made it necessary to reform teacher

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2 Evidence of this ongoing debate is the special issue of the Italian Journal of Special Education for Inclusion (2014) of the Italian Association of Special Pedagogy
education programmes so that pre-service teachers are adequately prepared to teach children with disabilities effectively in regular classrooms” (Sharma, 2012, p. 54). Moreover, this training is to be constructed on the basis of the available evidence and interpretations of research conducted on intentions and the interconnections between this antecedent and behavioural action (Aiello, Sharma & Sibilio, 2016b). As suggested by Sharma (2012, p. 54):

“Incorporating content related to teaching of students with special needs in teacher education programs appears to be a step in the right direction. However, the question remains whether changing teacher education curricula will adequately prepare pre-service teachers to teach effectively in inclusive classrooms. One way of determining whether pre-service teachers are ready to teach students with special learning needs alongside their peers is by understanding their attitudes to and concerns about inclusion (Forlin & Chambers, 2011; Chong, Forlin & Au, 2007) and examining their confidence levels (Forlin & Chambers, 2011)’.

Italian research on the perceptions of prospective teachers (Mura, 2014; Mura & Zurru, 2016) has highlighted the extent to which teacher education courses that include special pedagogy and didactics have had “a heuristic value that led them to 're-read' both their own professional competencies as well as the responsibilities of the school system, to employ qualitatively meaningful inclusive processes” (Mura, 2014, p. 188, authors' translation). Therefore, once the individual medical model has been overcome, the quality of inclusion seems to depend on a type of teacher education that is based on in-depth:

- knowledge of the disciplines to be taught and on general pedagogy and didactics;
- awareness of the main topics of special didactics and pedagogy.

with the aim of fading away teachers’ concerns, fostering self-percepts of efficacy and enhancing positive attitudes towards inclusion.

Hence, for a truly reformed education system, all teachers should be equipped with enough knowledge on special pedagogy and didactics, skills to act inclusively, as well as have the right values and attitude towards inclusive education. This is sustained in both international literature (Avramidis & Norwich, 2002; Chong, Forlin & Au, 2007; Eadsne, 2010; Forlin & Chambers, 2011; Sharma, 2012) and studies focusing on the Italian educational system (Aiello et al., 2014; Ianes et al., 2011). This is also completely in line with the latest efforts made on a European level in defining the competency profile of inclusive teachers “to identify the essential skills, knowledge and understanding, attitudes and values needed by everyone entering the teaching profession, regardless of the subject, specialism or age range they will teach or the type of school they will work in” (Eadsne, 2012, p. 6).

2. Theoretical framework: the theory of planned behaviour and teaching

In recent years, the focus on action in Italian research in didactics has stimulated a reflection on the mechanisms that orient action towards educational and inclusive objectives (Aiello et al., 2016b). As far as teacher education is concerned, this has given rise to further in-depth research on the variables involved during teaching, especially on implicit dimensions such as attitudes, concerns and sentiments that play a fundamental role in inclusive teaching practices (Forlin, Earle, Loreman & Sharma, 2011). Most of the studies aimed at bringing to light the hidden aspect of teaching have been supported by the shared idea that action is always controlled by intentions, though not all intentions are necessarily transformed into
action (Ajzen, 1985; 1988; 1991; Berthoz, 1997; 2003; 2012; Fishbein, 2009; Fishbein & Yzer, 2003). This thought is at the basis of some theories developed in the field of social psychology, centred on the causal relationships that link beliefs, attitudes, and intentions to actions. Particular reference is made to the Theory of Planned Behaviour (Ajzen, 1988; 1991) that has been guiding recent studies on this issue (Armitage & Conner, 2001; Hecht, Aiello, Pace & Sibilio, 2017; MacFarlane & Marks Woolfson, 2013; Pace & Aiello, 2016; Sharma, Aiello, Pace, Round & Subban, 2017; Sharma & Jacobs, 2016; Sharma & Nuttal, 2015; Theodorakis, Bagiatis & Goudas, 1995).

The TPB is a revisited model of Fishbein and Ajzen’s Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein and Ajzen, 1975) which postulates that a predictive factor of behaviour is intention towards a behaviour, which exercises direct and primary action towards a specific conduct. This in turn is determined by personal attitudes, i.e. the attitude that an individual has to engage or not in a specific behaviour and the subjective norms. The subjective norms are referred to as the influence that other people's opinions exert on individual choices: “Generally speaking, people intend to perform a behaviour when they evaluate it positively and when they believe that important others think they should perform it” (Ajzen, 1985, p. 12). Subsequently, the model proposed has been modified, partly involving the studies on self-efficacy conducted at the time by Albert Bandura (1989; 1997). The novel addition was the introduction of Perceived Behavioural Control, that is, a self-assessment of the possibility to have resources and/or opportunities needed to carry out a specific behaviour that influences the choice of the course of actions to be taken, the amount of commitment invested, and the level of perseverance while facing failures.

3. Research aim and hypothesis

Based on this premise, the research presented in this paper aimed at gathering information about the possible impact of a university teacher education course for future LSTs on the variables that influence intentional behaviour aimed at fostering school inclusion. In this study, it was hypothesised that future LSTs with lower degree of concerns, higher level of teaching efficacy, and favourable attitudes are likelier to have positive intentions to teach in inclusive classrooms.

The three variables measured were (attitudes, perceived competence and intentions) out of four key aspects of the Theory of Planned Behaviour to determine Italian learning support teachers’ intentions to teach in inclusive classrooms. Since it was not possible to measure the subjective norm aspect, the future LSTs’ concerns about inclusion was used as a proxy indicator of their subjective norm.

4. Methodology

4.1. Participants

On the basis of TPB theory and in line with recent research conducted on this theme, the present study collected data on the concerns, attitudes towards inclusion, and on self-percepts of efficacy of future learning support teachers in order to predict their intention to implement inclusive practices. The data was gathered before and after a training course
leading to the acquisition of the warrant to work as learning support teachers in nursery, primary, lower or upper secondary schools, which was held at the University of Salerno, Italy. This course was divided into different modules totalling 750 hours composed of lectures, tutorials, workshops, on-site teaching practice and tutorials. Among the various content areas taught, 157.5 hours are dedicated to special and inclusive didactics and pedagogy. The number of hours allocated to workshops account for 180, whereas another 150 hours are assigned to on-site practice.

4.2. Research instruments

For data collection, a 5-part questionnaire was administered at the beginning and the end of the course, guaranteeing anonymity in both phases. These paper-and-pencil self-report questionnaires were used to measure the extent to which the teacher education course has contributed to the promotion of intentions to act inclusively among the course participants. The first four sections were divided according to the variables being investigated, namely attitudes (Attitudes towards Inclusion Scale, Sharma & Jacobs, 2016), intentions (Intentions to Teach in Inclusive Classrooms Scale, Sharma & Jacobs, 2016), self-percepts of efficacy (Teacher Efficacy for Inclusive Practices Scale, Sharma, Loreman & Forlin, 2012) and concerns (Concerns about Inclusive Education Scale, Sharma & Desai, 2002). The fifth section collected socio-demographic data.

The Attitudes towards Inclusion Scale (AIS) (Sharma & Jacobs, 2016) includes 10 items measured on a 7-point Likert Scale whose anchors range from strongly disagree to strongly agree. The choice of the items was based on aspects commonly found in literature with regards to attitudes. This is considered a better choice than the SACIE-R (Forlin et al., 2011) scale since the way the items are worded are related to beliefs (6 items) and feelings (4 items) towards inclusive education. On the other hand, in the SACIE-R scale the items are based on a medical model.

The second measure, Intentions to Teach in Inclusive Classrooms Scale (ITICS) (Sharma & Jacobs, 2016) was developed in the same study as the AIS to conduct a comparative study involving in-service teachers from India and Australia. This scale is composed of 7 items and the Likert scale also has 7 anchors ranging from extremely likely to extremely unlikely. It investigates the teachers’ intentions to change curriculum (4 items) and to consult other stakeholders (3 items). Both the AIS and the ITICS scale have been found to be reliable tools to measure these variables.

Self-percepts of efficacy were measured using the Teacher Efficacy for Inclusive Practices scale (TEIP) (Sharma et al., 2012). This tool was specifically designed to measure three core areas of skills in order to teach effectively in inclusive classrooms. The factors that emerged from its confirmatory factor analysis are: (i) Efficacy to Use Inclusive Instruction; (ii) Efficacy in Managing Behaviour; and (iii) Efficacy in Collaboration. It includes 18 items, with 6 items measuring each of the three factors. This scale has already been used in Italy (Aiello et al., 2016a; Aiello, Pace, Dimitrov & Sibilio, 2018; Hecht et al., 2017) and was preferred to other scales, such as the Teacher Self-Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), because the items tap specifically on inclusive practices. The six-point Likert scale requires respondents to evaluate to what extent they agree or disagree with the statements proposed.

The Concerns about Inclusive Education Scale (CIES) (Sharma & Desai, 2002) investigates the teachers’ concerns regarding resources (6 items), acceptance (6 items), academic standards (5 items) and workload (4 items). These are measured on a 4-point
Likert type scale ranging from extremely concerned (4) to not at all concerned (1). Some of the items in this scale were included in the SACIE-R scale (Forlin et al., 2011) and has also been used by Sharma and Nuttal (2015) to investigate the effectiveness of a 9-week teacher education course in Australia.

4.3. Analysis strategy

Data was analysed using SPSS Statistics® and Microsoft Excel®. Following a descriptive analysis of the sample involved in this study and the calculations of mean and standard deviation, the correlations in attitudes, concerns and teaching efficacy scores were examined. A regression analysis was then undertaken to determine if change in intention scores could be predicted based on changes in the LSTs’ attitudes, concerns and efficacy scores. Hence, the constant predictor variables used were the latter three, whereas the dependent variable was intentions.

5. Results

5.1. Participants

All the course participants (N = 177) were asked to complete the questionnaire on the first and last day of the course. However, 156 responded in the pre-stage while 102 questionnaires were collected at the post stage. This drop in participation was mainly due to a considerable number of participants absent on the day of data collection and a slight drop-out rate. The course participants were teachers with varying levels of teaching experience. This paper presents the data for those who replied at both stages. Out of the 102 respondents, 93 (91%) were female, while 9 (9%) were male. The ages ranged from 26 to 55, with the majority being in the age ranges 31 to 35 years old (n = 39, 38%) and 36 to 40 years old (n = 26, 26%). The respondents whose age varied between 41 and 45 were 18 (18%), whereas 12 (12%) respondents were between 46 and 50 years old. Only 6 (6%) respondents were younger than 30, while one respondent was between 51 and 55 years old. The respondents’ teaching experience varied widely from none to 20 years. This heterogeneity is due to the minimum criteria for enrolment to the course, which was that of having a warrant to teach as mainstream teachers in primary or secondary school.

5.2. Descriptive Statistics

Initially, the mean and standard deviation for each of the four scales were calculated (Figure 1). Before starting the course, the participants already demonstrated to have positive feelings towards inclusive education. This could be attributed to the fact that all the course participants were teachers who wished to dedicate their career to support students with disability and special educational needs.

As regards their concerns, the mean values show that although teachers expressed concerns regarding the workload, academic performance and resources, these were not particularly high either.

With regards to the differences between the pre-test and the post-test, Figure 1 and Figure 2 show that there has been a rising trend for all three variables (attitudes, intentions and efficacy), whereas concerns decreased at the end of the course.
5.3. Multiple regression analysis

A multiple regression analysis was conducted on attitudes, concerns, and efficacy taken as dependent variables and using intentions as independent variables on the pretest. From the results obtained it can be concluded that there is a relation \( p = 3.53373 \times 10^{-5} \) between the independent and dependent variables, although a linear regression cannot be considered adequate \( (R = 0.48; R^2 = 0.23) \) (Figure 3).

**Regression Statistics**

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R squared</th>
<th>Adjusted R squared</th>
<th>Standard Error</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.476</td>
<td>0.227</td>
<td>0.201</td>
<td>0.419</td>
<td>94</td>
</tr>
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</table>

**Analysis of Variance**

<table>
<thead>
<tr>
<th></th>
<th>Df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
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<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>4.641</td>
<td>1.547</td>
<td>8.801</td>
<td>.000</td>
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<tr>
<td>Residual</td>
<td>90</td>
<td>15.821</td>
<td>0.176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>20.462</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Regression statistics.
To test whether this change was significative, paired T-Tests were conducted on the results from the pre-tests and the post-tests on each of the variables, as shown in Figure 5. In all four of the cases, the tests demonstrated the presence of a significative difference in the way the participants responded. Considering the trend illustrated in the graph, one can assume that this significant difference emerging from the T-Tests conducted is positive and that the course may have left a positive impact on the participants. On calculating the coefficient of variance, although there have been minor differences, they are slightly more cohesive (Figure 4 and 5). This means that the participants’ replies to the items investigating the different variables were closer to the mean.

<table>
<thead>
<tr>
<th>COEFFICIENT OF VARIANCE</th>
<th>PRE</th>
<th>POST</th>
</tr>
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<tbody>
<tr>
<td>Intention Mean</td>
<td>0.031225</td>
<td>0.021366</td>
</tr>
<tr>
<td>Attitude Mean</td>
<td>0.367892</td>
<td>0.329229</td>
</tr>
<tr>
<td>Concern Mean</td>
<td>0.218406</td>
<td>0.183816</td>
</tr>
<tr>
<td>Efficacy Mean</td>
<td>0.07765</td>
<td>0.047641</td>
</tr>
</tbody>
</table>

Figure 4. Coefficient of variance.

<table>
<thead>
<tr>
<th>T-TEST</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-post Intention Mean</td>
<td>3.44961E-08</td>
</tr>
<tr>
<td>Pre-post Attitude Mean</td>
<td>0.036511436</td>
</tr>
<tr>
<td>Pre-post Concern Mean</td>
<td>1.01396E-19</td>
</tr>
<tr>
<td>Pre-post Efficacy Mean</td>
<td>2.41608E-39</td>
</tr>
</tbody>
</table>

Figure 5. T-Test results.

In terms of correlation between the pre and post results, a significative result emerged only for attitudes (R = 0.71), showing that there is a link between the pre-test and post-test (Figure 6).

<table>
<thead>
<tr>
<th>CORRELATION</th>
<th>R</th>
</tr>
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<tbody>
<tr>
<td>Pre-post ITICS</td>
<td>0.207566183</td>
</tr>
<tr>
<td>Pre-post AIS</td>
<td>0.712798633</td>
</tr>
<tr>
<td>Pre-post CIES</td>
<td>0.37249883</td>
</tr>
<tr>
<td>Pre-post TEIP</td>
<td>0.266716467</td>
</tr>
</tbody>
</table>

Figure 6. Correlations between pre and post-tests.

6. Discussion and conclusions

This research investigated the attitudes, concerns, self-percepts of efficacy and intentions of future LSTs and the impact of a professional development course on these constructs. To date, a plethora of studies have been conducted in both developed and developing countries, providing evidence of the impact of these constructs on the successful implementation of inclusive practices. These have sometimes been explored singularly, whereas in other cases research concentrated on the relationship among the variables and their predictive value on intentional behaviour. The choice of measuring the four constructs together was influenced by recent literature in the field which affirms that attitudes alone,
or any of the other variables taken individually, are not enough to predict behaviour. Another important aspect to keep in mind is that the constructs examined do not provide a complete explanation of teacher agency and neither can they predict that the desired behaviour will be maintained over time. Other variables which have been identified include knowledge about inclusive education (Kuyini & Desai, 2007; Nketsia & Saloviita, 2013), support from other stakeholders within the school system (Ainscow, Booth & Dyson, 2004; Romero-Contreras, Garcia-Cedillo, Forlin & Lomeli-Hernández, 2013; Sharma & Desai, 2002), past work and personal experiences (Campbell, Gilmore & Cuskelly, 2003; Putman, 2012), culture and context (Malinen et al., 2013; Sharma et al., 2012), to name a few. This is also sustained by theories such as the Theory of Planned Behaviour (Ajzen, 1988; 1991), which provided the framework for this research. Thus, it was sustained that the variables investigated are strong predictors of how teachers orient their intentions to act. The scales designed for similar studies conducted internationally (Sharma & Desai, 2002; Sharma et al., 2012; Sharma & Jacobs, 2016) were used to ascertain whether and to what extent the professional development course attended by the future LSTs has contributed to increase their intentions to act in an inclusive manner throughout their daily activities.

Based on these results, it can be concluded that the participation in this professional development course positively influenced the participants’ intentions to teach in inclusive classrooms. Despite the small study sample, similar encouraging results were also reported in studies conducted internationally (Romero-Contreras et al., 2013; Savolainen, Engelbrecht, Nel & Malinen, 2012; Sharma & Nuttal, 2015; Sharma & Sokal, 2015). Hence, these research initiatives further confirm the significant role of teacher education to positively influence teachers’ attitudes and self-efficacy and reduce concerns which in turn stimulate the intentions needed to trigger inclusive practices. Nevertheless, one should keep in mind that this does not necessarily mean that teachers will automatically proceed to implement inclusive practices and sustain them over time. Longitudinal studies need to be designed in order to follow the teachers’ practices once in schools. Further, qualitative research should be integrated to complement statistical inquiry and allow in-depth reflective thinking on what teachers feel or think they would do in concrete situations and how they can practically achieve the intended goals.

References


