Developing a Teacher Training Model in Managing Student Behavior

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Abstract

A literature review on effective student behaviour management methods shows a shift from punishment to prevention and positive intervention. However, teacher trainings in these areas are proven to be insufficient as they fail to meet special needs and change in-service teachers' practices. The present study, based on effective student behaviour management methods (Positive Behaviour Support and Social Emotional Learning approaches) and evidence of successful professional training (derived from Adult Learning Theories), proposes a model of teacher training in managing student behaviour.The model consists of three complementary axes applied simultaneously: live instructional group meetings, distance learning and individual coaching sessions. The adaptation and pilot implementation of the model in a middle school in Thessaloniki-Greece are described as well as the methodological design for the evaluation of it simpact on teachers and their students. If beneficial, this model could become a stepping stone to effectively training teachers in managing student behavior in Greece and internationally.

Keywords: teacher training model, student behaviour management, in-service training, training evaluation

1. Introduction

Schools of today face huge challenges related to student misbehaviour. According to teachers from different countries and school systems, educational models and curricula, the most common and concerning student transgressions are disrespect and distraction/disruption of teaching and learning (Crawshaw, 2015; Dalgıc & Bayhan, 2014; National Centre for Education Statistics [NCES], 2017; Rescorla et al. 2007). Managing students' behaviour seems to be a key concern for teachers all over the world (Coalition for Psychology in Schools and Education [CPSE], 2006; Organisation for Economic Co-operation and Development [OECD], 2013) as it interferes with their wellbeing and self-efficacy, teaching time, students' academic achievement and school climate (Egeberg et al.2016; Levin & Nolan, 2014; Thapa et al. 2013). In addition, teachers report that student behaviour deteriorates over the years, while related courses in teacher preparation programs and proposed in-service trainings are insufficient (Bill & Melinda Gates Foundation, 2012; Cooper & Jacobs, 2011; García & Weiss, 2019; Kanavou, et al. 2020; Kaufmann & Landrum, 2013; Kourkoutas, et al. 2018; OECD, 2013).

The current paper is an attempt to designing an effective teacher training model in managing student behaviour, that will support pre-service and in-service teachers. After conducting a Greek nationwide needs analysis, regarding the characteristics of the training model, we came to the conclusion that teachers' training needs vary depending on the type of student misbehaviour, the role teachers consider to have in schools and demographic characteristics. Additionally, in-school, short-term trainings, led by qualified in-service teachers, concerning every-day problems and utilising case studies are preferred (Moutiaga, 2020). These findings are consistent with others in the literature and demonstrate that central, state-designed, universal, out-school trainings -as it is the case for many countries in the world- are ineffective (Barrera-Pedemonte, 2016; Darling-Hammond, et al. 2017; Greenberg, et al. 2014; OECD, 2019). Instead, there is a need for developing a teacher training model for student behavior management, that can be adapted to the specific needs of each school. (Admiraal, et al. 2021; Darling-Hammond, et al., 2017˙ OECD, 2019).

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2. Evidence-based Practices for Managing Student Behaviour

'Practice' is defined as an observable procedure designed to achieve a predetermined outcome. It is developed to be effective when applied to a specific population (e.g. children) and context (e.g. school) by specific groups of users (e.g. trained teachers). Each practice is framed by a conceptual theory and key mechanisms clearly defined, so that modifications and adaptations can be possible if it does not work smoothly. (Arendale, 2010; Horner, et al. 2010). Not all practices are evidence based. The definition of 'evidence base' can only be given to practices that are supported by multiple, rigorous research (e.g. research using high-quality methodology), from which causality of practice and result can be inferred and which have a significant impact on student outcomes. (Cook & Cook, 2013; Every Student Succeeds Act[ESSA], 2015; What Works Clearinghouse, 2020).

Traditionally, teachers have adopted exclusionary punitive practices to deal with their students' misbehaviour. They intuitively believed that doing so, they would prevent the recurrence of similar behaviours by themselves and other students, protecting the learning experience of classmates. However, research shows that these believes are scientifically unsupported. Punishment, on the contrary, is proven ineffective, or even harmful, for all students, especially for those with problematic behavioural patterns. Research indicates that exclusion, suspension and punishment fail to teach appropriate behaviour, because the resulting rejection exposes students to environments conductive to crime and reinforces misdemeanour by attracting attention. (Child Welfare League of America [CWLA], 2012-2016; Flannery, et al. 2012; Gazeley, 2010; Lacoe & Steinberg, 2019; Noltemeyer, et al. 2015; O'Malley & Austin, 2014).

Evidence-based effective alternatives to harsh and exclusionary discipline are defined in the literature. They use discipline to teach rather than punish students, holding them accountable for their actions while supporting them. These methods focus on prevention and early positive intervention, that establish trusting student-teacher relationships, improve student social behaviour and academic performance and prevent negative effects on peers. (Flannery, et al. 2012; Gazeley, 2010; Lacoe & Steinberg, 2019; Noltemeyer, et al. 2015). Same of the most effective of them are proven School- wide Positive Behavioural Interventions and Supports (SWPBIS) and Social Emotional Learning (SEL) (Emmer & Sabornie, 2014; Mergler, et al. 2014; Technical-Assistance-Centre PBIS, n.d).

SWPBIS is grounded in applied behaviour analysis and emphasises positive reinforcement and functional behaviour assessment. It focuses on evidence based behavioural practices that are based on instruction to expand the students' behavioural repertoire. In the same time, it promotes systematic changes that redesign the school environment while enhancing well-being and minimising problem behaviours. SWPBIS assists school staff to organise themselves in merging academic and social skills instruction and encourages the use of a preventive, gradually intensified, tiered system of support. Data-based decision making is suggested and used for problem solving. (Calderella, et al. 2011; Sugai & Horner 2010).

SEL is grounded in social learning and social cognitive theories and emphasises on explicitly teaching social-emotional and behavioural skills in contexts of supportive relationships. Specifically, children and adults learn how to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2015; Webster-Stratton, 2011).

In the present study we attempted to integrate SEL self-management approaches in a SWPBIS influenced process, in order to develop the content of a school-based teacher training model in student behaviour management, that can be tailored to the needs of each school. In order to reach this goal, the recent training model was based on evidence-based practices that are grouped in the literature as 'critical features of effective student management' (Simonsen, 2010) and include: (a) maximising structure through predictable rules development and environment design; (b) establishing expectations (rules) and teaching them in the context of routines. Reminding and prompting expectations, monitoring students' behaviour in natural context and reinforcing or correcting and then reinforcing accordingly. Finally evaluating the effect of instruction and making modifications; (c) actively engaging students in observable ways; (d) establishing a continuum of strategies to acknowledge appropriate behaviour; and (e) establishing a continuum of strategies to respond to inappropriate behaviour.

3. Teacher professional development in student behaviour management

Although research suggests positive disciplinary practices as the most effective, schools and teachers continue to use punishment when dealing with student misbehaviour, causing cyclical exclusions, that reduce student educational opportunities (Dishion & Snyder, 2016; Losen, 2015).

The disconnection between research and practice is attributed to inadequate pre-service and in-service training, since successful professional development is defined as 'structured professional learning that results in changes in teacher practices and improvements in student learning outcomes' (Darling-Hammond, et al. 2017, p. 2, see also State, et al. 2019).

A significant percentage of teachers around the world report that despite their involvement in professional development activities, they have not been helped. Therefore, they express a great need for effective education and support in student behaviour management (Darling-Hammond, et al. 2009; Gulamhussein, 2013; Moutiaga, 2020). Literature shows that teacher preparation and professional development programs are mostly state-designed, universal, out-school trainings that leave teachers' special needs uncovered. They adopt fragmentary workshop and/or seminar 'train-and-hope' approaches that are insufficient to promote sustainable changes in instructional practices. Furthermore, they usually focus on knowledge and skills improvement, asking teachers to develop a personal behaviour management style rather than translating their expertise into effective practice (Barrera-Pedemonte, 2016; CPSE, 2006; Darling-Hammond, et al. 2017; Greenberg, et al. 2014; Gulamhussein, 2013; OECD, 2019). Darling-Hammond and colleagues (2017) in an extensive literature review, identified the core elements of effective in-school professional development trainings. They should be content focused and closely related to the existing teacher needs, preferences or realities, incorporate active learning, engage teachers in collaboration, use models and modelling, provide coaching, performance feedback, reflection, expert support, and have sufficient duration, staying intensive and on-going (see also Admiraal, et al. 2021; Bluestone, et al. 2013; State, et al. 2018). Finally, literature indicates that smooth participation of the trainees is greatly facilitated if the trainer is perceived as supportive assistant rather than evaluator (Avalos, 2011; Gravani, 2012; Shi, 2017).

In order for a professional development training to be able to cover these characteristics at the same time, a combination of different training delivery strategies is required. There is a need for strategies that expose teachers to new knowledge combined with strategies that support them as they implement knowledge in their daily practice, recognising that implementation is the most difficult stage of their learning (Kinyaduka, 2017). Cooper (2009) suggests four evidence-based components for effective professional training delivery: (1) presentation of the underlying theory, (2) demonstration of strategies or skills, (3) initial practice during workshops and feedback (4) coaching and follow-up. After presenting the underlying theory, the proposed new skill or strategy should be described and demonstrated. Positive and negative examples should be provided for further understanding. A range of methods such as role-playing or simulations should be used for teachers to practice and immediate feedback should be provided. The last and most important step for the acquisition of the skill or strategy and its application in daily practice, is coaching. Teachers should apply the learned skill or strategy and coaches should monitor them and give performance feedback (praise, prompts or correction and further training) in a follow-up discussion.

An alternative to learning through knowledge transfer is the Situated Learning in a Community of Practice approach. As 'Community of Practice' [CoP] is defined a group of colleagues (e.g. teachers) who interact, collaborate and reflect in order to address a common case (e.g. their students' problem behavior), investigating their practice and coming up with appropriate approaches that deepen their knowledge (Wenger, et al. 2002). According to the Community of Practice approach, learning is a product of social process that take place in specific contexts and arises from the participants' effort to address common problems. Particular emphasis is given to practice, reflection and peer collaboration. In this way, teachers are given the opportunity to act as members of a group that produce, manage and evaluate new knowledge and achieve effective support for themselves and their students.

Based on Cooper's (2009) model, the CoP approach and adult learning principles, the delivery methods adopted for our training model consisted of three complementary axes, that were implemented simultaneously: (1) Live group-meetingsfor establishing, teaching, practising and evaluating effective evidence-based student management practices, (2) Distance Learning for deepen their knowledge and cover their further educational needs. (3) Individual Coaching sessions for achieving desired change in teacher behaviour. After each group meeting, teachers had to complete a task assigned to them and receive feedback on it at each subsequent meeting. In this way, the initial implementation of decisions taken in live-group meetings was ensured and the cooperation of colleagues was promoted.
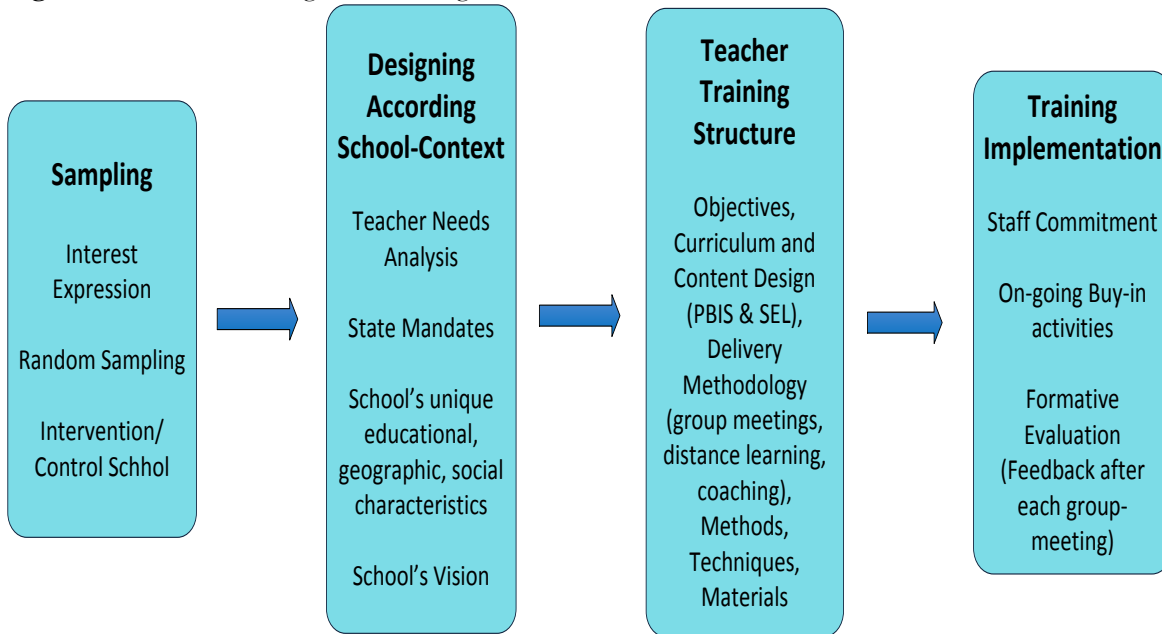
4. Method

4.1 Aim and Objectives

This study aimed to design and implement a teacher training framework that could be tailored to the needs of each school and that would provide support to teachers in managing their students' behaviour. Specifically, the objectives of the study were a) to design a training model for teachers in managing their students' behaviour, and b) to experimentally apply the training model in a real school context investigating its impact on teachers and their students

4.2 The Training model

The current teacher training model is designed to be a stepping stone for effective student behaviour management and an innovative proposal for the professional development of teachers. It is based on the belief that expected behaviour and the ways to achieve it are necessary to be taught before the trainees or their students are asked to apply it, as it is the case in all other school-subjects. In order to establish a common understanding for teaching and implementation feedback, a 'cooperation agreement' was proposed before the start of the training, that would clarify the training objectives and expectations for the participants, both the trainer and the trainees. In this way, a common understanding and collaboration basis will be created for teaching and implementation feedback. The content of the training should be adapted to the training objectives arisen from the specific needs of the school. Needs not only expressed by teachers, but also those arising from the state mandates, the vision of the school and its unique characteristics. The current training model proposes teacher focus groups, review of the school discipline legislation and non-interactive school observations to identify these needs. Content should be based on positive evidence-based practices known in the literature as 'critical features of effective student management' (Simonsen, 2010). Focusing on prevention, in contrast to punitive discipline approaches adopted sofar, in the current training model misbehaviour will be addressed early and relationships will be fostered sufficiently so that appropriate behaviour will be promoted and misdemeanour will be treated fairly (Cook, et al. 2015). A combination of delivery methods is proposed for addressing the difficulty of translating research findings and new knowledge into everyday practice. Instead of common out-school, central, one-shot, short seminars or workshops, an in-school and of sufficient duration multi-component training package is provided. It consisted of didactic training (interactive workshops), initial practice (assigned tasks and distance learning), coaching with performance feedback and procedural feedback on the content and implementation of the training, The main innovation of the current training model compared to the traditional ones was the coaching component in its delivery design. Coaching after good instruction and practice is proposed to improve and complete the learning process. After all the adoption of preventive and early intervening positive coaching strategies as well as the development of supporting systems for sustaining these strategies is all this model is about for students and teachers. Coaching would provide trainees with opportunities for implementation, personal support and reflection, gaining self-awareness about their practice, their impact on students and their further professional development needs. In this way teachers would become both learners and instructors who are guided and supported to translate their knowledge, into qualitative and effective daily practice in order to guide students as they were guided by their trainer. The logic of the model was to bring about changes in teachers' knowledge, practices and attitudes through professional learning, so that they change their behaviour at school and therefore the school policies they influence. This in turn will cause changes in student behaviour and learning achievement. Therefore, for the implementation part of the training, in addition to the aforementioned 'cooperation agreement' which ensures the initial commitment of the staff to the training, buy in activities and formative evaluation were carried out to ensure commitment until the end of the training (see Figure 1).

Figure 1: Teacher Training Model Design

Sampling	Designing According School-Context	Teacher Training Structure	Training Implementation
Interest Expression Random Sampling Intervention/ Control Schhol	Teacher Needs Analysis State Mandates School's unique educational, geographic, social characteristics School's Vision	Objectives, Curriculum and Content Design (PBIS & SEL), Delivery Methodology (group meetings, distance learning, coaching), Methods, Techniques, Materials	Staff Commitment On-going Buy-in activities Formative Evaluation (Feedback after each group-meeting)

4.3. Pilot implementation of the Training Model

The proposed model was applied experimentally in a public middle school in Greece, in order its value to be tested. A neighboring public middle school with quite similar characteristics was used as control school. Intervention and control schools were selected by random sampling among all middle schools in Thessaloniki-Greece that expressed interest at the invitation of the researchers. The training model was tailored to the needs of the intervention school, after examining the school's vision, the expressed training needs of the teachers, the current state mandates and the unique characteristics of the school. A focus group was conducted to explore the school vision and the teacher training needs. It was found that the most annoying student behaviors for teachers were disruption, destruction and disrespect. The role of the teachers was considered multidimensional, because as they stated they should not only teach all students and create a safe learning environment, but also socially influence them by supporting their behaviour and emotional development. The school's vision was shaped accordingly. It was the academic excellence of students and the promotion of their behavioral and emotional development. The expressed training needs, included: (a) the establishment and implementation of a 'School-Operating Regulation' based on the recent state mandates according to which teachers should reduce punishment and implement alternative discipline strategies which will improve the school climate (Greek-Government Gazette 120/23-1-2018). (b) the adoption of effective strategies in managing students' behavior. (c) the formulation of a misbehavior dealing methodology, (d) the improvement of student behavior and academic performance in the long term.

The unique school characteristics were explored by monitoring school activities for two days without active interaction with teachers and students. The intervention school was an urban school in which teachers did not have free time to attend the training during the school day, nor did they want to attend afterschool. They believed that their students knew how to behave properly and that it was not their job to teach behavior. In addition, it was observed that only 10% of students' behaviours attracted teachers' attention, and in fact in an inconsistent manner. An unequal distribution of students' academic performance was observed. Few had excellent performance, some mediocre and many below average. In terms of behavior, many students exhibited mildly disruptive behavior causing destruction that hindered learning and led to confrontations with teachers, escalation and deterioration of teacher-student relationships. Finally, some parents tried to intervene in the way teachers taught and educated students.

4.4 Adapted Aim and Objectives

The objectives that emerged after tailoring the training model to the needs of the intervention school, were i. to increase teachers' use of positive student management skills and guide them in developing a student management methodology, ii. to improve teachers' self-efficacy and the perceived school climate for both teachers and students, iii. to improve student behaviour and academic performance and iv. to maintain beneficial effects in the long term

4.5. Participants

The individuals participating to the training were the principals and teachers of the intervention and control schools respectively. 23 teachers and the principal from the intervention school and 19 teachers and the principal from the control school expressed interest to participate in the research. The most of them were women approaching their late forties, married with some extra studies and previous training in student management, with approximately 20 years of service. Teacher demographic and educational characteristics were equivalent for the two schools and are presented in Table 1.

Table 1: Descriptive Characteristics of the Participants

Characteristics	Intervention group (N=24)	Control group (N=20)
Sex		
Male	7	10
Female	17	10
Age(average)	48	50
Marital status		
Married	16	13
Unmarried	5	4
Widowed, Divorced	3	3
Specialty		
Science	9	6
Language/Religion	10	10
Technology/Law	2	1
Art/Gymnastics	3	3
Years of service(average)	19	22
Extra Studies		
No	12	12
Master	10	7
PhD	2	1
Previous training in students' management		
Yes	10	8
No	14	12

4.6. Procedure

After selecting the experimental and control schools and after adapting the training model to the needs of the experimental school (examination of the legislation on discipline in Greek schools, study of notes gathered from the teachers' focus group and the non-interactive school observations, coordinating meeting before the start of the training to clarify the school vision and define the training contract) the training was implemented. A complex delivery method consisting of three complementary axes implemented simultaneously was used: live group-meetings, distance learning and individual coaching sessions. After each live group-meeting participants had to complete a task assigned to them, on which they discussed and reflected at the next live group meeting. The content and delivery strategies of the program were slightly modified during the training, following feedback from the trainees after each live group meeting. A complete view of the training structure is provided in Table 2.

Table 2: The Adapted Teacher Training Structure

	Live group-meetings	Assigned Tasks	Distance education	Individual coaching	
1st	-Defining school Expectations - Introducing data collection/processing for data-based decision making and problem-solving	-Developing the School Operating Regulation and subsequent school-setting rules (posting them) - Collecting data from the yard	Digital folder with learning material to cover further educational needs	a) practicing skills presented in group-meetings b) meeting teachers' special needs	
2nd	- Developing and practicing teaching protocols for expectations and routines and guiding students to follow them - Practicing ways for building/maintaining positive teacher-student relationship	-Implementing Protocols for teaching Expectations/Routines - Guiding Students to follow Expectations/Routines - Collecting data			
3rd	-Assessing student behavior (using Functional BehaviorAssessment-FBA) - Sharing managing responsibilities	-Implementing Functional Behavior Assessment-FBA -Compiling list of principal and teacher responsibilities when dealing with student behavior			
4th	- Developing/applying procedures for encouraging/discouraging behaviors while strengthening emotional bonds - Practicing ways of self/mutual-support and parent positive approach	-Implementing universal support practices (Antecedent/Behavior/Consequences) - Collecting/Processing relevant data - implementing parent-approaching practices			
5th	- Providing/applying procedures for teacher peer work (Community of Practice) for student universal support, parent engagement and data collection/processing	-Implementing common procedures for student support, parent engagement and data collection/processing			Teachers CoP development
6th	Providing students additional support	- Implementing i.student selection procedures ii. additional support to students iii. procedures for parent engagement in additional support			
7th	- Providing students intensive support	-Implementing i.student selection procedures ii. intensive support to students iii. procedures for parent engagement in intensive support			
8th	Summary, conclusions, closing				

The contents of each of the three complementary axes is described below.

a) Live group-meetings: Eight four-hour workshops were held at the school over a six-month period. The first was theoretically focused and took place before the start of the school year, while the others were practical and took place once a month until the end of the first semester.The group-meetings aimed to provide teachers with knowledge and opportunities for practical use of positive social-emotional student management strategies. A further aim was to guide trainees in developing a Community of Practice at school, which will be able to combine positive strategies and develop/implement a student management methodology based on problem-solving after data-based decision-making. Presentation (lecture, power-point, video), as well as participatory (role plays, simulations), exploratory (projects) and application (case studies) methods were used.

In the first group-meeting information was provided on the underlying theoretical base of the training (PBIS and SEL) and on research findings confirming the effectiveness of the proposed practices. Emphasis was given on setting simple, clear school expectations that would apply to all participants constituting a common language for the whole school.

A working procedure was proposed to define or redefine the school expectations and after modifications by the trainees, applied. Finally, the logic of data collection and processing for data-based decision making to solve arisen problems was introduced.

In the second group-meeting protocols for teaching school expectations and related routines were developed. Expectations or routines were identified and demonstrated while their rationale was given. A range of positive and negative examples, along with activities for practicing and prompting the new behaviour were provided. Finally, ways to assess student progress and modify the teaching protocol, if necessary, were described. Trainees practiced in role plays the application of the protocols as well as the process of guiding students to follow expectations and routines using universal screening, prompts, encouragement, physical arrangement, progress monitoring, strategies for encouraging/limiting/discouraging behaviors and creating opportunities to respond. The critical role of positive teacher-student relationship was emphasized and ways of building and maintaining it were provided and implemented.

During the third group-meeting, detailed information was provided about the theory and research findings on the logic of tiered student support adopted by the current training. It was emphasized that successful implementation of tiered student support requires teachers to be able to evaluate their students' behavior and share behavior management responsibilities for saving energy and time. Thus, Functional Behavior Assessment was introduced and decisions were made regarding the responsibilities of teachers and the principal for dealing with student behavior.

In the fourth group-meeting, positive evidence-based behaviour management practices were presented. They were grouped into those that prevent problem behaviour, those that are applied in conjunction with it and can stop it, and those that are applied after the behaviour, preventing its escalation. The importance of teaching expectations and reinforcing them as well as supportive teacher-student relationships were emphasised for successful behaviour management. In addition, procedures were developed to encourage expected behaviour and discourage misbehaviour, while strengthening emotional bonds. Ways of self-support and support to colleagues, as well as ways of positive approach of parents were proposed and implemented.

The fifth group-meeting was dedicated to upgrading the existing cooperation of the school community members, into a Community of Practice. The active school Community of Practice undertook the responsibility to develop, based on the current training of its members, an action plan (methodology) to address misbehavior at school, to ensure its implementation and to make changes until it becomes effective. In this way workable decisions on student support, parent approaching and data collection and processing were made.

In the sixth group meeting, ways of selecting students that are considered non-responsive to universal interventions and need additional support were suggested. The Community of Practice selected students, made decisions about their additional support (e.g. more specific, intensive and relationship-building interventions) and encouraged teachers to practice through role-play before applying them to the students.

In the seventh group meeting, ways of selecting students that are considered non-responsive to universal and targeted interventions were proposed. The Community of Practice decided which students would receive intensive support and provided for each of them an individualised support plan called 'support from my favourite teacher'[i]. Trainees were encouraged to practice implementing the plan through role play before applying it to the student.

Finally in the eighth group meeting the training program was summarised and its main elements were presented: a. defining and teaching expectations, b. universal screening and progress monitoring on a regular basis, c. early intervention using evidence-based strategies, d. building teacher-student relationships while responding to appropriate/inappropriate behaviours, e. data-based decision making for problem solving and universal implementation, f. sharing management responsibilities, g. team based leadership -CoP with administrative support-, h. student tiered support after parent/guardian and school cooperation. Opportunities for further education and coaching were offered after request and the group meetings ended. The content, training methods, techniques, material and evaluation of the live group meetings are presented in Table 3.

Table 3: Content, methods, material, evaluation of the Live-group meetings

SN	Content	Hours	Training methods/techniques	Training material	Evaluation
1st	a. Providing information about the theoretical base of the training b. Highlighting importance of setting clear school expectations c. Defining school Expectations d. Introducing data collection/processing for data-based decision making and problem-solving	4	a.Lecture, demonstration b.Role play, buzz groups, discussion, reflection c.Buzz groups, discussion, questions and answers d.Data collection/ processing game	a.Power point b.Cards with roles, paper/pen c.Paper/pen d.School map, colored stickers, pen	a. Evaluation sheet: fill in the gaps (PBIS, SEL) b,c.Evaluation sheet: The process of defining school expectations and communicating them to parents d. Evaluation sheet: the easiest way for us to collect/process data
2nd	a.Developing and practicing teaching protocols for expectations and routines b. Guiding students to follow learned expectations and routines c. Practicing ways for building/maintaining positive teacher-student relationship	4	a.Lecture, demonstration, buzz groups, discussion, reflection b.Questions/answers, simulation, reflection c.Buzz groups, discussion, questions and answers, simulation, reflection	a.Powerpoint,video, paper/pen b.Video, paper/pen c.Cards with teacher-student relationship-building tips	a,b. Evaluation sheet: our school protocol for teaching expectations/ routines and the key evidence-based principles for managing students c. Evaluation sheet: my personal way to build/ maintain positive teacher-student relationships
3rd	Providing information about student's tiered support (prerequisite: Teachers i. assess student behavior (Functional BehaviorAssessment-FBA), ii. share managing responsibilities)	4	Lecture, demonstration, case study, buzz groups, discussion, reflection	Power point, The Target Behaviour Questionnaire	Evaluation sheets: -fill in the triangle -assess the student behavior -complete the list of management responsibilities for principal and staff
4th	a. Practicing positive management strategies that cultivate relationships b. Developing/applying procedures for encouraging/discouraging behaviors while strengthening emotional bonds c. Practicing ways of self/mutual-support and parents' positive approach	4	a.Lecture, demonstration, role play, buzz groups, discussion/reflection b.Buzz groups, discussion, reflection c.Buzz groups, discussion, brainstorming, role playing, reflection	a.Power point, video, paper/pen b.Video, paper/pen c.Cards with roles, paper/pen	a, b. Evaluation sheet: -powerful strategies and routines for dealing with students -commonly agreed procedures for encouraging and discouraging behaviors c.Evaluation sheet: effective ways of self/mutual-support and parents' approach
5th	Practicing teacher peer work (Community of Practice) for: i. student universal support (FBA and data-based decision making for problem solving), ii. parents' engagement and iii. data collection-processing	4	Lecture, demonstration, case study, role playing, buzz groups, brainstorming, discussion, reflection	Power point, paper/pen, FBA procedure tool, cards with roles	Evaluation sheet: Community of Practice work plans for student support, parents' engagement and data collection-processing
6th	a.Selecting students to provide additional support b. Providing/practicing additional support (more specific, intensive, relationship-building, interventions) c. Providing/practicing procedures for parents' engagement in additional support	4	a.Lecture, demonstration, brainstorming, discussion, reflection b, c. Simulation, buzz groups, brainstorming, discussion, reflection	a.Power point, paper/pen b, c Paper/pen	a, b, c. Community of Practice decision on: -which students will receive additional support and how -parents' engagement in additional support

7th	a.Selecting students to provide intensive support b.Providing/practicing intensive ('favorite teacher') support c. Providing/practicing procedures for parents' engagement in intensive support	4	a.Lecture, demonstration, brainstorming, discussion, reflection b, c. Simulation, buzz groups, brainstorming, discussion, reflection	a.Power point, paper/pen b, c.Paper/pen	a, b, c. Community of Practice decision on: -which students will receive intensive support and how -parents' engagement in intensive support
8th	Summary, conclusions, closing	4	Lecture, demonstration, buzz groups, discussion, reflection.	Power point, paper/pen	Evaluation sheet: Key principles for managing student behavior

b) Distance learning: during the training participants had access to a shared digital folder with learning material to expand their knowledge and meet their further educational needs. For example, after the first group meeting, articles with additional information about PBIS and SEL were uploaded, as well as articles on the importance of student and parent involvement in setting school rules and articles on effective data-based problem solving.

c) Individual coaching: after each group-meeting, a personal coaching-session was scheduled for each participant, aiming to support and motivate in real school conditions, skills presented in the group meeting and to meet the specific needs of each participant. A complete coaching session included i. collaborative planning of an intervention inspired by the material presented at the previous group meeting, ii. demonstration of the intervention in the daily practice, by the coach and observation by the trainee or joint intervention by both the coach and the trainee or demonstration by the trainee and observation by the coach and iii. Performance feedback. Some trainees refused to have the coach present when implementing in real school life conditions, because they were not comfortable with it. After planning the intervention with the coach, they implemented it themselves and discussed about it with the coach to receive feedback.

The opportunities for reflection, collaboration and practice offered by live group meetings, combined with the enrichment of knowledge from the digital folder and the application of skills during the performance of assigned tasks and individual coaching sessions, led to the development of a behaviour management methodology consisting of teacher collaboration, positive tiered student support, parental involvement and data based decision-making. The methodology was coordinated by the Community of Practice, developed during the training.

The validity of the training application was ensured by receiving feedback from the trainees after each group and individual meeting. The validity of the processing and the reliability of the group and individual discussions were ensured by summarising the recordings and presenting them during the feedback meetings.

4.7.Data collection

In order to evaluate the effectiveness of the pilot implementation of the training model, a convergent parallel mixed methods research design was used (Creswell 2014).

Mixed methods have been recognised as a reliable methodological choice because they can compensate for the weaknesses associated with quantitative and qualitative designs when used separately. In the present study, both quantitative and qualitative data were concurrently collected, separately analyzed and finally combined to obtain a better understanding of the staff perceptions about the proposed behavior management training, as well as its impact on teacher behavior and consequently on student behavior and academic performance. Mixed methods research is described in the literature as ideal for gaining in-depth understanding of student behavior management and discovering its true meaning (Yin, 2014).

Questionnaires for teachers and students were used to collect the quantitative data. The teacher questionnaire consisted of the three last subscales from the *Teacher Strategies Questionnaire-TSQ* (Webster-Stratton 2012, translated/validated in Greek by Leonidou and Kartasidou 2016), the *Revised School Level Environment Questionnaire-RSLEQ* (Johnson, Stevens and Zvoch 2007, translated/validated in Greek by Sotiriou and Iordanides 2014) and the *Teachers' Sense of Efficacy Scale-TSES* (Tschannen-Moran and Hoy 2001, translated/validated in Greek by Tsiggilis, Grammatikopoulos, and Koustelios 2010). For the current study thereliability for *TSQ* was a=.96 (ranging from a=.72 to a=.92 for the subscales), for *RSLEQ,* a= .91 (ranging from a=.71 to a= .81 for the subscales) and for *TSES,* a=.91 (ranging from a=.79 to a=.94 for the subscales)

The student questionnaire consisted of the "*Psychosocial Climate Scale for Students*" from the *Effective School Battery Questionnaire* (Gottfredson 1999, translated/validated in Greek by the first author). The reliability for the current study was a=.92 (ranging from a=.80 to a=.97 for the subscales).

Office Discipline References (ODR) and student grade data were extracted from the school records (e.g. the School Operation Support File, and the Student Progress Report File).
For the collection of qualitative data, an improvised semi-structured teacher interview was used that explored the topics covered by the quantitative teacher questionnaire.
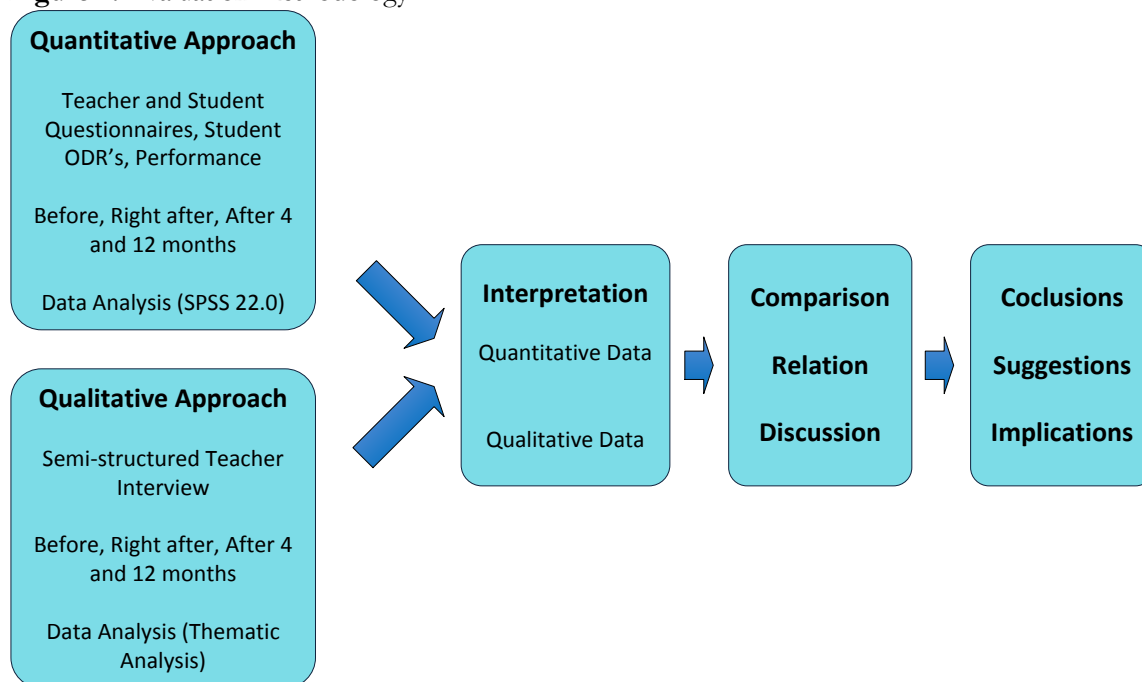
4.8.Evaluation Procedure

This longitudinal study examined the effect of a school-based teacher training model on teachers and students over a year's time period. Before the training, teachers' and students' questionnaires were distributed, semi-structured teacher interviews were conducted and ODR's as well as academic performance data were collected, from both the intervention and the control school. This process was repeated directly after the training completion to identify changes in teachers and students that could be attributed to the training. The same process was repeated two more times, after four months, at the end of the school year, and after twelve months, to investigate the effect of time on the training results.

The quantitative data were analysed using mixed Analysis of Variance. The within-subjects factor was *time* (before the training, right after the training completion, four months after the training completion, twelve months after the training completion) and the between-subjects factor was *school* (intervention, control).The normality hypothesis was visually examined with QQ-plots and Shapiro-Wilk control. Levene's test with Bonferroni correction for multiple controls was applied to define the homogeneity of variations. The condition of sphericity was checked by Mauchly's test. To examine the differences between the four time points for the two types of schools, repeated contrasts were applied with Bonferroni correction.Where normality was violated, a logarithmic transformation of the dependent variable was performed. Were sphericity was violated, Greenhouse-Geisser correction was used.

The qualitative data were analysed using the thematic analysis method, an inductive-semantic approach composed of six steps (see Braun and Clarke, 2006): i) familiarisation with data and noting initial ideas, ii) generation of initial codes by collating data relevant to each code, iii) searching for themes by collating codes relevant to each potential theme, iv) review of themes by checking how they match with coded extracts and the entire data set, v) definition and description of themes, generating a thematic map for the data, and vi) production of an analysis report, by selecting examples of excerpts to support documentation and relating the analysis with the research questions and the literature (see Figure 2)

Figure 2: Evaluation Methodology

5   Discussion

The present paper proposes a model of teacher professional training in student behavior management which is based on evidence-based building blocks regarding content and delivery method. The model was tested for its effectiveness in a random school using a neighboring school with quite same characteristics as control

school. After adapting the model to the intervention school needs, a longitudinal study was conducted examining its impact on teachers and their students. Specifically, it was investigated how the training affected the implementation of preventive and positive strategies by teachers, the degree of their cooperation with parents and colleagues, their sense of school climate and their self-efficacy. Particular emphasis was placed on exploring how changes in teacher behavior affected student behavior and sense of school climate, as well as their academic performance.

In contrast to standard teacher trainings, this one directly aimed to change teachers' behavior by providing knowledge, practice and coaching support for evidence-based practices, assuming that consequent improvements in student behavior would persuade teachers to adopt long-term the suggested practices changing their beliefs and attitudes (Guskey, 2020; Learning Forward, 2011; Zarrow, 2012). Teacher involvement and continuous participation in the training was ensured by using buy-in activities and modifying the content and delivery method of the training according to teachers' feedback (Liuet al., 2016). Evaluation was carried out using a mixture of quantitative and qualitative methods. The results will reveal whether the pilot application of the model was effective and which parts should be continued, modified or even discarded. Detailed description of the results of the pilot application, as well as proposed modifications and implications have been presented in another paper (Moutiaga, Papavassiliou-Alexiou, under review). After optimization, the current training model and its ability to adapt to the needs of each school would become the solution to the problem of effective teacher training in managing student behavior (Liu et al., 2016).

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[i] 'support from my favourite teacher': a caring teacher who intensively supports a student following the suggestions of the CoP