

Promoting Professional Development of Secondary-School Teachers in Greece: An in-school Training in managing Student Behaviour.

Sofia Moutiaga^a, Ioanna Papavassiliou-Alexiou^b

^a*Department of Educational and Social Policy, University of Macedonia, Thessaloniki, Greece* moutiaga@uom.edu.gr, 

^b*Department of Educational and Social Policy, University of Macedonia, Thessaloniki, Greece,* ipapav@uom.edu.gr, 

Sofia Moutiaga studied Pedagogy at the Higher Technological Educational Institution of Thessaloniki- Greece (Bachelor Degree), Psychology at the Aristotle University of Thessaloniki- Greece (Bachelor and Postgraduate Degrees) and Adult Education at the University of Macedonia, Thessaloniki -Greece (Postgraduate Degree) where she is currently a PhD candidate. She serves as a secondary school teacher after working for ten years as a school psychologist in high schools. Her research interests focus in the fields of *Educational Psychology, Lifelong Learning and Teacher Education*. She has published articles on these topics in Greek and international scientific journals and conference proceedings. She speaks fluently English and German.

Ioanna Papavassiliou-Alexiou is an Associate Professor in Guidance and Counselling at the Department of Educational and Social Policy, University of Macedonia, Thessaloniki - Greece. She did her postgraduate and PHD studies in Guidance and Counselling at the University of Heidelberg-Germany, Faculty of Social and Behavioural Sciences (1991-1996). She was also a Visiting Research Fellow at Teachers College - Columbia University, New York (September 1995 - April 1996). During her studies she was a scholar of the Greek Scholarships Foundation (1990-1993) and of the University of Heidelberg (1994-1995). Her research interests focus in the fields of *Lifelong Guidance and Counselling, Career and Professional Development, and Vocational Inclusion of People with Disabilities and other vulnerable groups*. On these topics she has published articles in Greek and international scientific journals, conference proceedings and book chapters, while she is a member of editorial board and reviewer in international journals on career.

Abstract

The study aimed to train teachers in managing student behaviour and to investigate the impact on teachers and their students. The training was based on adult-learning and group-leading strategies (development/application) as well as Social-Emotional-Learning and School-Wide-Positive-Behaviour-Supports approaches (content). It consisted of training meetings, coaching and

distance learning and was implemented at a Thessaloniki's middle-school, using a neighbouring middle-school as control-school. Impacts' stability was checked by follow-up tests after four and twelve months accordingly. A convergent parallel mixed-methods design was used for data-analysis. After training completion and four months later, an effective behaviour-management methodology and corresponding strategies were developed in the intervention-school. Teachers reported increased professional self-efficacy, teachers and students evaluated their school climate more positively and students' ODRs decreased, compared to control school. Benefits decreased a year later remaining however increased compared to control school. Ways to maintain beneficial results and a sustainable in-service teacher professional development policy are discussed.

Keywords: *teachers' professional development, students' behaviour management, in-school training*

Introduction

Schools of today face huge challenges related to student misbehaviour. According to teachers from different countries, school systems, educational models and curricula, the most common and concerning student transgressions are disrespect and distraction/disruption of teaching and learning (Rescorla et al. 2007; Dalgıç and Bayhan 2014; Crawshaw, 2015; NCES 2018). Managing student behaviour seems to be a key concern, as it is identified as one of the top challenges faced by teachers in 61 countries (CPSE 2006; OECD 2013) and interferes with school climate, teaching time, student academic achievement, teacher's self-efficacy and wellbeing (Thapa et al. 2013; Levin and Nolan 2014; Egeberg, McConney, and Price 2016). Recently student behaviour in Greek schools deteriorated, while related courses in teacher-preparation-programs and proposed in-service trainings are characterized as insufficient (Kourkoutas, Stavrou, and Plexousakis 2018; OECD 2013; Kanavou et al. 2020). International surveys also confirm this ascertainment (Cooper and Jacobs, 2011; Kaufmann and Landrum 2013) adding that teachers prefer in-school, short-term trainings, that are led by qualified in-service teachers, concern every-day problems and utilize case studies (Darling-Hammond, Hyler, & Gardner, 2017; Moutiaga, 2020; OECD, 2019).

This article discusses the content, methods and procedures of an in-school teachers' training in effective managing student behaviour that can be tailored to the needs of each school. The study presented here provides evidence that teachers, if properly trained and supported, adopt positive behaviour management practices that help students improve their behaviour

Student Behaviour Management Approaches

Traditionally, teachers adopt exclusionary punitive approaches to deal with students' misdemeanour, because they intuitively believe that doing so, they deter similar behaviour by other students, prevent recurrence of problematic behaviour and protect the learning experience of classmates. However, research shows not only that these beliefs are unfounded, but also that punishment is ineffective, or even harmful, for at-risk students' problematic behavioural patterns. Exclusion, suspension and punishment reject students by exposing them to environments conducive to crime, reinforce misbehaviour by attracting attention and fail to teach proper behaviour. Instead there are alternative research-based disciplinary approaches that focus on prevention and early positive intervention, which establish trusting student-teacher relationships and improve student social behaviour and academic performance (Gazeley 2010; Flannery, Frank, and Kato 2012; Lacoé and Steinberg, 2018; Noltemeyer, Ward, and Mcloughlin, 2015). Two of the most effective of them are proven School-wide Positive Behaviour Interventions and Supports (SWPBIS) and Social-Emotional Learning (SEL) (Emmer and Sabornie 2014; Mergler, Vargas, and Caldwell 2014; Technical-Assistance-Centre PBIS n.d). SWPBIS is grounded in applied behaviour analysis and emphasizes positive reinforcement and functional behaviour assessment. It focuses on instruction, using evidence based behavioural practices, to expand students' behavioural repertoire and promotes systematic changes to redesign school environments that enhance wellbeing while

minimizing problematic behaviour. SWPBIS assists school staff to organize themselves in merging academic and social skills instruction, encourages them to use a preventive gradually intensified tiered system of support and suggests data-based decision making (Calderella et al. 2002; Sugai and Horner 2010). SEL is grounded in social learning and social cognitive theories and emphasizes 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 (Webster-Stratton 2011; Casel 2015). 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 in student behaviour management, that can be tailored to the needs of each school.

Features of Teacher Training in Managing Student Behaviour

A significant part of teachers around the world expresses a high need for training and support in student management. 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 their personal behaviour management style rather than translating their expertise into effective practice (CPSE 2006; TALIS 2013; Greenberg, Putman, and Walsh 2014; Darling-Hammond, Hyler, and Garner 2017, OECD 2019). According to the literature, in-school professional development trainings can be successful and sustainable, only if they are embedded in the needs, preferences, organisation and culture of each school. They should be content focused and closely

related to the existing teacher realities, incorporate active learning, engage teachers in collaboration, use modelling, provide expert coaching, include opportunities for feedback and have sufficient duration. The trainer also plays a key role. He should be perceived as supportive assistant rather than as evaluator (Admiraal et al. 2019; Avalos 2011; Darling-Hammond et al. 2017; Gravani 2012; Shi 2017). Based on these features of effective teacher training and using group-leading strategies, drawing from Person-Centred, Group-Forming and Community of Practice theories¹, the authors designed and implemented the current teacher training. As research identified teachers' learning to have a key role in improving student behaviour by changing their learning environment (Koellner and Jacobs 2015; Vermunt 2014), the main aim of this study was to design, implement and evaluate a teachers' in-school training in managing student misbehaviour and to study its impact on teachers and their students.

The Training

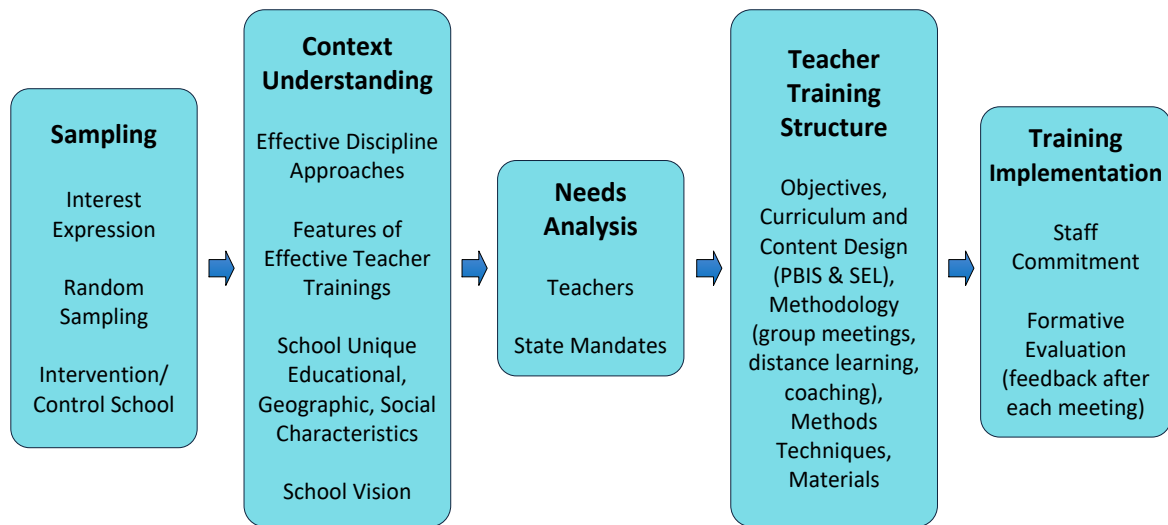
The current teacher training was designed to be a stepping stone for the effective student behaviour management in Greece and an innovative proposal for the professional development of teachers. In contrast to punitive discipline approaches adopted by now, its content was based on PBIS and SEL, two promising evidence-based, universal and positive approaches, that aim both to prevent misbehaviour by addressing it early and to foster relationships that promote appropriate behaviour and fair responses to student misdemeanour (Cook et al., 2015). This training addresses teacher professional learning needs in innovative ways, proposing instead of common out-school, central, one-shot seminars or workshops, an in-school, according needs and of sufficient duration training,

¹ For more information: Rogers 1986, Tuckman and Jensen 1977, Wenger, McDermott, and Snyder 2002

that combines coaching to already used group-meetings and distance learning. The coaching component provides teacher-trainees opportunities for personal support, feedback and reflection, gaining self-awareness about their practice, their impact on students and their further professional development needs. This way they became both learners and teachers who are guided and supported to translate their knowledge, into qualitative and effective daily practice.

Intervention and control schools were selected after random sampling among schools that expressed interest. The training was tailored to the intervention-school needs, considering state mandates and school characteristics/specific vision, along with the above-mentioned effective teacher-training features and discipline approaches. It was implemented after ensuring staff commitment by a cooperation agreement, buy-in activities and modifications indicated by formative evaluation (see Figure 1).

Figure 1. Teacher Training Design



A complex delivery method was used, consisting of three complementary axes implemented simultaneously: 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 (see Table 1)

Table 1. Training Structure

No	Live group-meetings	Assigned Tasks	Distance education	Individual coaching	
1	-Defining school Expectations -Introducing data collection/processing	-Developing the School-Operating Regulation -Collecting data from schoolyard	Digital folder with learning material to cover further educational needs	a) practicing skills presented in group-meetings b) meeting teachers' special needs	Teachers Community of Practice development
2	-Developing and practicing teaching protocols for expectations/routines while building/maintaining positive teacher-student relationship	-Implementing protocols for teaching expectations/routines and collecting data			
3	-Assessing student behaviour -Separating managing responsibilities	-Implementing Functional Behaviour Assessment-FBA -Compiling list of principal and teacher behaviour management responsibilities			
4	-Developing/applying support practices for students, teachers and parents	-Implementing support practices for students, teachers, parents and collecting/processing data			
5	-Providing/applying procedures for teacher peer work, student universal support, parental commitment and data collection/processing	-Implementing shared procedures for student support, parental commitment and data collection/processing			
6	-Providing students additional support	-Implementing shared procedures for student selection/additional support and parental commitment in additional support			
7	-Providing students intensive support	-Implementing shared procedures for student selection/intensive support and parental commitment in intensive support			

8	Summary, conclusions, closing				
---	-------------------------------	--	--	--	--

a) Live group-meetings: Eight four-hour workshops were held in-school over a six months period. The first was theoretically focused and took place before the beginning 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 (CoP) at school, which by combining the above strategies will develop an appropriate student management methodology and effective collaboration with colleagues and parents. In order to develop, implement, evaluate and improve this methodology, the CoP was guided to work through a data-driven decision-making and problem-solving process. 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 ineffectiveness of punishment and effectiveness of the proposed positive 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 the school expectations and after modifications by the trainees, applied. Finally, the logic of data collection and processing for databased decision making to solve arisen problems was introduced.

In the second group-meeting protocols for teaching school expectations and related routines were developed. Expectations/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, by creating opportunities to respond and using universal screening, prompts, encouragement, physical arrangement, progress monitoring and strategies for encouraging/limiting/discouraging behaviours. The critical role of positive teacher-student relationship was emphasised and ways of building and maintaining it were provided and implemented.

During the third group-meeting, detailed information was provided on the theory and research findings regarding the logic of tiered student support adopted by the current training. It was emphasised that successful implementation of tiered student support requires teachers' ability to evaluate students' behaviour and separation of behaviour management responsibilities for saving energy and time. Thus, Functional Behaviour Assessment was introduced and decisions were made regarding the responsibilities of teachers and principals for dealing with student behaviour.

In the fourth group-meeting, positive behavior management practices already used by teachers (coaching, proactive, social-emotional, limit-setting) 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 their reinforcement, as well as supportive teacher-student relationships for successful behaviour management were emphasised. 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 with parents were proposed and implemented.

The fifth group-meeting was dedicated to upgrading the staff cooperation achieved by the training, to a CoP. The active school CoP combining evidence-based strategies presented in the training, developed an action plan (methodology) to address misbehaviour at school and discussed ways to evaluate and optimise it, as well as parental involvement in its implementation. In this way decisions were made regarding teacher collaboration, student support, parental commitment and data collection/processing.

In the sixth group meeting, ways of selecting students that are considered non-responsive to universal interventions and need additional support were suggested. The CoP 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 students.

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

Finally in the eighth group meeting the training-workshops were summarised and their 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. separating management responsibilities, g. team based leadership -CoP with administrative support-, h. student tiered support after parent/guardian and school cooperation. Opportunities for further training and coaching were offered upon request and group-meetings were completed.

b) Distance learning: during the group-meetings participants had access to a shared digital folder with learning material to meet their further educational needs.

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. Coaching-sessions included intervention planning, implementation observation or joint implementation and performance feedback.

The reflection, collaboration and feedback opportunities provided by the training combined with the trainer's support, led to the development of a teacher CoP, that formed a student behaviour management methodology modified after data processing. The methodology consisted of teacher collaboration/mutual support, student tiered positive support and parent engagement.

The content and construct validity of the training was ensured by literature review, the application validity by feedback after each group and individual meeting. The editing validity and reliability of the group and individual discussions were ensured by the summary of the recordings and their presentation during feedback meetings.

Method

Aim and objectives

The aim of this attempt was to train teachers in managing student behaviour and to investigate the impact on themselves and their students. For this study success was defined as the change in teachers' perceptions and practices and consequently in students' perceptions and behaviour.

Specifically, the objectives of the study were formulated as follows: a. to affect the use and sense of usefulness of targeted strategies by teachers b. to support teachers establish

a CoP, which will develop and implement a misbehaviour dealing methodology c. to improve school climate, teachers' self-efficacy, students' behaviour and academic performance and d. to maintain effects in the long term.

Participants and Data Collection

The sample included the principals and teachers of the intervention and control school respectively. The descriptive characteristics of the participants were equivalent in both schools and are presented in Table 2.

Table 2. Participants' Descriptive Characteristics

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
Engineers/Lawyers,	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

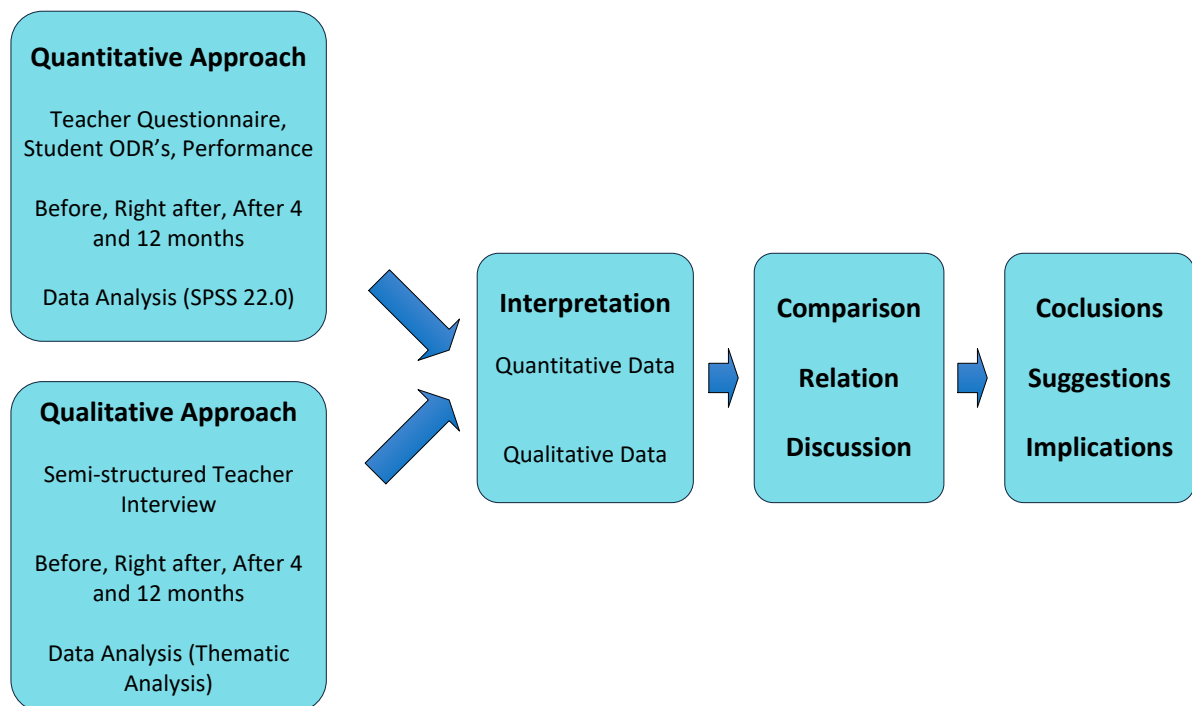
No

14

12

Training effectiveness was tested using a convergent parallel mixed-methods design (Creswell 2014), where quantitative and qualitative data were concurrently collected, separately analysed and finally combined in order to answer the research questions (see Figure 2).

Figure 2. Teacher Training Summative Evaluation



Quantitative Measures

The teacher questionnaire consisted of the three last subscales from the *Teacher Strategies Questionnaire-TSQ* (Webster-Stratton 2012, translated by the first author), 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). All instruments were used after permission from the authors.

For the current study the reliability for *TSQ* was $\alpha=.96$ (ranging from $\alpha=.72$ to $\alpha=.92$ for the subscales), for *RSLEQ*, $\alpha=.91$ (ranging from $\alpha=.71$ to $\alpha=.81$ for the subscales) and for *TSES*, $\alpha=.91$ (ranging from $\alpha=.79$ to $\alpha=.94$ 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) and was used after permission. The reliability for the current study was $\alpha=.92$ (ranging from $\alpha=.80$ to $\alpha=.97$ for the subscales).

Data about Office Discipline Referrals (ODR’s) and students’ grades were extracted from the “School-Operations Support Log” and “Students’ Progress Report” archives.

Qualitative Measures

Qualitative data were collected using teachers semi-structured interviews, that explored the topics covered by the quantitative teacher questionnaire.

Procedure and Data Analysis

This longitudinal study examined over a year’s time the effects of a teacher training on trainees and their students. Before the training, teacher and student questionnaires were distributed, teacher semi-structured interviews were conducted and ODR’s as well as academic performance data were collected, both from the intervention and the control school. Directly after the training completion, teacher and student questionnaires were redistributed, teacher semi-structured interviews were conducted and ODR’s as well as academic performance data were collected, both from the intervention and the control school. At the end of the school year -after four months- and one year later, the same procedure was repeated, to investigate the possible impact of time to the training outcomes.

The quantitative data were analysed using Friedman's ANOVA for repeated measures. Post hoc analysis was conducted with Wilcoxon signed-rank tests and Bonferroni correction. The qualitative data were analysed using the thematic analysis method. Following an inductive-semantic approach, data were organized to general and sub-themes which emerged from the interview texts (Brown and Clarke 2006).

Results

Use and sense of usefulness of behaviour management strategies

Concerning positive strategies (coaching, praise and incentives strategies, e.g. 'individual incentive programmes', proactive strategies, e.g. 'clear, positive directions', social-emotional strategies, e.g. 'teach specific social skills in circle time', limit-setting strategies, e.g. 'nonverbal signals to redirect'), repeated comparisons, showed statistically significant differences both for use in the intervention ($\chi^2(3) = 68.18, p < .001, \chi^2(3) = 67.45, p < .001, \chi^2(3) = 63.13, p < .001, \chi^2(3) = 62.83, p < .001$) and control school ($\chi^2(3) = 35.91, p < .001, \chi^2(3) = 43.20, p < .001, \chi^2(3) = 30.07, p < .001, \chi^2(3) = 15.53, p < .001$) and for usefulness in the intervention ($\chi^2(3) = 63.39, p < .001, \chi^2(3) = 68.40, p < .001, \chi^2(3) = 63.52, p < .001, \chi^2(3) = 67.57, p < .001$) and control school ($\chi^2(3) = 27.00, p < .001, \chi^2(3) = 33.26, p < .001, \chi^2(3) = 32.06, p < .001$), except for limit-setting strategies ($\chi^2(3) = 9.13, p = .153$). Post hoc comparisons showed quiet similar results: a) for the intervention school, that use and usefulness increased right after the training, stayed stable 4 months later and decreased after 12 months, remaining however higher than use and usefulness before the training, b) for the control school that use and usefulness decreased or remain stable right after the training, remained so 4 months later and decreased more after 12 months, resulting decreased compared to pre-training (see Tables 3-6).

Table 3: Means-Standard Deviations for use/usefulness of “Coaching, Praise and Incentives” Strategies

Time \ School	Intervention		Control	
	Mean(St.D)	Mean(St.D)	Mean(St.D)	Mean(St.D)
	Use	Usefulness	Use	Usefulness
Before	2.05(.35)*	2.56(.33)*	2.87(.44)*	3.12(.51)*
Right After	2.95(.43)*	3.52(.49)*	2.80(.42)	3.02(.52)
Four Months	3.20(.37)*	3.60(.44)*	2.80(.42)*	3.02(.52)
Twelve Months	2.29(.30)*	3.69(.27)*	2.69(.36)*	2.95(.47)*

Table 4: Means-Standard Deviations for use/usefulness of “Proactive” Strategies

Time \ School	Intervention		Control	
	Mean(St.D)	Mean(St.D)	Mean(St.D)	Mean(St.D)
	Use	Usefulness	Use	Usefulness
Before	2.32(.50)*	2.75(.34)*	3.61(.55)	3.60(.49)
Right After	3.70(.65)*	3.99(.38)	3.50(.53)	3.47(.39)
Four Months	3.84(.53)*	4.06(.38)*	3.50(.53)*	3.47(.39)*
Twelve Months	2.44(.39)*	2.89(.27)*	3.31(.45)*	3.32(.36)*

Table 5: Means-Standard Deviations for use/usefulness of “Social-Emotional” Strategies

Time \ School	Intervention		Control	
	Mean(St.D)	Mean(St.D)	Mean(St.D)	Mean(St.D)
	Use	Usefulness	Use	Usefulness
Before	2.19(.40)*	2.53(.31)*	3.64(.71)*	3.54(.65)*
Right After	3.37(.79)*	3.68(.69)	3.52(.69)	3.36(.56)
Four Months	3.48(.77)*	3.68(.69)*	3.53(.69)*	3.36(.56)*
Twelve Months	2.42(.32)*	2.62(.29)	3.42(.67)*	3.25(.57)*

* Statistically Significant difference with following measure

Table 6: Means-Standard Deviations for use/usefulness of “Limit-Setting” Strategies

Time \ School	Intervention		Control	
	Mean(St.D)	Mean(St.D)	Mean(St.D)	Mean(St.D)
	Use	Usefulness	Use	Usefulness
Before	2.75(.36)*	2.77(.29)*	3.49(.68)	3.45(.63)
Right After	3.52(.51)	3.61(.53)	3.46(.68)	3.37(.61)
Four Months	3.57(.45)*	3.63(.53)*	3.46(.68)	3.37(.61)
Twelve Months	2.83(.31)*	2.89(.24)*	3.41(.64)*	3.32(.59)

According to relevant qualitative data, before the training, teachers in both schools used positive strategies little, because they considered them ineffective or even aggravating the serious problems they faced in their schools. While this continued for the control school throughout all research phases, intervention school teachers changed their minds and used these strategies more frequently right after the training completion and until the end of the school year, 4 months later. As they mentioned, positive strategies when applied consistently have proved to be effective in building warm relationships with students. After a year, teachers stated that the effort and time spent using these strategies was disproportionate to their effectiveness and therefore reduced their use.

Concerning punitive strategies, repeated comparisons showed statistically significant differences both for use in the intervention ($\chi^2(3)=11.6, p=.009$) and control school ($\chi^2(3)=22.16, p<.001$) and for usefulness in the intervention ($\chi^2(3)=60.1, p<.001$) and control school ($\chi^2(3)=25.9, p<.001$). Post hoc comparisons showed for the intervention school that use remained stable right after the training completion, increased 4 months later and remained stable after 12 months reaching pre-training level while usefulness increased right after the training completion, stayed stable 4 months later, and decreased after 12 months, reaching pre-training level. For the control school use remain stable right after and 4 months after the training completion and increased after 12 months, resulting increased compared to pre-training while usefulness remained stable right after and 4

months after the training completion and increased 12 months later, remaining in pre-training level (see Table 7).

Table 7: Means-Standard Deviations for use/usefulness of “Punitive” Strategies

Time \ School	Intervention		Control	
	Mean(St.D)	Mean(St.D)	Mean(St.D)	Mean(St.D)
	Use	Usefulness	Use	Usefulness
Before	2.51(.68)	2.31(.60)*	2.71(.61)	2.86(.52)
Right After	2.27(.48)*	2.74(.65)	2.73(.57)	2.78(.53)
Four Months	2.33(.46)	2.77(.64)*	2.76(.56)*	2.78(.53)*
Twelve Months	2.58(.60)	2.26(.52)	2.85(.54)*	2.98(.43)

According to relevant qualitative data, before the training, teachers in both schools considered punitive strategies ineffective, but believed that they could be effective if they were stricter. Intervention-school teachers right after and four months after the training completion explained that they tried to replace punitive strategies because they could harm students. However, they admitted, that they resorted to punishment sometimes, because it came to them spontaneously. A year later teachers said they used punishment often because students responded well to it, but stressed that it was a temporary solution for them. Control school teachers declared at all research stages that they used punitive strategies because they had no other choice.

Methodology for dealing with student misbehaviour

Repeated comparisons showed statistically significant differences both for ‘positive approach with parents’ in the intervention ($\chi^2(3)=56.63$, $p<.001$) and control school ($\chi^2(3)=54.00$, $p<.001$) and for ‘planning-support’ student management projects in the intervention ($\chi^2(3)=53.41$, $p<.001$) and control school ($\chi^2(3)=39.69$, $p<.001$). Post hoc comparisons showed for the intervention school that use of ‘positive approach with parents’ increased right after the training, stayed stable 4 months later and decreased after

12 months, reaching pre-training levels while use of ‘planning-support’ projects increased right after the training and stayed stable 4 and 12 months later, resulting increased compared to pre-training. For the control school use of both “positive approach with parents” and ‘planning-support’ projects decreased right after the training, stayed stable 4 months later and decreased more after 12 months, resulting decreased compared to pre-training (see Table 8).

Table 8: Means-Standard Deviations for use of “Positive Approach with Parents” and “Planning-Support”

Time \ School	Intervention		Control	
	Mean(St.D) Positive Approach with Parents	Mean(St.D) Planning and Support	Mean(St.D) Positive Approach with Parents	Mean(St.D) Planning and Support
Before	1.93(.34)*	2.81(.72)*	2.94(.55)*	4.24(.67)*
Right After	2.90(.65)	4.38(1.16)	2.80(.46)	3.89(51)
Four Months	2.97(.66)*	4.42(1.12)	2.80(.46)*	3.88(48)*
Twelve Months	1.94(.27)	4.38(.88)*	2.48(.36)*	3.69(31)*

According to relevant qualitative data: intervention-school teachers before the training stated that parents wanted to dominate their work, so they tried to avoid parents. Right after the training completion and four months later, teachers stressed that they managed to turn parents' meddling into cooperation and this worked well for managing students' behaviour. A year later parent involvement was considered to create problems rather than solve them and teachers admitted that they tried to exclude parents from school-life again. Control school teachers reported in all research stages that they tried to reach out parents, but parents were indifferent. Regarding planning and support, teachers in both schools stated before the training, that, unless ordered by the Ministry of Education, they do not plan interventions for teachers and students, as this would be in vain due to constant changes in school staff and Ministry's instructions. Intervention school teachers reported that during the training they formed a CoP. In this way, they were able to design,

implement and develop a behaviour management methodology based on teacher collaboration and mutual support, parent involvement, tiered student support and data collection/processing. Four months later, intervention school teachers admitted that they refused to devote their limited time to CoP group-meetings, peer-coaching and data collection/processing, as the training was not central ordered. They continued, however, to use parent engagement and student support strategies. Twelve months later teachers admitted that neither CoP nor behaviour management methodology existed in their school, however, school-rules were in place and teachers implemented strategies they practiced during the training in their own way. Control school teachers continued to say that they do not plan support interventions because of constant changes in staff and Ministry's guidelines.

School-Climate

Repeated comparisons showed statistically significant differences regarding the school-climate assessment by both teachers in the intervention ($\chi^2(3)=59.40$, $p<.001$) and control school ($\chi^2(3)=54.48$, $p<.001$) and students in the intervention ($\chi^2(3)=611.56$, $p<.001$) and control school ($\chi^2(3)=39.69$, $p<.001$). Post hoc comparisons showed for the intervention school that teachers' ratings increased right after the training completion, remained stable 4 months later and decreased after 12 months reaching pre-training level. while students' ratings increased right after and 4 months after the training completion and decreased 12 months later, remaining increased compared to pre-training. For the control school teachers' ratings decreased right after and 4 months after the training and stayed stable 12 months later, resulting decreased compared to pre-training, while students' ratings decreased right after the training completion and stayed stable 4 and 12 months later, resulting decreased compared to pre-training (see Table 9).

Table 9: Means-Standard Deviations for School-Climat e valuation by Teachers/Students

Time \ School	Intervention		Control	
	Mean(St.D) School-Climate Teachers	Mean(St.D) School-Climate Students	Mean(St.D) School-Climate Teachers	Mean(St.D) School-Climate Students
Before	2.48(.06)*	2.92(.32)*	2.73(.07)*	2.95(.26)*
Right After	3.17(.05)	4.16(21)*	2.51(.04)*	2.92(.23)
Four Months	3.17(.05)*	4.18(19)*	2.40(.03)	2.91(.26)
Twelve Months	2.43(.28)	2.99(.25)*	2.41(.06)*	2.94(.25)*

According to relevant qualitative data, teachers in both schools before the training, said that they worked well with colleagues, relationships with students were poor, school resources and innovations were few but decent and their involvement in decision making was little but adequate. Right after the training completion and four months later, intervention school teachers stated they had meaningful collaborations with colleagues, better relationships with students and more involvement in decision making, which however entailed responsibility for implementing decisions taken. A year later teachers evaluated their school-climate in the same way as before the training and admitted that this reversal was their own fault because they stopped attending CoP-meetings. They said that although school-climate change during training was satisfactory, it was not worth the time and effort devoted. Control school teachers reported no difference in the school-climate parameters, at all subsequent research stages, except the worsening of relationships with students.

Teacher self-efficacy

Repeated comparisons showed statistically significant differences in teacher self-efficacy both for intervention ($\chi^2(3)=60.21$, $p<.001$) and control school ($\chi^2(3)=44.10$, $p<.001$). Post hoc comparisons showed that teachers' self-efficacy in the intervention school increased right after and 4 months after the training completion and decreased 12 months

later, resulting decreased compared to pre-training, while in the control school it decreased right after the training completion, remained stable 4 months later and decreased more after 12 months, resulting decreased, compared to pre-training (see Table 10).

Table 10: Means-Standard Deviations for Teachers' Self-efficacy

Time	School	Intervention	Control
		Mean(St.D) Teachers' Self-efficacy	Mean(St.D) Teachers' Self-efficacy
Before		6.35(.65)*	7.04(.57)*
Right After		7.08(.57)*	6.93(.58)
Four Months		7.18(.58)*	6.91(.55)*
Twelve Months		6.44(.56)*	6.83(.52)*

According to relevant qualitative data, teachers in both schools stated before the training, that they were confident instructing students, but not so confident in classroom management and student engagement. Right after the training completion and four months later, intervention school teachers stated they were more confident in managing classrooms, engaging students and teaching them. They admitted that coaching during training, although stressful, helped them implement management strategies and succeed in engaging students. However, they stressed that they would never trust and cooperate with coaches who had no previous teaching experience or are related to their evaluation from the Ministry. A year later, teachers had doubts about their effectiveness engaging students and managing classrooms, but felt confident in teaching. They stated that behaviour-management problems reappeared, but refused to request additional support, as they thought that the situation was still bearable and that coaching would oppress them. Control school teachers reported a slight decrease in their confidence managing classrooms, engaging students and teaching them in all subsequent research stages, mainly due to students' disrespect.

Student behaviour and performance

Repeated comparisons showed statistically significant differences for both major ($\chi^2(3)=8.92$, $p=.030$) and minor ($\chi^2(3)=9.30$, $p=.026$) incidences in the intervention school and major ($\chi^2(3)=10.94$, $p=.012$) and minor ($\chi^2(3)=7.92$, $p=.048$) incidences in the control school. Post hoc comparisons showed that ODR's for major and minor incidents in the intervention school decreased right after the training completion, and remained stable 4 and 12 months later, reaching pre-training level, while major and minor incidences in the control school increased slightly at all research stages, resulting 12 months later in statistically significant increase compared to pre-training (see Table 11).

Table 11: Means-Standard Deviations for Student ODR's per month (major/minor incidences)

School \ Time	Intervention		Control	
	Mean(St.D) Student ODR's (major)	Mean(St.D) Student ODR's (minor)	Mean(St.D) Student ODR's (major)	Mean(St.D) Student ODR's (minor)
Before	11.50(5.25)*	19.00(5.47)*	9.25(4.42)	13.75(2.62)
Right After	4.50(2.38)	4.25(1.70)	10.50(4.79)	17.25(0.50)
Four Months	6.25(.95)	10.50(2.38)	15.50(2.08)	18.25(2.06)
Twelve Months	10.00(5.35)	16.50(4.65)	16.00(2.16)*	20.00(3.74)*

According to relevant qualitative data, before the training, teachers in both schools stated that students' behaviour deteriorates every year because of parental omissions and social values crisis. Right after the training completion and four months later intervention school teachers reported better student behaviour due to staff interventions. A year later deterioration was reported again, attributed to parental omissions. Control school teachers continued to report deterioration in student behaviour due to parental omissions and social values crisis.

Repeated comparisons showed non statistically significant differences in student performance, both in the intervention ($\chi^2(3)=4.04$, $p=.258$) and control ($\chi^2(3)=0.82$, $p=.845$) school (see Table 12).

Table 12: Means-Standard Deviations for Student Academic Performance

Time \ School	Intervention	Control
	Mean (St.D) Student Performance	Mean (St.D) Student Performance
Before	15.48(.06)	15.69(.19)
Right After	15.52(.31)	15.63(.43)
Four Months	15.58(.17)	15.68(.14)
Twelve Months	15.47(.08)	15.63(.19)

According to relevant qualitative data, teachers of both schools, in all research stages stated that students underestimate knowledge and therefore have low performance. Intervention school teachers right after the training completion and in all subsequent research stages reported that although behaviour management increased teaching time and strengthened student-teacher emotional bonds, it failed to improve their grades.

Discussion

This study examined the impact of a professional development training, consisting of evidence-based building-blocks (content and delivery method), on teachers' behaviour management practices and on students' behaviour and performance. Specifically, it examined the training's impact on (i) use and sense of usefulness of targeted behaviour management strategies by teachers, (ii) adoption of a misbehaviour dealing methodology, (iii) school climate perceptions, (iv) teachers' self-efficacy, (v) student behaviour and academic performance and (vi) the stability of these changes over time. The training focused on guiding trainees to establish a school Community of Practice which, with trainer's support, will develop a school-compatible student management methodology by practicing and reinforcing positive behaviour management strategies, supportive school culture and data-driven decision-making. The evaluation was carried out using a mixed methods design.

Right after the training completion intervention-school teachers used more often and considered more useful positive (rewarding, proactive, social-emotional and limit-setting) strategies, while their attitude towards punitive strategies remained stable. The training seems to have helped them verify in practice the effectiveness of skill-teaching and trust-building strategies against harmful punishments and to change their minds (Guskey 2020). This change, if lasting, is linked in the literature to reduced student misbehaviour, improved school climate and student academic performance (Hall, Bohanon and Goodman 2016; Sanders, Munford and Boden 2018; Skiba and Sprague 2008). Contributing factor to this change, was probably the training requirement for consistency (commitment for use by all staff to all settings), persistency (continuous use and data collection-processing) and data-based decision making, that helped them accurately determine the effectiveness of each strategy they implemented.

In addition, intervention-school teachers, during the training, managed to establish a school CoP, which designed, developed, implemented and improved support for teachers, collaboration with parents and an integrated three-tiered support system for students. These three systems, enriched by the aforementioned strategies and data-processing for modifications, consisted the school's behaviour management methodology. Initially CoP met during the training sessions and undertook to continue its meetings once a week after the training completion keeping them short. Control school teachers reported uncoordinated, unsuccessful individual attempts for managing student behaviour, continuous reduction in cooperation with parents and few, only Ministry-ordered, support activities for teachers.

School-climate was perceived as better right after the training completion by intervention-school teachers. However, they expressed dissatisfaction with the time and energy they had to devote to CoP-meetings. Control-school teachers reported school-climate

deterioration, mainly caused by poor relationships with students. Intervention-school students perceived their school-climate as better right after the training completion while control-school students as worse. It is worth noting that teachers and students in each school expressed similar assessments of their school climate, although, according to the literature, they focus on different factors when evaluating it (Mitchell Bradshaw, and Leaf 2010). It seems that the training influenced teachers' and students' perceptions in different but similar positive ways.

Intervention school teachers' self-efficacy improved right after the training completion. They stressed, however, that although coaching supported them in engaging and managing students, it was effort-demanding, time-consuming and stressful. Control-school teachers reported self-efficacy deterioration.

ODRs decreased right after the training completion for the intervention school while remained stable for the control school. Although successful behaviour management strengthened student-teacher relationships and increased teaching time in the intervention school, student grades remained stable. So was the case for the control school too. Literature findings confirm these results showing that positive effects can be maintained and academic performance can be consequently improved, only if behaviour support systems are applied reliably, for at least 3-5 years (Madigan et al. 2016; Angus and Nelson 2019).

Regarding the stability of training benefits over time, four months after the training completion and without the trainer's support, teachers stopped implementing the training requirements (devote time on CoP-meetings, provide peer-coaching, engage parents, support students consistently/persistently/data-driven) and consequently the CoP weakened. However, training beneficial effects remained stable because, as it was the end of the school-year, the student management methodology probably did not need

modifications in order to remain functional. Twelve months later, in the middle of the next school year, CoP and student management methodology disappeared and training benefits decreased, since CoP meetings stopped. This finding is consistent with others in the literature, according to which benefits of successful trainings can only be sustained if long-term support is provided (Calderella et al. 2011; Gage et al. 2015; Valdebenito et al. 2019). Although benefits decreased one year later, they remained higher than or reached pre-training level, while the behaviour management parameters at the control-school deteriorated. Based on the way we defined success for this training (changes in teachers' practices and consequently in students' behaviour), it is considered successful and promising provided proper implementation and long-term support.

Conclusions

The current teacher training responding to school's request, provided a methodology for managing student behaviour, based on a developed CoP that defined and supported this methodology. On a first evaluation, directly after the training completion, teachers reported increased professional self-efficacy, teachers and students evaluated their school climate as more positive and students' ODRs decreased, compared to control school. However, right after the training completion and a year later, teachers refused to devote time to CoP meetings and to participate in peer-coaching, coordinated parent engagement and student support after data-based decisions. They stressed that although this training was in line with Ministry's instructions, it was merely an experiment supported by the university, which will be abandoned due to the constant changes in the instructions. In addition, they stated that even if this does not happen, the frequent staff changes in Greek schools will destabilise the CoP, spending their time and energy.

The sustainability of the training outcomes in the long run could be ensured if the training was promoted by the Ministry as the official framework for teachers' long-term support

in managing student behavior. In this way a strong commitment to implementation would be possible for teachers. In addition to the training, organizational changes should be introduced in schools (Guskey, 2016), so that new policies and practices proposed by the training could be framed, implemented and sustained. Organizational changes could include ensuring leadership support, providing time/place/resources/conditions for successful CoP meetings, establishing procedural and summative evaluation of school-data and engaging in boost meetings for 3-5 years after the training completion (Madigan et al. 2016; Akinyemi et al. 2019; Angus and Nelson 2019). During this time, the CoP would be able to fully integrate into school life and effectively manage student behavior without further support. Consequently, staff changes would not affect the stability of the CoP and new-coming teachers would be integrated into the already established school operating culture without causing disturbances. Support for organizational change could be provided by the same specially trained team of experts (veteran teachers, psychologists, etc.) who will implement and support the training in the long term. This will ensure better coordination, influence and feedback on the training and its results. In conclusion, the current teacher professional development training could be a stepping stone for effective student behavior management in Greece, if the Ministry supported it in its formulation, implementation and sustainability.

Going a step further, the training proposed in this paper is an innovative approach to the nature and practice of in-service teacher professional development provided in Greece. It proposes instead of the central, state-designed, universal, out-of-school trainings provided so far (Eurydice, 2021), state support to each school to establish a professional learning and development environment, a CoP, which according needs will self-organize teacher professional training using problem-solving methods.

References

- Admiraal, W., L.D.J. Schenke, Y. Emmelot, and H. Sligte. 2019. "Schools as Professional Learning Communities: What can Schools do to Support Professional Development of their Teachers?" *Professional Development in Education*. Advance online publication. doi.org/10.1080/19415257.2019.1665573.
- Akinyemi, A.F., S. Rembe, J. Shumba, and T.M. Adewumi. 2019. "Allocation of time in communities of practice: A strategy to enhance continuing professional teachers' development of high-school teachers", *Cogent Social Sciences*, 5:1,1583629, doi: 10.1080/23311886.2019.1583629
- Anastasiadis, P. 2011. "National Teacher Training Program of Greece: Basic Design and Implementation Principles." Paper presented at the 6th International Conference in Open and Distance Learning, Loutraki/Greece, 4-6 November.
- Angus, G., and R.B. Nelson. 2019. "School-wide Positive Behavior Interventions and Supports and Student Academic Achievement." *Contemporary School Psychology*. Advance online publication. [doi:10.1007/s40688-019-00245-0](https://doi.org/10.1007/s40688-019-00245-0).
- Avalos, B. 2011. "Teacher Professional Development in Teaching and Teacher Education over ten Years." *Teaching and Teacher Education* 27(1):10–20. doi:10.1016/j.tate.2010.08.007.
- Braun, V. and V. Clarke, 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2): 77-101. doi:10.1191/1478088706qp063oa.
- Calderella, P., R.H. Shatzer, K.M. Gray, K.R. Young, and E.L. Young. 2011. "The Effects of School-wide Positive Behavior Support on Middle-school Climate and Student Outcomes." *Research in Middle-Level Education* 35(4):1-14. <https://doi.org/10.1080/19404476.2011.11462087>.
- Coalition for Psychology in Schools and Education. 2006. *Report on the Teacher Needs Survey*, Washington, DC: American Psychological Association.

Collaborative for Academic, Social, and Emotional Learning. 2015. *Effective Social and Emotional Learning Programs-Middle and High School Edition*. Chicago.

<http://secondaryguide.casel.org/>

Cook, C.R., M., Frye, T., Slemrod, A.R., Lyon, T.L., Renshaw, and Y., Zhang, 2015.

“An integrated approach to universal prevention: Independent and combined effects of PBIS and SEL on youths’ mental health.” *School Psychology Quarterly*, 30(2), 166-183.

doi:10.1037/spq0000102

Cooper, P. and B. Jacobs. 2011. *From Inclusion to Engagement: Helping students engage with schooling through*. Oxford:John Wiley.

Crawshaw, M. 2015. “Secondary school teachers’ perceptions of student misbehavior: A review of international research, 1983-2013.” *Australian Journal of Education*, 59(3):293-311. doi:10.1177/0004944115607539

Creswell, J.W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4thed. Thousand Oaks, CA:Sage.

Dalgıç, G. and G. Bayhan. 2014. “A Meta-Analysis: Student Misbehaviors That Affect Classroom Management.” *Cypriot Journal of Educational Sciences*. 9(2):100-116.

Darling-Hammond, L., M.E. Hyler, and M. Gardner. 2017. *Effective Teacher Professional Development*. Palo Alto,CA: Learning Policy Institute.

Davis C.S. 2002. *Statistical Methods for the Analysis of Repeated Measurements*. NY:Springer.

Durlak, J.A., C.E. Domitrovich, R.P. Weissberg, and T.P. Gullotta. (Eds.). 2015. *Handbook of Social and Emotional Learning: Research and Practice*. The Guilford Press.

Egeberg, H.M., A. McConney, and A. Price. 2016. “Classroom Management and National Professional Standards for Teachers: A Review of the Literature on Theory and

Practice.” *Australian Journal of Teacher Education*, 41(7):1-18.
doi:10.14221/ajte.2016v41n7.1.

Emmer, E.T. and E.J. Sabornie. 2014. *Handbook of Classroom Management*. 2nd ed. New York: Routledge.

Eurydice (2021) https://eacea.ec.europa.eu/national-policies/eurydice/content/continuing-professional-development-teachers-working-early-childhood-and-school-education-30_en

Flannery, K., J. Frank, and M. Kato. 2012. “School Disciplinary Responses to Truancy: Current Practice and Future Directions.” *Journal of School Violence* 11(2):118-137.
doi:10.1080/15388220.2011.653433.

Gage, N.A., G. Sugai, T.J. Lewis, and S. Brzozowy. 2015. “Academic Achievement and School-wide Positive Behavior Supports.” *Journal of Disability Policy Studies*, 25(4):199–209. doi:10.1177/1044207313505647.

Gazeley, L. 2010. “The Role of School Exclusion Processes in the Re-production of Social and Educational Disadvantage.” *British Journal of Educational Studies* 58(3):293-309. doi:10.1080/00071000903520843.

Gottfredson, G. 1999. *User’s Manual for Effective School Battery*. Ellicott City, MD: Gottfredson Associates.

Greenberg, J., H. Putman, and K. Walsh. 2014. *Training Our Future Teachers: Classroom Management*. Washington,DC: National Council on Teacher Quality

Gravani, M. 2012. “Adult Learning Principles in Designing Learning Activities for Teacher Development.” *International Journal of Lifelong Education*, 31(4):419-432.
[doi:10.1080/02601370.2012.663804](https://doi.org/10.1080/02601370.2012.663804).

Guskey, T.R. 2016. Gauge impact with 5 levels of data. *JSD*, 37(1), 32-37.
<https://tguskey.com/wp-content/uploads/Professional-Learning-1-Gauge-Impact-with-Five-Levels-of-Data.pdf>

Hall, N., H. Bohanon, and S. Goodman. 2016. "Behavioral Support: Research-based Program Reduces Discipline Problems." *American School Board Journal*. Advance online publication. <https://www.nsba.org/newsroom/american-school-board-journal/behavioral-support>

Johnson, B., J.J. Stevens, and K. Zvoch. 2007. "Teachers' Perceptions of School Climate: A Validity Study of Scores from the Revised School Level Environment Questionnaire." *Educational and psychological measurement*, 67(5):833-844.
doi:10.1177/0013164406299102.

Kanavou, E., M. Stavrou, A. Fotiou and A. Kokkevi. 2020. *Adolescents in Greece and in the 44 countries of the 2018 HBSC/WHO Study. Series of Short Reports: Adolescents, Behaviors and Health*. Athens,GR: "Kostas Stefanis" University Research Institute for Mental Health, Neurosciences and Medical Precision.

Kauffman, J., and T. Landrum. 2013. *Characteristics of emotional and behavioral disorders of children and youth*. Boston: Pearson/Merrill.

Koellner, K., and J. Jacobs, (2015). "Distinguishing models of professional development: The case of an adaptive model's impact on teachers' knowledge, instruction, and student achievement." *Journal of Teacher Education*, 66(1), 51-67. doi: 10.1177/0022487114549599

Kourkoutas, E., P. Stavrou, and S. Plexousakis, 2018. "Teachers' Emotional and Educational Reactions toward Children with Behavioral Problems: Implication for School-Based Counseling Work with Teachers." *Journal of Psychology and Behavioral Science*, 6(2), 17-33. doi:10.15640/jpbs.v6n2a3

- Lacoe, J. and M. Steinberg, 2018. "Do suspensions affect student outcomes?" *Educational Evaluation and Policy Analysis*, 41(1), 34-62. doi:10.3102/0162373718794897.
- Levin, J. and J. Nolan. 2014. *Principles of Classroom Management: A Professional Decision-making Model*. 7th Edition. New Jersey: Pearson.
- Madigan, K., R.W. Cross, K. Smolkowski, and L. Strycker. 2016. "Association between Schoolwide Positive Behavioral Interventions and Supports and Academic Achievement: A 9-year Evaluation." *Educational Research and Evaluation*, 22(7), 402–421, doi:10.1080/13803611.2016.1256783.
- Mergler, M.S., Vargas, K.M., and Caldwell, C. 2014. "Alternative discipline can benefit learning." *Phi Delta Kappan*, 96(2):25. doi:10.1177/0031721714553406
- Mitchell, M.M., C.P. Bradshaw, and P. Leaf. 2010. "Student and Teacher Perceptions of School-Climax: A Multilevel Exploration of Patterns of Discrepancy." *Journal of School Health*, 80(6):271-279. doi:10.1111/j.1746-1561.2010.00501.x.
- Moutiaga, S. 2020. "Teacher-training Needs in managing Secondary-School Student Misbehavior." *Modern Society, Education, and Mental Health*, 6:308-324. ISSN: 1791 597X
- National Center for Education Statistics. 2017. *Digest of Education Statistics*. 53rd ed. Washington: U.S. Department of Education
- Noltemeyer, A., R., Ward, and C. McLoughlin, 2015. "Relationship between school suspension and student outcomes: A meta-analysis." *School Psychology Review*, 44(2), 224 –240. doi:10.17105/spr-14-0008.1
- OECD. 2013. *Do Students Perform Better in Schools with Orderly Classrooms? PISA in focus 32*: OECD Publishing Paris.

OECD. 2019. *Teachers and School Leaders as Lifelong Learners*, TALIS 2018 Results(vol1): OECD Publishing, Paris.

Reinke, W.M., K.C. Herman, and M. Stormont. 2012. "Classroom-level Positive Behavior Supports in Schools Implementing SW-PBIS: Identifying Areas for Enhancement." *Journal of Positive Behavior Interventions*, 15(1), 39-50. doi:10.1177/1098300712459079.

Rescorla, L.A., T. M. Achenbach, S. Ginzburg, M. Ivanova et al. 2007. "Consistency of Teacher-Reported Problems for Students in 21 Countries." *School Psychology Review*, 36(1), 91-110.

Rogers, C. 1986. "Carl Rogers on the Development of the Person-Centered Approach." *Person-Centered Review*, 1(3):257-259.

Sanders, J., R. Munford, and J. Boden. 2018. "Improving Educational Outcomes for at-Risk Students." *British Educational Research Journal* 44(5):763-780. doi:10.1002/berj.3462.

Shi, H. 2017. "Planning Effective Educational Programs for Adult Learners." *World Journal of Education*. 7(3):79-83. doi:10.5430/wje.v7n3p79.

Skiba, R. and J. Sprague. 2008. "Safety without Suspensions." *Educational Leadership*, 66(1):38-42.

Sotiriou, A. and G. Iordanidis. 2014. "Relationships between School Climate and Job Satisfaction of Teachers." *Step of the Social Sciences*, 16(64):117-140.

Sugai, G. and R.H. Horner. 2010. "School-wide Positive Behavior Support: Establishing a Continuum of Evidence-based Practices." *Journal of Evidence-based Practices for Schools*. 11(1):62-83.

Technical Assistance Centre on PBIS. n.d. www.pbis.org

- Thapa A, Cohen J. and Guffey S., 2013. "A Review of School Climate Research." *Review of Educational Research*, 83(3):357–385.
- Tschannen-Moran, M. and A. Hoy. 2001. "Teacher Efficacy: Capturing and Elusive Construct." *Teaching and Teacher Education*, 17(7):783-805. doi:10.1016/S0742-051X(01)00036-1.
- Tsigilis, N., V. Grammatikopoulos, and A. Koustelios. 2010. "Psychometric Properties of the Teachers' Sense of Efficacy Scale within the Greek Educational System." *Journal of Psychoeducational Assessment*, 28(2):153-162.
- Tuckman, B. and M. Jensen. 1977. "Stages of Small-group Development Revisited". *Group and Organization Studies*, 2(4):419–427. Doi:10.1177/105960117700200404.
- Valdebenito, S., M. Eisner, D.P. Farrington, M.M. Ttofi, and A. Sutherland, 2019. "What Can we do to Reduce Disciplinary School Exclusion? A Systematic Review and meta-Analysis." *Journal of Experimental Criminology* 15:253–287. doi.org/10.1007/s11292-018-09351-0.
- Vermunt J.D. 2014. "Teacher Learning and Professional Development." In: S. Krolak-Schwerdt, Glock S., Böhmer M. (eds) *Teachers' Professional Development. The Future of Education Research*. Rotterdam: Sense Publishers. doi.org/10.1007/978-94-6209-536-6_6
- Wang, M. and R. Holcombe. 2010. "Adolescents' Perceptions of School Environment, Engagement and Academic Achievement in Middle-school." *American Educational Research Journal* 47(3):633-662. doi:10.3102/0002831209361209.
- Webster-Stratton, C. 2011. *The Incredible Years: Parents, Teachers, and Children's Training Series: Program Content, Methods, Research and Dissemination*. Seattle,WA: Incredible Years.

Webster-Stratton, C. 2012. *Teacher Strategies Questionnaire*

<http://www.incredibleyears.com/for-researchers/measures/>

Wenger, E., R. McDermott, and W. Snyder. 2002. *Cultivating Communities of Practice*.

Boston,MA: Harvard Business School Press