# Implementation of the Field Trials

## D3.2 Report on Findings

## Partnership

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# Acknowledgements

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# Executive Summary

The current report was prepared within the framework of ProW project ("Promoting Teachers' Well-being through Positive Behaviour Support in Early Childhood Education"; 2021- 2024) under the ERASMUS + Key Action 3. The project spans the years 2021 to 2024 and operates within the ERASMUS + Key Action 3 framework, focusing on policy cooperation at the European Union level. This report specifically contributes to the Implementation of the Field Trials Work Package 3, providing a detailed account of the project's field trials, methodologies employed, ensuing data analysis and presenting the findings of the ProW implementation. As a crucial component of the ProW project, Work Package 3 plays a pivotal role in assessing the practical effectiveness of the implemented strategies and their impact on teachers' well-being, children's prosocial skills and the overall climate of early childhood education settings.

Part 1 delves into the theoretical underpinnings of the ProW initiative, examining the PERMA model, SWPBS model, and Professional Development model. By elucidating these theoretical approaches, the section offers a comprehensive understanding of the project's foundational framework, providing context for the subsequent discussions and analyses

Part 2 details the goals and objectives of the ProW project, offering a concise overview of the research methodology. Elements such as the ProW research design, research hypotheses, sample, data collection instruments, and ethical considerations are highlighted. The analytical strategy, incorporating score-code matching and statistical analysis, is outlined to provide insight into the project's methodological rigor.

A thorough analysis unfolds at Part 3: covering various stages of the project. This includes baseline comparisons among four countries for both teachers and children, descriptive statistics at Time 2, value-added analysis in Year 1, comparisons at Time 3 and Time 4, value-added analysis in Year 2, and matched analysis from Time 1 to Time 4. Each analysis contributes to a nuanced understanding of the project's impact across different time points and participant groups.

At Part 4, summarizing the project's findings, this section engages in a robust discussion that explores the nuances and implications of the research. It delves into the significance of the results, providing a deeper understanding of the project's outcomes and their potential implications for early childhood education.

Finally, the Part 5 includes suggested Policies and Practices for Enhancing Teachers' Well-being and Profession. It offers insights into how the project's findings can inform and enhance policies and practices aimed at fostering the well-being and professionalism of teachers.

This comprehensive overview serves as a detailed guide to the ProW project, providing stakeholders, policymakers, and educators with a thorough understanding of its theoretical foundations, research methodology, key findings, and practical implications. The synthesis of these elements underscores the project's significance and potential impact on the field of early childhood education.

# Part 1: The context of the ProW project

## 1.1 Theoretical approach

### *1.1.1 PERMA model*

The PERMA model is a theoretical approach of positive psychology, developed by Martin Seligman (2012). The word PERMA is an acronym that stands for Positive emotions, Engagement, Relationships, Meaning, and Accomplishment. The model is based on research indicating that these five elements are essential components of well-being (Kauffman, 2017) and that people who cultivate them are more likely to lead a happy and fulfilling life through growth. In the following sections,  the theoretical framework of the PERMA model is explored and some of its practical applications are presented.

### *Positive Emotions*

The first component of the PERMA model is positive emotions. Positive Emotions refer to the subjective experience of pleasure, joy, and happiness (Goodman, Disabato, Kashdam and Kauffman, 2018; Selingman, 2012). According to Fredrickson (2009), positive emotions are crucial for well-being because they can broaden an individual's perspective and help them build resources for the future.  Positive emotions also have a positive impact on health, creativity, resilience and social relationships.

The Broaden-and-Build Theory is a theoretical framework within positive psychology that was developed by Barbara Fredrickson, a social psychologist and researcher. The theory proposes that positive emotions broaden an individual's momentary thought-action repertoires, which in turn, builds their long-term personal resources. According to the theory, positive emotions such as joy, gratitude, love, and are broaden an individual's attention and encourage them to explore and engage with their environment. This broadening of attention allows individuals to see a wider range of possibilities and options, leading to increased creativity, resilience, and social connections. Positive emotions also

increase the likelihood of experiencing positive feedback from others, leading to an upward spiral of positive emotions and personal resources (Fredrickson, 2009).

Fredrickson's research has shown that positive emotions can build a range of personal resources, including physical resources such as physical health, psychological resources such as resilience and coping abilities, and social resources such as positive relationships and social support. These resources can then be used to enhance an individual's overall well-being and facilitate growth and development (Fredrickson, 2009).

Moreover, the broaden-and-build theory proposes that positive emotions are not only beneficial for the present moment but also for the future. Positive emotions can build personal resources that can help individuals cope with future challenges and adversity. This idea is consistent with the PERMA model, which emphasizes the importance of positive emotions as a foundation for growth and development (Fredrickson, 2009).

In summary, the Broaden-and-Build Theory suggests that positive emotions broaden an individual's momentary thought-action repertoires, leading to increased personal resources that can be used to enhance overall well-being and facilitate growth and development. This theory has important implications for the field of positive psychology and has been used to develop interventions aimed at increasing positive emotions and personal resources.

The experience of positive emotions can be cultivated through various practices, including gratitude journaling, meditation, and spending time in nature. These practices help to shift attention toward positive experiences, which in turn, leads to increased positive emotions. Moreover, Seligman suggests that positive emotions should not be viewed as mere hedonism, but as a foundation for growth and development (Fredrickson, 2009). Regarding teachers, as research indicates, job-related wellbeing - especially the positive emotions in the workplace - play a paramount role in the reported job satisfaction of teachers (Dreer, 2022).

*Engagement*

The second component of the PERMA model is engagement, which refers to being fully absorbed in an activity. Engagement is characterized by a sense of flow, where one is so immersed in an activity that they lose track of time and become completely absorbed in the experience. Engagement is associated with increased well-being, productivity, and creativity (Kern, 2015). This term was coined by Mihaly Csikszentmihalyi (1990), a Hungarian-American psychologist, who studied the psychology of optimal experience. According to Csikszentmihalyi, flow is a state of complete concentration and enjoyment that occurs when individuals engage in challenging activities that match their skills and abilities.

Flow is characterized by several key features, including:

1. Intense concentration: Individuals in flow are fully absorbed in the activity and have a heightened sense of focus and concentration.

2. Clear goals: Individuals in flow have clear goals and a sense of direction that helps them to stay focused and motivated.

3. Feedback: Individuals in flow receive immediate feedback about their progress, which helps them to adjust their behavior and stay engaged in the activity.

4. Sense of control: Individuals in flow have a sense of control over the activity and feel that they can to influence the outcome of the activity.

5. Loss of self-consciousness: Individuals in flow lose their sense of self-consciousness and become completely immersed in the activity (Csikszentmihalyi, 1990).

Flow can occur in a variety of activities, including sports, music, work, and creative pursuits (Bakker, 2005; Chikszentmihalyi et al., 1997). Chikszentmihalyi (1990) suggests that flow is an optimal state of experience that leads to increased well-being and personal growth. Flow experiences have been linked to increased happiness, creativity and motivation.

Engagement can be achieved by pursuing activities that align with one's values and strengths. Seligman suggests that engagement should be a central component of a fulfilling life and that individuals should strive to find activities that they enjoy and that challenge

them. In the workplace, engagement is defined in terms of employee commitment and intellectual absorption. There is evidence (Bakker, 2005; Csikszentmihalyi et al., 1997) that teachers who experience flow and engagement influence their students' experiences, so teachers who are enthusiastic, authentic and inspiring can generate engagement and interest in learning in their students. In teaching, engagement plays a paramount role, especially social engagement (Klassen et al., 2013), with research indicating that teachers with higher levels of engagement are active in engaging their students both in the learning process and in building relationships with them, thus raising motivation in students and gaining job-related satisfaction (Dreer, 2022).

## *Relationships*

The third component of the PERMA model is Positive Relationships, which refer to social connections with others. Social relationships are essential for well-being since they provide emotional support, a sense of belonging, and opportunities for growth and learning. Social relationships also have a positive impact on physical health and longevity (Boehm & Lyubomirsky, 2009; Godoy et al. 2009).

To cultivate Positive Relationships, Seligman suggests that individuals should focus on building close and meaningful connections with others, caring, cooperating and creating positive social interactions to gain the merits of higher levels of well-being, of better physical health (Lieberman al., 2007), mental health (Schwartz et al. 2003) and self-esteem (Kuipers et al., 2007). To do so there are several evidence-based interventions to enhance positive relationships such as random acts of kindness and gratitude letters just to name a few. These can be achieved by spending quality time with friends and family, expressing gratitude and kindness towards others, and engaging in activities that foster social connections.

In teaching, same as with engagement, teachers who invest in relationships with their students report better levels of well-being. Relationships with students seem to be

exceeding the importance of the relationship between their colleagues (Dreer, 2022; Klassen et al., 2012).

## *Meaning*

The fourth component of the PERMA model is Meaning, which refers to having a sense of purpose and direction in life. Meaning is characterized by a sense of belonging to something greater than oneself (Steger, 2012), and by the pursuit of goals that are aligned with one's values and beliefs. Meaning is associated with increased well-being, resilience, and life satisfaction (Baumeister et al., 2013).

To cultivate meaning in life, Seligman suggests that individuals should reflect on their values and beliefs and in applying their character strengths as much as possible (Steger, 2012). Also, they should strive to align their actions with their values which can be achieved by pursuing activities that are meaningful and fulfilling, volunteering, and engaging in acts of service to others (Waterman, Schwartz, & Conti, 2008). Teachers reporting higher levels of meaning in their work report higher levels of engagement and resilience (Van Wingerden & Poell, 2019).

## *Accomplishment*

The fifth and final component of the PERMA model is Accomplishment, which refers to the achievement of goals and the experience of mastery. Accomplishment is characterized by a sense of achievement and the satisfaction of having accomplished something meaningful. Accomplishment is associated with increased well-being, self-esteem, and motivation (Sheldon & Elliot, 1999).

The traits of an effective goal to achieve motivation are represented by the SMART model. SMART is an acronym for specific, measurable, attractive, realistic, and in a specific time frame (Hassed, 2008). If a goal is defined in a SMART way can lead to even higher motivation especially if they are self-determined (Sheldon & Elliot, 1999).

To cultivate accomplishment in life, Seligman suggests that individuals should set goals that are challenging but achievable and focus on developing the skills and resources necessary to achieve them. This can be achieved by practicing deliberate practice, seeking feedback and support from others, and developing a growth mindset. The SMART model for goal setting is a widely used framework that helps individuals set and achieve their goals effectively. Each of these elements provides a guideline for setting goals that are clear, realistic, and achievable (Hassed, 2008).

1. Specific: Goals should be specific and well-defined. This means that they should clearly state what you want to achieve and why it is important to you. For example, rather than setting a vague goal to "exercise more," a specific goal might be to "run for 30 minutes every day."

2. Measurable: Goals should be measurable, so you can track your progress and know when you have achieved them. This means that you should set concrete criteria for success and measure your progress regularly. For example, if your goal is to run for 30 minutes every day, you could measure your progress by tracking your distance or time.

3. Achievable: Goals should be realistic and achievable, given your current abilities and resources. This means that you should set goals that are challenging but not impossible. For example, if you have never run before, it may be unrealistic to set a goal to run a marathon in a few months.

4. Relevant: Goals should be relevant to your overall objectives and values. This means that they should be aligned with your personal or professional aspirations and contribute to your overall sense of purpose. For example, if your goal is to improve your health, it may be relevant to set a goal to run for 30 minutes every day.

5. Time-bound: Goals should have a specific timeframe for completion. This means that you should set a deadline or timeline for achieving your goal. For example, if your goal is to run for 30 minutes every day, you could set a goal to achieve this within the next three months.

By using the SMART model, individuals can set goals that are specific, measurable, achievable, relevant, and time-bound, which can increase their chances of success. The SMART model provides a clear framework for setting goals that are realistic, actionable, and aligned with an individual's overall objectives and values. Research also highlights the importance of celebrating one's accomplishments (Hassed, 2008).

Achievement plays an important role in teaching since research indicates that the sense of achievement in teachers benefits in a significant way on the achievements of their students. Thus, being able to create SMART goals for themselves and their students is pivotal not only to safeguard but to enhance their subjective wellbeing (Dreer, 2022; Frenzel, 2014).

### *1.1.2 SWPBS model*

School-Wide Positive Behaviour Support (SWPBS) is a three-tiered framework theoretically founded around the theory of Applied Behaviour Analysis (ABA), according to which every behavioural sequence proceeds from an antecedent to a respective behaviour, and then to a consequence (Johnston et al., 2006). SWPBS is neither a curriculum, an intervention, or a program, nor its implementation is equal from context to context (Sugai & Horner, 2009). Instead, it is a framework aiming to prevent challenging behaviour from occurring and to intervene effectively with evidence-based strategies when it occurs (Lewis & Sugai, 1999; Sugai et al., 2000). SWPBS relies on the premise that human behaviour is influenced by several biological, environmental, social, and individual factors, but also by intentional learning opportunities (Sugai et al., 2000). In SWPBS implementation, these learning opportunities are aligned with evidence-based intervention practices focused on the instruction of social skills. The framework foresees the contextual and cultural adaptation (Horner et al., 2014) of a set of sequenced common features: (a) the establishment of a leadership school team; (b) the definition of a common vision based on a school-wide culture; (c) the establishment of 3 to 5 behaviour expectations/ values aligned with the school common vision; (d) the explicit teaching of behaviour expectations, social skills, and other competencies to promote children's social and emotional development; (e) the establishment of a continuum of strategies to reinforce expected behaviours; (f) the

establishment of a continuum of strategies to address unwelcome challenging behaviours; (g) the establishment of ongoing monitoring and assessment procedures (OSEP, 2015). SWPBS has been proving its efficacy by positively impacting schools' organizational health, students' academic achievement, and behaviour (Lee & Gage, 2020). Literature on ECEC settings' implementation of SWPBS has also revealed positive results in reducing children's disruptive behaviour (Floress & Jacoby, 2017; Jolstead et al., 2017; Mahon et al., 2020), on the improvement of the general quality (i.e., the quality of emotional support, classroom organization, and instructional support assessed with CLASS Pre-K (Pianta et al., 2007)) of ECEC settings (Steed et al., 2013), and on the children's on-task behaviours and use of appropriate social skills (Mahon et al., 2020). Using a tiered approach, teams at school can organize their support along a continuum that ranges from support for all students (universal support – tier 1) to support for some students (targeted support – tier 2) to support for some students who further require (intensive support – tier 3) (McIntosh & Goodman, 2016). Implementation of the SWPBS approach in the ProW project focused on Tier 1. To address it, a training program for external coaches was designed focused on the following elements (Manolitsis et al., 2021):

1. Definition of a school's common philosophy and purpose;
2. Definition of a school's leadership team;
3. Strategies for the clarification of expected behaviours;
4. Strategies for teaching expected behaviours;
5. Strategies for encouraging expected behaviours;
6. Strategies for discouraging inappropriate behaviours;
7. Ongoing monitoring and assessment.

Based on this training, external coaches were responsible for training and supporting preschool staff during the ProW implementation (2021-2023). The training sessions focused on the aforementioned elements of SWPBS, as well as on the five pillars of the PERMA model (Seligman, 2012). Overall, training on SWPBS features aimed at encouraging schools' staff to implement a structural framework based on proactive systems of behaviour

management and focused on the establishment of positive relationships and teaching of social and emotional skills. This requires the engagement of all ECEC staff in using a common language and adopting common practices and procedures that support children's socioemotional development through the adoption of expected behaviours. A thorough description of the training-specific aims related to the SWPBS approach is detailed in Table 1.

**Table 1**

*SWPBS training aims for school professionals.*

| Aims | Duration |
|------|----------|
| 1. Establishing a school vision and new philosophy of discipline, identifying 2-3 schoolwide expectations. | 2 sessions \| 2 hours each |
| 2. Creating positive learning environments through the building of positive relationships at school. | |
| 3. Defining expected behaviours and developing a schoolwide behaviour matrix. | 3 sessions \| 01h30 to 2 hours each |
| 4. Developing a schoolwide acknowledgement system and introducing the monitoring system for the implementation of SWPBS. | |
| 5. Defining strategies for teaching and encouraging expected behaviours by implementing activities for social skills instruction. | |
| 6. Defining strategies for discouraging inappropriate behaviours by providing specific positive feedback (e.g., behaviour specific praise and correcting student behaviour). | |

| 7. Developing a schoolwide acknowledgment system and introducing the monitoring system for the implementation of SWPBS. | |
|---|---|
| 8. Developing an action plan for correcting problem behaviours, as well as an adaptation of TFI fidelity assessment. | |

Although the previously mentioned plan for the training sessions' contents and duration was recommended (Manolitsis et al., 2021b), adaptations to the cultural and contextual specificities of each country have been made by each partner (Horner et al., 2014).

## 1.1.3 Professional Development Model

The professional development of teachers is a top priority for the education sector, and local interventions can improve teaching practices. Teacher coaching has become a popular reform effort as research shows that it can lead to improved quality of education and better academic performance. Coaching is a support process that allows coaches to optimize their potential, overcome obstacles, and prepare for future tasks. National authorities and implementers are using coaching to help teachers put workshop knowledge into practice and improve learning outcomes.

### Professional development of teachers (conceptual framework, features, expectations).

Professional Development (PD) is a crucial aspect of enhancing the knowledge, skills, and attitudes of teachers to improve student learning (Guskey, 2000). Teachers encounter various challenges, such as new curricula, assessment methods, and technologies, and diverse student populations that may resist traditional teaching methods. Effective PD for teachers requires five essential features, according to Desimone's theoretical framework (2009): content focus, coherence, collective participation, active learning, and duration (Desimone, 2009).

The content of PD is critical because it determines what teachers learn (Garet et al., 2001). Coherence refers to the extent to which PD aligns with other learning opportunities, teachers' knowledge and beliefs, and school and district policies (Desimone, 2011). Collective participation involves multiple teachers from the same school participating in the same learning opportunities (Hochberg & Desimone, 2010). Active learning entails teachers engaging in the analysis of teaching and learning (Garet et al., 2001). Duration refers to the number of contact hours and the length of time over which the activity spans (Hochberg & Desimone, 2010).

Teachers need a voice and choice in the PD offered to them. They should deeply consider their professional learning needs and understand the trends, shifts, and needs their students bring with them that require new teacher skills and capacities. PD should be relevant to the needs of students and prepare teachers to guide student learning through passion, interest, and personalized efforts. Teachers also want PD that they can use immediately, providing opportunities to enact, engage, or apply what they are learning (Powerful Learning Practice, 2015).

Teachers prefer PD conducted by professionals with classroom experience who can share their best pedagogy practices. They also want innovative and creative PD that allows them to bring innovation and creativity to the learning space. Moreover, teachers desire PD that makes them better teachers and is practical, rather than theoretical. They want to build their skills and understand the evidence behind what they are doing, as a professional learning environment is a place of trust and safety (Powerful Learning Practice, 2015).

Educational change is challenging because it requires re-evaluating values and dispositions and letting go of what teachers are vested in (Uwamariya & Mukamurera, 2005). Effective PD should focus on content, coherence, collective participation, active learning, and duration. Teachers want PD that is relevant, practical, innovative, and conducted by professionals with classroom experience. PD should be a place of trust and safety, where teachers can build their skills, make connections, and strengthen values with passion within each educator who participates (Timperley, 2015).

Professional empowerment of teachers. Over the past few years, the concept of empowerment has gained increased attention in the fields of research, education, and social intervention (Maury & Hedjerassi, 2020). Empowerment is defined as the development of power to act, agency, skills, and accompanying capacities. Although initially applied in business settings, teacher empowerment has emerged as a promising approach for enhancing teacher control and addressing administrative challenges in the teaching profession (Wan, 2005).

In education, empowerment has become increasingly important in response to European imperatives aimed at promoting social and cultural integration in all aspects of life (Freire, 2013). Empowering experiences are considered essential for personal development and societal transformation (Liquète & Maury, 2007). Teacher empowerment has been identified as a crucial construct for school effectiveness (Kauts & Kaur, 2020), as it enables participants to develop competence and take charge of their growth and problem-solving (Short et al., 1994).

Research on teacher empowerment has examined various factors such as job satisfaction, motivation, conflict, participation in decision-making, commitment, instructional practice, and student achievement (Kauts & Kaur, 2020). Empowerment is seen as a process where teachers develop faith in their ability, knowledge, and skills to improve their working situation. Emancipation and empowerment can help bring about a project of social transformation towards another possible world.

Professional development should be based on the presumption of competence, horizontal exchange of practices, co-construction of training projects, sufficient autonomy to implement/act in the workplace, and a "skills portfolio" type training account (Bacqué & Biewener, 2013). Studies on teacher empowerment show that it depends on the degree to which teachers are included in the process of organizational decision-making, which is a vital element of the empowerment construct (Kauts & Kaur, 2020).

Empowerment should be considered at three levels: teacher, administrative, and school levels, which are further subdivided into human factors and operational level. Empowered teachers should have access to high-quality training and continuous opportunities for career development (Wan, 2005).

Teacher empowerment is a modern tool for the professional development of teachers that enables multiple ways of field actions. The concept of empowerment is accompanied by the problematization of knowledge (Reyes-Gasperini et al., 2015) and requires ongoing training and career development opportunities.

Teacher empowerment represents a promising approach to improve teaching and learning processes and promote positive social change.

*Coaching teachers (features, implied factors)*

Coaching is an integral part of professional development programs for teachers as it helps them build their will, skills, knowledge, and capacity, which significantly impacts their intellect, behaviors, practices, beliefs, values, and emotions (Aguilar, 2013, Patzer, 2020). Coaching provides a nurturing relationship where the client feels cared for, allowing them to access and implement new knowledge (Aguilar, 2013). Furthermore, coaching has been recognized as a strategy for enhancing teaching and learning across entire systems (Metz, 2015; Sugai & Horner, 2006).

The primary objectives of coaching are to enhance teaching practices, particularly the use of effective evidence-based approaches (Knight, 2009; Kretlow & Bartholomew, 2010; Neufeld & Roper, 2003; Snyder et al., 2015) and improve academic and behavioral outcomes for learners (Bean, Knaub, & Swan, 2000; Joyce & Showers, 2002; Kretlow & Bartholomew, 2010; Snyder et al., 2015). Effective coaching demands a variety of complex skills, knowledge, and attitudes that must be continuously cultivated to develop expertise.

Observation, modelling/demonstration, and performance feedback are the most effective coaching methods with the strongest evidence for enhancing teacher practices and learner

outcomes (Fallon, Collier-Meek, Maggin, Sanetti, & Johnson, 2015; Solomon et al., 2012; Stormont et al., 2015). Specific, positive, timely, and corrective feedback is crucial in improving teaching practices and learner outcomes (Scheeler et al., 2004; Solomon et al., 2012).

Alliance-building techniques, such as fostering a positive teacher-coach relationship, are crucial in creating a strong foundation for subsequent collaboration between the dyad (Snyder et al., 2015; Wehby et al., 2012). Additionally, team coaching and collective support are aimed at achieving excellence and efficiency in group and teamwork. Training for team coaching explores the techniques, tools, and attitudes that enable facilitators and coaches to succeed in the challenge of collective intelligence.

## *Positive teacher-coach alliance (conceptual framework, factors, strategies to build a positive teacher-coach alliance)*

The collaborative partnership between a coach and a teacher, known as the positive teacher-coach alliance, is a vital component of the strategic coaching process that can help to transform educational organizations. This alliance is formed by various factors such as interpersonal skills (Snyder et al., 2015; Wehby et al., 2012), collaboration skills (Neuman & Wright, 2010; Vanderburg & Stephens, 2009), the coach's expertise (Neuman & Wright, 2010; Vanderburg & Stephens, 2009) and teachers' perceptions of coaching as evaluative (Mangin, 2009; Walpole et al., 2010).

Building an alliance with teachers can involve strategies such as empathetic listening, restating and summarizing, open-ended questions, and non-evaluative language. Empathetic listening requires creating a safe and comfortable space for sharing, acknowledging feelings, paying attention to body language, and being encouraging. Restating and summarizing can help to clarify the speaker's message, while open-ended questions and affirming the difficulty of change can promote reflection and exploration.

Collaboration skills are also crucial in building a positive teacher-coach alliance. Meeting teachers' needs and goals and conveying that improving teaching is a collective effort are some of the strategies that can promote collaboration.

Referring to past accomplishments, current goals, and identifying and working towards teachers' goals and needs are also effective ways to foster collaboration. The coach's expertise in teaching and content areas can be demonstrated by referring to effective teaching practices, conveying deep content-area knowledge, and explaining complex concepts succinctly.

The positive teacher-coach alliance is a critical element in the coaching process, and utilizing strategies such as empathetic listening, collaboration skills, and expertise can facilitate the transformation of educational organizations and lead to positive outcomes for both teachers and learners. Some research from early learning suggests that alliance is also important across coaches, teachers, and families (Basu, Salisbury & Thorkidlsen, 2010; Rush & Shelden, 2011).

# Part 2: The ProW implementation

## 2.1 Aim and Objectives of the study

The aim of the ProW project was to investigate the effects of the ProW intervention (PERMA model & SWPBS) in ECEC settings across the four European countries, Cyprus, Greece, Portugal and Romania between 2021-2023. Embedded within this aim were three objectives: to determine if the intervention had an effect on i) teacher outcomes (teachers' well-being, sense of efficacy, burnout, and job satisfaction), ii) children outcomes (behavior and social competencies) and iii) school level outcomes (ECEC settings climate). The foci of these objectives were teachers' outcomes as measured on a yearly basis (annually), child outcomes as measured annually and school outcomes as measured annually and by the rate of progress made between two points in time (value-added) (Table 2.1).

**Table 2.1**

*Aim, objectives, and foci of the ProW evaluation*

| Aim | To investigate the effects of the ProW intervention | | | |
|---|---|---|---|---|
| **Objectives** | Effects of the ProW intervention across four countries | | | |
| **Foci** | Teachers | Children | ECEC settings | |
| **Level of analysis** | Annual | Annual | Annual | Value added |
| **Time points of Analysis** | | | | *Between time points* |
| | T1 T2 | T1 T2 | T1 T2 | T1 – T2 |
| | | | | T1 – T4 |
| | T3 T4 | T3 T4 | T3 T4 | T3 – T4 |

## 2.2 Summary of the Methodology

### 2.2.1 ProW Research Design

The ProW study has an exploratory perspective, and utilized a mixed- method, randomized wait-list trial with an embedded qualitative component. The current report presents the study's quantitative data and findings. Qualitative findings were reported separately at D3.1 Implementation of the field trials report.

The intervention consisted of participation in an 8-month programme based on the PERMA model, the SWPBS approach and PD training. All participating teachers in the wait-list control group (Group B) received the intervention, but only after the intervention group (Group A). In brief, around 15 preschool settings per country were randomly allocated to the treatment group (Group A) and to the control group (Group B). Half of the schools were randomly selected to implement the ProW intervention during the school year 2021-22 (Group A) and half of them followed a "business-as-usual" program for the year 2021-22 and implemented the same intervention during the school year 2022-23 (Group B). Table 2.2 depicts the experimental design. The study was conducted over 24 months between 2021 and 2024. A detailed description of the methodology has been previously published (for an overview see D2.2. Research Design & Measures).

**Table 2.2**

*Experimental design of ProW intervention*

| Group level of participation | PERMA, SWPBS frameworks 1st year | | | PERMA, SWPBS frameworks 2nd year | | |
|---|---|---|---|---|---|---|
| **Treatment** | $T_1$ | ProW implementation | $T_2$ | $T_3$ | ProW implementation | $T_4$ |
| **Control** | $T_1$ | ------ | $T_2$ | $T_3$ | ProW implementation | $T_4$ |

*Note.*

T1 = Time 1 (beginning of the academic year 2021-22) T2 = Time 2 (end of the academic year 2021-22)

T3 = Time 3 (beginning of the academic year 2022-23) T4 = Time 4 (end of the academic year 2022-23)

## 2.2.2 Research Hypotheses and Questions

*Teachers' level*

1. Does the implementation of the ProW model impact positively on early childhood teachers' well-being, sense of efficacy and job satisfaction?
2. Does the implementation of the ProW model reduce early childhood teachers' burnout levels?

*Children's level*

3. Does the implementation of the ProW framework impact positively on children's social competences?

*ECEC settings' level*

4. Does the implementation of the ProW model impact positively on school climate?

The main hypothesis of the ProW study is that there would be an improvement in teachers' basic elements for their careers (self-efficacy levels, job satisfaction, burnout, professional well-being) after participating in the ProW intervention. Furthermore, researchers of this study hypothesize that the ProW intervention will impact on children's behaviour and the whole ECEC setting.

## 2.2.3 Research Sample

ECEC settings in four countries were identified by the public authorities of each country (Directorate of Primary Education of Western Thessaloniki, DPEWE; Municipality of Kalamaria, MoK; Municipality of Lousada, MoL; and Inspectoratul Şcolar Judetean Arges, JSJ

Arges). Each National ProW leadership team recruited a large sample of ECEC settings, as it taking into account the possibility of attrition (loss of participating schools during the 2 years of the project – dropouts) from both groups. Recruitment across the four countries lasted 4 months.

In each ECEC setting, all teachers, children and their parents who agreed to participate in the ProW project were included in the study's sample. Table 2.3 presents the participation rate across four countries for both intervention years 2021-2022 and 2022-2023.

**Table 2.3**

*Participation and attrition from T1 to T4 across four countries*

| | Treatment Intervention: 2021-2022 | Control - 2021-2022 | Total | Treatment Intervention: 2022-2023 | Control Intervention: 2022-2023 | Total |
|---|---|---|---|---|---|---|
| | Group A | Group B | | Group A | Group B | |
| **Cyprus** | | | | | | |
| ECEC settings | 10 | 10 | 20 | 10 | 6 | 16 |
| Teachers | 47 | 32 | 79 | 45 | 25 | 70 |
| Assistants | - | - | - | - | - | - |
| Children | 380 | 307 | 687 | 285 | 196 | 481 |
| **Greece** | | | | | | |
| ECEC settings | 18 | 15 | 33 | 18 | 15 | 33 |
| Teachers | 52 | 39 | 91 | 55 | 47 | 102 |
| Assistants | - | - | - | - | - | - |
| Children | 602 | 465 | 1067 | 644 | 553 | 1197 |

***Portugal***

| | | | | | | |
|---|---|---|---|---|---|---|
| ECEC settings | 12 | 12 | 24 | 11 | 13 | 24 |
| Teachers | 27 | 28 | 55 | 19 | 27 | 46 |
| Assistants | 25 | 27 | 52 | 20 | 29 | 49 |
| Children | 189 | 208 | 397 | 125 | 184 | 309 |

***Romania***

| | | | | | | |
|---|---|---|---|---|---|---|
| ECEC settings | 13 | 5 | 18 | 13 | 5 | 18 |
| Teachers | 93 | 16 | 109 | 92 | 16 | 108 |
| Assistants | 13 | 5 | 18 | 13 | 5 | 18 |
| Children | 810 | 125 | 935 | 827 | 116 | 943 |

## 2.2.4 Data Collection

Data were collected in four waves or time points. (T1) baseline: The aim of wave one is to provide baseline measures of elements of teachers' careers, children's behaviour and ECEC settings' climate. This wave occurred approximately 2 weeks prior to teachers from Group A being trained on the ProW intervention; they then delivered the intervention program to their classroom's children for the following year (2021-2022). For each ECEC setting from the wait list control group, data were collected on the same day and in the same manner as for the treatment group. The T2 occurred approximately 1–2 weeks post-delivery of the ProW intervention for the teachers in the treatment group of the study, while the wait list control group teachers completed the questionnaires at the same time. The T3 occurred at the beginning of the second year of the intervention (2022-2023). Teachers from both treatment and control groups filled in the questionnaires at the same time before the delivery of the ProW intervention. Finally, T4 data collection was collected after the participants completed the intervention for the second year (both treatment and control groups).

The study's questionnaires were mailed through SurveyMonkey and Google forms (in Cyprus, Greece, and Romania) or given to participants in person (in Portugal). Due to access limitations to online surveys in the Portuguese context, the instruments were printed and filled in by the participants in a paper and pencil administration. When needed, help was provided by the psychologists from the Municipality of Lousada working in the schools on how to fill them in. Questionnaire packages included a self-addressed, cover letter with contact details for the researchers and a request that questionnaires would be completed and returned within a set number of weeks. (T1) questionnaires were distributed to the intervention participants after the 5th session of teachers' training on SWPBS. Participants from Control group B also received the questionnaire in the mail through SurveyMonkey or Google forms. All questionnaires were mailed for T2, T3, and T4 for Cyprus, Greece, and Romania. Follow up strategies were implemented if a survey was not returned within 4 weeks from posting, consisting of phone calls and emails to the ECEC settings made by a research assistant or an external coach.

### 2.2.4.1 Instruments

The original instruments were translated from the international English version to participating countries' languages: in Greek, Portuguese, and Romanian. The instruments were translated into these languages, using the back-translation method. The translations were reviewed by each national research team.

At every stage, instruments were selected to measure outcomes that reflected elements of teachers' career and children's behaviour, both generally and specifically. The instruments which were administered to the participating teachers and assistants are presented in Table 2.4:

**Table 2.4**

*Teachers' and children's instruments[1] used in ProW intervention project*

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[1] Full details of the instruments used can be found in D2.2 Research design and measures.

| | | |
|---|---|---|
| Teachers | Demographics | |
| | Teacher Subjective Wellbeing Questionnaire (TSWQ) | Teachers' work-related wellbeing |
| | Teachers' Sense of Efficacy Scale (TSES) | Teachers' efficacy for instructional strategies, student engagement and classroom management |
| | Teacher Social Self-efficacy (TSSES) | Teachers' social self-efficacy for developing positive teacher- child relationships |
| | Employee Satisfaction Inventory (ESI) | Job satisfaction regarding working conditions, supervision, pay, job itself, promotion, and organization as a whole |
| | The Maslach Burnout Inventory (MBI) | Emotional Exhaustion, Personal Accomplishment, and Depersonalization |
| | Professional Development Evaluation Form (PDEF) | Evaluates different aspects of the teachers' training such as seminar's organization, educational material, the content of the lectures, |
| | PERMA Profiler | Psychological well-being |
| Children | Demographics | |
| | Strengths & Difficulties Questionnaire (SDQ) | Children's internalizing/externalizing problems |
| | Adaptive Social Behavior Inventory (ASBI)[2] | Children's social-emotional competence |
| | Child Behaviour Rating Scale (CBRS) | Children's work-related skills and social skills, |
| ECEC setting | Preschool Climate Scale (PCS) | Teachers' perceptions of school climate |

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[2] In this project, we employed the factor structure of ASBI as recommended by Sammons et al., 2003 to meet our specific requirements.

| Parents | Families interview protocol | Parents' views on the use and impact of the ProW framework. |
|---|---|---|
| Monitoring ProW intervention (SWPBS module)[3] | Fidelity Assessment template (FAT) | Direct observation of positive behavior support systems and practices within an ECEC setting |
| | PBIS Team Implementation Checklist (PBIS – TIC) | Assess information about activities related to the critical features of the SWPBS framework |

## 2.2.5 Ethics

All procedures involving human participants in this study were performed in accordance with the principles of the Declaration of Helsinki. The study was approved by the department of research ethics advisory board across the four countries. Previously to the administration of instruments, Informed consent was obtained from all participants (teachers, assistants, and children's legal guardians) in the study.

More specifically, the study meets the following ethical guidelines across four countries:

1. All ECEC staff were informed via letter/leaflet and meetings with the researchers about the ProW project.

2. The parents of all children were informed of the aims and methods via letter and personal contact if requested.

3. A letter of informed consent was obtained from every participating family before the child joined the study.

4. All records from teachers, staff and parents were confidential. Completed questionnaires contained no personal information to preserve anonymity. No names were used in the computer records. Information collected from staff was available to those individuals who provided it. Names and settings have been altered into

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[3] Fidelity data from the FAT and PBIS - TIC scales are presented in the Appendix.

numbers on the database. The names were kept in a locked file following the ethics advisory board's guidelines for educational research.

5. GDPR: All data collection was complied with GDPR regulations.

## 2.3 Analytical Strategy

Since a primary goal of the ProW study is to communicate with non-technical audiences such as members of the business community and policymakers, ProW research teams followed non-technical ways to present the project's findings. Therefore, this report largely relies on descriptive statistics to report results. However, the most advanced inferential statistical analysis will be employed when analyzing data for examination of the ProW intervention effects.

### 2.3.1 Score-Code matching

Data was collected as described in the data collection section, and it was coded on an excel template provided by the IHU research team. Data from excel sheets was then imported to IBM SPSS statistics program (Version 27) and organized separately by each country and measurement occasion by the UOC research team. At this time, data from the four countries were not yet merged together. The data from all countries was first cleaned to check for duplicate codes for individuals and any variable values outside the expected range (typically caused by mistakes in coding).

### 2.3.2 Statistical Analysis

*Initial analysis*

After data examination by the UOC research team and cleaning up the data files of each country, the necessary recodings of some negatively measured items were performed by reversing the initial scores according to the original scales' guidelines. Subsequently, Cronbach's Alpha reliability tests were carried out on the measures (scales and subscales) we adopted in ProW as teachers' and children's outcomes (see Tables with Cronbach's Alpha reliability values for each country across the 4 assessment times in Appendix). All outcomes we adopted in this study were composite variables consisted of the items that the original scale guidelines suggested to use for the assessment of the global scale's score or each subscale's score.

*Pattern of analysis*

Descriptive statistics for the samples (e.g., teachers' experience, age, gender, etc.) were provided. Mean scores (with standard deviations) were calculated and presented for each of the four waves of evaluations. Group comparisons were assessed by testing differences with ANOVA *F* tests and *t*-tests for independent samples or one-sample design. The significance level for examining differences across all the analyses presented in this report was set at $p < 0.05$. Missing values treated with a listwise selection method for missing cases. Therefore, if there was a missing value in an item of a subscale this participant was removed from the analyses for this specific subscale. Notably, the participants (N) in Portuguese sample variates often across subscales, because of the paper and pencil format of delivery, which resulted in more missing values across scales' items than in the case of the other countries adopted an online method of measures administration.

*Procedure of results presentation*

The analysis of this project's results will be implemented by providing descriptive for each scale per country allocated in sections based:

(a) on the assessment time in Year 1 and Year 2 and

(b) on the value-added analysis from one time to the next one.

In each section, results presented in subsections based on the source of information, providing separately findings related to teachers and findings related to children as participants of this study. The presentation of the findings in each scale based on the subscales that have been already reported by the original scale or by related evidence in previous studies. In the following tables A and B, we present each scale with its respective subscales and the including items.

In the sections (3.1, 3.2, 3.4, 3.5) providing results in each assessment Time, ANOVA *F* tests implemented for testing the equivalence of scores in each subscale across countries in both the experimental and the control group. Superscript numbers show which of the country's mean score differ from the respective mean score of another country in the post-hoc

analyses. However, the main interest here was to present the profile of each country in each Time of assessment and not to focus on the comparison between countries' scores, because in each country different cultural and educational settings may lead to differences in the subscales' mean scores.

In the sections (3.3, 3.6) providing results for the effects of the ProW intervention from the baseline assessment in year 1 (Time 1) to the next assessment time (Time 2) and from the follow up assessment in year 2 (Time 3) to the last assessment point (Time 4), it is presented the change or gain scores of teachers and children in each subscale across countries. Examining the impact of ProW intervention on teachers' and children's outcomes two series of analyses were run to test:

(a) whether change/gain scores differ between groups (experimental vs control) and/or countries and

(b) whether both groups' change/gain scores show a significant difference from the assessment before the initiation of the intervention in each year (Time 1 and Time 3).

In these analyses, we presented descriptives of the change (gain) scores for each source (teacher and children) in each group (experimental and control) per country and whether there is a change (gain) significantly different from the baseline assessment in each year. Initially it was run 2-way ANOVAs for each subscale's score with group and country as independent variables. In tables presented separately the group and country effects as well as the interaction (group by country) effect. In these analyses, it is of particular interest the group effect and whether this group effect is similar across countries (that means non-significant interaction effect). Subsequently, it was run single samples t-test analyses for examining whether the mean change (gain) score in each scale and subscale assessed during Year 1 was different from the zero (0) point, which denote the baseline assessment. A significant group effect in the mean change (gain) scores would denote that the ProW intervention had influence participants' scores in the subscale under examination. Country differences will not be discussed here, because the intervention in each country followed

specificities derived from particular cultural and educational issues that were included in the implementation of the ProW intervention in each country.

**Table A.** Measures – Outcomes – Children: Scales' items per subscale

| Scales | Subscales | Items |
|---|---|---|
| SDQ | Emotional problems | 3, 8, 13, 16, 24 |
| | Conduct problems | 5, 7R, 12, 18, 22 |
| | Hyperactivity | 2, 10, 15, 21R, 25R |
| | Peer problems | 6, 11R, 14R, 19, 23 |
| | Prosocial skills | 1, 4, 9, 17, 20 |
| CBRS | Classroom self-regulation | 15, 20, 21, 22, 23, 24, 25, 27, 28, 29 |
| | Interpersonal skills | 3, 5R, 6R, 7, 8, 13, 16 |
| | Social play-interaction | 9, 4, 1, 11, 10, 14, 2 |
| | Engagement | 32, 31, 30, 19 |
| | Social problem solving | 18, 12, 17, 26 |
| ASBI | Conformity/Compliance | 3, 5, 7, 9, 14 17, 19 |
| | Prosocial | 1, 2, 6, 10, 11, 12, 13R, 16, 18 |
| | Confidence/Independence | 8, 20, 21, 23, 25 |

*Note:* R = Reverse scoring

Table B. Measures – Outcomes – Teachers: Scales' items per subscale

| Scales | Subscales | Items |
|---|---|---|
| TSWQ | Teaching Efficacy | 2, 4, 6, 8 |
| | School Connectedness | 1, 3, 5, 7 |
| TSES | Student engagement | 2, 3, 4, 11 |
| | Instructional strategies | 5, 9, 10, 12 |
| | Classroom management | 1, 6, 7, 8 |
| TSSES | Teacher Sensitivity | 12, 16, 17, 23, 26, 27 |
| | Social Guidance | 3, 7, 8, 14, 18, 25 |
| | Teacher-Child Support | 6, 20, 21 |
| | Classroom Climate-Children Engagement | 2, 4, 9, 10, 11, 13, 15, 19 |
| | Classroom Management-Conflict Resolution | 1, 5, 22, 24, 28 |
| MBI | Emotional Exhaustion | 1, 2, 3, 6, 8, 13, 14, 16, 20 |
| | Depersonalization | 5, 10, 11, 15, 22 |
| | Personal Accomplishment | 4, 7, 9, 12, 17, 18, 19, 21 |
| ESI | Working Conditions | 1, 2 ,3R, 4R, 5R |

|  |  |  |
|---|---|---|
|  | Supervisor | 6, 7, 8R, 9R |
|  | Pay | 10, 11R, 12R, 13R |
|  | Job Itself | 14, 15, 16R, 17R |
|  | Organization as a Whole | 18, 19, 20R, 21R |
|  | Promotion | 22, 23, 24R |
| PCS | Teacher-student | 5, 3, 8 |
|  | Student-Student | 11, 16, 9, 10 |
|  | Teacher-home | 22, 4, 7, 1, 2 |
|  | School safety | 6, 17, 20 |
|  | Clarity of expectations | 13, 19, 12 |
|  | Fairness of rules | 21, 14 |
|  | Respect of diversity | 15, 18 |
| PERMA | Positive -P | 7, 12, 22 |
|  | Engagement - E | 5, 13, 21 |
|  | Relationships - R | 8, 14, 20 |
|  | Meaning - M | 1, 11, 18 |
|  | Accomplishment -A | 3, 10, 17 |
|  | Negative - N | 4, 9, 16 |
|  | Health -H | 6, 15, 19 |
|  | Loneliness | 12 |
|  | Happy | 23 |

*Note*: R = Reverse scoring

# Part 3: Analysis of the ProW data

## 3.1 Baseline - Comparisons between 4 countries for teachers and children

In this section are presented the results from the baseline assessment (Time 1). ANOVA *F* tests implemented for testing the equivalence of scores in each subscale across countries in both the experimental and the control group. Superscript numbers show which of the country's mean score differ from the respective mean score of another country in the post-hoc analyses.

### *a. Findings for Teachers*

The tables 3.1.1a and 3.1.1b show the results from the composite scores of each one of the subscales in the TSWQ questionnaire assessed preschool teachers' wellbeing in the school context. Teacher Wellbeing is the total score of the TSWQ and provides a global assessment of the teachers' wellbeing in the preschool setting they worked before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.1.1a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 1 for the Experimental Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | $3.42^3$ | 0.51 | $3.37^3$ | 0.44 | 3.64 | 0.41 | $3.32^3$ | .57 | 6.63* |
| *School Connectedness* | 3.57 | 0.44 | 3.58 | 0.49 | 3.63 | 0.43 | $3.31^3$ | .60 | 4.01* |
| *Teacher Wellbeing* | 3.49 | 0.42 | 3.47 | 0.37 | 3.64 | 0.35 | $3.30^3$ | .53 | 6.68* |
| N | 54 | | 53 | | 93 | | 39-41$^a$ | | 239-241 |

*Notes:* * p < .05; min = 1, max = 4 ; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.1b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 1 for the Control Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.46 | 0.46 | 3.20 | 0.60 | 3.77[2] | 0.32 | 3.50[2] | .38 | 6.43* |
| *School Connectedness* | 3.67 | 0.42 | 3.45 | 0.65 | 3.81 | 0.28 | 3.52 | .53 | 2.55 |
| *Teacher Wellbeing* | 3.57 | 0.38 | 3.32 | 0.49 | 3.78[2] | 0.28 | 3.52 | .39 | 5.46* |
| N | 39 | | 43 | | 16 | | 48-51[a] | | 146-149 |

*Notes*: * p < .05; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

According to ANOVAs findings it is shown that in both groups there were cross-country differences. In general, it seems that Romanian teachers have a significantly higher sense of wellbeing than teachers from the other countries and particularly in terms of their teaching efficacy. More pronounced differences emerged between Portuguese and Cypriot teachers vs Romanian teachers. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a quite high sense of wellbeing in terms of their teaching efficacy and their connection with their school. Subsequently, it is quite high in their general sense of wellbeing as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Greece, it is shown, it is shown by both tables that preschool teachers have a quite high sense of wellbeing in terms of their teaching efficacy and their connection with their school. Subsequently, it is quite high in their general sense of wellbeing as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Cyprus, both tables show that preschool teachers have a high sense of well-being, before the beginning of the ProW intervention (baseline assessment). This can be seen

from the two subscales, that of self-efficacy and that of the connection that teachers have with the school. In particular, both in the control group and in the experimental group teachers reported that they evaluate their teaching as effective, that as teachers they are helpful towards their students and that they have achieved a lot in this role. This sense of wellbeing is also enhanced by the sense of 'belonging' to this school, and the care and respect teachers receive from it.

In the case of Romanian, it is shown by both tables that preschool teachers have a quite high sense of wellbeing in terms of their teaching efficacy and their connection with their school. Subsequently, it is quite high in their general sense of wellbeing as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Portugal, the above tables show that both groups of preschool teachers rate statements related to their work-related wellbeing very positively and it seems that they experience a high sense of teaching efficacy and connectedness with their respective schools very often or almost always. Teachers of the control group also seem to self-report even higher than the experimental group before the beginning of the intervention.

The tables 3.1.2a and 3.1.2b show the results from the composite scores of each one of the subscales in the TSES questionnaire assessed preschool teachers' sense of efficacy. Teachers' sense of efficacy was assessed in terms of student engagement, instructional strategies and classroom management before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.1.2a.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 1 for the Experimental Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.51 | 1.03 | 7.43[3] | 0.67 | 7.92 | 0.98 | 7.12[3] | 1.11 | 7.50* |
| *Instructional strategies* | 7.51[3,4] | 1.14 | 7.33[3] | 0.65 | 8.01 | 1.01 | 6.91[3] | 1.13 | 13.22* |
| *Classroom management* | 7.32[3] | 0.97 | 7.52 | 0.69 | 7.91 | 0.99 | 7.10[3] | .96 | 9.15* |
| N | 54 | | 53 | | 93 | | 41-42 | | 241-242[a] |

*Notes:* * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.2b.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 1 for the Control Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.80 | 0.73 | 7.18 | 1.39 | 7.03 | 1.89 | 7.59 | .98 | 2.80 |
| *Instructional strategies* | 7.63 | 0.86 | 7.20 | 1.59 | 7.37 | 2.01 | 7.14 | .94 | 1.23 |
| *Classroom management* | 7.40 | 1.00 | 7.05 | 1.47 | 7.26 | 1.88 | 7.37 | .92 | 0.68 |
| N | 39 | | 43 | | 16 | | 51-52 | | 149-150[a] |

*Notes*: * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

According to ANOVAs findings it is shown that in the experimental group there were significant cross-country differences, but not in the control group. In general, it seems that Romanian teachers in the experimental group have a significantly higher sense of teaching efficacy than teachers from the other countries. More pronounced differences emerged

between Portuguese and Greek teachers vs Romanian teachers. Below it is briefly described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a rather high level sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. Thus, preschool teachers have a rather high sense of efficacy as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Cyprus, as it is shown in both tables, preschool teachers have a high sense of self efficacy as scored in the three subscales: classroom management, instructional strategies and student engagement. Moreover, the sense of self-efficacy is quite high, as it is shown in both experimental group and control group before the beginning of the ProW intervention. Teachers feel quite a bit competent that they can control students to follow rules and reduce disruptive behavior through an adoption of a management system in their classroom. Also, the creation of alternative opportunities for learning, teaching strategies and assessment are valued high from teachers working in preschool settings in Cyprus.

In the case of Romania, it is shown by both tables that preschool teachers have a high sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. As we see there are some differences between the experimental and control group of Romanian preschool teachers in terms of their efficacy as it is shown before the beginning of the ProW intervention (baseline assessment).

In the case of Portugal, the above tables show that preschool teachers perceive their efficacy for instructional strategies, student engagement and classroom management at a very high level before the beginning of the intervention. In other words, both groups answer questions indicating very little difficulty in managing student behavior, implementing alternative strategies, and establishing productive relations with their students. Again, teachers in the control group surpass the experimental group in all subscales of the efficacy scale.

The tables 3.1.3a and 3.1.3b show the results from the composite scores of each one of the subscales in the TSSES questionnaire assessed preschool teachers' sense of social self-efficacy. Teachers' sense of social self-efficacy was assessed in terms of teacher sensitivity, social guidance, teacher-child support, classroom climate-children engagement and classroom management before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.1.3a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 1 for the Experimental Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.20[3] | 1.21 | 7.30[3] | 0.68 | 8.34 | 0.64 | 7.53[3] | 1.02 | 26.54* |
| *Social Guidance* | 7.42[3] | 1.11 | 7.68[3] | 0.62 | 8.51 | 0.50 | 7.36[3] | .95 | 32.96* |
| *Teacher-Child Support* | 7.65[3] | 1.05 | 7.76[3] | 0.69 | 8.48 | 0.59 | 7.82[3] | .91 | 17.03* |
| *Classroom Climate-Children Engagement* | 7.51[3] | 1.12 | 7.51[3] | 0.64 | 8.48 | 0.50 | 7.53[3] | .93 | 28.33* |
| *Classroom Management-Conflict Resolution* | 7.52[3] | 1.04 | 7.64[3,4] | 0.59 | 8.26 | 0.63 | 7.14[3] | .93 | 23.22* |
| *TSSES Global* | 7.46[3] | 1.04 | 7.58[3] | 0.57 | 8.41 | 0.50 | 7.45[3] | .89 | 29.26* |
| N | 54 | | 53 | | 93 | | 41-42[a] | | 240-241 |

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.3b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 1 for the Control Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.34[3] | 0.83 | 7.16 | 1.37 | 8.21 | 0.63 | 7.87 | .90 | 6.49* |
| *Social Guidance* | 7.48 | 0.76 | 7.49 | 1.11 | 8.19 | 0.68 | 7.63 | .86 | 2.67 |
| *Teacher-Child Support* | 7.71 | 0.82 | 7.55 | 1.29 | 8.29 | 0.58 | 7.88 | .90 | 2.47 |
| *Classroom Climate-Children Engagement* | 7.49 | 0.78 | 7.37 | 1.24 | 8.18[2] | 0.59 | 7.76[2] | .77 | 3.65* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Classroom Management-Conflict Resolution* | 7.50 | 0.89 | 7.43 | 1.21 | 8.01 | 0.75 | 7.44 | .85 | 1.60 |
| *TSSES Global* | 7.50 | 0.75 | 7.41 | 1.22 | $8.18^{2}$ | 0.59 | 7.72 | .80 | 3.19* |
| N | 39 | | 43 | | 16 | | 52 | | 149 |

*Notes*: * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

Interestingly the ANOVAs findings show that in the experimental group there were significant cross-country differences across all subscales of the TSSES measure of social self-efficacy, but this was not the case in the control group. In general, in both groups it seems that Romanian teachers felt more confident for implementing activities related to their sense of social self-efficacy than teachers form all the other countries before the beginning of ProW intervention. This was particularly evident in the experimental group. Teachers from the other three countries shared a similar level sense of social self-efficacy in both groups. Below it is briefly described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have from some extent to a great extent a sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their students. Thus, Greek preschool teachers seem to have a very satisfactory sense of their social self-efficacy as it is shown by the high mean scores in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Cyprus it is shown by both tables that preschool teachers have a high sense of self efficacy in terms of teacher sensitivity, child support, classroom climate and children engagement in the classroom, as well as conflict resolution in the classroom. Subsequently, it is high their general sense of self-efficacy as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment). More specifically, in both groups teachers seem to feel effective in detecting negative emotions of their students, in predicting their reactions, and in understanding their needs for help. Also, teachers seem to feel that they serve as role models for students and

develop a qualitative relationship with each one of them· in fact, students learn to work as a team, while teachers are able to create opportunities, but also explain their expectations regarding the rules in the classroom and giving opportunities for positive behaviors so that children have the expected behaviors. They cultivate children's motives to play with other children, enhancing children's involvement in helping their classmates and they give freedom to choose the classmate they want to play with. They successfully control a noisy classroom, help solving problems between peers and deal with unwanted behaviors successfully.

In the case of Romania, it is shown by both tables that preschool teachers have from some extent to a great extent a sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their pupils. So, Romanian preschool teachers have a quite great extent sense of their social self-efficacy as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

Both groups of preschool teachers from Portugal seem to have highly developed confidence in their social self-efficacy at the beginning of the program and before the implementation of the intervention. The average rating of responses in all five dimensions indicates that they feel quite competent in creating and maintaining positive and supportive environments for their children. Small differences are noted as previously in favor of the control group.

The tables 3.1.4a and 3.1.4b show the results from the composite scores of each one of the subscales in the MBI questionnaire assessed preschool teachers' sense of burnout. Particularly, burnout was assessed in terms of emotional exhaustion, depersonalization and personal accomplishment before the intervention in Year 1 in both groups across the four participating countries in the ProW project. The scoring of each subscale is based on the rules for item inclusion and reverse scoring provided by the original SDQ scale.

**Table 3.1.4a.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 1 for the Experimental Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.83[3] | 0.90 | 2.28[3] | 0.88 | 1.14 | 1.33 | 1.84[3] | 1.51 | 11.42* |
| *Depersonalization* | 0.36 | 0.53 | 0.47 | 0.64 | 0.59 | 1.20 | .38 | .76 | 0.95 |
| *Personal Accomplishment* | 5.01 | 0.63 | 5.08 | 0.49 | 5.09 | 0.93 | 5.04 | .73 | 0.15 |
| N | 54 | | 53 | | 93 | | 40 | | 239 |

*Notes:* * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.1.4b.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 1 for the Control Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.81[3] | 0.97 | 2.08[3] | 1.04 | 0.71 | 0.65 | 1.78[3] | 1.47 | 5.40* |
| *Depersonalization* | 0.30 | 0.51 | 0.51 | 0.69 | 0.16 | 0.34 | 0.30 | 0.67 | 1.60 |
| *Personal Accomplishment* | 5.31 | 0.54 | 5.13 | 0.77 | 4.78 | 1.37 | 5.32 | 0.59 | 2.52 |
| N | 39 | | 43 | | 16 | | 53 | | 225 |

*Notes*: * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups there were significant cross-country differences in terms of the emotional exhaustion subscale of MBI. Particularly, it is shown that Romanian teachers felt significantly less exhausted emotionally than all the other teachers from Cyprus, Greece and Portugal. However, there was no other significant difference in the remaining two subscales of MBI across countries in any group. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a very good accomplishment with their work, they do not feel at all depersonalization and they rarely feel emotional exhaustion from their work. Thus, Greek preschool teachers have a very satisfactory feeling from their work as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In Cyprus, it is shown in both tables that preschool teachers before the ProW intervention experience a moderate level of emotional exhaustion, very low rate of depersonalization and very high rate of personal accomplishment. Work is an activity that creates moderate emotional exhaustion to teachers in a way that they feel moderate feelings of fatigue, frustration and difficulty in dealing with everyday situations at school. In addition, they manage to a very large extent to feel their work is full of energy, able to understand their students and face problems calmly, and as a result they have significant achievements in their work. Finally, they experience a small rate of depersonalization with their students.

In Romania, it is shown in both tables that preschool teachers are at very low levels of emotional exhaustion and depersonalization, but also at very high rates of personal accomplishment before the beginning of the Pro W intervention. Their work does not exhaust them emotionally, nor does it frustrate them, and they can respond to the daily problems that arise at preschool settings. Teachers seem to care about their students, think positively about them, without feeling that they are burdened by their job. In addition, they succeed in significant aspects in relation to their work, understand students and their needs and react calmly even in difficult situations.

The summary of responses in the Maslach Burnout Inventory (MBI) for the preschool teachers from Portugal show that both groups had experienced very little emotional exhaustion or burnout and almost never were unfeeling or impersonal towards their students. On the contrary, their responses indicate high feelings of competence and successful achievement in their work.

The tables 3.1.5a and 3.1.5b show the results from the composite scores of each one of the subscales in the ESI questionnaire assessing preschool teachers' satisfaction for their job before the intervention in Year 1 in both groups across the four participating countries in the ProW project. Teachers' satisfaction for their job is assessed in terms of various dimensions, which appear as subscales in the above tables. For the construction of the subscales have been made transformations with reverse scoring in specific items (3,4,5,8,9,11,12,13,16,17, 20,21,24). Therefore, a higher score in each subscale shows higher satisfaction for this dimension of teachers' job.

**Table 3.1.5a.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI) in Time 1 for the Experimental Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.18 | 0.69 | 4.08 | 0.53 | 3.97 | .47 | 3.99 | .59 | 1.67 |
| *Supervisor* | 4.56[,3,4] | 0.51 | 4.50[3] | 0.49 | 4.11[2] | .48 | 4.26[2] | .49 | 12.52* |
| *Pay* | 2.88[2] | 0.99 | 3.42 | 1.06 | 3.20[2] | .79 | 2.97 | .86 | 3.72* |
| *Job Itself* | 4.49[3,4] | 0.62 | 4.39 | 0.44 | 4.16 | .42 | 4.02[2] | .59 | 8.75* |
| *Organization as a Whole* | 3.65[3] | 0.82 | 2.81[3] | 0.85 | 3.99 | .56 | 3.33[3] | .83 | 30.12* |
| *Promotion* | 2.41[3,4] | 0.95 | 2.63[3] | 0.95 | 4.04[4] | .52 | 2.98 | 1.01 | 58.44* |
| *ESI Global* | 3.70[3] | 0.49 | 3.64 | 0.42 | 3.91[2,4] | .38 | 3.61 | .48 | 7.28* |
| N | 54 | | 53 | | 93 | | 37-39[a] | | 237-239 |

Notes: * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.5b.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI) in Time 1 for the Control Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.20 | 0.72 | 4.02 | 0.73 | 3.90 | .27 | 4.27 | .63 | 2.01 |
| *Supervisor* | 4.63[3,4] | 0.46 | 4.35 | 0.67 | 3.96 | .46 | 4.17 | .96 | 4.26* |
| *Pay* | 2.74[2] | 0.99 | 4.07[4] | 0.81 | 3.12[2] | .55 | 3.01 | 1.13 | 15.10* |
| *Job Itself* | 4.68[3,4] | 0.40 | 4.48[4] | 0.52 | 4.21 | .27 | 4.16 | .62 | 8.68* |
| *Organization as a Whole* | 3.67[2] | 0.79 | 3.12 | 0.78 | 4.18[2] | .30 | 3.77[2] | .97 | 8.42* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Promotion | 2.61[3] | 0.84 | 2.64[3] | 0.65 | 3.93[4] | .38 | 2.93 | 1.17 | 9.67* |
| ESI Global | 3.75 | 0.38 | 3.78 | 0.43 | 3.88 | .22 | 3.73 | .66 | 0.43 |
| N | | 39 | | 43 | | 16 | | 51-53[a] | 149-151 |

*Notes:* * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

Interestingly the ANOVAs findings show that in both groups there were significant cross-country differences across almost all subscales of the ESI measure (except for the working conditions subscale). In general, in both groups it seems that teachers from Cyprus showed less job satisfaction in most of the ESI subscales than teachers form the other three countries. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have very good feelings about their job, their supervisor and their working conditions, but they have bad feelings about their pay and their promotion. They also are unsure about the whole organization. All these components lead Greek preschool teachers to have generally good feelings about their work, as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Cyprus it is shown in both tables that preschool teachers have a moderate sense of satisfaction regarding their job. More specifically, *working conditions* are satisfactory for both groups (control and experimental). In the other subscales related to job satisfaction, such as *Supervisor* and whether teachers seem satisfied with the way they are treated and understand their problems, *Job itself,* whether their job is boring or worthwhile,  and in the subscales *Organization as a Whole*, if it takes care of their employees and *Promotion*, what kind of prospects this school creates,  the teachers' answers showed that they are not sure if this is offered to them in the context of the particular school. It should also be mentioned that in both groups teachers are not satisfied with the financial rewards they have in relation to the school and the work they offer. Subsequently, it is quite moderate their general sense of job satisfaction as it is shown in both experimental and control groups before the beginning of the ProW intervention (baseline assessment).

In the case of Romania, responses from both groups on the Employee Satisfaction Inventory (ESI) indicate in general positive tendencies in their feelings about their employment status, especially regarding the teaching profession and their respective organization. Less satisfactory aspects of their employment appear to be the salary that clearly prompts a level of uncertainty in the responses of both groups.

Preschool teachers from Portugal on the Employee Satisfaction Inventory (ESI) evaluate positively their jobs, working conditions and supervisors while they seem to be uncertain in the assessment of their organizations. Both groups appear dissatisfied with their professional prospects and clearly uncertain regarding their salaries. In general, Portuguese teachers from both groups seem to be only marginally satisfied by their overall work experience.

The tables 3.1.6a and 3.1.6b show the results from the composite scores of each one of the subscales in the PCS questionnaire assessed preschool teachers' view for the climate in their preschool setting. Particularly, preschool climate assessed in terms of seven (7) different dimensions, which are described in the subscales of the above tables, before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.1.6a.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 1 for the Experimental Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.59 | 0.71 | 3.64 | 0.42 | 3.70 | .67 | 3.90 | .15 | 1.40 |
| *Student-Student* | $3.03^3$ | 0.64 | $3.18^3$ | 0.34 | 3.48 | .70 | 3.38 | .35 | 7.67* |
| *Teacher-home* | 3.46 | 0.63 | 3.49 | 0.39 | 3.67 | .66 | 3.76 | .21 | 2.66 |
| *School safety* | 3.62 | 0.71 | 3.59 | 0.45 | 3.72 | .66 | 3.76 | .28 | 0.85 |
| *Clarity of expectations* | $3.21^3$ | 0.68 | 3.31 | 0.37 | 3.54 | .66 | 3.56 | .42 | 4.44* |
| *Fairness of rules* | 3.50 | 0.71 | 3.51 | 0.43 | 3.66 | .67 | 3.62 | .42 | 1.18 |
| *Respect of diversity* | 3.67 | 0.72 | 3.67 | 0.44 | 3.72 | .66 | 3.81 | .34 | 0.36 |
| *PCS Global* | 3.44 | 0.64 | 3.48 | 0.34 | 3.64 | .64 | 3.68 | .21 | 2.24 |

| | N | 53 | 53 | 93 | 19-20[a] | 218-219 |
|---|---|---|---|---|---|---|

*Notes:* * p < .05; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.6b.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 1 for the Control Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.59 | 0.95 | 3.71 | 0.39 | 3.70 | .38 | 3.93 | .17 | 1.44 |
| *Student-Student* | 3.07[4] | 0.64 | 3.12[4] | 0.53 | 3.26 | .46 | 3.53 | .42 | 3.73* |
| *Teacher-home* | 3.44 | 0.82 | 3.51 | 0.33 | 3.58 | .48 | 3.82 | .27 | 2.37 |
| *School safety* | 3.41[4] | 0.86 | 3.54 | 0.44 | 3.79 | .40 | 3.84 | .24 | 3.17* |
| *Clarity of expectations* | 3.20 | 0.71 | 3.25 | 0.49 | 3.41 | .43 | 3.52 | .38 | 1.86 |
| *Fairness of rules* | 3.32 | 0.99 | 3.46 | 0.45 | 3.50 | .48 | 3.66 | .36 | 1.24 |
| *Respect of diversity* | 3.55 | 0.98 | 3.63 | 0.46 | 3.71 | .44 | 3.85 | .28 | 0.96 |
| *PCS Global* | 3.37 | 0.80 | 3.46 | 0.35 | 3.56 | .38 | 3.73 | .24 | 2.33 |
| N | 39 | | 43 | | 16 | | 20-21[a] | | 118-119 |

*Notes:* * p < .05; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

According to ANOVAs findings in both groups most of the differences appeared in the dimensions of preschool climate were non-significant. A few exceptions were observed in student-student relationships in both groups; Greek teachers' views on this dimension of preschool climate were slightly lower than respective views of teachers in Romania and Portugal. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers believe strongly enough that their preschool setting is characterized by a good classroom climate in all the above terms as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment).

In the case of Cyprus it is shown by both tables that preschool teachers have a qualitative climate in their classroom. Subsequently, the preschool climate is highly estimated as it is shown by the high mean score in both experimental and control group before the beginning

of the ProW intervention. More specifically, teachers seem to a large extent to care for their students, to emphasize in facing students' problems and they adopt rules whose violation has fair consequences. In addition, within the preschool context students feel safe and develop friendly relationships with their peers, as long as there are appropriate conditions, and the children feel safe; there is respect from the teachers' towards children from different cultural backgrounds. Finally, communication with the children's parents is cultivated, so that they are informed of both the positive and negative behaviors of their children and cooperate with each other effectively and practically when the child faces a problem.

In the case of Romania, teacher responses from both groups on the Preschool Climate Scale indicate very positive perceptions of the climate in the preschool settings. Interestingly, the only subscales with slightly lower ratings from both groups are those referring to student relations, expectations, and established rules while they highly rate interactions between teachers and students as well as safety of the environment.

Preschool teachers from Portugal appear to evaluate very positively the school climate in most dimensions. Responses are similar from both groups that are quite confident about their valuable relations to students, parents, and the safety of the school climate. On the other hand, most variability appears in both groups' responses regarding student relations, expectations, and established rules that are rated with slightly less confidence.

The tables 3.1.7a and 3.1.7b show the results from the composite scores of each one of the subscales in the PERMA questionnaire assessed preschool teachers' sense of wellbeing in their personal lives. Particularly, teachers' personal well-being is assessed in 5 general dimensions (positive emotions, engagement, relationships, meaning in their lives and sense of achievement-accomplishment). These mean average of these five main dimensions comprised the PERMA global score, which denotes a general well-being sense of the teachers. Also, these tables presented teachers' scores on a subscale assessing negative emotions, sense of personal health conditions and a general sense of happiness and loneliness emotions.

**Table 3.1.7a.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 1 for the Experimental Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.33 | 1.46 | 7.51 | 1.36 | 8.26 | 1.47 | 7.62 | 1.59 | 5.78* |
| Engagement - E | 7.45 | 1.33 | 7.58 | 1.14 | 7.66 | 1.69 | 7.95 | 1.29 | 1.00 |
| Relationships - R | 7.65 | 1.47 | 7.70 | 1.41 | 8.21 | 1.53 | 7.98 | 1.32 | 2.30 |
| Meaning - M | 7.78 | 1.27 | 7.73 | 1.30 | 8.36 | 1.46 | 8.10 | 1.24 | 3.37* |
| Accomplishment -A | 7.59 | 1.36 | 7.35 | 1.13 | 8.14 | 1.48 | 7.55 | 1.33 | 4.68* |
| Negative - N | 4.89 | 2.02 | 4.96 | 1.79 | 2.31 | 2.57 | 4.86 | 2.08 | 26.3* |
| Health -H | 7.46 | 1.79 | 6.96 | 1.88 | 8.05 | 1.58 | 7.06 | 1.97 | 5.58* |
| PERMA Global | 7.52 | 1.22 | 7.62 | 1.10 | 8.14 | 1.39 | 7.90 | 1.04 | 3.64* |
| Loneliness (item 12) | 3.37 | 2.98 | 3.36 | 2.87 | 5.38 | 4.07 | 3.86 | 3.64 | 5.51* |
| Happy (item 23) | 7.31 | 1.83 | 7.85 | 1.49 | 8.20 | 1.59 | 8.19 | 1.34 | 4.05* |
| N | 54 | | 53 | | 93 | | 42 | | 242 |

*Notes:* * $p < .05$; min = 0, max = 10

**Table 3.1.7b.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA

Profiler in Time 1 for the Control Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.71 | 1.47 | 7.99 | 1.47 | 7.77 | 2.22 | 7.83 | 1.39 | 0.23 |
| Engagement - E | 7.67 | 1.34 | 8.09 | 1.36 | 6.88 | 2.26 | 8.09 | 1.44 | 3.29* |
| Relationships - R | 8.13 | 1.64 | 7.92 | 1.64 | 7.80 | 2.28 | 8.16 | 1.28 | 0.36 |
| Meaning - M | 8.16 | 1.46 | 8.10 | 1.33 | 7.83 | 2.29 | 8.52 | 1.21 | 1.25 |
| Accomplishment -A | 7.86 | 1.22 | 7.71 | 1.17 | 7.60 | 2.38 | 8.01 | 1.28 | 0.55 |
| Negative - N | 5.22 | 2.03 | 4.76 | 2.10 | 1.02 | 1.90 | 4.15 | 1.90 | 18.02* |
| Health -H | 7.56 | 1.95 | 7.67 | 1.69 | 7.15 | 2.27 | 6.69 | 2.50 | 2.07 |
| PERMA Global | 7.93 | 1.30 | 7.99 | 1.23 | 7.64 | 2.19 | 7.90 | 1.04 | 0.50 |
| Loneliness (item 12) | 3.05 | 2.89 | 2.93 | 2.95 | 3.50 | 3.81 | 2.25 | 3.15 | 1.52 |
| Happy (item 23) | 8.05 | 1.65 | 8.09 | 1.70 | 7.98 | 2.32 | 8.00 | 1.73 | 0.29 |
| N | 39 | | 43 | | 16 | | 53-52[a] | | 150-151 |

*Notes:* * $p < .05$; min = 0, max = 10; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

According to ANOVAs findings in both groups most of the differences in the PERMA dimensions appeared as non-significant. A few exceptions appeared in the case of positive emotions, meaning, accomplishment and happiness for the experimental group (Romanian teachers seem to have higher positive emotions than the others). Similar significant differences for the control group appeared only for teachers' negative emotions and the Romanian teachers showed the lowest negative emotions from the other countries in both groups. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers experience various feelings and emotional states in all the above terms as it is shown by the high mean score in both experimental and control group before the beginning of the ProW intervention (baseline assessment). In both groups the general PERMA feeling is in a very positive direction with high mean scores. However, teachers in the control group showed slightly more positive emotions than teachers in the experimental group in Time 1.

In the case of Cyprus it is shown in both tables that preschool teachers have a positive profile in all the above terms as it is shown by the mean scores in both experimental and control group. More specifically, preschool teachers in both groups seem to experience positive feelings, are interested in activities, they feel loved and supported by others and feel valuable for them; they are doing well regarding their responsibilities and feel good for their achievements, they have a purpose in life, and they seem to work and feeling able to reach their goals.

In the case of Romania it is shown also in both tables that preschool teachers have an interesting profile regarding all the above dimensions of PERMA, as it is shown by the mean scores in both experimental and control group. Furthermore, tendencies show that they are involved in activities, they experience positive emotions, they feel joyful and valued by others; they also have a sense of purpose in life, they work towards reaching their goals, as well as having a  high sense of health.

Preschool teachers from Portugal provided a very interesting profile of their wellbeing that indicates the exact same tendencies from both groups. First, preschool teachers in both groups seem to experience positive feelings, they feel loved and supported by others and feel valuable for them as well as the subjective views of accomplishment emerged rather high (especially for the control group) possibly indicating adequate developed feelings of mastery and achievement. Also, the negative feelings and loneliness emotions are rather low for both groups of teachers.

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## b. Findings for Children

Tables 3.1.8a and 3.1.8b show the results from the composite scores of each one of the subscales in Strengths and Difficulties Questionnaire (SDQ) regarding emotional, conduct difficulties, hyperactivity and relations with peers and prosocial behavior across the four participating countries. More specifically, children's strengths and difficulties were assessed in terms of the frequency with which they were exhibited from 1 (not true) to 3 (true). Strengths and difficulties are grouped according to five (5) different dimensions, which are described in the subscales presented in the tables, for both groups across the four participating countries in the Pro-W project in Year 1 before the intervention phase. ANOVA F tests show the statistical testing of the countries' differences in each subscale. Superscript numbers show which of the country's mean score differs from the respective mean score of another country in the post-hoc analyses.

**Table 3.1.8a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Strength and Difficulties Questionnaire (SDQ) in Time 1 for the Experimental Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | 1.29[3] | 0.38 | 1.34 | 0.40 | 1.35 | 0.39 | 1.34 | 0.35 | 3.12* |
| Conduct problems | 1.25[3] | 0.34 | 1.24[3] | 0.38 | 1.48 | 0.36 | 1.32[3] | 0.40 | 65.60* |
| Hyperactivity | 1.47[2,4] | 0.53 | 1.60[3,4] | 0.53 | 1.51[4] | 0.42 | 1.82 | 0.54 | 25.83* |
| Peer problems | 1.35[2,3] | 0.37 | 1.26[3] | 0.29 | 1.45 | 0.37 | 1.22[1,3] | 0.28 | 36.80* |
| Prosocial skills | 2.45 | 0.56 | 2.53[3] | 0.50 | 2.42 | 0.49 | 2.41 | 0.40 | 4.69* |
| N | 623 | | 399 | | 810 | | 179-180[a] | | 2011-2012 |

*Notes:* * $p < .05$; ** $p < .01$; *** $p < .001$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.1.8b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Strength and Difficulties Questionnaire's subscales (SDQ) in Time 1 for the Control Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | **M** | **SD** | **M** | **SD** | **M** | **SD** | **M** | **SD** | **F** |
| Emotional problems | 1.29 | 0.38 | 1.35 | 0.41 | 1.28 | 0.27 | 1,37 | 0.36 | 2.99 |
| Conduct problems | 1.24[3,4] | 0.32 | 1.26[3,4] | 0.40 | 1.47 | 0.29 | 1,41 | 0.48 | 19.41* |
| Hyperactivity | 1.43[2,4] | 0.50 | 1.55[4] | 0.52 | 1.56[4] | 0.35 | 1.81 | 0.59 | 27.53* |
| Peer problems | 1.31[3,4] | 0.33 | 1.29[3,4] | 0.31 | 1.44[4] | 0.30 | 1.20 | 0.28 | 15.42* |
| Prosocial skills | 2.53 | 0.48 | 2.48 | 0.48 | 2.41 | 0.48 | 2.45 | 0.53 | 2.33 |
| N | 459 | | 371 | | 125 | | 216 | | 1171 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups most of the differences among countries are statistically significant but the difference sizes were in most of the cases very small. Also, in most of the cases children in both groups shared similar scores across the subscales in Time 1.

In the case of Greece, children's scores from both groups on Strengths and Difficulties Questionnaire (SDQ) in Time 1 indicate a low rate of emotional difficulties (unhappiness, easily scared, nervous in new situations, easily lose confidence, are tearful), conduct problems (e.g. often fight with other children, have temper tantrums, can be spiteful to others)  and peer relationships problems (e.g. are generally liked by others, have at least one good friend). Somewhat higher was the rate of hyperactivity symptoms (are overactive, easily distracted, restless e.tc.) Regarding prosocial skills (often volunteer to help others, are kind to younger children, considerate other children's feelings) Greek preschool children rated high scores in both groups.

Almost same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also low frequency of children's emotional (e.g. have many fears, are often in a bad mood), conduct (they are generally not obedient, often fight with other children), and peer

relations problems. The hyperactivity problems (children cannot stay still for long) was somewhat higher than the others and children showed high rates of prosocial skills.

In the case of Romania, children's scores from both groups on Strengths and Difficulties Questionnaire indicate emotional, conduct and peer problems in a low rate similar to the pattern derived from the other countries (e.g. children have not many fears, are not clingy in new situations, they are usually obedient to adults' requests). Children in Romania also showed higher rates regarding hyperactivity problems and they have high scores in prosocial skills as it is occurs in the rest of the countries.

In the case of Portugal, children's scores on SDQ in Time 1 from both groups show low frequency of conduct problems, emotional difficulties and peer relationship problems. The hyperactivity problems scores in both groups were higher than the scores on the other scales assessing behavior problems. Similarly as in the other countries, children showed a rather high rate of prosocial skills.

Overall, teachers' perceptions of students' frequencies to emotional and conduct difficulties, hyperactivity symptoms, peer problems and prosocial skills reveal similar tendencies for both experimental and control groups in all countries. The area of strength for all countries seem to be prosocial skills.

Tables 3.1.9a and 3.1.9b show the results from the composite scores of each one of the subscales in Child Behavior Rating Scale (CBRS) regarding children's task behavior and social behavior with peers and adults across the four participating countries. In detail, children's specific behaviors were assessed in terms of the frequency with which they were exhibited from 1 (never) to 5 (always). Behaviors are grouped according to five (5) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Year 1 before the intervention.

**Table 3.1.9a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 1 for the Experimental Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 3.80[4] | .85 | 3.80[4] | .80 | 3.75 | .88 | 3.57 | .87 | 3.50* |
| Interpersonal skills | 4.13[3] | .79 | 4.07 | .70 | 3.88 | .68 | 3.92 | .62 | 16.58* |
| Social play-interaction | 3.68 | .98 | 3.82 | .82 | 3.75 | .85 | 3.72 | .57 | 2.10 |
| Engagement | 3.95 | .91 | 4.09[4] | .77 | 3.99 | .81 | 3.93 | .76 | 2.84* |
| Social problem solving | 3.43 | .97 | 3.42 | .81 | 3.58 | .89 | 3.29 | .72 | 7.53* |
| N | 623 | | 399 | | 810 | | 180 | | 2012 |

*Notes:* * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.1.9b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 1 for the Control Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 3.83[3] | .80 | 3.73 | .79 | 3.27 | .74 | 3.74 | .86 | 15.98* |
| Interpersonal skills | 4.19[3] | .69 | 4.01 | .68 | 3.72 | .52 | 3.97 | .76 | 18.10* |
| Social play-interaction | 3.74[3] | .90 | 3.66 | .74 | 3.42 | .70 | 3.91[3] | .75 | 10.74* |
| Engagement | 4.05[3] | .81 | 3.87 | .82 | 3.60 | .76 | 4.13[3] | .87 | 14.70* |
| Social problem solving | 3.50 | .85 | 3.36 | .80 | 3.20 | .80 | 3.40 | .90 | 5.32* |
| N | 459 | | 371 | | 125 | | 216-217 | | 1171-1172 |

*Notes:* * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups almost all of the differences among countries are statistically significant but the difference sizes were in most of the cases very small. Also, in most of the cases children in both groups did not show substantially different scores across the subscales in Time 1.

In the case of Greece, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 1 indicate very positive perceptions of children's social/interpersonal skills and engagement behaviors (willingness to share, taking turns, compliance, cooperation, etc.)

while children's behavioral regulation during academic tasks and social play-interaction are also rated high.

The exact same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also high frequency of children's social/interpersonal skills and engagement behaviors.

Similar findings emerge from Romania where very positive perceptions emerge from both groups on children's social/interpersonal skills, social play-interaction, and engagement behaviors while self-regulation behaviors in classroom and social problem solving were observed less frequently.

In the case of Portugal, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 1 indicate social problem solving as the least frequent behavior in comparison to other behaviors but also to children's scores from the other countries. The pattern of the other exhibited behaviors in the rest of the subscales is similar to the one that emerged from the other countries.

Overall, teachers' perceptions of students' approaches to learning, self-regulation, and social-emotional adjustment reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be social/interpersonal skills (sharing, cooperation, compliance, etc.) and engagement while the least frequently rated behavior was social problem solving (resolving social conflicts, etc.). Finally, according to analysis of variance children's behavior scores differ across countries in all subscales except ratings of the social-play interaction that was exhibited by the experimental group children.

Tables 3.1.10a and 3.1.10b show the results from the composite scores of each one of the subscales in Adaptive Social Behavior Inventory (ASBI). In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 to 3.

**Table 3.1.10a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 1 for the Experimental Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.70 | 0.46 | 2.67 | 0.43 | 2.72 | 0.39 | 2.70 | 0.36 | 1.16 |
| Prosocial | 2.54[3,4] | 0.44 | 2.57 | 0.39 | 2.62 | 0.39 | 2.64 | 0.32 | 5.29* |
| Confidence/Independence | 2.44[3,4] | 0.49 | 2.46[3,4] | 0.44 | 2.69 | 0.37 | 2.78 | 0.32 | 67.2* |
| N | 623 | | 399 | | 810 | | 180 | | 2012 |

*Notes:* * p < .05; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.1.10b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 1 for the Control Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.77[2,3] | 0.38 | 2.64 | 0.44 | 2.66 | 0.45 | 2.63 | 0.50 | 8.50* |
| Prosocial | 2.60[2,3] | 0.41 | 2.47[4] | 0.41 | 2.47 | 0.45 | 2.68 | 0.40 | 12.32* |
| Confidence/Independence | 2.48[2,4] | 0.44 | 2.34[3.4] | 0.44 | 2.57 | 0.46 | 2.66 | 0.45 | 25.88* |
| N | 459 | | 371 | | 125 | | 209 | | 1164 |

*Notes:* * p < .05; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups almost all of the differences among countries are statistically significant but the difference sizes were in most of the cases very small. Also, in most of the cases children in both groups in each country did not show substantially different scores across the subscales in Time 1.

In the cases of Greece and Cyprus, children's scores from both groups (experimental and control group) on Adaptive Social Behavior Inventory (ASBI) in Time 1 were slightly higher on the subscale of Conformity/Compliance than on the other two subscales. Subsequently children's scores on Prosocial skills were slightly higher than scores on the Confidence/Independence subscale.

The findings from Romania indicate that both groups in Time 1 have somewhat better scores on Conformity/Compliance than in the other two subscales. In the case of Portugal, findings have shown that the experimental group children's scores are slightly better on the subscale Confidence/Independence than on the other two subscales, but the control group showed a rather similar performance profile across the three subscales.

Overall, teachers' perceptions of students' social behavior skills in Time 1 reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be conformity and compliance behavior across groups and countries, and for prosocial skills it seems that there is room for improvement, although were not low in the baseline assessment.

## 3.2 Time 2: Descriptive statistics across 4 countries for teachers and children (Annual Analysis)

### a. Findings for Teachers

The tables 3.2.1a and 3.2.1b show the results from the composite scores of each one of the subscales in the TSWQ questionnaire assessed preschool teachers' wellbeing. Teacher Wellbeing is the total score of the TSWQ and provides a global assessment of the teachers' wellbeing after the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.2.1a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 2 for the Experimental Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.52 | 0.43 | 3.52 | 0.44 | 3.69 | 0.48 | 3.46 | .48 | 3.19 |
| *School Connectedness* | 3.70 | 0.38 | 3.61 | 0.53 | 3.61 | 0.60 | 3.46 | .47 | 1.46 |
| *Teacher Wellbeing* | 3.61 | 0.36 | 3.56 | 0.39 | 3.65 | 0.49 | 3.47 | .41 | 1.61 |
| N | 52 | | 47 | | 93 | | 31-33[a] | | 223-225 |

*Notes:* * $p < .05$; min = 1, max = 4; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.1b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 2 for the Control Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.49 | 0.47 | 3.19[3] | 0.60 | 3.75 | 0.31 | 3.69[2] | .44 | 7.69* |
| *School Connectedness* | 3.72[2] | 0.35 | 3.23[3] | 0.70 | 3.83 | 0.24 | 3.52 | .54 | 7.08* |
| *Teacher Wellbeing* | 3.61[2] | 0.35 | 3.21[3] | 0.54 | 3.79 | 0.25 | 3.61 | .45 | 8.50* |
| N | 39 | | 31 | | 16 | | 37-38[a] | | 123-124 |

*Notes:* * $p < .05$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

Interestingly, according to ANOVAs findings it is shown that cross-country differences for the experimental group in terms of teaching efficacy disappeared in Time 2 after the ProW intervention. However, for the control group significant differences among the countries across all TSWQ dimensions remained as in Time 1. In general, it seems that Cypriot teachers have a significantly lower sense of wellbeing than teachers from the other countries and in terms of their teaching efficacy. More pronounced differences in the control group emerged between Cypriot teachers vs Romanian and Greek teachers. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to have a quite high sense of wellbeing in terms of their teaching efficacy and their connection with their school. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Cyprus it is shown by both tables that preschool teachers continue in Time 2 to have a quite high sense of wellbeing. This is based on the two subscales, that of self-efficacy and the one that investigates the connectedness teachers have with their school. Teachers in both groups report that they feel successful in their role, supporting their students and feel that their school respects them and cares that their needs are met, as they are an integral part of it. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Romanian, it is shown by both tables that preschool teachers continue in Time 2 to have a quite high sense of wellbeing in terms of their teaching efficacy and their connection with their school. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Portugal, the above tables show that in Time 2 both groups of preschool teachers rate statements related to their work-related wellbeing very positively and it seems that they experience a high sense of teaching efficacy and connectedness with their respective schools very often or almost always. Also, teachers of the control group seem to continue to surpass the experimental group at the second measurement time.

The tables 3.2.2a and 3.2.2b show the results from the composite scores of each one of the subscales in the TSES questionnaire assessed preschool teachers' sense of efficacy. Teachers' sense of efficacy was assessed in terms of student engagement, instructional strategies and classroom management after the intervention in Year 1 in both groups across the four participating countries in the ProW project.

According to ANOVAs findings it is shown that in Time 2 significant cross-country differences appeared for both groups and not only for the experimental group as it was the case for Time 1. In general, it seems that Romanian teachers in both groups have a significantly higher sense of teaching efficacy than teachers from the other countries. More pronounced differences continued to appear between Portuguese and Greek teachers vs Romanian teachers. Below it is briefly described each country's profile according to teachers' answers.

**Table 3.2.2a.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 2 for the Experimental Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | $7.71^3$ | 1.18 | 7.89 | 0.72 | 8.23 | 0.70 | 7.49 | 1.04 | 7.41* |
| *Instructional strategies* | $7.75^3$ | 1.23 | $7.95^4$ | 0.75 | $8.34^4$ | 0.72 | $7.34^3$ | 1.10 | 11.02* |
| *Classroom management* | $7.63^3$ | 1.01 | 7.81 | 0.83 | 8.16 | 0.77 | 7.29 | 1.09 | 9.02* |
| N | 52 | | 47 | | 93 | | 33-34ª | | 225-226 |

*Notes*: * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.2b.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 2 for the Control Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.74 | 0.80 | 7.14 | 1.26 | 7.75 | 0.77 | 7.54 | 1.04 | 2.43 |
| *Instructional strategies* | 7.76 | 1.24 | 7.12[3] | 1.36 | 8.12 | 0.64 | 7.32 | 1.18 | 4.14* |
| *Classroom management* | 7.57 | 1.01 | 7.02[3] | 1.30 | 8.01 | 0.59 | 7.49 | 1.1 | 3.47* |
| N | 39 | | 31 | | 16 | | 37 | | 123 |

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to have a rather high sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. Thus, preschool teachers seem to feel a quite high sense of their efficacy as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Cyprus, as it is shown in both tables, preschool teachers continue in Time 2 to have a rather high sense of self efficacy. This is evident across the subscales of *Classroom management, Instructional Strategies* and *Student Engagement*. Moreover, the sense of self-efficacy seems higher in the experimental group than in the control group after the end of the ProW intervention in Year 1. In particular, teachers from the experimental group believe at a higher rate than the control group's teachers that they can encourage their students to succeed in school and highly value the learning process, use different assessment methods and also make students understand when they feel confused.

In the case of Romania, although it shown that teachers in both groups share a rather high sense of teaching efficacy in Time 2, teachers' scores from the experimental group outperformed teachers from the control group.

In the case of Portugal, the above tables show that during the second assessment period preschool teachers perceive their efficacy for instructional strategies, student engagement and classroom management at a very high level. In other words, both groups answer

questions indicating very little difficulty in managing student behavior, implementing alternative strategies, and establishing productive relations with their students. Teachers in the control group appear to have comparable responses with the experimental group in all subscales of the efficacy scale.

**Table 3.2.3a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 2 for the Experimental Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | $7.79^3$ | 0.76 | $7.79^3$ | .70 | $8.61^4$ | 0.46 | 7.67 | .99 | 24,41* |
| *Social Guidance* | $7.76^{2,3}$ | 0.76 | $8.18^{3,4}$ | .63 | $8.61^4$ | 0.46 | 7.52 | 1.03 | 29,75* |
| *Teacher-Child Support* | $7.93^3$ | 0.83 | $8.26^4$ | .67 | 8.58 | 0.49 | 7.83 | .98 | 14,28* |
| *Classroom Climate-Children Engagement* | $7.87^3$ | 0.82 | $8.03^3$ | .72 | 8.55 | 0.51 | $7.73^3$ | 1.08 | 15,51* |
| *Classroom Management-Conflict Resolution* | $7.89^3$ | 0.84 | $8.11^4$ | .72 | $8.35^4$ | 0.59 | 7.29 | .99 | 17,97* |
| *TSSES Global* | $7.85^3$ | 0.75 | $8.09^{3,4}$ | 0.66 | $8.54^4$ | 0.46 | 7.61 | .92 | 22,17* |
| N | 52 | | 47 | | 93 | | 34-35[a] | | 226-227 |

*Notes:* * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.3b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 2 for the Control Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | $7.51^3$ | 0.91 | $7.18^3$ | 1.29 | 8.32 | 0.73 | $7.85^2$ | .83 | 5.64* |
| *Social Guidance* | $7.50^3$ | 0.91 | $7.54^3$ | 1.09 | 8.32 | 0.73 | 7.68 | .95 | 3.09* |
| *Teacher-Child Support* | 7.71 | 0.88 | $7.46^3$ | 1.17 | 8.37 | 0.84 | 7.86 | .72 | 3.65* |
| *Classroom Climate-Children Engagement* | 7.66 | 0.83 | $7.35^3$ | 1.18 | 8.25 | 0.84 | 7.72 | .94 | 3.09* |
| *Classroom Management-Conflict Resolution* | 7.58 | 0.88 | 7.50 | 1.22 | 8.11 | 0.72 | 7.50 | .91 | 1.67 |
| *TSSES Global* | 7.59 | 0.83 | $7.41^3$ | 1.17 | 8.27 | 0.87 | 7.72 | .82 | 3.30* |

| N | 39 | 31 | 16 | 37 | 123 |
|---|----|----|----|----|-----|

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

The tables 3.2.3a and 3.2.3b show the results from the composite scores of each one of the subscales in the TSSES questionnaire assessed preschool teachers' sense of social self-efficacy. Teachers' sense of social self-efficacy was assessed in terms of teacher sensitivity, social guidance, teacher-child support, classroom climate-children engagement and classroom management after the intervention in Year 1 in both groups across the four participating countries in the ProW project.

According to ANOVAs findings it is shown that in Time 2 significant cross-country differences appeared for both groups. Interestingly these findings show that in Time 2 there were significant cross-country differences across the subscales of the TSSES measure of social self-efficacy for both groups (but not for classroom management for the control group). However, the cross-country differences in the experimental groups were more pronounced than in the control group. In general, it seems that Romanian teachers continued to feel more confident for implementing activities related to their sense of social self-efficacy than teachers form all the other countries after the ProW intervention. This was particularly evident in the experimental group., Teachers form the other three countries shared a similar level in their sense of social self-efficacy in both groups, although Cypriot teachers seem to feel in some dimensions of the TSSES more confident than Portuguese teachers. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to have from some extent to a great extent sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their pupils. So, Greek preschool teachers have a very satisfactory extent sense of their social self-efficacy as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Cyprus it is shown by both tables that preschool teachers continue in Time 2 to have a high sense of self efficacy in terms of teacher sensitivity, child support, classroom

climate and children engagement, as well as conflict resolution in the classroom. Subsequently, their general sense of self-efficacy is high as it is shown by the rather high mean score in both experimental and control group after the end of the ProW intervention in Year 1. However, it seems that teachers from the experimental group provided higher scores on all the subscales of social self-efficacy than teachers from the control group. More specifically, in both groups teachers seem, among others, to recognize the cases where their students need help and who experience negative emotions. In fact, they serve as role models for their students and focus on each student separately, explaining the expectations they have regarding students' behaviors. In fact, they cultivate a positive climate in the classroom, directing children to work as a team and involve classmates in their play, and they help solving problems that may arise between peers by explaining the rules that should govern a preschool classroom.

In the case of Romania, it is shown by both tables that preschool teachers continue in Time 2 to have from some extent to a great extent sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their pupils. So, Romanian preschool teachers have a quite positive sense of their social self-efficacy as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

Both groups of teachers from Portugal preschools continue at time 2 to have highly developed confidence in their social self-efficacy. The average rating of responses in all five dimensions indicates that they feel quite competent in creating and maintaining positive and supportive environments for their children. Very small differences are noted as in the previous assessment time in favor of the control group.

The Tables 3.2.4a and 3.2.4b show the results from the composite scores of each one of the subscales in the MBI questionnaire assessed preschool teachers' sense of burnout. Particularly, burnout was assessed in terms of emotional exhaustion, depersonalization and personal accomplishment after the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.2.4a.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 2 for the Experimental Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.71[3] | 0.91 | 2.18[3] | 0.97 | 1.15 | 1.09 | 1.96[3] | 1.32 | 11,67* |
| *Depersonalization* | 0.31 | 0.62 | 0.39 | 0.48 | 0.57 | 0.94 | .48 | .81 | 1,32 |
| *Personal Accomplishment* | 5.31 | 0.52 | 5.23 | 0.55 | 5.39 | 0.64 | 5.28 | .71 | 0,73 |
| N | 52 | | 47 | | 93 | | 33-34[a] | | 225-226 |

*Notes:* * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.4b.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 2 for the Control Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.86[3] | 1.04 | 2.34[3] | 1.06 | 0.95 | 0.95 | 1.71[3] | 1.25 | 5.74* |
| *Depersonalization* | 0.31 | 0.48 | 0.70 | 0.96 | 0.46 | 0.87 | .42 | .84 | 1.46 |
| *Personal Accomplishment* | 5.26 | 0.64 | 4.99 | 0.85 | 5.26 | 1.07 | 5.34 | .66 | 1.29 |
| N | 39 | | 31 | | 16 | | 37 | | 123 |

*Notes:* * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings it is shown that in Time 2 in both groups continue to exist significant cross-country differences in terms of the emotional exhaustion subscale of MBI. Particularly, it is shown that Romanian teachers continue to feel significantly less exhausted emotionally than all the other teachers from Cyprus, Greece and Portugal. Similarly, as in Time 1, there was no other significant difference in the remaining two subscales of MBI across countries in any group. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to have a very good accomplishment with their work, they do not feel at all depersonalization and they rarely feel emotional exhaustion from their work. So, Greek preschool teachers have a very satisfactory feeling from their work as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In Cyprus, it is shown in both tables that preschool teachers continue in Time 2 to experience moderate levels of emotional exhaustion. Subsequently, as it is shown by the moderate mean score in both the experimental and control group after the end of the ProW intervention in Year 1 they experience moderate levels of exhaustion and burnout. Teachers also believe that they influence other people's lives through their work in a positive way, by experiencing enthusiasm with students and cultivating a relaxed atmosphere. In fact, they experience depersonalization with their students at a very low level, such as feeling that their work makes them more distant and emotionally tough people, who treat students in a detached way.

In Romania, it is shown in both tables that preschool teachers continue in Time 2 to experience low levels of emotional exhaustion. Subsequently, as it is shown by the low mean score in both the experimental and control group after the end of the Pro W intervention in Year 1 they experience low levels of exhaustion and burnout. Teachers also believe that they positively influence their students' lives and create appropriate conditions for their students in order to participate in the educational process. They experience depersonalization with their students at a very low level, they care for all students and they don't feel that their job is hardening them emotionally.

The summary of responses in the Maslach Burnout Inventory (MBI) for the preschool teachers from Portugal at the second time of assessment indicate that both groups had experienced very little emotional exhaustion or burnout during the previous time. Also, they were not unfeeling or impersonal towards their students except very rarely. On the contrary, their responses in Time 2 keep indicating high feelings of competence and successful achievement in their work.

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The Tables 3.2.5a and 3.2.5b show the results from the composite scores of each one of the subscales in the ESI questionnaire assessing preschool teachers' satisfaction for their job after the intervention in Year 1 in both groups across the four participating countries in the ProW project. Teachers' satisfaction for their job is assessed in terms of various dimensions, which appear as subscales in the above tables. For the construction of the subscales have been made transformations with reverse scoring in specific items. Therefore, a higher score in each subscale shows higher satisfaction for this dimension of teachers' job.

**Table 3.2.5a.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI) in Time 2 for the Experimental Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.40 | 0.55 | 4.08 | .64 | 4.34 | .58 | 4.08 | .63 | 3.95 |
| *Supervisor* | 4.52 | 0.63 | 4.58 | .50 | 4.37 | .74 | 4.33 | .51 | 1.73 |
| *Pay* | 2.71[2] | 0.96 | 3.44[4] | 1.02 | 3.13 | .93 | 2.83 | 1.00 | 5.47* |
| *Job Itself* | 4.54[4] | 0.51 | 4.39 | .53 | 4.47[4] | .49 | 4.15 | .43 | 4.76* |
| *Organization as a Whole* | 3.72[2,3] | 0.64 | 2.95[3,4] | .65 | 4.10[4] | .79 | 3.51 | .83 | 26.02* |
| *Promotion* | 2.48[3] | 0.95 | 2.64[3] | .97 | 4.11[4] | .75 | 2.84 | .99 | 52.43* |
| *ESI Global* | 3.73[3] | 0.42 | 3.68[3] | .47 | 4.09[4] | .51 | 3.62 | .46 | 13.42* |
| N | 52 | | 47 | | 93 | | 34-35[a] | | 226-227 |

*Notes:* * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.5b.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI) in Time 2 for the Control Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.18 | 0.77 | 3.89 | 0.53 | 4.22 | .69 | 4.14 | .79 | 1.22 |
| *Supervisor* | 4.45[2] | 0.51 | 4.27[3] | 0.55 | 4.32 | .66 | 4.48[2] | .50 | 1.11 |
| *Pay* | 2.76[2] | 1.04 | 3.77[4] | 0.98 | 3.43 | .83 | 3.06 | .87 | 6.96* |
| *Job Itself* | 4.51 | 0.47 | 4.26 | 0.58 | 4.31 | .40 | 4.24 | .53 | 2.17 |
| *Organization as a Whole* | 3.73[2,3] | 0.78 | 2.98[3,4] | 0.60 | 4.37[4] | .59 | 3.67 | .79 | 14.10* |
| *Promotion* | 2.44[2] | 0.94 | 2.72[3] | 0.64 | 4.10[1] | .45 | 2.79 | .93 | 15.79* |
| *ESI Global* | 3.68[3] | 0.43 | 3.64[3] | 0.33 | 4.13[4] | .43 | 3.73 | .49 | 5.09* |

| | N | 39 | 31 | 16 | 38 | 124 |
|---|---|---|---|---|---|---|

*Notes:* * p < .05; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

Interestingly, according to ANOVAs findings it seems that teachers in both groups from Cyprus continue to show less job satisfaction in most of the ESI subscales than teachers form the other three countries, although the Cypriot teachers reported higher satisfaction in terms of the payment conditions than teachers in the other countries. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to have good feelings about their job, their supervisor and their working conditions, but they have bad feelings about their pay and their promotion. They also are unsure about the whole organization. All these components lead Greek preschool teachers to have in general satisfactory feelings about their work, as it is shown by the moderate mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Cyprus it is shown in both tables that preschool teachers have a moderate sense of satisfaction regarding their job. More specifically, working conditions are satisfactory as it is shown by the mean score in both experimental and control group after the end of the ProW intervention in Year 1. In the other subscales related to job satisfaction, such as *Supervisor* and whether teachers seem satisfied with the way they are treated, Job itself, whether their job is a routine or satisfying, and in the subscales *Organization as a Whole*, if there is distinction and favoritism between the employees and *Promotion*, what kind of prospects this school creates and if these prospects are limited, the teachers' answers show that they are unsure if these are offered to them in the context of the particular school. In both groups, teachers are moderately satisfied with the financial rewards they have in relation to the services they offer. Subsequently, it is quite moderate their general sense of job satisfaction as it is shown in both experimental and control groups after the end of the ProW intervention in Year 1.

In the case of Romania, responses from both groups on the Employee Satisfaction Inventory (ESI) at Time 2 indicate in general very positive tendencies in their feelings about their employment status, especially regarding the teaching profession and their respective organization. Less satisfactory aspects of their employment continue to be the salary that keeps revealing a level of uncertainty in the responses of both groups.

Preschool teachers from Portugal on the Employee Satisfaction Inventory (ESI) at Time 2 evaluate positively their jobs, working conditions and supervisors while they seem to be uncertain in the assessment of their organizations. Both groups continue to appear dissatisfied with their professional prospects and clearly uncertain regarding their salaries. In general, Portugal teachers from both groups seem to continue being marginally satisfied by their overall work experience.

The tables 3.2.6a and 3.2.6b show the results from the composite scores of each one of the subscales in the PCS questionnaire assessed preschool teachers' view for the climate in their preschool setting. Particularly, preschool climate assessed in terms of seven (7) different dimensions, which are described in the subscales of the above tables, after the intervention in Year 1 in both groups across the four participating countries in the ProW project.

According to ANOVAs findings in Time 2, it is interesting that in both groups almost all of the cross-country differences appearing in the dimensions of preschool climate were significant, in contrast with the pattern of non-significant differences found in Time 1. In particular, the post-hoc analyses showed that in the experimental group Greek teachers' views on all of the dimensions of preschool climate were significantly lower than respective views of teachers in Cyprus, Romania and Portugal. Below it is briefly described each country's profile according to teachers' answers.

**Table 3.2.6a.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 2 for the Experimental Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.33 | 1.08 | 3.83 | 0.30 | 4.00 | .00 | 3.85 | .20 | 16.41* |
| *Student-Student* | 2.97 | 0.93 | 3.42 | 0.52 | 3.89 | .34 | 3.38 | .39 | 29.49* |
| *Teacher-home* | 3.21 | 1.01 | 3.68 | 0.33 | 3.98 | .08 | 3.72 | .30 | 23.47* |
| *School safety* | 3.35 | 1.09 | 3.79 | 0.34 | 3.99 | .06 | 3.76 | .40 | 13.39* |
| *Clarity of expectations* | 3.18 | 0.99 | 3.65 | 0.42 | 3.91 | .24 | 3.55 | .41 | 18.61* |
| *Fairness of rules* | 3.29 | 1.07 | 3.88 | 0.32 | 4.00 | .00 | 3.61 | .43 | 18.60* |
| *Respect of diversity* | 3.36 | 1.09 | 3.88 | 0.32 | 3.98 | .15 | 3.72 | .39 | 12.92* |
| *PCS Global* | 3.24 | 1.01 | 3.73 | 0.29 | 3.96 | .07 | 3.66 | .26 | 20.85* |
| N | 52 | | 47 | | 93 | | 18 | | 210 |

*Notes:* * $p < .05$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.2.6b.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 2 for the Control Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.44[3] | 0.88 | 3.57 | 0.40 | 4.00 | .00 | 3.71 | .66 | 3.01* |
| *Student-Student* | 3.02[3] | 0.62 | 3.14[3] | 0.44 | 3.76 | .55 | 3.42 | .67 | 7.27* |
| *Teacher-home* | 3.37[3] | 0.82 | 3.44[3] | 0.38 | 3.97 | .10 | 3.71 | .66 | 4.50* |
| *School safety* | 3.41[3] | 0.88 | 3.56 | 0.42 | 4.00 | .00 | 3.77 | .66 | 3.67* |
| *Clarity of expectations* | 3.22[3] | 0.75 | 3.33 | 0.47 | 3.79 | .46 | 3.52 | .67 | 3.52* |
| *Fairness of rules* | 3.37[3] | 0.86 | 3.53 | 0.44 | 3.93 | .25 | 3.57 | .71 | 2.79* |
| *Respect of diversity* | 3.50 | 0.89 | 3.53 | 0.44 | 4.00 | .00 | 3.71 | .69 | 2.44 |
| *PCS Global* | 3.33[3] | 0.78 | 3.44 | 0.37 | 3.92 | .14 | 3.63 | .64 | 4.21* |
| N | 39 | | 31 | | 16 | | 21 | | 107 |

*Notes:* * $p < .05$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 to believe strongly enough that their preschool setting is characterized by a good classroom

climate in all the above dimensions, as it is shown by the high mean score in both experimental and control group after the end of the ProW intervention in Year 1.

In the case of Cyprus it is shown by both tables that preschool teachers continue in Time 2 to have a qualitative climate in their classroom. Subsequently, the climate in the preschool classroom is highly estimated as it is shown by the high mean score in both experimental and control group, although the former group scored slightly better than the latter one in all the dimensions of preschool climate. More specifically, teachers seem to a large extent to care about their students, listen to their problems, and support the adoption and observance of rules by cultivating a safe environment for all. Teachers consider that children develop friendly relationships with their peers, also showing respect for diversity regarding children from different cultural environments. Finally, effective and meaningful communication with the children's parents is cultivated to a very important extent.

In the case of Romania, teacher responses from both groups in the Preschool Climate Scale at Time 2 keep indicating very positive perceptions of the climate in the preschool settings. All subscales from both groups are scored very highly, especially those referring to teacher student relations and established fairness of practices (experimental group) and safety of the environment and respect of diversity (control group) that have received unified responses as "good".

Preschool teachers from Portugal continue to feel very positively about the school climate in most dimensions during the second time. Responses are similar and both groups are quite confident about their valuable relations to students, parents, and the safety of the school climate. On the other hand, most variability appears in both groups' responses regarding student relations, expectations, and established rules that again are rated with slightly less confidence.

The tables 3.2.7a and 3.2.7b show the results from the composite scores of each one of the subscales in the PERMA questionnaire assessed preschool teachers' sense of wellbeing in their personal lives at Time 2. The mean average of the five main dimensions comprised the

PERMA global score, which denotes a general well-being sense of the teachers. According to ANOVAs findings it seems that cross-country differences disappeared in Time 2 but remained for the negative dimensions of PERMA; Romanian teachers held significantly fewer negative emotions than teachers from the other countries, although they expressed more loneliness feelings than the others. Below it is briefly described each country's profile according to teachers' answers.

**Table 3.2.7a.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 2 for the Experimental Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | $7.75^3$ | 1.36 | 8.16 | 1.10 | 8.54 | 1.46 | 7.83 | 1.30 | 4.68* |
| Engagement - E | 7.93 | 1.44 | 8.12 | 1.27 | 7.85 | 1.76 | 8.06 | 1.26 | 0.39 |
| Relationships - R | 8.08 | 1.21 | 8.10 | 1.18 | 8.49 | 1.43 | 7.95 | 1.43 | 1.10 |
| Meaning - M | 8.06 | 1.19 | 8.40 | 1.07 | 8.63 | 1.51 | 8.23 | 1.34 | 2.20 |
| Accomplishment -A | 7.90 | 1.13 | 8.25 | 1.02 | 8.47 | 1.46 | 7.88 | 1.28 | 3.02* |
| Negative - N | $4.87^3$ | 2.14 | 4.70 | 1.89 | 2.47 | 2.49 | 4.31 | 2.04 | 17.95*** |
| Health -H | 7.74 | 1.61 | 7.41 | 2.00 | 8.04 | 1.54 | $6.95^3$ | 1.88 | 3.72* |
| PERMA Global | 7.94 | 1.14 | 8.25 | 0.92 | 8.41 | 1.44 | 8.03 | 1.13 | 1.93 |
| Loneliness (item 12) | $3.19^3$ | 2.86 | $2.96^3$ | 3.23 | 5.42 | 4.07 | $3.33^3$ | 3.01 | 7.71* |
| Happy (item 23) | 7.88 | 1.38 | 8.43 | 1.02 | 8.49 | 1.60 | 8.21 | 1.60 | 2.15 |
| N | 52 | | 46 | | 93 | | 33 | | 224 |

*Notes:* * $p < .05$; min = 0, max = 10

**Table 3.2.7b**. Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 2 for the Control Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.81 | 1.28 | 7.61 | 1.69 | 7.94 | 1.74 | 7.90 | 1.34 | 0.27 |
| Engagement - E | 7.82 | 1.24 | 7.77 | 1.42 | 7.5 | 1.78 | 7.90 | 1.26 | 0.34 |
| Relationships - R | 8.03 | 1.39 | 7.42 | 2.03 | 7.94 | 1.79 | 7.99 | 1.66 | 0.92 |
| Meaning - M | 8.18 | 1.13 | 7.73 | 1.82 | 8.29 | 1.80 | 8.46 | 1.31 | 1.46 |
| Accomplishment -A | 7.86 | 1.26 | 7.43 | 1.62 | 8.00 | 1.66 | 7.83 | 1.08 | 0.88 |
| Negative - N | 4.44 | 1.94 | 4.71 | 2.28 | 0.88 | 1.03 | 3.95 | 2.00 | 15.37*** |
| Health -H | 7.44 | 1.89 | 7.32 | 1.95 | 7.88 | 1.62 | 6.61 | 2.14 | 1.97 |
| PERMA Global | 7.93 | 1.12 | 7.63 | 1.55 | 7.93 | 1.67 | 8.04 | 1.17 | 0.57 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Loneliness (item 12) | 2.92 | 2.20 | 3.13 | 2.79 | 4.19 | 3.92 | 2.41 | 2.87 | 1.53 |
| Happy (item 23) | 7.89 | 1.37 | 7.84 | 1.71 | 7.94 | 2.04 | 8.16 | 1.41 | 0.29 |
| N | | 39 | | 31 | | 16 | | 37 | 123 |

*Notes:* * p < .05; min = 0, max = 10

In the case of Greece, it is shown by both tables that preschool teachers continue in Time 2 (after the ProW intervention) to experience various positive feelings and emotional states as it is shown by the high mean score in both experimental and control group. It is interesting that teachers in the experimental group showed to compensate for the small differences they had before the intervention with the control group and to experience equivalent positive feelings as teachers in the control group. In other words, it seems that the small differences between groups that appeared in Time 1, have vanished in Time 2.

In the case of Cyprus, results show in both groups that in Time 2 preschool teachers continue to have a positive profile in all the above terms as it is shown by the mean scores in both experimental and control group, although the former one outperformed the later. More specifically, preschool teachers in the experimental group seem to experience more positive feelings, are more interested in activities, they feel loved and supported by others and feel more valuable to them than teachers in the control group. Also, teachers in the experimental groups are doing well regarding their responsibilities, they feel good for their achievements, they have a purpose in life, and they seem to work and feel able to reach their goals to a greater extent than teachers in the control group.

In the case of Romania preschool teachers in both groups in Time 2 continue to show an interesting profile regarding all the above dimensions of PERMA, as it is shown by the mean scores in both experimental and control group, that remained the same tendencies from both groups. Furthermore, tendencies show that teachers from both groups are involved in activities, they experience positive emotions, they feel joyful and valued by others, by having also a sense of health and purpose in life.

Preschool teachers from Portugal in time 2 continue to indicate a similar profile of their wellbeing for both groups. First, feelings of contentment and joy seemed to exceed

tendencies toward sad and anxious feelings. Second, both groups seemed to continue to exhibit high levels of engagement, appearing absorbed, interested, and involved.

### b. Findings for Children

Tables 3.2.8a and 3.2.8b show the results from the composite scores of each one of the subscales in Strengths and Difficulties Questionnaire (SDQ) regarding emotional, conduct difficulties, hyperactivity and relations with peers and prosocial behavior across the four participating countries during the second assessment period (T2).

**Table 3.2.8a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Strength and Difficulties Questionnaire (SDQ) in Time 2 for the Experimental Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | $1.20^{3,4}$ | 0.31 | $1.26^3$ | 0.36 | 1.35 | 0.40 | 1.34 | 0.36 | 20.48* |
| Conduct problems | $1.18^{3,4}$ | 0.35 | $1.20^3$ | 0.37 | 1.81 | 0.31 | $1.28^3$ | 0.37 | 512.7* |
| Hyperactivity | $1.35^{2,3}$ | 0.48 | $1.46^{3,4}$ | 0.52 | $2.00^4$ | 0.28 | $1.71^1$ | 0.53 | 318.6* |
| Peer problems | $1.23^3$ | 0.29 | $1.19^3$ | 0.27 | 1.73 | 0.31 | $1.14^3$ | 0.22 | 516.9* |
| Prosocial skills | $2.67^{3,4}$ | 0.46 | $2.68^3$ | 0.43 | 2.50 | 0.47 | $2.55^3$ | 0.37 | 22.4* |
| N | 638 | | 374 | | 810 | | 168 | | 1990 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.2.8b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Strength and Difficulties Questionnaire's subscales (SDQ) in Time 2 for the Control Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | $1.21^2$ | 0.33 | $1.35^4$ | 0.41 | $1.32^1$ | 0.30 | 1.25 | 0.31 | 10.28* |
| Conduct problems | $1.18^{2,3}$ | 0.33 | $1.27^3$ | 0.42 | 1.77 | 0.24 | $1.32^3$ | 0.40 | 85.23* |
| Hyperactivity | $1.35^{2,3}$ | 0.48 | $1.55^3$ | 0.56 | $2.03^4$ | 0.30 | $1.54^1$ | 0.55 | 59.55* |
| Peer problems | $1.23^{3,4}$ | 0.32 | $1.27^{3,4}$ | 0.35 | 1.77 | 0.25 | $1.15^3$ | 0.28 | 113.7* |
| Prosocial skills | $2.64^{2,3}$ | 0.45 | $2.50^3$ | 0.50 | 2.34 | 0.44 | $2.53^{1,3}$ | 0.46 | 14.71* |

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*Notes:* \* p < .05; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

More specifically, children's strengths and difficulties were assessed in terms of the frequency with which they were exhibited from 1 (not true) to 3 (true). Strengths and difficulties are grouped according to five (5) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Year 2 after the intervention. According to ANOVAs findings it seems that cross-country differences in Time 2 remained across all the subscales of both groups. Below it is briefly described each country's profile according to teachers' answers.

In the case of Greece, children's scores from both groups on Strengths and Difficulties Questionnaire (SDQ) continue in Time 2 to indicate low emotional difficulties (e.g., unhappiness, fears), low frequency of conduct problems (e.g. often fight with other children, have temper tantrums, can be spiteful to others), as well as low hyperactivity symptoms (are overactive, easily distracted, restless e.tc.) and peer problems. Greek preschool children's prosocial skills (often volunteer to help others, are kind to younger children, considerate other children's feelings) continue to be rated high by their teachers.

Almost the same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also low frequency of children's emotional (e.g. have many fears, are often in a bad mood), conduct problems (they are generally not obedient, often fight with other children), as well as low hyperactivity and peer problems. Also, it is seen a slightly higher rate on prosocial skills for the experimental group compared to the control group.

In the case of Romania, children's scores from both groups on Strengths and Difficulties Questionnaire in Time 2 indicate a rather moderate rate of hyperactivity, conduct and peer relationships problems, which differentiate them from other countries. Children in Romania showed also a slightly higher rate of prosocial skills for the experimental group than the control group.

In the case of Portugal, children's scores on SDQ in Time 2 show a small decline of hyperactivity problems with the control group to show lower scores than the experimental group. Prosocial skills for both groups were at a very satisfactory level.

Overall, teachers' assessment of students' emotional and conduct difficulties, hyperactivity symptoms, peer problems and prosocial skills reveal similar tendencies for both experimental and control groups in all countries. The only exception seems to be the better performance of the experimental group than the control group in prosocial skills for Cyprus and Romania.

Tables 3.2.9a and 3.2.9b show the results from the composite scores of each one of the subscales in Child Behavior Rating Scale (CBRS) regarding children's task behavior and social behavior with peers and adults across the four participating countries during the second assessment period (T2).  In detail, children's specific behaviors were assessed in terms of the frequency with which they were exhibited from 1 (never) to 5 (always).  Behaviors are grouped according to five (5) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Year 2 after the intervention.

According to ANOVAs findings it seems that cross-country differences in all subscales of CBRS at Time 2 remained significant across countries. Below it is briefly described each country's profile according to teachers' answers.

**Table 3.2.9a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 2 for the Experimental Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 4.15 | .74 | 4.08 | .76 | 3.99 | .90 | 3.84 | .72 | 9.01* |
| Interpersonal skills | 4.40 | .75 | 4.32 | .65 | 4.02 | .71 | 4.01 | .60 | 42.83* |
| Social play-interaction | 4.10 | .83 | 4.19 | .75 | 3.96 | .84 | 3.92 | .53 | 9.78* |
| Engagement | 4.34 | .78 | 4.33 | .70 | 4.15 | .89 | 4.16 | .62 | 8.42* |
| Social problem solving | 3.91 | .89 | 3.81 | .84 | 3.82 | .91 | 3.54 | .67 | 7.92* |
| N | 638 | | 374 | | 810 | | 167-168 | | 1990-1989 |

*Notes:* * p < .05; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.2.9b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 2 for the Control Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 3.99 | .74 | 3.80 | .80 | 3.53 | .90 | 3.81 | .67 | 13.17* |
| Interpersonal skills | 4.32 | .67 | 4.05 | .79 | 3.72 | .69 | 3.91 | .62 | 32.56* |
| Social play-interaction | 4.08 | .80 | 3.79 | .78 | 3.58 | .79 | 3.99 | .61 | 18.05* |
| Engagement | 4.22 | .82 | 3.91 | .85 | 3.82 | .84 | 4.15 | .70 | 13.96* |
| Social problem solving | 3.84 | .83 | 3.49 | .84 | 3.39 | .85 | 3.54 | .66 | 17.75* |
| N | 449 | | 300 | | 125 | | 199-200[a] | | 1073-1074 |

*Notes:* * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

In the case of Greece, children's scores from both groups on Child Behavior Rating Scale (CBRS) continue in Time 2 to indicate very positive perceptions of children's social/interpersonal skills and engagement behaviors (willingness to share, taking turns, compliance, cooperation, etc.) while children's behavioral regulation during academic tasks and social play-interaction also continue to be rated high.

The exact same pattern is shown in the case of Cyprus, where children's scores from both groups indicate high frequency of children's social/interpersonal skills and engagement behaviors as it was shown previously. During the second assessment period behaviors in all five subscales are rated even higher than before, especially for the experimental group.

Similar findings emerge from Romania where in Time 2 more positive perceptions emerge from both groups on children's social/interpersonal skills, social play-interaction, and engagement behaviors while social problem-solving behaviors have increased since the previous assessment but continued to be observed less frequently.

In the case of Portugal, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 2 indicate also social problem solving as the least frequent behavior in comparison to other behaviors. The pattern of the other exhibited behaviors in the rest of the subscales is similar to the one that emerged from the other countries.

Overall, teachers' perceptions of students' approaches to social play interaction, self-regulation, and social-emotional adjustment reveal similar tendencies for increased frequency especially for the experimental group in all countries. In addition, children's behavior scores continue to differ across countries in all five subscales. In more detail, in all countries areas of strength continue to be social/interpersonal skills (sharing, cooperation, compliance, etc.), engagement and social play interaction while the least frequently rated behavior continues to be the social problem solving (resolving social conflicts, etc.).

Tables 3.2.10a and 3.2.10b show the results from the composite scores of each one of the subscales in Adaptive Social Behavior Inventory (ASBI). In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 to 9.

According to ANOVAs children's behavior scores differ across countries in all subscales except the subscale of Conformity/Compliance for the experimental group children. However, these differences are small, although significant. Below it is described briefly each country's profile according to teachers' answers.

**Table 3.2.10a**. Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 2 for the Experimental Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.81 | 0.38 | 2.78 | 0.38 | 2.77 | 0.36 | 2.73 | 0.34 | 2.35 |
| Prosocial | 2.71[3] | 0.36 | 2.71[3] | 0.35 | 2.65 | 0.35 | 2.70 | 0.30 | 4.64* |
| Confidence/Independence | 2.60[3,4] | 0.40 | 2.62[3,4] | 0.39 | 2.74[4] | 0.36 | 2.86 | 0.25 | 31.02* |
| N | 638 | | 374 | | 810 | | 167-168[a] | | 1990-1989 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.2.10b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 2 for the Control Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.81[2] | 0.36 | 2.64[4] | 0.45 | 2.71 | 0.41 | 2.75 | 0.39 | 10.70* |
| Prosocial | 2.70[2,3] | 0.34 | 2.51[4] | 0.42 | 2.59[4] | 0.37 | 2.79[1] | 0.33 | 28.47* |
| Confidence/Independence | 2.59[2,4] | 0.40 | 2.37[3,4] | 0.42 | 2.67[4] | 0.37 | 2.82 | 0.30 | 57.39* |
| N | 449 | | 301 | | 125 | | 199-200[a] | | 1074-1075 |

*Notes*: * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

In the cases of Greece and Cyprus, children's scores from both groups (experimental and control groups) on Adaptive Social Behavior Inventory (ASBI) in Time 2 indicate a similar pattern. Specifically, it seems that children got better scores on the assessment of Conformity/Compliance behavior, subsequently on the subscale assessed prosocial skills and lastly on the assessment of Confidence/Independence behavior.

On the other hand, findings from Romania show that for both groups in Time 2 children's prosocial skills were assessed slightly lower than the other two behavior skills. However, the difference between scores in these three subscales were not substantially different. In the case of Portugal, it is shown that children's scores from both groups are better on the subscale assessing Confidence/Independence behavior.

Overall, it is interesting that prosocial skills of the experimental group in Cyprus and Romania were higher than the control group, but in the other two countries it is not observed a similar difference between groups.

## 3.3 From Time 1 to Time 2: Value added analysis in Year 1 (Progress between T1 – T2)

In this section is presented the value added analysis from Time 1 (pre-intervention) to Time 2 (post-intervention) for all the measures administered during the Year 1 of the study. In order to examine whether Teachers' well-being and job satisfaction feelings, as well as their sense of self-efficacy beliefs made a substantial progress during Year 1 due to ProW intervention and if this progress is similar across the 4 countries of the project we run the following analyses:

First, we calculated the change (or gain) scores for each one of the participants, which derived from the subtraction of Time 2 scores from the Time 1 scores, in order to use it as an indicator of the participants' progress during Year 1. Therefore, a zero (0) value indicates that there is no improvement from the pre to post intervention time, a positive value indicates an increase, and a negative value indicates a decline from Time 1 to Time 2.

Second, we run 2-way ANOVAs on the subscales' means of each questionnaire's gain scores as dependent variables with group and country as independent variables to examine the effects of ProW intervention and whether the effects are specific to each country. If there was a significant interaction effect between group with country, then a post hoc analysis was run to find the specific country or countries with significant differences between experimental and control groups. The significant differences between groups in each country were highlighted in the tables with bold digits of the respective mean scores.

Third, we run one sample t-test with zero (0) as test value to examine whether the mean gain score in the experimental and the control group is significantly different form the zero value, which is an indicator of no difference (or no change/gain) from the baseline score. According to our expectations for a positive effect of ProW intervention, the experimental group's mean

change (or gain) score would be significantly different from zero (0), but the control group's mean score would not. If both groups showed a significant or a non-significant gain score from zero (0), this would be an indication of no effect of the intervention or an existence of other extraneous or intervening variables that affect the intervention's outcomes and they have not taken into control by this study.

In the following presentation of the results, first, we present findings for the effects of the ProW intervention on teachers' outcomes providing all the related information from the Teachers' scales and subscales. Second, we present findings for the effects of the intervention on children's outcomes providing data from children's scales and subscales.

### a. Findings for Teachers

According to table 3.3.1a it seems that no significant group or country effects appeared in any of the subscales. Also, there were no significant interaction effects of group by country in any subscale and this result shows that mean differences on change scores from Time 1 to Time 2 were non-significant between experimental and control groups across countries.

**Table 3.3.1a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Year 1 for both Groups across countries

| TSWQ subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Teaching Efficacy* | Experimental | .10 | .45 | .15 | .37 | .05 | .50 | .20 | .59 | 1.80 | 1.17 | .05 |
| | Control | .03 | .37 | .07 | .39 | -.01 | .46 | .12 | .37 | | | |
| *School Connectedness* | Experimental | .13 | .51 | .01 | .53 | -.01 | .61 | .05 | .38 | 2.22 | 1.57 | .47 |
| | Control | .04 | .41 | -.19 | .71 | .01 | .33 | -.07 | .54 | | | |
| *Teacher Wellbeing* | Experimental | .11 | .40 | .08 | .37 | .02 | .51 | -.02 | .48 | 2.77 | .59 | .21 |
| | Control | .04 | .33 | -.06 | .41 | .00 | .37 | .02 | .36 | | | |
| | N | 91 | | 78 | | 109 | | 62 | | | 340 | |

*Notes:* * p < .05; G = Group effect; C = Country effect

**Table 3.3.1b**. One sample *t*-test values for examining probability of each subscale's change score on the Teacher Subjective Wellbeing Questionnaire (TSWQ) to differ from no change (0 score) in Year 1 for both Groups across countries.

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teaching Efficacy* | 1.65 | .54 | 2.27** | 1.04 | 1.04 | -.14 | 1.73 | 2.44* | 3.21* | 2.09* |
| *School Connectedness* | 1.92 | .68 | .068 | -1.05 | -.17 | .19 | 1.30 | -.82 | 1.15 | -1.12 |
| *Teacher Wellbeing* | 2.06* | .72 | 1.44 | -.82 | .41 | .00 | 1.76 | .96 | 2.38* | .46 |
| N | 52 | 39 | 47 | 31 | 93 | 16 | 29-33[a] | 35-37[a] | 221-225 | 92 |

*Notes*: * p < .05; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

As it is shown in Table 3.3.1b change scores of the experimental group for the full sample of participants differed significantly from 0, which means that there is an improvement from Time 1 to Time 2 on the subscale of Teaching Efficacy and on the global Teacher Wellbeing assessment. These significant changes from 0 were not evident in the control group for the global Teacher Wellbeing.  Particularly, these improvements on the TSWQ subscales appeared in the Greek sample for the global Teacher Wellbeing and in the Cypriot sample for the Teaching Efficacy subscale. Significant improvements did not appear in any other country's experimental group. Unexpectedly the Portuguese control group appeared a significant improvement on the teaching efficacy subscale, but this change was small and probably the significant value affected by the outliers appeared in this specific group. In general improvements of scores in the TSWQ from Time 1 to Time 2 were low for the experimental group, although slightly higher than the respective changes in the scores of the control group.

Overall, it seems that the ProW intervention made a substantial effect (although small) in preschool teachers' sense of Teaching Efficacy and their sense of wellbeing in the preschool

setting, when we take into consideration the full sample of this project and these effects were more distinct in the samples of Greek and Cypriot teachers.

According to table 3.3.2a only one significant country effect appeared in the student engagement subscale while there were no significant interaction effects of group by country in any other subscale. This result indicates that mean differences on change scores between experimental and control groups from Time 1 to Time 2 across countries were non-significant.

**Table 3.3.2a**. Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on Teachers' Sense of Efficacy Scale (TSES -short form) in Year 1 for both Groups across countries

| TSES subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Student engagement* | Experimental | .17 | 1.54 | .42 | .63 | .31 | 1.17 | .10 | 1.11 | .31 | 2.91* | 1.24 |
| | Control | -.06 | .74 | .15 | .81 | .72 | 1.73 | -.10 | .79 | | | |
| *Instructional strategies* | Experimental | .21 | 1.53 | .65 | .75 | .33 | 1.18 | .25 | 1.11 | .47 | 1.53 | 1.92 |
| | Control | .13 | .83 | .10 | .85 | .75 | 2.02 | .10 | .86 | | | |
| *Classroom management* | Experimental | ,29 | 1,30 | .28 | .90 | .24 | 1.22 | .06 | 1.06 | .30 | 1.48 | 1.02 |
| | Control | .17 | .91 | .17 | .93 | .75 | 1.82 | .08 | .94 | | | |
| | N | 91 | | 78 | | 109 | | 70 | | 348 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

As it is shown in Table 3.3.2b significant improvements on the TSES subscales appeared for all subscales in the Cypriot and Romanian experimental group samples, while no other significant improvements appeared in experimental groups from the other countries. It is important to note here that in these two countries teachers from the control group did not show a significant improvement. Also, it is interesting that significant improvements were found in the analyses of the full sample for all the subscales. However, the ProW intervention effect in the full sample can be argued only for teachers' sense of efficacy in student's engagement, because only there we observe an improvement of the experimental group but not of the control group.

**Table 3.3.2b.** One sample *t*-test values for examining probability of each subscale's change score on the Teachers' Sense of Efficacy Scale (TSES -short form) to differ from 0 in Year 1 for both Groups across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Student engagement* | .81 | -.49 | 4.57* | 1.06 | 2.59* | 1.66 | .52 | -.77 | 3.49* | .955 |
| *Instructional strategies* | 1.02 | .96 | 6.00* | .63 | 2.69** | 1.48 | 1.33 | .70 | 4.53* | 1.98* |
| *Classroom management* | 1.59 | 1.18 | 2.12* | 1.01 | 1.94* | 1.65 | .34 | .49 | 3.05* | 2.22* |
| N | 52 | 39 | 47 | 31 | 93 | 16 | 34 | 36 | 348 | |

Notes: * p < .05

According to table 3.3.3a it seems that there were significant group effects on the mean change scores of the subscale *Teacher Sensitivity* and in the composite assessment of the TSSES questionnaire. In addition, the absence of interaction effects on these two measures denotes that the effect of ProW intervention is not country specific and can be generalized for the full sample. However, no significant group effects appeared in the change scores from Time 1 to Time 2 for the rest of the subscales. Also, there were country effects on the change scores in all the subscales of Teacher Social Self-efficacy (TSSES) scale, except for *Social Guidance.* However, there were no significant interactions of group by country in any of these subscales and this result shows that the pattern of differences between experimental and control group on change scores for these subscales were similar across countries.

**Table 3.3.3a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on Teacher Social Self-efficacy (TSSES) in Year 1 for both Groups across countries

| TSSES subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | ANOVA | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Teacher Sensitivity* | Experimental | .57 | 1.28 | .49 | .71 | .27 | .53 | -.01 | 1.18 | 4.84* | 3.66* | .83 |
| | Control | .17 | .88 | .22 | .70 | .11 | .56 | -.02 | .78 | | | |
| *Social Guidance* | Experimental | .32 | 1.20 | .49 | .70 | .11 | .44 | .09 | 1.16 | 3.17 | 2.31 | .52 |
| | Control | .02 | .77 | .25 | .74 | .14 | .52 | -.07 | .91 | | | |
| *Teacher-Child Support* | Experimental | .26 | 1.06 | .45 | .74 | .10 | .47 | -.06 | 1.17 | 2.15 | 3.26* | .61 |
| | Control | .00 | .79 | .24 | .86 | .08 | .48 | -.07 | .82 | | | |
| *Classroom Climate Children Engagement* | Experimental | .34 | 1.04 | .51 | .61 | .07 | .46 | .15 | 1.15 | 3.36 | 2.72* | .36 |
| | Control | .17 | .77 | .21 | .78 | .07 | .49 | -.09 | .79 | | | |
| *Classroom Management - Conflict Resolution* | Experimental | .35 | 1.06 | .52 | .68 | .09 | .59 | .02 | 1.00 | 1.84 | 3.20* | .49 |
| | Control | .07 | .69 | .27 | .74 | .10 | .58 | -.03 | .87 | | | |
| *TSSES Global* | Experimental | .37 | 1.04 | .49 | .58 | .13 | .38 | .06 | 1.02 | 4.08* | 3.42* | .48 |
| | Control | .09 | .69 | .24 | .69 | -.06 | .74 | .08 | .68 | | | |
| | N | 91 | | 78 | | 109 | | 71 | | 349 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

**Table 3.3.3b.** One sample *t*-test values for examining probability of each subscale's change score on the Teacher Social Self-efficacy (TSSES) to differ from 0 in Year 1 for both Groups across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teacher Sensitivity* | 3.20** | 1.20 | 6.41* | 1.59 | 5.01*** | 0.82 | .12 | -.14 | 5.74* | 1.70 |
| *Social Guidance* | 1.94 | .17 | 4.98* | 1.75 | 2.35* | 1.05 | .40 | -.49 | 4.12* | .93 |
| *Teacher-Child Support* | 1.75 | .00 | 4.32* | 1.59 | 2.04* | .70 | -.07 | -.51 | 3.47* | .71 |
| *Classroom Climate-Children Engagement* | 2.34* | 1.40 | 5.12* | 1.58 | 1.53 | .57 | .75 | -.71 | 4.47* | 1.33 |
| *Classroom Management - Conflict Resolution* | 2.42* | 1.66 | 5.20* | 2.18* | 1.56 | .70 | .25 | -.23 | 4.31* | 1.40 |
| *TSSES Global* | 2.53* | 1.79 | 5.78* | 1.92 | 3.33** | .91 | .34 | -.47 | 5.01* | 1.37 |
| N | 51 | 39 | 47 | 31 | 92 | 16 | 33-34[a] | 36 | 225-6 | 122 |

*Notes:* * p < .05; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

As it is shown in Table 3.3.3b the mean change scores of the experimental group for the full sample of participants differed significantly from 0, which means that there is a significant improvement from Time 1 to Time 2 on all subscales of Teacher Social Self-Efficacy (TSSES) and on the global TSSES assessment. These significant changes from 0 were not evident in the control group. Therefore, it seems that the ProW intervention influenced the change of teachers' sense of Social Self-efficacy in the global sample of this project.

Further examination in each country, shows that these improvements on the TSSES subscales *(Teacher Sensitivity, Social Guidance, Teacher-Child Support, Classroom Climate-Children Engagement, Classroom Management-Conflict Resolution)* appeared mainly in the Cypriot sample of teachers for the whole range of subscales, as well as in the Greek and Romanian samples for most of the TSSES subscales. In general improvements of scores in the TSSES from Time 1 to Time 2 were high for the experimental group, and there were no significant changes in the scores of the control group.

**Table 3.3.4a**. Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on Maslach Burnout Inventory (MBI) in Year 1 for both Groups across countries

| MBI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Emotional Exhaustion* | Experimental | -.14 | .69 | -.16 | .75 | .01 | 1.11 | .41 | 1.01 | 1.86 | 2.32 | .76 |
| | Control | -.04 | .80 | .16 | .89 | .23 | .99 | .26 | 1.03 | | | |
| *Depersonalization* | Experimental | -.05 | .48 | -.11 | .58 | -.03 | 1.26 | .18 | .57 | 3.15 | .75 | .76 |
| | Control | .01 | .62 | .24 | .83 | .30 | .92 | .18 | .80 | | | |
| *Personal Accomplishment* | Experimental | .31 | .52 | .16 | .61 | .29 | .92 | .23 | .70 | 4.53* | 2.66* | 1.64 |
| | Control | -.05 | .48 | -.13 | .65 | .47 | 1.72 | -.09 | .55 | | | |
| | N | 91 | | 78 | | 109 | | 69 | | | 347 | |

*Notes:* * p < .05; G = Group effect; C = Country effect

According to the table 3.3.4a it seems that no significant group or country effects appeared in the Emotional Exhaustion and Depersonalization subscales. Also, there was no significant interactions of group by country in any of these two subscales and this result shows that

differences on change scores of these two subscales were nonsignificant across countries between all groups. However, there is a significant group and country effect on personal accomplishment, but with no interaction effect. In other words, teachers' scores on the Personal Accomplishment subscale differ significantly between experimental and control group across countries as well as teachers gain scores differ significantly across countries. Notably, the descriptives showed that teachers in the experimental group have better gain scores than teachers in the control group in personal accomplishment from Time 1 to Time 2 in 3 of the countries, but in Romania there was a different pattern of progress; Romanian teachers' gain scores in the control group were higher than the respective ones in the experimental group. This incompatible pattern of findings for Romanian sample does not mean that ProW did not have a positive effect for the personal accomplishment of teachers, if we take into account (a) the non significant difference of the control group's mean gain score from 0 (as it is depicted in Table 3.3.4b) and (b) the small N of teachers in the control group (16).

As it is shown in Table 3.3.4b change scores on the subscale of *Personal Accomplishment* differed significantly from 0 for the full sample of participants in the experimental group, which means that there is an improvement from Time 1 to Time 2 on this assessment of MBI. As far as for the control group, it is shown that teachers in the control group have experienced more Emotional Exhaustion and Depersonalization from Time 1 to Time 2, but this did not happen for the teachers in the experimental group who remained in the same level of burnout in these two subscales after the intervention in Time 2. However, there are some differentiations between the countries.

**Table 3.3.4b.** One sample *t*-test values for examining probability of each subscale's change score on the Maslach Burnout Inventory (MBI) to differ from 0 in Year 1 for both Groups across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Emotional Exhaustion* | -1.48 | .35 | -1.43 | 1.04 | .06 | .95 | 2.33* | 1.53 | -.05 | 2.00* |
| *Depersonalization* | -.75 | .10 | -1.29 | 1.64 | -.20 | 1.31 | -.97 | 1.99* | -.32 | 2.50* |
| *Personal Accomplishment* | 4.30* | -.71 | 1.79 | -1.11 | 3.05* | 1.10 | 1.85 | .96 | 5.18* | -.19 |
| N | 52 | 39 | 47 | 31 | 93 | 16 | 33 | 37 | 225 | 123 |

*Notes*: * p < .05

Particularly, improvements in *Personal Accomplishment* appeared in both Greek and Romanian samples of teachers who belong to the experimental group. On the other hand, the experimental group of the Portuguese sample showed a significantly higher score in Time 2 than in Time 1 for the *Emotional Exhaustion* subscale, but this did not happen for the control group. The more emotionally exhausted teachers from the experimental group in Portugal may be due to enhanced duties that teachers have in this country and the inclusion of the ProW activities resulted to be considered by them as an add on obligation in their job. Significant changes from Time 1 to Time 2 did not appear in any other country's experimental group. Also, borderline significant positive change (p = .054) from 0 (higher score in Time 2 than in Time 1) were evident in the control group of the Portuguese sample on the subscale of *Depersonalization*, but this change was small and probably the significant value affected by the outliers appeared in this specific group. In general, it is notable that experimental groups in all countries have improvements of teachers' scores in the Personal Accomplishment subscale and in most of the cases teachers received the ProW intervention did not show a worsening of their burnout levels in terms of emotional exhaustion (but not in Portugal) and depersonalization dimensions of burnout feelings.

According to table 3.3.5a it seems that no significant group effects appeared from Time 1 to Time 2 in the subscales *Supervisor, Pay, Organization as a Whole, and Promotion*; the only significant group effect appeared in the subscales *Working Conditions* and *Job Itself*. Also, there were country effects on the change scores of the subscales *Working Conditions, Supervisor, Job itself and Promotion.* But there were no significant interactions of group by country in any subscale and this result shows that differences on change scores among countries were similar for both experimental and control groups. Also, the nonsignificant interaction effects on the subscales of *Working Conditions* and *Job Itself* in combination with the significant effects of group and country reveals that the change scores differ between the two groups for all the countries, but among countries the change scores differed too for both groups. In other words, preschool teachers from the whole sample of the project provided responses that reflect an improvement of their satisfaction for their job and conditions they worked for after the first year of the ProW intervention.

**Table 3.3.5a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on Employee Satisfaction Inventory (ESI) in Year 1 for both Groups across countries

| ESI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Working Conditions* | Experimental | .22 | .54 | .03 | .64 | .37 | .65 | -.05 | .61 | 4.32* | 6.61* | .40 |
| | Control | -.02 | .53 | -.20 | .46 | .33 | .61 | -.16 | .87 | | | |
| *Supervisor* | Experimental | -.04 | .53 | .02 | .49 | .26 | .64 | .02 | .61 | .00 | 7.15* | 2.22 |
| | Control | -.18 | .39 | -.13 | .57 | .36 | .30 | .25 | .72 | | | |
| *Pay* | Experimental | -.15 | .73 | .01 | .45 | -.07 | .76 | -.19 | .87 | .34 | 1.51 | 2.63 |
| | Control | .03 | .98 | .10 | .44 | .31 | .84 | -.12 | .97 | | | |
| *Job Itself* | Experimental | .03 | .42 | -.01 | .27 | .31 | .57 | .04 | .78 | 5.23* | 3.53* | .69 |
| | Control | -.17 | .43 | -.03 | .26 | .09 | .45 | .06 | .54 | | | |
| *Organization as a Whole* | Experimental | .08 | .75 | -.10 | .33 | .11 | .75 | .04 | .90 | 1.24 | .71 | .83 |
| | Control | .07 | .64 | -.06 | .29 | .19 | .43 | -.13 | .92 | | | |
| *Promotion* | Experimental | .04 | .75 | .06 | .47 | .07 | .71 | -.33 | 1.09 | .02 | 2.68* | .54 |
| | Control | -.16 | .95 | -.07 | .41 | .17 | .57 | -.26 | 1.39 | | | |
| *ESI Global* | Experimental | .03 | .33 | .01 | .18 | .17 | .50 | -.06 | .43 | 1.88 | 5.57* | 1.20 |
| | Control | -.07 | .29 | -.07 | .16 | .24 | .39 | -.10 | .54 | | | |
| | N | 91 | | 78 | | 109 | | 72 | | | 350 | |

*Notes*: * $p < .05$; G = Group effect; C = Country effect

As it is shown in Table 3.3.5b change scores of the experimental group for the full sample of participants differed significantly from 0 in most of the scores assessed by the ESI scale, which means that there is a significant improvement from Time 1 to Time 2 in most of the dimensions of Employee Satisfaction. Only the subscales of *Organization as a whole* and *Promotion* did not show a significant change of teachers' scores. Also, it is notable that none of the ESI scores changed significantly for the control group, which is indicative of the substantial effect that the ProW intervention had on teachers' satisfaction as employees.

Looking into each country's results, these improvements on the ESI subscales seem to differ among the various dimensions of employee satisfaction. Particularly, it seems that the most clear picture of the effects of ProW on ESI subscales observed in *Working Condition*s subscale, because (a) 3 of the countries (except Portugal) showed positive change scores, (b) the Greek and Romanian teachers who received the ProW intervention showed a significant change score from 0 and the teachers of the respective control groups did not show a significant change from 0, and (c) the Cypriot teachers of the control group showed a significant negative change score (that means a lower sense of working conditions in Time 2 than in Time 1) in that subscale. Also, the subscale *Job Itself* seem to have been affected by the ProW because (a) Romanian teachers showed a significant change score while the respective control group did not show significant change and (b) Greek teachers of the control group show a significant lower change score in the Job itself subscale. In the cases of the Supervisor subscale and the ESI global score it is difficult to support an effect of the ProW intervention in the Romanian sample because both experimental and control group have significant change scores from Time to Time 2.

**Table 3.3.5b**. One sample *t*-test values for examining probability of each subscale's change score on the Employ Satisfaction Inventory (ESI) to differ from 0 in Year 1 for both Groups across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Working Conditions* | 2.96* | -.24 | .37 | -2.43* | 5.44* | 2.10 | -.11 | -1.35 | 4,10* | -1.21 |
| *Supervisor* | -.59 | -2.85* | .82 | -1.50 | 3.83* | 4.76* | .15 | 2.08* | 2,60* | .56 |
| *Pay* | -1.51 | .16 | .27 | -2.57* | -.85 | 1.48 | -1.79 | -1.50 | -2,11* | .31 |
| *Job Itself* | .50 | -2.40* | .51 | -.1.74 | 5.14* | .84 | .34 | .17 | 3,83* | -1.09 |
| *Organization as a Whole* | .79 | .70 | 2.18* | -.83 | 1.42 | 1.73 | .41 | -1.10 | 1,17 | -.29 |
| *Promotion* | .37 | -1.06 | .11 | .95 | .93 | 1.17 | -.94 | -1.10 | 0.44 | -1.41 |
| *ESI Global* | .64 | -1.57 | 1.14 | -2.48* | 3.36* | 2.46* | -.83 | -1.11 | 2.56* | -1.09 |
| N | 51 | 38 | 47 | 30 | 92 | 15 | 31-33[a] | 35-37 | 223-225 | 121-223 |

*Notes:* * $p < .05$; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

In general improvements of scores in the ESI from Time 1 to Time 2 were substantial for most of the subscales taking into account the analyses of the full sample and there were some interesting differentiations among countries.

According to table 3.3.6a it seems that there are significant country effects on almost all the subscales of the PCS (but not in School Safety subscale) and on the global change score of the PCS scale. However, there is no group or interaction effect on the change score in any of the dimensions of preschool climate as it is assessed by the subscales and the global score of the PCS . Overall, these results show that differences on the change scores between groups were not significant in general, but there are significant differences in the change scores among the countries. This significant country effect seems to be due to the higher change scores observed in the sample of the Romanian teachers in both groups compared to the teachers of the other countries. The absence of group and interaction effects mean that the ProW

intervention did not influence in any way the school climate during Year 1 among the participating countries.

**Table 3.3.6a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on Preschool Climate Scale (PCS) in Year 1 for both Groups across countries

| PCS subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Teacher-student | Experimental | -.26 | .99 | .20 | .42 | .29 | .67 | -.02 | .14 | .84 | 4.90* | 1.07 |
| | Control | -.14 | 1.33 | -.11 | .39 | .29 | .38 | -.20 | .73 | | | |
| Student-Student | Experimental | -.06 | 1.02 | .26 | .50 | .41 | .73 | .07 | .39 | .58 | 5.84* | .77 |
| | Control | -.05 | .80 | .00 | .43 | .50 | .63 | -.07 | .76 | | | |
| Teacher-home | Experimental | -.26 | .96 | .20 | .40 | .31 | .67 | .02 | .18 | .07 | 5.69* | 1.31 |
| | Control | -.07 | 1.17 | -.05 | .29 | .38 | .52 | -.09 | .77 | | | |
| School safety | Experimental | -.26 | 1.00 | .21 | .48 | .26 | .66 | .09 | .36 | .11 | 2.74 | 1.36 |
| | Control | .00 | 1.33 | .01 | .39 | .21 | .40 | -.05 | .78 | | | |
| Clarity of expectations | Experimental | -.04 | 1.00 | .35 | .43 | .37 | .69 | .59 | .44 | .21 | 3.83* | .48 |
| | Control | .02 | .95 | .14 | .51 | .37 | .53 | .02 | .80 | | | |
| Fairness of rules | Experimental | -.21 | 1.05 | .39 | .46 | .33 | .67 | .59 | .49 | .71 | 4.66* | 1.91 |
| | Control | -.05 | .49 | .08 | .41 | .44 | .60 | -.11 | .77 | | | |
| Respect of diversity | Experimental | -.30 | .99 | .23 | .44 | .26 | .67 | -.03 | .48 | .13 | 3.53* | 1.80 |
| | Control | .05 | 1.47 | .12 | .48 | .28 | .45 | -.11 | .74 | | | |
| PCS Global | Experimental | -.20 | .96 | .26 | .34 | .32 | .64 | .00 | .27 | .16 | 5.07* | 1.30 |
| | Control | -.03 | 1.14 | .01 | .30 | .35 | .39 | -.08 | .72 | | | |
| N | | 91 | | 78 | | 109 | | 35 | | 313 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

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**Table 3.3.6b.** One sample *t*-test values for examining probability of each subscale's change score on the Preschool Climate Scale (PCS) to differ from 0 in Year 1 for both Groups across countries.

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teacher-student* | -1.87 | -0.68 | 3.23* | -1.54 | 4.20*** | 3.05** | -1.00 | -1.29 | 2.14* | -0.89 |
| *Student-Student* | -0.44 | -0.35 | 3.56* | 0.00 | 5.40*** | 3.16** | 0.13 | -0.47 | 4.21*** | 0.67 |
| *Teacher-home* | -1.93 | -0.38 | 3.41* | -0.98 | 4.50*** | 2.99** | -0.20 | -0.49 | 2.39* | 0.02 |
| *School safety* | -1.88 | 0.00 | 3.05* | 0.15 | 3.85*** | 2.07 | 0.27 | -0.30 | 1.99 | 0.28 |
| *Clarity of expectations* | -0.32 | 0.11 | 5.49* | 1.53 | 5.18*** | 2.84* | 0.35 | 0.19 | 4.58*** | 1.51 |
| *Fairness of rules* | -1.45 | 0.24 | 5.80* | 1.09 | 4.78*** | 2.91* | 0.24 | -0.45 | 3.47** | 1.04 |
| *Respect of diversity* | -2.16* | -0.22 | 3.64* | -1.31 | 3.71*** | 2.52* | -0.25 | -0.64 | 1.76 | -0.29 |
| *PCS Global* | -1.50 | -1.91 | 5.34* | -0.11 | 4.80*** | 3.63** | -0.02 | -0.48 | 3.14** | 0.32 |
| N | 52 | 39 | 47 | 31 | 93 | 16 | 18 | 19 | 210 | 105 |

*Notes:* * p < .05

According to the results from the Table 3.3.6b, teachers' change score of the experimental group for the full sample differed significantly from 0 scores in almost all the subscales of PCS, but no significant changes found for the control group. This pattern of results means that there is an improvement from Time 1 to Time 2 in the school climate for the full sample of teachers, which is due to the ProW intervention.

However, beyond the results derived from the full sample, there are interesting findings for each particular country. Taking into consideration that only in the Cypriot sample the change score revealed a significant increase in the scores of the school climate for the experimental group from Time 1 and an unchanged level of school climate for the control group, the ProW intervention seems to influence school climate mainly for Cyprus. In the case of Romania there was a significant increase in both groups and for this reason it cannot be attributed this change only to the ProW intervention. In the other two countries no significant increase of the school climate level was observed after the intervention.

According to table 3.3.7a it seems that no significant group effects appeared from Time 1 to Time 2 in the subscales Positive, Engagement, Relationships, Meaning, Accomplishment, Negative, Health, the PERMA Global Score and the item 2 for Loneliness. The only significant group effect appeared in the assessment of happiness (item 13). There were no significant interactions of group by country in any subscale and this result shows that differences on change scores among countries were similar for both experimental and control groups and the intervention did not influence differently any of the subscales of wellbeing during Year 1 among the participating countries.

**Table 3.3.7a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on the PERMA Profiler in Year 1 for both Groups across countries

| PERMA subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Positive -P | Experimental | .44 | 1.52 | .60 | 1.18 | .28 | 1.85 | -.17 | 1.20 | 3.57 | 1.07 | 1.54 |
| | Control | .09 | 1.58 | -.34 | 1.05 | .17 | 1.73 | -.10 | .10 | | | |
| Engagement - E | Experimental | .51 | 1.59 | .50 | 1.54 | .19 | 2.19 | -.02 | 1.67 | 1.15 | 1.6 | 1.05 |
| | Control | .15 | 1.50 | -.13 | .90 | .62 | 2.10 | -.36 | 1.48 | | | |
| Relationships - R | Experimental | .47 | 1.73 | .40 | 1.25 | .28 | 1.97 | -.38 | 1.29 | 3.06 | 1.52 | 1.32 |
| | Control | -.09 | 1.57 | -.40 | .87 | .14 | 1.90 | -.21 | 1.13 | | | |
| Meaning - M | Experimental | .31 | 1.49 | .67 | 1.06 | .27 | 1.85 | -.06 | 1.44 | 2.05 | 1.43 | 1.08 |
| | Control | .02 | 1.54 | -.10 | 1.22 | .46 | 1.94 | -.23 | 1.09 | | | |
| Accomplishment -A | Experimental | .36 | 1.49 | .85 | 1.22 | .33 | 1.85 | .17 | 1.17 | 5.34 | 1.49 | 1.06 |
| | Control | .00 | 1.43 | -.02 | 1.11 | .39 | 1.91 | -.32 | 1.10 | | | |
| Negative - N | Experimental | -.07 | 2.01 | -.32 | 1.60 | .16 | 2.97 | -.41 | 2.02 | .033 | .49 | 1.28 |
| | Control | -.78 | 1.65 | -.07 | 1.62 | -.14 | 1.99 | .17 | 2.21 | | | |
| Health -H | Experimental | .33 | 1.69 | .44 | 1.36 | -.02 | 1.99 | -.55 | 1.43 | .11 | 3.11 | 2.03 |
| | Control | -.13 | 1.66 | -.18 | 1.45 | .73 | 2.02 | -.49 | 1.85 | | | |
| PERMA Global | Experimental | .45 | 1.42 | .60 | 1.04 | .27 | 1.81 | -.10 | 1.02 | 3.33 | 1.20 | 1.19 |
| | Control | .00 | 1.40 | -.20 | .80 | .30 | 1.80 | -.20 | .86 | | | |
| Loneliness (item 2) | Experimental | -.25 | 3.34 | -46 | 3.55 | .04 | 5.49 | -.54 | 3.20 | 1.83 | .24 | .21 |
| | Control | -.13 | 2.42 | .22 | 2.87 | .69 | 3.91 | .58 | 3.42 | | | |
| Happy (item 23) | Experimental | .61 | 2.05 | .63 | 1.45 | .29 | 2.06 | -.18 | 1.26 | 4.03* | .56 | 1.29 |
| | Control | -.15 | 1.56 | -.16 | 1.10 | .29 | 2.06 | -.18 | 1.26 | | | |
| N | | 91 | | 77 | | 109 | | 69 | | | 346 | |

*Notes:* * p < .05; G = Group effect; C = Country effect

As it is shown in Table 3.3.7b change scores of the experimental group for the full sample of participants differed significantly from 0 in most of the scores assessed by the PERMA profiler, which means that there is a significant improvement from Time 1 to Time 2 in most of the dimensions of teachers' overall well-being and flourishing (Positive, Engagement, Relationships, Meaning, Accomplishment, Health, Global and Item 23/Happy). Also, it is notable that none of the PERMA profiler's scores changed significantly for the control group, which is indicative of the substantial effect that the ProW intervention had on teachers' general sense of wellbeing.

**Table 3.3.7b.** One sample *t*-test values for examining probability of each subscale's change score on the PERMA Profiler to differ from 0 in Year 1 for both Groups across countries.

| PERMA subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Positive -P | 2.09* | .37 | 3.44* | -1.81 | 1.45 | .384 | -.80 | -.66 | 3.01* | -.56 |
| Engagement - E | 2.32* | .64 | 2.20* | -.79 | .822 | 1.18 | -.07 | -1.48 | 2.37* | -.08 |
| Relationships - R | 1.94* | -.37 | 2.16* | -2.55* | 1.38 | .30 | -1.7 | -1.14 | 2.20* | -1.44 |
| Meaning - M | 1.48 | .06 | 4.25* | -.44 | 1.39 | .94 | -.22 | -1.31 | 2.94* | -.23 |
| Accomplishment -A | 1.73 | .00 | 4.72* | -.107 | 1.71 | .829 | .84 | -1.74 | 3.99* | -.40 |
| Negative - N | -.25 | -2.93* | -1.35 | -.25 | .53 | -.29 | -1.18 | .46 | -.46 | -1.37 |
| Health -H | 1.41 | -.48 | 2.21* | -.70 | -.08 | 1.43 | -2.21* | -1.60 | .68 | -.88 |
| PERMA Global | 2.28* | .01 | 3.97* | -1.35 | 1.45 | .66 | -.60 | -1.48 | 3.27* | -.66 |
| Loneliness (item 2) | -.54 | -.33 | -.87 | .43 | .07 | .70 | -.60 | -1.48 | 2.95 | 1.01 |
| Happy (item 23) | 2.16* | -.61 | 2.95* | -.81 | 1.36 | .00 | -.83 | -.14 | 2.95* | -.73 |
| N | 52 | 39 | 46 | 31 | 93 | 16 | 33 | 37 | 224 | 123 |

*Notes:* * p < .05

In more detail, Cyprus teachers' experimental group appear to have the largest probability of change in Year 1 as it is indicated by their scores in the subscales Positive, Engagement,

Relationships, Meaning, Accomplishment, Health and their PERMA Global Score. A similar pattern is also indicated by the answers of Greek teachers that also exhibited significant changes in the above subscales except the subscales for Meaning, Accomplishment and Health. No significant differences were found in overall well-being elements for any of the teachers' groups from Romania and Portugal except for a negative change in the subscale of Health that was indicated by the Portugal experimental group teachers.

In general, improvements in PERMA Profiler scores from Time 1 to Time 2 were substantial for most of the subscales considering the analyses of the full sample and there were some interesting differentiations among participating countries.

## b. Findings for Children

According to table 3.3.8a it seems that the gain scores of children in the Experimental group differ from the respective scores of the Control group sporadically in the subscales of SDQ reflecting children's behavior problems. Specifically, in the Emotional and hyperactivity problems subscales there is a country effect and an interaction effect between country and group, but no group effect. According to these significant interaction effects it seems that children in the Experimental group differ from children in the Control group only in some of the countries. Post-hoc analyses showed that the significant effects appeared only in Cyprus and Portugal for the Emotional problems subscale. Children of the experimental group (EG) in Cyprus showed a significant decrease in emotional problems than children of the control group (CG), but in Portugal occurred the reverse pattern with CG children showing a decrease in emotional problems than the EG ones. The significant interaction for the hyperactivity subscale seems to be due to significant differences between groups in Cyprus and Portugal. Cypriot children appeared to have diminished their hyperactivity problems after the intervention, but for the Portuguese sample the pattern of findings was again in the reverse direction; the control group diminished more the hyperactivity problems than children in the experimental group.

**Table 3.3.8a.** Means (M) and standard deviations (sd) of subscales' gain scores (from T1 to T2) on the Strengths and Difficulties Questionnaire (SDQ) in Year 1 for both Groups across countries

| SDQ subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Emotional problems | Experimental | -.08 | .33 | **-.10** | .37 | .00 | .40 | **.01** | .32 | .01 | 7.70* | 8.00* |
| | Control | -.08 | .32 | **-.01** | .35 | .04 | .29 | **-.12** | .34 | | | |
| Conduct problems | Experimental | -.06 | .30 | -.02 | .27 | .33 | .38 | -.04 | .34 | 1.46 | 149.6* | 1.84 |
| | Control | -.06 | .27 | .01 | .29 | .29 | .29 | -.10 | .37 | | | |
| Hyperactivity | Experimental | -.11 | .36 | **-.13** | .36 | .49 | .41 | **-.10** | .45 | .41 | 278.3* | 13.56* |
| | Control | -.07 | .34 | **-.00** | .36 | .46 | .37 | **-.28** | .44 | | | |
| Peer problems | Experimental | -.11 | .30 | -.07 | .27 | 28 | .37 | -.06 | .25 | 6.03* | 179.1* | .21 |
| | Control | -.07 | .27 | -.03 | .26 | .33 | .28 | -.05 | .33 | | | |
| Prosocial skills | Experimental | .21 | .42 | .14 | .40 | .08 | .55 | .14 | .37 | 29.55* | 12.57* | .53 |
| | Control | .11 | .41 | .03 | .38 | -.07 | .47 | .08 | .43 | | | |
| N | | 1047 | | 658 | | 935 | | 363 | | 3003 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

**Table 3.3.8b**. One sample *t*-test values for examining probability of each subscale's gain score on the Strengths and Difficulties Questionnaire (SDQ) to differ from no change (0 score) in Year 1 for both Groups across countries.

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Emotional problems | -5.85* | -5.06* | -5.16* | -0.29 | 0.00 | 1.46 | 0.71 | -4.83* | -4.99* | -4.97* |
| Conduct problems | -4.60* | -4.77* | -1.52 | .55 | 24.98* | 1.01 | -1.57 | -3.73* | 13.14* | -65 |
| Hyperactivity | -7.79* | -4.60* | -6.69* | -.10 | 33.98* | 1.49 | -2.71* | -8.97* | 12.18* | -2.25* |
| Peer problems | -9.03* | -.13 | -4.99* | -1.60 | 21.67* | -.59 | -3.24* | 2.22 | 7.74* | -1.07 |
| Prosocial skills | 12.30* | 5.53* | 6.47* | 1.58 | 4.09* | -1.73 | 4.94* | 2.16 | 12.60* | 4.60* |
| N | 602 | 445 | 362 | 296 | 810 | 125 | 167 | 196 | 1941 | 1062 |

*Notes:* * p < .05

As it is shown in Table 3.3.8b the gain scores of children for the full sample differed significantly from 0 in most of the cases for both groups. However, the pattern of findings for the gain scores was not always in the expected direction. However, this was not the case within each country. Specifically, it seems that emotional problems, conduct problems, hyperactivity problems diminished significantly in Greece for both groups and prosocial skills improved for both groups. An indication of a positive effect of the ProW intervention for the Greek sample derived from the findings for the significantly diminished score in peer relationships problems only for the experimental group.

In Cyprus emotional, hyperactivity and peer problems diminished significantly only for the experimental group, and this is clear evidence that the intervention had an effect on the improvement of these skills. Similar improvement is evident for the improvement of prosocial skills only for the experimental group. Overall, a significant positive effect of the intervention for the diminish of emotional -behavioral problems and improvement of prosocial skills seem to be shown for children in Cyprus.

On the other hand, in Romania children of the experimental group appear to improve their prosocial skills after the intervention indicating the positive effect of ProW, but the pattern of findings for the problems scales was not in the expected direction; the experimental group seem to increase the behavioral problems after the intervention.

In the case of Portugal peer problems diminished significantly and prosocial skills improved significantly only for the experimental group and this is a clear indication that the ProW intervention made an effect on these behavioral skills. However, for the rest of the SDQ subscales either both groups had a significant gain score or only the control group diminished their problems; therefore no effect can be argued for these specific emotional and behavioral problems.

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**Table 3.3.9a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on the Child Behavior Rating Scale (CBRS) in Year 1 for both Groups across countries

| CBRS subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | ANOVA | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Classroom self-regulation | Experimental | .34 | .64 | .26 | .57 | .23 | .99 | .28 | .73 | 14.81* | 2.27 | 2.37 |
| | Control | .15 | .53 | .09 | .51 | .26 | .91 | .08 | .67 | | | |
| Interpersonal skills | Experimental | .26 | .60 | .22 | .53 | .14 | .83 | .10 | .60 | 29.78* | 6.36* | .20 |
| | Control | .13 | .50 | .06 | .54 | .00 | .65 | -.06 | .60 | | | |
| Social play-interaction | Experimental | .40 | .71 | .36 | .60 | .20 | .91 | .18 | .52 | 12.42* | 11.07* | 1.82 |
| | Control | .33 | .62 | .14 | .46 | .16 | .83 | .10 | .56 | | | |
| Engagement | Experimental | **.38** | .74 | .22 | .63 | .16 | .99 | .20 | .60 | 10.28* | 4.57* | 3.16* |
| | Control | **.17** | .67 | .08 | .62 | .22 | .86 | .06 | .70 | | | |
| Social problem solving | Experimental | .45 | .81 | .38 | .65 | .24 | 1.00 | .26 | .70 | 13.98* | 6.70* | 1.02 |
| | Control | .33 | .73 | .16 | .63 | .19 | .92 | .16 | .79 | | | |
| | N | 1047 | | 657 | | 935 | | 357 | | 2996 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

According to table 3.3.9a results in all subscales of the Child Behavior Rating Scale (CBRS) show significant differences between the experimental and control groups. Additionally, the subscales of interpersonal skills, social play-interaction, engagement, and social problem solving also exhibit significant variations between groups depending on the country. However, only for the subscale assessed engagement behavior observed a significant interaction.  The significant interaction revealed for the 'engagement' subscale indicates that the effectiveness of the intervention on the engagement behavior varied across different countries and the group effect is limited only for the Greek sample after the post-hoc analyses. These results suggest that for all the other behaviors assessed by the rest of the CBRS subscales, the ProW intervention implemented to the experimental group had a significant impact on them, which is not country specific. In other words, ProW influences children's behavior in all countries, although the sizes of the effects could vary.

As it is shown in Table 3.3.9b gain scores of children in both groups for the full sample differed significantly from 0 for all CBRS subscales and in each of the four participating countries. In more detail, the experimental group consistently shows statistically significant improvements compared to the control group. Additionally, the total sample analysis also reveals highly significant differences for the experimental group and somewhat lower (although) significant differences for the control group, indicating the overall effectiveness of the intervention. These findings suggest that the ProW intervention had a positive impact on the measured behaviors across all countries included in the study.

**Table 3.3.9b**. One sample *t*-test values for examining probability of each subscale's change score on the Child Behavior Rating Scale (CBRS) to differ from no change (0 score) in Year 1 for both Groups across countries.

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Classroom self-regulation | 13.26* | 6.12* | 8.58* | 3* | 6.68* | 3.15* | 4.93* | 1.76 | 15.17* | 7.22* |
| Interpersonal skills | 10.61* | 5.27* | 7.92* | 1.86 | 4.96* | .06 | 2.28* | -1.40 | 12.08* | 3.45* |
| Social play-interaction | 13.75* | 11.30* | 11.35* | 5.33* | 6.38* | 2.20* | 4.51* | 2.36* | 16.55* | 11.60* |
| Engagement | 12.57* | 5.32* | 6.79* | 2.26* | 4.64* | 2.91* | 4.29* | 1.27 | 12.93* | 6.23* |
| Social problem solving | 13.62* | 9.54* | 11.13* | 4.27* | 6.88* | 2.30* | 4.88* | 2.88* | 17.00* | 10.26* |
| N | 602 | 445 | 362 | 295 | 810 | 125 | 149 | 187 | 1923 | 1052 |

*Notes:* * p < .05

Overall, the combined findings from the ANOVAs and one sample t-tests for the CBRS scale showed that the ProW intervention influenced various social and behavioral skills of children across the countries of the project. Experimental group's children improved their behavior at the end of the Year 1 more than children in the control group and this is clear evidence for the ProW effects on them.

According to table 3.3.10a it seems that the gain scores of children in all countries except Cyprus, did not exhibit a significant difference between groups from Time 1 to Time 2. Although there is no group effect, the significant interaction effects revealed from the ANOVAs between group by country means that there is a group effect in specific country (or countries). According to the post-hoc analyses it is shown that the interaction is due to the significant group differences observed in the Cypriot sample. In other words, children of the experimental group from Cyprus differed significantly from children in the control group in terms of their gains after the intervention across all the behavioral and social skills assessed by the ASBI scale. In the case of the other countries, these findings did not show a significant gain of children after the intervention because of their inclusion in the experimental group who received the ProW intervention.

As it is shown in Table 3.3.10b children's gain scores in both groups for almost all the measures across countries differed significantly from 0, which means that there is an improvement from Time 1 to Time 2 for all. However, a clear effect of the ProW on children's behavioral and social skills is observed only for the sample from Cyprus and in a single variable for the sample from Romania (conformity/compliance behavior).

**Table 3.3.10a.** Means (M) and standard deviations (sd) of subscales' change scores (from T1 to T2) on the Adaptive Social Behavior Inventory (ASBI) in Year 1 for both Groups across countries

| ASBI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conformity / Compliance | Experimental | .09 | .31 | **.09** | .27 | .05 | .41 | .03 | .33 | 2.91 | .76 | 6.24* |
| | Control | .03 | .26 | **-.01** | .28 | .04 | .40 | .10 | .31 | | | |
| Prosocial | Experimental | .16 | .32 | **.13** | .32 | .03 | .40 | .06 | .27 | .91 | 5.03* | 8.85* |
| | Control | .10 | .31 | **.02** | .31 | .12 | .34 | .08 | .33 | | | |
| Confidence / Independence | Experimental | .15 | .37 | **.17** | .35 | .04 | .43 | .06 | .29 | 1.10 | 2.64 | 8.45* |
| | Control | .09 | .35 | **.04** | .34 | .09 | .40 | .13 | .36 | | | |
| N | | 1047 | | 658 | | 935 | | 356 | | 2996 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

**Table 3.3.10b**. One sample *t*-test values for examining probability of each subscale's change score on the Adaptive Social Behavior Inventory (ASBI) to differ from no change (0 score) in Year 1 for both Groups across countries.

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Exp** | **Con** | **Exp** | **Con** | **Exp** | **Con** | **Exp** | **Con** | **Exp** | **Con** |
| Conformity/Compliance | 7.75* | 2.89* | 7.07* | -.03 | 3.50* | 1.29 | 1.35 | 4.83* | 9.15* | 4.22* |
| Prosocial | 12.35* | 6.94* | 8.30* | 1.35 | 2.44* | 3.97* | 2.75* | 3.49* | 11.72* | 8.08* |
| Confidence/Independence | 10.38* | 5.97* | 9.35* | 1.85 | 2.71* | 2.66* | 2.82* | 4.99* | 11.63* | 7.89* |
| N | 602 | 445 | 362 | 296 | 810 | 125 | 168 | 188 | 1942 | 1054 |

*Notes:* * p < .05

Overall, it seems that the intervention had a clear significant positive effect on the improvement of all the social behavioral skills assessed by the ASBI scale mainly for children from Cyprus. In all the other countries, it is not clear whether children's improvements in behavioral skills of ASBI at the end of Year 1 were due to ProW intervention or other extraneous variables.

## 3.4 Time 3: Comparisons between 4 countries for teachers and children

### a. Findings for Teachers

The tables 3.4.1a and 3.4.1b show the results from the composite scores of each one of the subscales in the TSWQ questionnaire assessed preschool teachers' wellbeing in the school context at Time 3. Teacher Wellbeing is the total score of the TSWQ and provide a global assessment of the teachers' wellbeing in the preschool setting they worked in the beginning of the 2nd year of the study (Time 3) in both groups across the four participating countries in the ProW project.

**Table 3.4.1a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 3 for the Experimental Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.46 | 0.53 | 3.44 | 0.51 | 3.68 | 0.45 | 3.62 | 0.41 | 3.93 |
| *School Connectedness* | 3.69 | 0.40 | 3.42 | 0.52 | 3.63 | 0.56 | 3.52 | 0.57 | 2.45 |
| *Teacher Wellbeing* | 3.57 | 0.39 | 3.43 | 0.42 | 3.65 | 0.46 | 3.59 | 0.43 | 2.44 |
| N | 58 | | 38 | | 92 | | 32-34[a] | | 220-222 |

*Notes:* * $p < .05$; min = 1, max = 4 ; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.4.1b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 3 for the Control Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.40 | 0.52 | 3.07 | 0.56 | 3.70 | 0.32 | 3.45 | 0.47 | 5.61* |
| *School Connectedness* | 3.62 | 0.46 | 3.29 | 0.48 | 3.81 | 0.25 | 3.32 | 0.58 | 6.55* |
| *Teacher Wellbeing* | 3.50 | 0.43 | 3.18 | 0.43 | 3.76 | 0.24 | 3.40 | 0.48 | 6.20* |
| N | 54 | | 24 | | 16 | | 47-49[a] | | 141-143 |

*Notes:* * $p < .05$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

According to ANOVAs findings it is shown that there were cross-country differences in the control group. In general, it seems that Romanian teachers have a significantly higher sense of wellbeing than teachers from the other countries and particularly in the control group. In terms of school connectedness Greek teachers also have a high sense in the experimental group. More pronounced differences emerged between Cypriot vs Romanian teachers. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a quite high sense of their wellbeing and their connection with their school. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group in the beginning of the 2nd year of the study (Time 3).

In the case of Cyprus, preschool teachers have a quite high sense of well-being in Time 3, especially in the experimental group. This can be seen from the three subscales, that of self-efficacy, wellbeing and that of the connection that teachers have with the school. In particular, teachers reported that they evaluate their teaching as effective, that as teachers they are helpful towards their students and that they have achieved a lot in this role. This

sense of wellbeing is also enhanced by the sense of 'belonging' to this school, and the care and respect teachers receive from it.

In the case of Romanian, it is shown by both tables that preschool teachers have a quite high sense in terms of their teaching efficacy, their wellbeing and their connection with their school. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group before in the beginning of the 2nd year.

In the case of Portugal, the above tables show that both groups of preschool teachers rate statements related to their work-related wellbeing very positively and it seems that they experience high sense of teaching efficacy and connectedness with their respective schools very often or almost always. Teachers of the experimental group also seem to self-report even higher than the control group in Time 3.

The Tables 3.4.2a and 3.4.2b show the results from the composite scores of each one of the subscales in the TSES questionnaire assessed preschool teachers' sense of efficacy. Teachers' sense of efficacy assessed in terms of student engagement, instructional strategies and classroom management before the intervention in Time 3 in both groups across the four participating countries in the ProW project.

Table 3.4.2a. Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 3 for the Experimental Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.23 | 1.06 | 7.67 | 0.80 | 8.28 | 0.76 | 7.34 | 1.10 | 19.15* |
| *Instructional strategies* | 7.27 | 1.02 | 7.68 | 0.81 | 8.46 | 0.65 | 7.33 | 1.37 | 25.53* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Classroom management* | 6.10 | 1.18 | 7.65 | 1.00 | 8.23 | 0.73 | 7.38 | 1.07 | 22.16* |
| N | | 58 | | 38 | | 92 | | 34 | 222 |

Notes: * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.2b.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 3 for the Control Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.20 | 1.10 | 6.86 | 1.07 | 7.94 | 1.23 | 7.27 | 1.21 | 2.84 |
| *Instructional strategies* | 7.14 | 1.12 | 6.84 | 1.24 | 8.33 | 0.89 | 7.11 | 1.22 | 6.00* |
| *Classroom management* | 6.97 | 1.18 | 6.50 | 1.11 | 8.13 | 1.05 | 7.04 | 1.25 | 6.25* |
| N | 54 | | 24 | | 16 | | 49 | | 143 |

Notes: * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings it is shown there were significant cross-country differences, in both groups. In general, it seems that Romanian teachers have a significantly higher sense of teaching efficacy than teachers from the other countries, except from student engagement in the control group. More pronounced differences emerged between Cypriot vs Romanian teachers in the control group. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a rather high level sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. Thus, preschool teachers have a rather high sense of efficacy as it is shown by the high mean score in both experimental and control group in Time 3.

In the case of Cyprus, as it is shown in both tables, preschool teachers have a high sense of self efficacy as scored in the three subscales: classroom management, instructional

strategies and student engagement. Moreover, the sense of self-efficacy is quite high, as it is shown in both experimental group and control group in Time 3, with higher scores in the experimental group. Teachers feel quite a bit competent that they can control students to follow rules and reduce disruptive behavior and create a management system in their classroom· also value for learning and motivation of children with low level of achievement, as well as creating alternative opportunities for learning, strategies and assessment are valued high from teachers working in preschool settings in Cyprus.

In the case of Romania, it is shown by both tables that preschool teachers have a high sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. As we see there are high scores in the experimental and in control group of Romanian preschool teachers in terms of their efficacy as it is shown in Time 3.

In the case of Portugal, the above tables show that preschool teachers perceive their efficacy for instructional strategies, student engagement and classroom management at a very high level. In other words, both groups answer questions indicating very little difficulty in managing student behavior, implementing alternative strategies, and establishing productive relations with their students.  Teachers in the experimental group surpass the control group in all subscales of the efficacy scale.

The tables 3.4.3a and 3.4.3b show the results from the composite scores of each one of the subscales in the TSSES questionnaire assessed preschool teachers' sense of social self-efficacy. Teachers' sense of social self-efficacy assessed in terms of teacher sensitivity, social guidance, teacher-child support, classroom climate-children engagement and classroom management in Time 3 in both groups across the four participating countries in the ProW project.

**Table 3.4.3a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 3 for the Experimental Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.12 | 1.18 | 7.77 | 0.77 | 8.52 | 0.55 | 7.91 | 0.78 | 34.58* |
| *Social Guidance* | 7.16 | 1.19 | 8.01 | 0.73 | 8.63 | 0.40 | 7.71 | 0.86 | 41.77* |
| *Teacher-Child Support* | 7.34 | 1.03 | 8.06 | 0.67 | 8.57 | 0.52 | 7.86 | 0.85 | 31.84* |
| *Classroom Climate-Children Engagement* | 7.19 | 1.23 | 7.90 | 0.73 | 8.57 | 0.42 | 7.87 | 0.84 | 34.52* |
| *Classroom Management-Conflict Resolution* | 7.22 | 1.09 | 7.96 | 0.68 | 8.36 | 0.61 | 7.52 | 0.86 | 25.56* |
| *TSSES Global* | 7.21 | 1.10 | 7.94 | 0.68 | 8.53 | 0.44 | 7.78 | 0.76 | 37.77* |
| N | 58 | | 38 | | 92 | | 34 | | 222 |

*Notes:* * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.3b.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 3 for the Control Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.12 | 1.01 | 6.85 | 1.10 | 8.38 | 0.63 | 7.64 | 0.83 | 11.17* |
| *Social Guidance* | 7.25 | 0.88 | 7.15 | 1.11 | 8.39 | 0.63 | 7.49 | 0.92 | 7.30* |
| *Teacher-Child Support* | 7.36 | 1.01 | 7.10 | 1.11 | 8.44 | 0.65 | 7.76 | 0.88 | 7.93* |
| *Classroom Climate-Children Engagement* | 7.28 | 0.93 | 6.98 | 1.06 | 8.24 | 0.70 | 7.52 | 1.05 | 5.93* |
| *Classroom Management-Conflict Resolution* | 7.23 | 0.95 | 6.91 | 1.18 | 8.26 | 0.55 | 7.35 | 0.83 | 7.40* |
| *TSSES Global* | 7.25 | 0.89 | 7.00 | 1.08 | 8.34 | 0.60 | 7.55 | 0.83 | 8.71* |

*Notes:* * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

The ANOVAs findings show that in both experimental and control group there were significant cross-country differences across all subscales of the TSSES measure of social self-efficacy. In general, in both groups it seems that Romanian teachers felt more confident for implementing activities related to their sense of social self-efficacy than teachers form all the other countries in Time 3. This was particularly evident in both groups. Teachers form the other three countries shared a similar level sense of social self-efficacy in both groups. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have from some extent to a great extent sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their students. Thus, Greek preschool teachers seem to have a very satisfactory sense of their social self-efficacy as it is shown by the high mean scores in both experimental and control group in Time 3.

In the case of Cyprus it is shown by both tables that preschool teachers have a high sense of self efficacy in terms of teacher sensitivity, child support, classroom climate and children engagement in the classroom, as well as conflict resolution in the classroom. Small differences are noted in favor of the control group with lower scores in some subscales in comparison with the experimental group in Time 3. Teachers seem to feel effective in detecting negative emotions of their students, in predicting their reactions, and in understanding their needs for help. Also, teachers seem to feel that they serve as role models for students and develop a qualitative relationship with each one of them· in fact, students learn to work as a team, while teachers are able to create opportunities, but also explain their expectations regarding the rules in the classroom and giving opportunities for positive behaviors so that children have the expected behaviors. They cultivate children's motives to play with other children, enhancing children's involvement in helping their classmates and they give freedom to choose the classmate they want to play with. They

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successfully control a noisy classroom, help solving problems between peers and deal with unwanted behaviors successfully.

In the case of Romania, it is shown by both tables that preschool teachers have to a great extent sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their pupils. So, Romanian preschool teachers have a quite great extent sense of their social self-efficacy as it is shown by the high mean score in both experimental and control group in Time 3.

Both groups of preschool teachers from Portugal seem to have highly developed confidence in their social self-efficacy in Time 3. The average rating of responses in all five dimensions indicates that they feel quite competent in creating and maintaining positive and supportive environments for their children.

The tables 3.1.4a and 3.1.4b show the results from the composite scores of each one of the subscales in the MBI questionnaire assessed preschool teachers' sense of burnout. Particularly, burnout assessed in terms of emotional exhaustion, depersonalization, and personal accomplishment in Time 3 in both groups across the four participating countries in the ProW project. The scoring of each subscale is based on the rules for items inclusion and reverse scoring provided by the original SDQ scale.

**Table 3.1.4a.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 3 for the Experimental Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.94 | 1.09 | 2.05 | .70 | .94 | 1.07 | 1.66 | 1.48 | 14.61** |
| *Depersonalization* | .31 | .63 | .41 | .55 | .46 | .98 | .41 | .70 | .46 |
| *Personal Accomplishment* | 5.10 | .68 | 5.37 | .57 | 5.34 | .70 | 5.31 | .64 | 1.88 |
| N | 58 | | 38 | | 92 | | 34 | | 222 |

*Notes:* * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.1.4b.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 3 for the Control Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.74 | 1.12 | 2.29 | 1.09 | .57 | .51 | 2.28 | 1.75 | 7.70** |
| *Depersonalization* | .25 | .70 | .73 | .90 | .20 | .36 | .30 | .60 | 3.30* |
| *Personal Accomplishment* | 5.23 | .63 | 4.92 | .88 | 5.44 | .61 | 5.27 | .65 | 2.19 |
| N | 54 | | 24 | | 16 | | 48 | | 142 |

*Notes:* * p < .05; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups there were significant cross-country differences in terms of the emotional exhaustion subscale of MBI. Particularly, it is shown that Romanian teachers felt significantly less exhausted emotionally than all the other teachers from Cyprus, Greece, and Portugal. Another significant cross-country difference emerged in the depersonalization scale but only for the control group. There was no other significant difference in the remaining subscale of MBI (personal accomplishment) across countries in any group. Below is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a very good accomplishment with their work, they do not feel at all depersonalization, and they rarely feel emotional exhaustion from their work. Thus, Greek preschool teachers have a very satisfactory feeling from their work as it is shown by the high mean score in both experimental and control group before the beginning of this phase of the ProW intervention (T3).

In Cyprus, it is shown in both tables preschool teachers before this ProW intervention phase experience a moderate level of emotional exhaustion, very low rate of depersonalization (the experimental group) and high rate of personal accomplishment. Work is an activity that creates moderate emotional exhaustion in teachers in a way that they feel moderate feelings of fatigue, frustration, and difficulty in dealing with everyday situations at school. In addition, they manage to a very large extent to feel in their work full of energy, able to understand their students and face problems calmly, and as a result they have significant achievements

in their work. Finally, the experimental group experienced a small rate of depersonalization with their students while reports from the control group were higher.

In Romania, it is shown in both tables that preschool teachers are at very low levels of emotional exhaustion and depersonalization, but also at very high rates of personal accomplishment before the beginning of this phase of the Pro W intervention. Their work does not exhaust them emotionally, nor does it frustrate them, and they can respond to the daily problems that arise in preschool settings. Teachers seem to care about their students, think positively about them, without feeling that they are burdened by their job. In addition, they succeed in significant aspects in relation to their work, understand students and their needs and react calmly even in difficult situations.

The summary of responses in the Maslach Burnout Inventory (MBI) for the preschool teachers from Portugal show that the control group had experienced more emotional exhaustion or burnout in comparison to experimental group as well as to other groups from the other countries). However, they were never unfeeling or impersonal towards their students. On the contrary, both group responses indicate high feelings of competence and successful achievement in their work.

The tables 3.4.5a and 3.4.5b show the results from the composite scores of each one of the subscales in the ESI questionnaire assessed preschool teachers' satisfaction for their jobbefore the intervention in Time 3in both groups across the four participating countries in the ProW project. Teachers' satisfaction for their job assessed in terms of various dimensions, which appear as subscales in the above tables. For the construction of the subscales have been made transformations with reverse scoring in specific items (3,4,5,8,9,11,12,13,16,17, 20,21,24). Therefore, higher score in each subscale shows higher satisfaction for this dimension of teachers' job.

**Table 3.4.5a.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI)in Time 3 for the Experimental Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.37 | 0.51 | 3.94 | 0.68 | 4.53 | 0.59 | 4.16 | 0.55 | 10.36*** |
| *Supervisor* | 4.48 | 0.66 | 4.25 | 0.78 | 4.51 | 0.67 | 4.34 | 0.47 | 1.72 |
| *Pay* | 2.51 | 1.06 | 3.29 | 1.15 | 3.16 | 1.16 | 2.77 | 0.92 | 6.38*** |
| *Job Itself* | 4.61 | 0.48 | 3.29 | 1.16 | 4.53 | 0.53 | 4.31 | 0.54 | 36.42*** |
| *Organization as a Whole* | 3.64 | 0.95 | 2.84 | 0.69 | 4.25 | 0.79 | 3.64 | 0.74 | 27.83*** |
| *Promotion* | 2.46 | 1.00 | 2.45 | 0.90 | 4.27 | 0.64 | 3.13 | 0.99 | 71.11*** |
| *ESI Global* | 3.68 | 0.50 | 3.34 | 0.53 | 4.21 | 0.50 | 3.71 | 0.43 | 32.18*** |
| N | 58 | | 38 | | 92 | | 33-34[a] | | 221-222 |

*Notes:* * p < .05; ** p < .01; *** p < .001; max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

**Table 3.4.5b**. Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI)in Time 3 for the Control Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.15 | 0.72 | 3.90 | 0.68 | 4.42 | 0.37 | 2.21 | 0.70 | 2.10 |
| *Supervisor* | 4.50 | 0.60 | 4.37 | 0.60 | 4.53 | 0.36 | 4.36 | 0.65 | 0.65 |
| *Pay* | 2.77 | 0.95 | 3.58 | 1.11 | 3.48 | 0.56 | 2.96 | 0.81 | 5.92** |
| *Job Itself* | 4.57 | 0.40 | 3.58 | 1.11 | 4.30 | 0.45 | 4.14 | 0.59 | 13.76*** |
| *Organization as a Whole* | 3.41 | 0.88 | 2.95 | 0.72 | 4.30 | 0.48 | 3.54 | 0.50 | 9.86*** |
| *Promotion* | 2.55 | 0.89 | 2.68 | 0.81 | 4.08 | 0.49 | 3.06 | 1.01 | 13.14*** |
| *ESI Global* | 3.66 | 0.41 | 3.51 | 0.55 | 4.18 | 0.27 | 3.71 | 0.52 | 7.34*** |
| N | 54 | | 24 | | 16 | | 48-49[a] | | 142-143 |

*Notes:* * p < .05; ** p < .01; *** p < .001; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

The ANOVAs findings show that in both groups there were significant cross-country differences across almost all subscales of the ESI measure (except for the supervisor subscale). Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have very good feelings about their job, their supervisor and their working conditions, but they have bad feelings about their pay and their promotion. They also are unsure about the whole organization. All these components lead Greek preschool teachers to have generally a bit good feelings about their work, as it is shown by the high mean score in both experimental and control group after the ProW intervention.

In the case of Cyprus it is shown in both tables that preschool teachers have a moderate sense of satisfaction regarding their job. More specifically, *working conditions* and *supervisor* are satisfactory for both groups (control and experimental). In all the other subscales related to job satisfaction, and especially in the subscales P*ay* and *Promotion,* the teachers' answers showed that they are not satisfied. Subsequently, it is quite moderate their general sense of job satisfaction as it is shown in both experimental and control groups after the Pro W intervention.

In the case of Romania, responses from both groups on the Employ Satisfaction Inventory (ESI) indicate in general positive tendencies in their feelings about their employment status, especially regarding the teaching profession and their respective organization. Less satisfactory aspects of their employment appear to be the salary that clearly prompts a level of uncertainty in the responses of both groups.

Preschool teachers from Portugal on the Employ Satisfaction Inventory (ESI) evaluate positively their jobs, working conditions and supervisors while they seem to be uncertain in the assessment of their organizations. Both groups appear dissatisfied with their professional prospects and with their salaries. In general, Portugal teachers from both groups seem to be only marginally satisfied by their overall work experience.

The tables 3.4.6a and 3.4.6b show the results from the composite scores of each one of the subscales in the PCS questionnaire assessed preschool teachers' view for the climate in their preschool setting. Particularly, preschool climate assessed in terms of seven (7) different dimensions, which are described in the subscales of the above tables, before the

intervention in Year 3 in both groups across the four participating countries in the ProW project.

**Table 3.4.6a.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 3 for the Experimental Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.74 | 0.64 | 3.78 | 0.35 | 3.87 | 0.29 | 3.78 | 0.33 | 1.20 |
| *Student-Student* | 3.04 | 0.50 | 3.25 | 0.42 | 3.57 | 0.46 | 3.46 | 0.32 | 15,84*** |
| *Teacher-home* | 3.55 | 0.59 | 3.62 | 0.39 | 3.85 | 0.27 | 3.69 | 0.39 | 6.80*** |
| *School safety* | 3.65 | 0.63 | 3.71 | 0.41 | 3.85 | 0.32 | 3.80 | 0.29 | 2.71* |
| *Clarity of expectations* | 3.32 | 0.61 | 3.42 | 0.37 | 3.64 | 0.42 | 3.49 | 0.39 | 5.56** |
| *Fairness of rules* | 3.57 | 0.68 | 3.60 | 0.45 | 3.77 | 0.36 | 3.53 | 0.41 | 2.82* |
| *Respect of diversity* | 3.78 | 0.65 | 3.76 | 0.36 | 3.86 | 0.32 | 3.76 | 0.76 | 0.63 |
| *PCS Global* | 3.52 | 0.53 | 3.59 | 0.32 | 3.77 | 0.29 | 3.64 | 0.23 | 5.72 |
| N | 48 | | 38 | | 92 | | 17 | | 195 |

*Notes*: * $p < .05$; ** $p < .01$; *** $p < .001$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.6b.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 3 for the Control Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.17 | 1.15 | 3.53 | 0.46 | 3.85 | 2.42 | 3.84 | 0.20 | 4.95** |
| *Student-Student* | 2.85 | 0.71 | 2.97 | 0.45 | 3.26 | 0.43 | 3.29 | 0.34 | 4.65** |
| *Teacher-home* | 3.06 | 1.03 | 3.42 | 0.42 | 3.74 | 0.27 | 3.78 | 0.31 | 6.44*** |
| *School safety* | 3.02 | 1.06 | 3.46 | 0.43 | 3.85 | 0.30 | 3.78 | 0.34 | 7.92*** |
| *Clarity of expectations* | 2.89 | 0.88 | 3.21 | 0.51 | 3.44 | 0.42 | 3.45 | 0.43 | 4.79** |
| *Fairness of rules* | 3.02 | 1.04 | 3.37 | 0.45 | 3.65 | 0.40 | 3.56 | 0.51 | 4.19** |
| *Respect of diversity* | 3.12 | 1.20 | 3.54 | 0.49 | 3.78 | 0.36 | 3.85 | 0.35 | 4.80** |
| *PCS Global* | 3.02 | 0.97 | 3.36 | 0.38 | 3.65 | 0.27 | 3.65 | 0.26 | 6.02** |
| N | 47 | | 24 | | 16 | | 23 | | 110 |

*Notes*: * $p < .05$; ** $p < .01$; *** $p < .001$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings the differences appeared in all the dimensions of preschool climate were significant for the control group and the most of them for the experimental group. Greek teachers' views on all the dimensions of preschool climate were slightly lower than respective views of teachers in the other three countries. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers believe strongly enough that their preschool setting is characterized by a good classroom climate in all the above terms as it is shown by the high mean score in both experimental and control group after the ProW intervention.

In the case of Cyprus it is shown by both tables that preschool teachers have a qualitative climate in their classroom. Subsequently, the preschool climate is highly estimated as it is shown by the high mean score in both experimental and control group the ProW intervention. Interestingly, the only subscale with slightly lower ratings from both groups is the one referring to relations between students.

In the case of Romania, teacher responses from both groups on the Preschool Climate Scale indicate very positive perceptions of the climate in the preschool settings. Interestingly, the only subscales with slightly lower ratings from both groups are those referring to student relations, expectations, and established rules while they highly rate interactions between teachers and students as well as safety of the environment.

Preschool teachers from Portugal appear to evaluate very positively the school climate in most dimensions. Responses are similar from both groups that are quite confident about their valuable relations to students, parents, the safety of the school climate, expectations, and established rules. On the other hand, most variability appear in both groups' responses regarding student relations, that are rated with slightly less confidence, as in all countries.

Tables 3.4.7a and 3.4.7b show the results from the composite scores of each one of the subscales in the PERMA questionnaire assessed preschool teachers' sense of wellbeing in their personal lives. Particularly, teachers' personal well-being assessed in 5 general

dimensions (positive emotions, engagement, relationships, meaning in their lives and sense of achievement-accomplishment). These mean average of these five main dimensions comprised the PERMA global score, which denotes a general well-being sense of the teachers. Also, in these tables presented teachers' scores on a subscale assessing negative emotions, sense of personal health conditions and a general sense of happiness and loneliness emotions.

**Table 3.4.7a.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 3 for the Experimental Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 6.98 | 1.92 | 8.00 | 1.34 | 9.10 | 1.17 | 8.00 | 1.30 | 25.84*** |
| Engagement - E | 7.03 | 1.81 | 7.76 | 1.39 | 8.27 | 1.68 | 8.34 | 1.05 | 8.45*** |
| Relationships - R | 7.24 | 1.65 | 7.93 | 1.43 | 9.11 | 1.24 | 8.20 | 1.15 | 22.90*** |
| Meaning - M | 7.26 | 1.65 | 7.96 | 1.40 | 9.37 | .94 | 8.57 | 1.04 | 35.70*** |
| Accomplishment -A | 7.06 | 1.64 | 7.71 | 1.41 | 9.10 | .96 | 8.00 | .99 | 33.77*** |
| Negative - N | 4.14 | 2.15 | 4.54 | 1.93 | 1.59 | 2.16 | 4.32 | 2.07 | 30.06*** |
| Health -H | 6.83 | 2.19 | 7.23 | 2.20 | 8.61 | 1.57 | 7.07 | 1.73 | 13.28*** |
| PERMA Global | 7.12 | 1.67 | 7.94 | 1.15 | 9.01 | 1.06 | 8.27 | .85 | 28.42*** |
| Loneliness (item 12) | 2.77 | 2.48 | 2.32 | 2.38 | 5.00 | 4.62 | 2.61 | 3.00 | 8.18*** |
| Happy (item 23) | 7.14 | 1.94 | 8.27 | 1.18 | 9.11 | 1.37 | 8.50 | 1.28 | 20.57*** |
| N | 58 | | 38 | | 92 | | 34 | | 222 |

*Notes:* * p < .05; min = 0, max = 10

**Table 3.4.7b.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 3 for the Control Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.28 | 1.56 | 7.64 | 1.120 | 8.23 | 2.49 | 7.67 | 1.59 | 1.48 |
| Engagement - E | 7.09 | 1.55 | 7.83 | 1.09 | 7.85 | 2.65 | 7.82 | 1.49 | 2.29 |
| Relationships - R | 7.57 | 1.57 | 7.68 | 1.29 | 8.23 | 2.50 | 7.84 | 1.77 | .65 |
| Meaning - M | 7.38 | 1.60 | 7.46 | 1.34 | 8.44 | 2.56 | 8.16 | 1.62 | 2.91* |
| Accomplishment -A | 7.20 | 1.60 | 7.15 | 1.36 | 8.12 | 2.48 | 7.61 | 1.36 | 1.80 |
| Negative - N | 4.13 | 1.71 | 4.28 | 1.94 | 1.31 | 1.52 | 4.12 | 1.73 | 12.69*** |
| Health -H | 7.06 | 1.81 | 6.89 | 1.91 | 7.94 | 2.49 | 6.32 | 2.19 | 2.76* |
| PERMA Global | 7.34 | 1.48 | 7.58 | .99 | 8.21 | 2.49 | 7.80 | 1.46 | 1.59 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Loneliness (item 12) | 2.67 | 2.21 | 2.71 | 2.53 | 4.12 | 4.26 | 3.23 | 3.32 | 1.18 |
| Happy (item 23) | 7.50 | 1.66 | 7.71 | .91 | 8.37 | 2.60 | 7.70 | 1.87 | 1.01 |
| N | | 54 | | 24 | | 16 | | 48 | 142 |

*Notes:* \* $p < .05$; min = 0, max = 10

According to ANOVAs findings all differences in the PERMA dimensions for the experimental group appeared significant.  Romanian teachers seem to have higher positive emotions than the others. Similar significant differences for the control group appeared only for teachers' negative emotions, health and meaning as the Romanian teachers showed the lowest negative emotions from the other countries in both groups. Below is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers experience various feelings and emotional states in all the above terms as it is shown by the high mean score in both experimental and control group at the beginning of this phase of ProW intervention. In both groups the general PERMA feeling is in a very positive direction with high mean scores. However, teachers in the control group showed slightly more positive emotions than teachers in the experimental group in Time 3. This finding is somewhat expected as many teachers in the control group have been assigned in the experimental group at the previous phase of the study.

In the case of Cyprus, it is shown in both tables that preschool teachers have a positive profile in all the above terms as it is shown by the mean scores in both experimental and control group. More specifically, preschool teachers in both groups seem to experience positive feelings, are interested in activities, they feel loved and supported by others and feel valuable for them; they are doing well regarding their responsibilities and feel good for their achievements, they have a purpose in life, and they seem to work and feeling able to reach their goals.

In the case of Romania, it is shown also in both tables that preschool teachers have a very positive profile regarding all the above dimensions of PERMA, as it is shown by the mean

scores in both experimental and control group with the experimental group being even more positive than the control group. Furthermore, tendencies show that they are involved in activities, they experience positive emotions, they feel joyful and valued by others; they also have a sense of purpose in life, they work towards reaching their goals, as well as having a high sense of health.

Preschool teachers from Portugal provided also a very positive profile of their wellbeing that indicates the same tendencies from both groups and slightly more positive reports from the experimental group. Preschool teachers in both groups seem to experience positive feelings, they feel loved and supported by others and feel valuable for them as well as the subjective views of meaning, happiness and accomplishment emerged rather high (especially for the experimental group) possibly indicating adequate developed feelings of mastery and achievement.

## b. Findings for Children

Tables 3.4.8a and 3.4.8b show the results from the composite scores of each one of the subscales in Strengths and Difficulties Questionnaire (SDQ) regarding emotional, conduct difficulties, hyperactivity and relations with peers and prosocial behavior across the four participating countries. More specifically, children's strengths and difficulties were assessed in terms of the frequency with which were exhibited from 1 (not true) to 3 (true). Strengths and difficulties are grouped according to five (5) different dimensions, which are described in the subscales presented in the tables, for both groups across the four participating countries in the Pro-W project in Time 3 before the intervention phase bean for the control group. ANOVA F tests show the statistical testing of the countries' differences in each subscale, except from Emotional Problems in the experimental group.

**Table 3.4.8a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Strength and Difficulties Questionnaire (SDQ) in Time 3 for the Experimental Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | 1.25 | 0.36 | 1.28 | 0.36 | 1.26 | 0.33 | 1.33 | 0.41 | 2.28 |
| Conduct problems | 1.19 | 0.34 | 1.22 | 0.36 | 1.44 | 0.32 | 1.25 | 0.38 | 74.63*** |
| Hyperactivity | 1.41 | 0.50 | 1.54 | 0.53 | 1.37 | 0.40 | 1.67 | 0.52 | 22.50*** |
| Peer problems | 1.32 | 0.33 | 1.24 | 0.32 | 1.32 | 0.34 | 1.18 | 0.28 | 10.23*** |
| Prosocial skills | 2.51 | 0.51 | 2.57 | 0.47 | 2.60 | 0.45 | 2.50 | 0.46 | 5.02** |
| N | 678 | | 285 | | 810 | | 133 | | 1906 |

*Notes:* * $p < .05$; ** $p < .01$; *** $p < .001$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.8b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Strength and Difficulties Questionnaire's subscales (SDQ) in Time 3 for the Control Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | 1.23 | 0.35 | 1.32 | 0.40 | 1.22 | 0.27 | 1.41 | 0.44 | 12.81*** |
| Conduct problems | 1.18 | 0.35 | 1.26 | 0.42 | 1.40 | 0.22 | 1.38 | 0.47 | 20.93*** |
| Hyperactivity | 1.37 | 0.49 | 1.54 | 0.48 | 1.47 | 0.39 | 1.73 | 0.55 | 27.15*** |
| Peer problems | 1.26 | 0.31 | 1.28 | 0.33 | 1.38 | 0.30 | 1.29 | 0.36 | 5.16** |
| Prosocial skills | 2.55 | 0.52 | 2.43 | 0.45 | 2.48 | 0.48 | 2.52 | 0.45 | 3.00 |
| N | 553 | | 196 | | 133 | | 175 | | 1057 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups most of the differences among countries are statistically significant. Also, in most of the cases children in both groups shared similar scores across the subscales in Time 3.

In the case of Greece, children's scores from both groups on Strengths and Difficulties Questionnaire (SDQ) in Time 3 indicate a low rate of emotional difficulties (unhappiness, easily scared, nervous in new situations, easily lose confidence, are tearful), conduct problems (e.g. often fight with other children, have temper tantrums, can be spiteful to others) and peer relationships problems (e.g. are generally liked by others, have at least one good friend). Somewhat higher was the rate hyperactivity symptoms (are overactive, easily distracted, restless e.tc.) Regarding prosocial skills (often volunteer to help others, are kind to younger children, considerate other children's feelings) Greek preschool children rated high scores in both groups.

Almost same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also low frequency of children's emotional (e.g. have many fears, are often in a bad mood), conduct (they are generally not obedient, often fight with other children), and peer relations problems. The hyperactivity problems (children cannot stay still for long) was somewhat higher than the others and children showed high rates on prosocial skills.

In the case of Romania, children's scores from both groups on Strengths and Difficulties Questionnaire indicate emotional, conduct and peer problems in a low rate similar to the pattern derived from the other countries (e.g. children have not many fears, are not clingy in new situations, they are usually obedient to adults' requests). Children in Romania showed also higher rates regarding hyperactivity problems and they have high scores in prosocial skills as it is occurred in the rest of the countries.

In the case of Portugal, children's scores on SDQ in Time 3 from both groups show low frequency of conduct problems, emotional difficulties and peer relationship problems. The hyperactivity problems scores in both groups were higher than the scores on the other scales assessing behavior problems. Similarly as in the other countries, children showed a rather high rate of prosocial skills.

Overall, teachers' perceptions of students' frequencies to emotional and conduct difficulties hyperactivity symptoms, peer problems and prosocial skills reveal similar tendencies for both

experimental and control groups in all countries. The area of strength for all countries seem to be prosocial skills.

Tables 3.4.9a and 3.4.9b show the results from the composite scores of each one of the subscales in Child Behavior Rating Scale (CBRS) regarding children's task behavior and social behavior with peers and adults across the four participating countries. In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 (never) to 5 (always). Behaviors are grouped according to five (5) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Time 3.

**Table 3.4.9a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 3 for the Experimental Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 3.91 | .85 | 3.89 | .76 | 4.14 | .78 | 3.81 | .72 | 15.08*** |
| Interpersonal skills | 4.19 | .77 | 4.16 | .71 | 4.16 | .64 | 4.01 | .61 | 2.62* |
| Social play-interaction | 3.84 | .95 | 3.93 | .80 | 4.10 | .76 | 3.79 | .60 | 14.32*** |
| Engagement | 4.04 | .95 | 4.16 | .78 | 4.31 | .75 | 4.00 | .66 | 15.62*** |
| Social problem solving | 3.55 | 1.00 | 3.63 | .76 | 3.92 | .86 | 3.51 | .67 | 25.04*** |
| N | 678 | | 285 | | 810 | | 131 | | 1904 |

*Notes:* * p < .05; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.9b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 3 for the Control Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 3.95 | .82 | 3.78 | .74 | 3.83 | .64 | 3.75 | .74 | 4.55** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Interpersonal skills | 4.28 | .71 | 4.03 | .74 | 3.90 | 52 | 3.94 | .65 | 19.23*** |
| Social play-interaction | 3.92 | .90 | 3.63 | .68 | 3.82 | .66 | 3.82 | .66 | 6.29*** |
| Engagement | 4.17 | .86 | 3.86 | .85 | 4.12 | .62 | 3.98 | .72 | 7.84*** |
| Social problem solving | 3.73 | .92 | 3.23 | .73 | 3.62 | .68 | 3.39 | .72 | 21.02*** |
| N | 553 | | 196 | | 133 | | 176 | | 1058 |

*Notes*: * $p < .05$; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups indicate that all differences among countries are highly statistically significant. Also, in all cases children in both groups did not show substantially different scores across the subscales in Time 3 except for the subscale Interpersonal skills for the experimental group.

In the case of Greece, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 3 indicate very positive perceptions of children's social/interpersonal skills and engagement behaviors (willingness to share, taking turns, compliance, cooperation, etc.) while children's behavioral regulation during academic tasks and social play-interaction are also rated high.

The exact same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also high frequency of children's social/interpersonal skills and engagement behaviors.

Similar findings emerge from Romania where very positive perceptions emerge from both groups on children's social/interpersonal skills, social play-interaction, and engagement behaviors -particularly for the experimental group. On the other hand, social problem solving, and social play interaction were observed less frequently.

In the case of Portugal, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 3 indicate social play interaction and social problem solving as the least frequent behaviors in comparison to other behaviors but also to children's scores from the other countries. The pattern of the other exhibited behaviors in the rest of the subscales is similar to the one that emerged from the other countries with a slight advantage of the experimental group.

Overall, teachers' perceptions of students' approaches to learning, self-regulation, and social-emotional adjustment reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be social/interpersonal skills (sharing, cooperation, compliance, etc.) and engagement while the least frequently rated behavior was social problem solving (resolving social conflicts, etc.). Finally, according to analysis of variance children's behavior scores from both groups differ significantly across countries in all subscales.

Tables 3.4.10a and 3.4.10b show the results from the composite scores of each one of the subscales in Adaptive Social Behavior Inventory (ASBI). In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 to 3.

**Table 3.4.10a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 3 for the Experimental Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.74 | 0.43 | 2.68 | 0.44 | 2.84 | 0.30 | 2.75 | 0.38 | 16.98*** |
| Prosocial | 2.62 | 0.42 | 2.60 | 0.41 | 2.74 | 0.33 | 2.71 | 0.32 | 17.85*** |
| Confidence/Independence | 2.51 | 0.46 | 2.51 | 0.42 | 2.80 | 0.32 | 2.85 | 0.60 | 84.82*** |
| N | 678 | | 285 | | 810 | | 133 | | 1906 |

*Notes:* * $p < .05$; ** $p < .01$; *** $p < .001$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.4.10b**. Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 3 for the Control Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.79 | 0.37 | 2.66 | 0.41 | 2.81 | 0.30 | 2.64 | 0.33 | 11.59*** |
| Prosocial | 2.65 | 0.40 | 2.46 | 0.37 | 2.67 | 0.32 | 2.68 | 0.33 | 14.70*** |
| Confidence/Independence | 2.55 | 0.43 | 2.33 | 0.42 | 2.77 | 0.31 | 2.73 | 0.34 | 44.50*** |
| N | 553 | | 196 | | 133 | | 175 | | 1057 |

*Notes:* * p < .05; ** p < .01; *** p < .001; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups all of the differences among countries are statistically significant but the difference sizes were in most of the cases very small. Also, in most of the cases children in both groups in each country did not show substantially different scores across the subscales in Time 3.

In the cases of Greece and Cyprus, children's scores from both groups (experimental and control group) on Adaptive Social Behavior Inventory (ASBI) in Time 3w ere slightly higher on the subscale of Conformity/Compliance than on the other two subscales. Subsequently children's scores on Prosocial skills were slightly higher than scores on the Confidence/Independence subscale.

The findings from Romania indicate that both groups in Time 3 have somewhat better scores on Conformity/Compliance than in the other two subscales. In the case of Portugal, findings have shown that the experimental group children's scores are slightly better on the subscale Confidence/Independence than on the other two subscales.

Overall, teachers' perceptions of students' social behavior skills in Time 3 reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be conformity and compliance behavior across groups and countries, and for prosocial skills it seems that there is room for improvement, although were not low in the baseline assessment.

## 3.5 Time 4: Comparisons between 4 countries for teachers and children

### a. Findings for Teachers

The tables 3.5.1a and 3.5.1b show the results from the composite scores of each one of the subscales in the TSWQ questionnaire assessed preschool teachers' wellbeing in the school context at Time 4. Teacher Wellbeing is the total score of the TSWQ and provide a global assessment of the teachers' wellbeing in the preschool setting they worked after the intervention provided for the control group in Year 2 of the study (Time 4). The following tables present the Time 4 findings in both groups across the four participating countries in the ProW project.

**Table 3.5.1a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 4 for the Experimental Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teaching Efficacy* | 3.47 | .50 | 3.68 | .43 | 3.77 | .35 | 3.43 | .45 | 7.56*** |
| *School Connectedness* | 3.72 | .40 | 3.70 | .60 | 3.66 | .51 | 3.23 | .57 | 4.86* |
| *Teacher Wellbeing* | 3.60 | .39 | 3.69 | .40 | 3.70 | .38 | 3.33 | .46 | 5.24* |
| N | 59 | | 40 | | 92 | | 19 | | 210 |

*Notes:* * p < .05; min = 1, max = 4 ; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.1b**. Means (M) and standard deviations (sd) of subscales' scores on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Time 4 for the Control Group across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |

| | M | SD | M | SD | M | SD | M | SD | F |
|---|---|---|---|---|---|---|---|---|---|
| *Teaching Efficacy* | 3.6 | .43 | 3.36 | .61 | 3.73 | .31 | 3.50 | .48 | 2.51 |
| *School Connectedness* | 3.64 | .55 | 3.30 | .61 | 3.88 | .22 | 3.23 | .63 | 7.35*** |
| *Teacher Wellbeing* | 3.62 | .44 | 3.33 | .52 | 3.80 | .22 | 3.37 | .51 | 5.73** |
| N | 50 | | 25 | | 16 | | 42 | | 133 |

*Notes*: * $p < .05$; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings it is shown that in both groups there were cross-country differences. In general, it seems that Romanian teachers continue to have a significantly higher sense of wellbeing than teachers from the other countries and particularly in the control group.  In terms of school connectedness Greek and Cypriot teachers also have a high sense in the experimental group. More pronounced differences emerged between Cypriot vs Romanian teachers in the control group and between Portuguese teachers vs Romanian teachers in the experimental group. Below it is described briefly each country's profile according to teachers' answers in Time 4.

In the case of Greece, it is shown by both tables that preschool teachers continue to have a quite high sense of their wellbeing and their connection with their school. Subsequently, it is quite high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group in Time 4 of the study.

In In the case of Cyprus, preschool teachers also have a quite high sense of well-being in Time 4, especially in the experimental group.  This can be seen from the three subscales, that of self-efficacy, wellbeing and that of the connection that teachers have with the school with higher scores in the experimental group.

In the case of Romanian, it is shown by both tables that preschool teachers have a quite high sense of wellbeing especially in terms of their Teaching Efficacy and their Wellbeing in the experimental group and all the subscales in the control group. Subsequently, it is very high their general sense of wellbeing as it is shown by the high mean score in both experimental and control group in Time 4.

In the case of Portugal, the above tables show that both groups of preschool teachers estimate their work-related wellbeing positively and it seems that they experience high sense of teaching efficacy with their respective schools very often or almost always. Teachers of both groups also seem to self-report similar scores with the control group scoring higher in Teaching efficacy in Time 4.

The tables 3.5.2a and 3.5.2b show the results from the composite scores of each one of the subscales in the TSES questionnaire assessed preschool teachers' sense of efficacy. Teachers' sense of efficacy assessed in terms of student engagement, instructional strategies and classroom management after the intervention in the control group (Time 4) in both groups across the four participating countries in the ProW project.

**Table 3.5.2a.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 4 for the Experimental Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.36 | 1.12 | 8.15 | .70 | 8.34 | .73 | 7.46 | 1.14 | 17.06*** |
| *Instructional strategies* | 7.39 | 1.15 | 8.17 | .73 | 8.50 | .65 | 7.38 | 1.16 | 22.68*** |
| *Classroom management* | 7.19 | 1.13 | 8.14 | .71 | 8.41 | .69 | 7.34 | 1.18 | 25.98*** |
| N | 59 | | 40 | | 92 | | 19 | | 210 |

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.2b.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in Time 4 for the Control Group across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | M | SD | M | SD | M | SD | M | SD | F |
| *Student engagement* | 7.59 | .91 | 7.07 | 1.37 | 8.23 | .67 | 7.34 | 1.24 | 4.05* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Instructional strategies* | 7.60 | .93 | 7.05 | 1.54 | 8.36 | .68 | 7.27 | 1.28 | 4.84* |
| *Classroom management* | 7.41 | .88 | 7.01 | 1.53 | 8.14 | .69 | 7.44 | 1.13 | 3.52* |
| N | 50 | | 25 | | 16 | | 41 | | 132 |

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings it is shown there were significant cross-country differences, in both groups. In general, it seems that Romanian teachers have a significantly higher sense of teaching efficacy than teachers from the other countries, with Cypriot teachers from the experimental group following. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a rather high level sense of their efficacy in terms of their instructional strategies, classroom management and student engagement. Moreover, preschool teachers have a rather higher sense of efficacy as it is shown by the high mean score in the control group in Time 4.

In the case of Cyprus, as it is shown in both tables, preschool teachers have a high sense of self efficacy as scored in the three subscales: Classroom Management, Instructional Strategies and Student Engagement. Thus, the sense of self-efficacy is quite high, as it is shown in both experimental group and control group in Time 4, with higher scores in the experimental group.

In the case of Romania, it is shown by both tables that preschool teachers have a high sense of their efficacy in terms of their Instructional Strategies, Classroom Management and Student Engagement. As we see there are high scores in both groups of Romanian preschool teachers, but higher in the experimental group in terms of their efficacy as it is shown in Time 4.

In the case of Portugal, the above tables show that preschool teachers perceive their efficacy for Instructional strategies, Student Engagement and Classroom Management at a high level. Teachers in the experimental group surpass the control group in Student Engagement and

Instructional Strategies and the control group teachers indicate higher rate in Classroom Management in terms of the efficacy scale.

The tables 3.5.3a and 3.5.3b show the results from the composite scores of each one of the subscales in the TSSES questionnaire assessed preschool teachers' sense of social self-efficacy. Teachers' sense of social self-efficacy assessed in terms of teacher sensitivity, social guidance, teacher-child support, classroom climate-children engagement and classroom management in both groups in Time 4 across the four participating countries in the ProW project.

**Table 3.5.3a.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 4 for the Experimental Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.40 | 1.00 | 8.15 | .69 | 8.49 | .70 | 7.92 | .94 | 21.31*** |
| *Social Guidance* | 7.46 | 1.00 | 8.34 | .60 | 8.64 | .54 | 7.91 | .86 | 32.07*** |
| *Teacher-Child Support* | 7.49 | 1.01 | 8.33 | .71 | 8.65 | .49 | 8.02 | 1.14 | 27.33*** |
| *Classroom Climate-Children Engagement* | 7.36 | 1.02 | 8.21 | .68 | 8.61 | .56 | 7.84 | 1.00 | 31.97*** |
| *Classroom Management-Conflict Resolution* | 7.45 | 1.06 | 8.31 | .69 | 8.37 | .78 | 7.56 | 1.06 | 16.17*** |
| *TSSES Global* | 7.43 | .99 | 8.2680 | .65 | 8.55 | .57 | 7.85 | .95 | 27.15*** |
| N | 59 | | 40 | | 92 | | 19 | | 210 |

*Notes:* * p < .05; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.1.3b**. Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES) in Time 4 for the Control Group across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher Sensitivity* | 7.58 | .84 | 7.31 | .91 | 8.34 | .51 | 7.80 | .92 | 5.32* |
| *Social Guidance* | 7.69 | .81 | 7.67 | .95 | 8.47 | .50 | 7.72 | .87 | 4.11* |
| *Teacher-Child Support* | 7.68 | .80 | 7.64 | .95 | 8.50 | .57 | 7.86 | .97 | 4.13* |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Classroom Climate-Children Engagement | 7.60 | .85 | 7.54 | .86 | 8.38 | .64 | 7.80 | .86 | 4.18* |
| Classroom Management-Conflict Resolution | 7.67 | .79 | 7.62 | .91 | 8.31 | .52 | 7.38 | 1.00 | 4.54* |
| TSSES Global | 7.64 | .79 | 7.56 | .88 | 8.40 | .51 | 7.71 | .88 | 4.22* |
| N | 50 | | 25 | | 16 | | 42 | | 133 |

*Notes:* * $p < .05$; min = 1, max = 9; [1]GR; [2] CY; [3]RO; [4]PO

Interestingly the ANOVAs findings show that in both groups there were significant cross-country differences, across all subscales of the TSSES measure of social self-efficacy but especially in the experimental group these differences were remarkable. In general, in both groups it seems that Romanian teachers felt more confident for implementing activities related to their sense of social self-efficacy with Cypriot teachers following especially teachers from the experimental group. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have from some extent to a great extent sense of their social self-efficacy in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their students. Moreover, these scores are higher in the control group as shown in the above tables. Thus, Greek preschool teachers seem to have a high sense of their social self-efficacy as it is shown by the high mean scores in both experimental and control group in Time 4.

In the case of Cyprus it is shown by both tables that preschool teachers have a very satisfactory sense of self efficacy in terms of teacher sensitivity, child support, classroom climate and children engagement in the classroom, as well as conflict resolution in the classroom. Differences are noted in favor of the control group with lower scores in all the subscales of the social self-efficacy scale in comparison with the experimental group in Time 4.

In the case of Romanian teachers, it is shown by both tables that preschool teachers have to a great extent sense of their social self-efficacy, in terms of their confidence to guide and support children, manage the classroom, resolve conflicts, create a good classroom climate and be sensitive for their pupils. So, Romanian preschool teachers have a quite great extent sense of their social self-efficacy as it is shown by the high mean score in both experimental and control group in Time 4. In addition, these scores were higher in the experimental group.

Both groups of preschool teachers from Portugal seem to have highly developed confidence in their social self-efficacy in Time 4. The average rating of responses in all five dimensions indicates that they feel quite competent in creating and maintaining positive and supportive environments for their children· these rates were higher in the experimental group.

The tables 3.5.4a and 3.5.4b show the results from the composite scores of each one of the subscales in the MBI questionnaire assessed preschool teachers' sense of burnout. Particularly, burnout assessed in terms of emotional exhaustion, depersonalization and personal accomplishment in Time 4 in both groups across the four participating countries in the ProW project. The scoring of each subscale based on the rules for items inclusion and reverse scoring provided by the original SDQ scale.

**Table 3.5.4a.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 4 for the Experimental Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.90 | 1.02 | 2.20 | 1.08 | .95 | .89 | 2.32 | 1.72 | 20.11*** |
| *Depersonalization* | .45 | .71 | .37 | .59 | .38 | .63 | .53 | .61 | .39 |
| *Personal Accomplishment* | 5.10 | .74 | 5.36 | .60 | 5.40 | .75 | 5.07 | .69 | 2.73* |
| N | 59 | | 40 | | 92 | | 18 | | 209 |

*Notes:* *p < .05; **p<.01; p*** <.001; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.4b**. Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI) in Time 4 for the Control Group across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Emotional Exhaustion* | 1.60 | .99 | 2.53 | 1.19 | 1.19 | 1.00 | 2.31 | 1.64 | 6.00** |
| *Depersonalization* | .25 | .43 | .82 | 1.25 | .44 | .69 | .57 | .79 | 3.23* |
| *Personal Accomplishment* | 5.28 | .77 | 5.19 | .62 | 5.51 | .56 | 4.99 | 1.10 | 1.70 |
| N | 50 | | 25 | | 16 | | 42 | | 133 |

*Notes:* *p < .05; **p<.01; p*** <.001; min = 0, max = 6; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups there were significant cross-country differences in terms of the emotional exhaustion subscale of MBI. Particularly, it is shown that Romanian teachers felt significantly less exhausted emotionally than all the other teachers from Cyprus, Greece, and Portugal. Other significant cross-country differences emerged in the Personal Accomplishment scale for the experimental group and the Depersonalization scale for the control group. There was no other significant difference in the remaining subscales of MBI across countries in any group. Below is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have a very good accomplishment with their work, they do not feel at all depersonalization, and they rarely feel emotional exhaustion from their work. Thus, Greek preschool teachers have a very satisfactory feeling from their work as it is shown by the high mean score in both experimental and control group after the end of this phase of the ProW intervention (T4).

In Cyprus, it is shown in both tables preschool teachers after this ProW intervention phase experience a moderate level of emotional exhaustion, very low rate of depersonalization (the experimental group) and high rate of personal accomplishment. Work is an activity that creates moderate emotional exhaustion in teachers in a way that they feel moderate feelings of fatigue, frustration, and difficulty in dealing with everyday situations at school. In addition, they manage to a very large extent to feel in their work full of energy, able to understand

their students and face problems calmly, and as a result they have significant achievements in their work. Finally, the experimental group experienced a small rate of depersonalization with their students while reports from the control group were higher than the other countries.

In Romania, it is shown in both tables that preschool teachers are at very low levels of emotional exhaustion and depersonalization, but also at very high rates of personal accomplishment after this phase of the Pro W intervention.  Their work does not exhaust them emotionally, nor does it frustrate them, and they can respond to the daily problems that arise in preschool settings. Teachers seem to care about their students, think positively about them, without feeling that they are burdened by their job. In addition, they succeed in significant aspects in relation to their work, understand students and their needs and react calmly even in difficult situations.

The summary of responses in the Maslach Burnout Inventory (MBI) for the preschool teachers from Portugal show that the control group had experienced similar levels of emotional exhaustion or burnout with the experimental group as well as to other groups from the other countries. However, they were never unfeeling or impersonal towards their students. On the contrary, both group responses indicate high feelings of competence and successful achievement in their work.

The tables 3.5.5a and 3.5.5b show the results from the composite scores of each one of the subscales in the ESI questionnaire assessed preschool teachers' satisfaction for their job before the intervention in Time 3in both groups across the four participating countries in the ProW project. Teachers' satisfaction for their job assessed in terms of various dimensions, which appear as subscales in the above tables. For the construction of the subscales have been made transformations with reverse scoring in specific items (3,4,5,8,9,11,12,13,16,17, 20,21,24). Therefore, higher score in each subscale shows higher satisfaction for this dimension of teachers' job.

**Table 3.5.5a**. Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI)in Time 4 for the Experimental Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.38 | 0.55 | 4.19 | 0.50 | 4.46 | 0.63 | 4.00 | 0.69 | 4.05* |
| *Supervisor* | 4.47 | 0.73 | 4.39 | 0.79 | 4.55 | 0.67 | 4.28 | 0.51 | 1.03 |
| *Pay* | 2.61 | 0.95 | 3.41 | 1.09 | 2.56 | 0.85 | 2.81 | 0.93 | 8.43* |
| *Job Itself* | 4.55 | 0.46 | 4.48 | 0.57 | 4.47 | 0.53 | 3.93 | 0.75 | 6.44* |
| *Organization as a Whole* | 3.59 | 0.86 | 2.97 | 0.84 | 4.33 | 0.79 | 3.36 | 0.68 | 30.47* |
| *Promotion* | 2.51 | 0.99 | 2.76 | 0.90 | 4.21 | 0.76 | 2.78 | 0.75 | 59.06* |
| *ESI Global* | 3.69 | 0.48 | 3.70 | 0.51 | 3.85 | 0.53 | 3.51 | 0.33 | 14.73* |
| N | 59 | | 40 | | 92 | | 19 | | 210 |

Notes: * p < .05; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.5b.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI)in Time 4 for the Control Group across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Working Conditions* | 4.32 | 0.60 | 3.92 | 0.60 | 4.25 | 0.40 | 4.12 | 0.73 | 2.47 |
| *Supervisor* | 4.34 | 0.71 | 4.20 | 0.64 | 4.34 | 0.59 | 3.95 | 0.95 | 2.16 |
| *Pay* | 2.88 | 1.09 | 3.47 | 1.12 | 2.98 | 0.74 | 3.00 | 0.84 | 2.01 |
| *Job Itself* | 4.60 | 0.50 | 4.12 | 0.63 | 4.23 | 0.48 | 3.96 | 0.68 | 9.79* |
| *Organization as a Whole* | 3.69 | 0.79 | 2.98 | 0.60 | 4.17 | 0.59 | 3.24 | 1.00 | 8.05* |
| *Promotion* | 2.63 | 0.98 | 2.69 | 0.77 | 3.81 | 0.74 | 2.86 | 1.06 | 6.66* |
| *ESI Global* | 3.75 | 0.49 | 3.56 | 0.44 | 3.97 | 0.38 | 3.55 | 0.65 | 3.12* |
| N | 50 | | 25 | | 16 | | 42 | | 133 |

*Notes:* * p < .05; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

The ANOVAs findings show that in both groups there were significant cross-country differences across almost all subscales of the ESI measure (except for the supervisor subscale). Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers have very good feelings about their job, their supervisor and their working conditions, but they have negative

feelings about their pay and their promotion procedures. Also, they feel rather unsure for the whole organization of the preschool setting they worked in. All these components lead Greek preschool teachers to have in general rather good feelings about their work, as it is shown by the high mean score in both experimental and control group after the ProW intervention.

In the case of Cyprus it is shown in both tables that preschool teachers have a moderate sense of satisfaction regarding their job. More specifically, *working conditions* and *supervisor* are satisfactory for both groups (control and experimental). In all the other subscales related to job satisfaction, and especially in the subscales P*ay* and *Promotion,* the teachers' answers showed that they are not quite satisfied. Subsequently, it is quite moderate their general sense of job satisfaction as it is shown in both experimental and control groups after the ProW intervention.

In the case of Romania, responses from both groups on the Employ Satisfaction Inventory (ESI) indicate general positive tendencies in their feelings about their employment status, especially regarding the teaching profession and their supervisors, but they are not satisfied for their salary. These results clearly suggest a level of uncertainty in the responses of both groups.

Preschool teachers from Portugal on the Employ Satisfaction Inventory (ESI) evaluate positively their jobs, working conditions and supervisors while they seem to be uncertain in the assessment of their organizations. Both groups appear dissatisfied with their professional prospects and with their salaries. In general, Portuguese teachers from both groups seem to be only marginally satisfied by their overall work experience.

The tables 3.5.6a and 3.5.6b show the results from the composite scores of each one of the subscales in the PCS questionnaire assessed preschool teachers' view for the climate in their preschool setting. Particularly, preschool climate assessed in terms of seven (7) different dimensions, which are described in the subscales of the above tables, before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

The tables 3.5.6a and 3.5.6b show the results from the composite scores of each one of the subscales in the PCS questionnaire assessed preschool teachers' view for the climate in their preschool setting. Particularly, preschool climate assessed in terms of seven (7) different dimensions, which are described in the subscales of the above tables, before the intervention in Year 1 in both groups across the four participating countries in the ProW project.

**Table 3.5.6a.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 4 for the Experimental Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 3.22 | 1.14 | 3.82 | 0.34 | 4.00 | 0.00 | 3.76 | 0.23 | 17.94* |
| *Student-Student* | 2.95 | 0.89 | 3.38 | 0.49 | 3.91 | 3.50 | 3.37 | 0.32 | 32.58* |
| *Teacher-home* | 3.16 | 1.07 | 3.64 | 0.33 | 3.98 | 0.71 | 3.76 | 0.24 | 22.72* |
| *School safety* | 3.23 | 1.15 | 3.85 | 0.32 | 3.98 | 0.97 | 3.76 | 0.27 | 17.15* |
| *Clarity of expectations* | 3.13 | 1.05 | 3.71 | 0.39 | 3.71 | 0.39 | 3.50 | 0.39 | 23.72* |
| *Fairness of rules* | 3.19 | 1.12 | 3.75 | 0.48 | 3.97 | 0.18 | 3.42 | 0.47 | 17.44* |
| *Respect of diversity* | 3.25 | 1.22 | 3.87 | 0.32 | 3.99 | 0.10 | 3.66 | 0.39 | 14.68* |
| *PCS Global* | 3.16 | 1.06 | 3.72 | 0.30 | 3.97 | 0.10 | 3.61 | 0.20 | 22.43* |
| N | 59 | | 40 | | 92 | | 12 | | 203 |

*Notes:* * p < .05; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.6b**. Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in Time 4 for the Control Group across countries

| PCS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| *Teacher-student* | 2.97 | 1.23 | 3.63 | 0.42 | 4.00 | 0.00 | 3.80 | 0.30 | 9.05*** |
| *Student-Student* | 2.83 | 1.07 | 3.18 | 0.28 | 3.91 | 0.37 | 3.57 | 0.40 | 9.96*** |
| *Teacher-home* | 2.99 | 1.11 | 3.51 | 0.40 | 4.00 | 0.00 | 3.78 | 0.37 | 9.52*** |
| *School safety* | 2.92 | 1.22 | 3.59 | 0.47 | 4.00 | 0.00 | 3.77 | 0.33 | 9.51*** |
| *Clarity of expectations* | 2.88 | 1.14 | 3.39 | 0.51 | 4.00 | 0.00 | 3.63 | 0.45 | 9.51*** |
| *Fairness of rules* | 2.94 | 1.24 | 3.51 | 0.49 | 9.94 | 0.25 | 3.52 | 0.42 | 9.45*** |
| *Respect of diversity* | 3.01 | 1.28 | 3.66 | 0.47 | 4.00 | 0.00 | 3.77 | 0.43 | 7.27*** |
| *PCS Global* | 2.93 | 1.16 | 3.50 | 0.38 | 3.98 | 0.06 | 3.69 | 0.33 | 9.19*** |
| N | 50 | | 25 | | 16 | | 22 | | 113 |

*Notes:* * p < .05; min = 1, max = 4; [1]GR; [2] CY; [3]RO; [4]PO

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According to ANOVAs findings the differences appeared in all the dimensions of preschool climate among countries were significant for both the control and the experimental group. Greek teachers' views for the preschool climate across all of its dimensions were substantially lower than the respective views of teachers in the other three countries. Below it is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers believe strongly enough that their preschool setting is characterized by a rather good classroom climate in all of the above dimensions as it is shown by the rather high mean scores in both experimental and control group after the ProW intervention.

In the case of Cyprus it is shown by both tables that preschool teachers have a qualitative climate in their classroom. Subsequently, the preschool climate is highly estimated as it is shown by the quite high mean score in both experimental and control group the ProW intervention. Interestingly, the only subscale with slightly lower ratings from both groups is the one referring to relations between students.

In the case of Romania, teacher responses from both groups on the Preschool Climate Scale indicate very positive view for the climate in the preschool settings. Interestingly, the only subscales with slightly lower ratings for both groups are those referring to student relations, while they highly rate the interactions between teachers and students, teachers and parents as well as their feeling for the safety of the environment.

Preschool teachers from Portugal appear to evaluate very positively the school climate in most of its dimensions. Responses are similar from both groups that are quite confident about their valuable relations to students, parents, the safety of the school climate, expectations, and established rules. However, lower scores appear in both groups' responses regarding student relations, as it observed in the other countries too.

Tables 3.5.7a and 3.5.7b show the results from the composite scores of each one of the subscales in the PERMA questionnaire assessed preschool teachers' sense of wellbeing in

their personal lives. Particularly, teachers' personal well-being assessed in 5 general dimensions (positive emotions, engagement, relationships, meaning in their lives and sense of achievement-accomplishment). These mean average of these five main dimensions comprised the PERMA global score, which denotes a general well-being sense of the teachers. Also, in these tables presented teachers' scores on a subscale assessing negative emotions, sense of personal health conditions and a general sense of happiness and loneliness emotions.

**Table 3.5.7a.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 4 for the Experimental Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.10 | 2.00 | 8.31 | 1.34 | 9.11 | 1.32 | 7.60 | 1.41 | 21.36*** |
| Engagement - E | 7.33 | 1.96 | 8.43 | 1.25 | 8.33 | 1.56 | 8.21 | 1.28 | 5.69** |
| Relationships - R | 7.42 | 1.78 | 8.60 | 1.18 | 9.01 | 1.36 | 7.90 | 1.48 | 15.07*** |
| Meaning - M | 7.41 | 1.84 | 8.62 | 1.10 | 9.30 | 1.21 | 8.51 | 1.63 | 22.52*** |
| Accomplishment -A | 7.23 | 1.73 | 8.36 | 1.13 | 9.08 | 1.29 | 7.63 | 1.25 | 22.66*** |
| Negative - N | 3.99 | 2.04 | 4.77 | 2.16 | 1.95 | 2.33 | 4.72 | 1.92 | 22.38*** |
| Health -H | 6.74 | 2.19 | 7.68 | 2.04 | 8.80 | 1.39 | 7.12 | 1.63 | 17.37*** |
| PERMA Global | 7.28 | 1.78 | 8.48 | 1.02 | 9.00 | 1.23 | 7.87 | 1.20 | 19,52*** |
| Loneliness (item 12) | 2.86 | 2.56 | 2.47 | 2.65 | 4.70 | 4.58 | 4.00 | 3.16 | 4.86* |
| Happy (item 23) | 7.20 | 2.01 | 8.55 | 1.39 | 9.15 | 1.55 | 8.00 | 1.15 | 17.43*** |
| N | 59 | | 40 | | 92 | | 19 | | 210 |

*Notes:* * p < .05; min = 0, max = 10

**Table 3.5.7b**. Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in Time 4 for the Control Group across countries

| PERMA profiler | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Positive -P | 7.62 | 1.72 | 7.76 | 1.06 | 9.29 | .56 | 7.58 | 1.72 | 5.67** |
| Engagement - E | 7.67 | 1.57 | 8.20 | 1.06 | 7.70 | 1.99 | 8.01 | 1.34 | .90 |
| Relationships - R | 7.60 | 1.83 | 7.91 | 1.04 | 9.29 | .38 | 7.77 | 1.68 | 5.03* |
| Meaning - M | 7.65 | 1.71 | 7.80 | 1.35 | 9.33 | .68 | 8.28 | 1.51 | 5.64** |
| Accomplishment -A | 7.64 | 1.67 | 7.56 | 1.02 | 7.48 | 3.20 | 7.67 | 1.33 | .06 |
| Negative - N | 4.03 | 2.14 | 5.19 | 1.93 | 3.06 | 3.88 | 4.56 | 2.04 | 3.07* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Health -H | 7.25 | 1.86 | 7.28 | 1.40 | 8.58 | 1.01 | 6.18 | 2.17 | 7.27*** |
| PERMA Global | 7.64 | 1.65 | 7.84 | .95 | 8.70 | .90 | 7.84 | 1.37 | 2.44 |
| Loneliness (item 12) | 2.62 | 2.70 | 2.84 | 2.73 | 5.81 | 4.68 | 2.90 | 2.91 | 4.69** |
| Happy (item 23) | 7.64 | 1.84 | 7.80 | 1.44 | 9.12 | .80 | 7.76 | 1.68 | 3.58* |
| N | 50 | | 25 | | 16 | | 41 | | 132 |

*Notes:* * $p < .05$; min = 0, max = 10

According to ANOVAs findings all differences in the PERMA dimensions for the experimental group appeared significant (most highly significant). Romanian teachers seem to have higher positive emotions than the others. Similar significant differences for the control group appeared only for teachers' positive and negative emotions, health, meaning and relationships as well in the items regarding loneliness and happiness. Romanian teachers showed the lowest negative emotions from the other countries in both groups. Below is described briefly each country's profile according to teachers' answers.

In the case of Greece, it is shown by both tables that preschool teachers experience various feelings and emotional states in all the above terms as it is shown by the high mean score in both experimental and control group at the end of this final phase of ProW intervention. In both groups the general PERMA feeling is in a very positive direction with high mean scores. However, teachers in the control group showed slightly more positive emotions than teachers in the experimental group in Time 4. This finding is somewhat expected as the teachers in the control group have been assigned in the experimental group at the previous phase of the study.

In the case of Cyprus, it is shown in both tables that preschool teachers have a very positive profile in all the above terms as it is shown by the mean scores in both experimental and control group. Preschool teachers in the experimental group particularly seem to experience more positive feelings, are interested in activities, they feel loved and supported by others and feel valuable for them; they are doing well regarding their responsibilities and feel good for their achievements, they have a purpose in life, and they seem to work and feeling able to reach their goals.

In the case of Romania, it is shown also in both tables that preschool teachers have a very positive profile regarding all the above dimensions of PERMA, as it is shown by the mean scores in both experimental and control group with the experimental group being even more positive than the control group. Furthermore, tendencies show that they are involved in activities, they experience positive emotions, they feel joyful and valued by others; they also have a sense of purpose in life, they work towards reaching their goals, as well as having a high sense of health.

Preschool teachers from Portugal also provided a positive profile of their wellbeing that indicates the same tendencies from both groups and slightly more positive reports from the experimental group. Preschool teachers in both groups seem to experience positive feelings, they feel loved and supported by others and feel valuable for them (especially the experimental group) possibly indicating adequate developed feelings of mastery and achievement.

### b. Findings for Children

Tables 3.5.8a and 3.5.8b show the results from the composite scores of each one of the subscales in Strengths and Difficulties Questionnaire (SDQ) regarding emotional, conduct difficulties, hyperactivity and relations with peers and prosocial behavior across the four participating countries. More specifically, children's strengths and difficulties were assessed in terms of the frequency with which were exhibited from 1 (not true) to 3 (true). Strengths and difficulties are grouped according to five (5) different dimensions, which are described in the subscales presented in the tables, for both groups across the four participating countries in the Pro-W project in Time 3 before the intervention phase bean for the control group. ANOVA F tests show the statistical testing of the countries' differences in each subscale. Superscript numbers show which of the country's mean score differs from the respective mean score of another country in the post-hoc analyses.

**Table 3.5.8a**. Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Strength and Difficulties Questionnaire (SDQ) in Time 4 for the Experimental Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | 1.21 | .32 | 1.27 | .38 | 1.20 | .31 | 1.26 | .36 | 3.53* |
| Conduct problems | 1.19 | .36 | 1.21 | .40 | 1.42 | .33 | 1.28 | .39 | 55.63*** |
| Hyperactivity | 1.36 | .48 | 1.47 | .53 | 1.31 | .40 | 1.64 | .52 | 19.83*** |
| Peer problems | 1.26 | .31 | 1.21 | .32 | 1.27 | .32 | 1.19 | .27 | 4.31* |
| Prosocial skills | 2.63 | .48 | 2.71 | .39 | 2.68 | .45 | 2.57 | .43 | 3.86* |
| N | 644 | | 283 | | 810 | | 88 | | 1825 |

*Notes*: * p < .05; ** p < .01; *** p < .001; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.8b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Strength and Difficulties Questionnaire's subscales (SDQ) in Time 4 for the Control Group across countries

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Emotional problems | 1.19 | .33 | 1.34 | .36 | 1.20 | .27 | 1.42 | 0,47 | 23.59*** |
| Conduct problems | 1.17 | .35 | 1.26 | 0,44 | 1.41 | .22 | 1.38 | .44 | 24.37*** |
| Hyperactivity | 1.33 | .48 | 1.49 | .46 | 1.35 | .31 | 1.68 | .51 | 27.51*** |
| Peer problems | 1.22 | .31 | 1.26 | .31 | 1.35 | .31 | 1.21 | .33 | 6.77*** |
| Prosocial skills | 2.69 | .43 | 2.61 | .43 | 2.63 | .41 | 2.58 | .41 | 3.61* |
| N | 553 | | 184 | | 133 | | 177 | | 1047 |

*Notes:* * p < .05; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups most of the differences among countries are statistically significant. Also, in most of the cases children in both groups shared similar scores across the subscales in Time 4.

In the case of Greece, children's scores from both groups on Strengths and Difficulties Questionnaire (SDQ) in Time 4 indicate a low rate of emotional difficulties, conduct problems and peer relationships. Higher was the rate of hyperactivity symptoms as seen in both groups. Regarding prosocial skills Greek preschool children rated high scores in both groups, with higher rates in control group.

In the case of Cyprus, where children's scores from both groups indicate also low frequency of children's emotional and conduct problems, as well as of peer relations problems. The hyperactivity problems' rate was somewhat higher than the others for both groups and children showed high rates on prosocial skills, but lower in the control group in comparison to the experimental group.

In the case of Romania, children's scores from both groups on Strengths and Difficulties Questionnaire indicate emotional, conduct and peer problems in a low rate similar to the pattern derived from the other countries. Children in Romania showed also higher rates regarding hyperactivity problems, higher in the control group than the experimental group. Romanian children also have high scores in prosocial skills, indicating higher rate in the experimental group.

In the case of Portugal, children's scores on SDQ in Time 4 from both groups show low frequency of conduct problems, emotional difficulties and peer relationship problems. The hyperactivity problems scores in both groups were higher than the scores on the other scales assessing behavior problems. Rates are surprisingly higher for the control group. Similarly, as in the other countries, children showed a rather high rate of prosocial skills, but lower than that of the other three countries.

Overall, teachers' perceptions of students' frequencies to emotional and conduct difficulties hyperactivity symptoms, peer problems and prosocial skills reveal similar tendencies, with prosocial skills remaining the area of strength for all countries.

Tables 3.5.9a and 3.5.9b show the results from the composite scores of each one of the subscales in Child Behavior Rating Scale (CBRS) regarding children's task behavior and social

behavior with peers and adults across the four participating countries. In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 (never) to 5 (always). Behaviors are grouped according to five (5) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Time 4.

**Table 3.5.9a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 4 for the Experimental Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 4.12 | .77 | 4.00 | .77 | 4.50 | .54 | 4.00 | .66 | 61.892*** |
| Interpersonal skills | 4.34 | .74 | 4.26 | .70 | 4.48 | .54 | 4.06 | .65 | 17.431*** |
| Social play-interaction | 4.09 | .86 | 4.13 | .71 | 4.50 | .51 | 4.05 | .67 | 52.144*** |
| Engagement | 4.23 | .84 | 4.25 | .75 | 4.63 | .49 | 4.17 | .70 | 51.489*** |
| Social problem solving | 3.83 | .97 | 3.87 | .79 | 4.42 | .56 | 3.59 | .66 | 95.336*** |
| N | 644 | | 283 | | 810 | | 79 | | 1816 |

*Notes:* *p < .05; **p<.01; p*** <.001; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.9b.** Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Child Behavior Rating Scale (CBRS) in Time 4 for the Control Group across countries

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Classroom self-regulation | 4.14 | .74 | 4.03 | .68 | 4.31 | .59 | 3.99 | .75 | 5.99*** |
| Interpersonal skills | 4.40 | .66 | 4.26 | .72 | 4.30 | .51 | 3.96 | .62 | 20.94*** |
| Social play-interaction | 4.16 | .81 | 4.02 | .58 | 4.33 | .47 | 3.99 | .60 | 7.79*** |
| Engagement | 4.34 | .76 | 4.15 | .78 | 4.41 | .58 | 4.16 | .68 | 5.96*** |
| Social problem solving | 4.01 | .85 | 3.65 | .71 | 4.17 | .62 | 3.56 | .65 | 26.96*** |
| N | 553 | | 184 | | 133 | | 177 | | 1047 |

*Notes:* *p < .05; **p<.01; p*** <.001; min = 1, max = 5; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups indicate that all differences among countries are highly statistically significant. Also, in all cases children in both groups did not show substantially different scores across the subscales in Time 4.

In the case of Greece, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 4 indicate very positive perceptions of children's social/interpersonal skills and engagement behaviors (willingness to share, taking turns, compliance, cooperation, etc.) while children's behavioral regulation during academic tasks and social play-interaction are also rated high.

The exact same pattern is shown in the case of Cyprus, where children's scores from both groups indicate also high frequency of children's social/interpersonal skills and engagement behaviors. On the other hand, social problem solving was observed less frequently in both groups.

Similar findings emerge from Romania where very positive perceptions emerge from both groups on children's social/interpersonal skills, social play-interaction, and engagement behaviors -particularly for the experimental group.

In the case of Portugal, children's scores from both groups on Child Behavior Rating Scale (CBRS) in Time 4 indicate social problem solving and classroom self-regulation as the least frequent behaviors in comparison to other behaviors but also to children's scores from the other countries. The pattern of the other exhibited behaviors in the rest of the subscales is like the one that emerged from the other countries with a slight advantage of the experimental group.

Overall, teachers' perceptions of students' approaches to learning, self-regulation, and social-emotional adjustment reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be social/interpersonal skills (sharing, cooperation, compliance, etc.) and engagement while the least frequently rated behaviors were social problem solving (resolving social conflicts, etc.) and classroom self-regulation.

Finally, according to analysis of variance children's behavior scores from both groups differ significantly across countries in all subscales.

Tables 3.5.10a and 3.5.10b show the results from the composite scores of each one of the subscales in Adaptive Social Behavior Inventory (ASBI). In detail, children's specific behaviors were assessed in terms of the frequency with which were exhibited from 1 to 3. Behaviors are grouped according to three (3) different dimensions, which are described in the subscales of the above tables, for both groups across the four participating countries in the ProW project in Time 4.

**Table 3.5.10a.** Means (M) and standard deviations (sd) of subscales' scores on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 4 for the Experimental Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.79 | 0.36 | 2.76 | 0.39 | 2.91 | 0.22 | 2.73 | 0.42 | 26.39* |
| Prosocial | 2.50 | 0.47 | 2.70 | 0.35 | 2.78 | 0.25 | 2.75 | 0.34 | 8.30* |
| Confidence/Independence | 2.78 | 0.32 | 2.60 | 0.39 | 2.88 | 0.22 | 2.81 | 0.32 | 114.41* |
| N | 644 | | 283 | | 810 | | 80 | | 1817 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

**Table 3.5.10b**. Means (M) and standard deviations (sd) of subscales' scores on the on the Children's scores on Adaptive Social Behavior Inventory (ASBI) in Time 4 for the Control Group across countries

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD | F |
| Conformity/Compliance | 2.84 | 0.33 | 2.74 | 0.38 | 2.89 | 0.26 | 2.66 | 0.41 | 16.03* |
| Prosocial | 2.74 | 0.34 | 2.59 | 0.32 | 2.76 | 0.28 | 2.69 | 0.37 | 10.03* |
| Confidence/Independence | 2.65 | 0.35 | 2.47 | 0.37 | 2.82 | 0.30 | 2.76 | 0.35 | 31.23* |
| N | 553 | | 184 | | 133 | | 177 | | 1047 |

*Notes:* * $p < .05$; min = 1, max = 3; [1]GR; [2] CY; [3]RO; [4]PO

According to ANOVAs findings in both groups all of the differences among countries are statistically significant but the size of the differences were very small in most of the cases. Also, in most of the cases children in both groups in each country did not show substantially different scores across the subscales in Time 4.

In the cases of Greece and Cyprus, children's scores from both groups (experimental and control group) on Adaptive Social Behavior Inventory (ASBI) in Time 4 were slightly higher on the subscale of Conformity/Compliance than on the other two subscales. Subsequently, children's scores on Prosocial skills were slightly higher than scores on the Confidence/Independence subscale.

The findings from Romania indicate that both groups in Time 4 have somewhat better scores on Conformity/Compliance than in the other two subscales. In the case of Portugal, findings have shown that the experimental group children's scores are slightly better on the subscale Confidence/Independence than on the other two subscales.

Overall, teachers' assessment of students' social behavior skills in Time 4 reveal similar tendencies for both experimental and control groups in all countries. Specifically, areas of strength seem to be conformity and compliance behavior across groups and countries, and for prosocial skills it seems that there is room for improvement, although were not low in the baseline assessment.

## 3.6 From Time 3 to Time 4: Value added analysis in Year 2 (Progress between (T3 – T4)

In this section is presented the value added analysis from Time 3 to Time 4 (post-intervention for the control) for all the measures administered during the Year 2 of the study. In order to examine whether Teachers' well-being and job satisfaction feelings, as well as their sense of self-efficacy beliefs made a substantial progress during Year 2 due to ProW intervention and if this progress is similar across the 4 countries of the project we run the following analyses:

First, we calculated the change (or gain) scores for each one of the participants, which derived from the subtraction of Time 4 scores from the Time 3 scores, in order to use it as an indicator of the participants' progress during Year 2. Therefore, a zero (0) value indicates that there is no improvement from the beginning of Year 2 (Time 3) to post intervention time for the control group (Time 4), a positive value indicates an increase, and a negative value indicates a decline from Time 3 to Time 4.

Second, we run 2-way ANOVAs on the subscales' means of each questionnaire's gain scores as dependent variables with group and country as independent variables to examine the effects of ProW intervention and whether the effects are specific to each country. If there was a significant interaction effect between group with country, then a post hoc analysis was run to find the specific country or countries with significant differences between experimental and control groups. The significant differences between groups in each country were highlighted in the tables with bold digits of the respective mean scores.

Third, we run one sample t-test with zero (0) as test value to examine whether the mean gain score in the experimental and the control group is significantly different form the zero value, which is an indicator of no difference (or no change/gain) from the Time 3 score (initial score in Year 2). According to our expectations for a positive effect of ProW intervention in the control group, the control group's mean change (or gain) score would be significantly different from zero (0) because this group received the ProW intervention

during Year 2. However, in this case if the experimental group's mean scores change too, this would be an indicator of a long term effect of the intervention they received during Year 1, but if this group's scores remain unchanged or decreased from Time 3, this would be an indicator of an effect attenuation for participants received the intervention in Year 1.

In the following presentation of the results, first, we present findings for the effects of the ProW intervention on teachers' outcomes providing all the related information form the Teachers' scales and subscales. Second, we present findings for the effects of the intervention on children's outcomes providing data from children's scales and subscales.

### a. Findings for Teachers

According to table 3.6.1a it seems that no significant group or country effects appeared in any of the subscales. Also, there was no significant interaction effects of group by country in any subscale and this result shows that mean differences on change scores from Time 3 to Time 4 were nonsignificant between experimental and control groups across countries.

**Table 3.6.1a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on the Teacher Subjective Wellbeing Questionnaire (TSWQ) in Year 2 for both Groups across countries

| TSWQ subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Teaching Efficacy* | Experimental | .02 | .33 | .23 | .40 | .08 | .55 | -.04 | .54 | 1.40 | 2.62 | 1.35 |
| | Control | .26 | .51 | .24 | .37 | .03 | .26 | .05 | .37 | | | |
| *School Connectedness* | Experimental | .01 | .35 | .22 | .57 | .03 | .74 | -.03 | .61 | .64 | .50 | 1.09 |
| | Control | .05 | .49 | -.06 | .50 | .06 | .19 | -.06 | .38 | | | |
| *Teacher Wellbeing* | Experimental | .02 | .30 | .22 | .43 | .05 | .58 | -.04 | .54 | .01 | 1.47 | 1.09 |
| | Control | .15 | .45 | .09 | .39 | .05 | .18 | -.01 | .31 | | | |
| | N | 102 | | 56 | | 108 | | 56 | | 322 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

**Table 3.6.1b**. One sample *t*-test values for examining probability of each subscale's change score on the Teacher Subjective Wellbeing Questionnaire (TSWQ) to differ from no change (0 score) in Year 2 for both Groups across countries

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teaching Efficacy* | .62 | 3.45* | 3.32* | 2.99* | 1.41 | .49 | -.64 | .57 | 2.26* | 3.99** |
| *School Connectedness* | .29 | .75 | 2.24* | -.53 | .34 | 1.29 | -.23 | -1.03 | 1.17 | -.04 |
| *Teacher Wellbeing* | .51 | 2.35* | 3.04* | 1.10 | .90 | 1.03 | -.65 | -.67 | 1.76* | 1.93* |
| N | 55 | 47 | 34 | 22 | 92 | 16 | 17-18[a] | 39-41 | 198-9 | 124-6 |

*Notes:* * $p < .05$; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

As it is shown in Table 3.6.1b change scores of the experimental group for the full sample of participants differed significantly from 0, which means that there is an improvement from Time 3 to Time 4 on the subscale of Teaching Efficacy and on the global Teacher Wellbeing assessment. These significant changes from 0 were also evident in the control group.

Particularly, these improvements on the TSWQ subscales appeared in the Cypriot sample for all the subscales. Significant improvements did not appear in any other country's experimental group. The Greek control group appeared an improvement on the Teaching Efficacy subscale, and the Teacher Wellbeing subscale and the Cypriot control group an improvement on Teaching Efficacy subscale. This is reasonable, given that in Year 2 the control group was the one who received the ProW intervention.

Overall, it seems that the ProW intervention in year 2 made a substantial effect in preschool teachers' sense of Teaching Efficacy and their sense of wellbeing in the preschool setting, when we take into consideration the full sample of this project and these effects were more distinct in the samples of Greek and Cypriot teachers.

According to table 3.6.2a it seems that no significant group or country effects appeared in any of the subscales. Also, there was no significant interaction effects of group by country in any

subscale and this result shows that mean differences on change scores from Time 3 to Time 4 were nonsignificant between experimental and control groups across countries.

Table 3.6.2a. Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on Teachers' Sense of Efficacy Scale (TSES -short form) in Year 2 for both Groups across countries

| TSES subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Student engagement* | Experimental | .23 | .94 | .47 | .74 | .06 | .98 | .14 | .89 | .02 | .48 | .94 |
| | Control | .32 | .93 | .13 | 1.39 | .30 | .90 | .08 | .92 | | | |
| *Instructional strategies* | Experimental | .26 | .84 | .46 | .62 | .03 | .91 | -.01 | .86 | .00 | 1.52 | .77 |
| | Control | .39 | 1.02 | .15 | 1.79 | .03 | .80 | .19 | .97 | | | |
| *Classroom management* | Experimental | .30 | .74 | .46 | .85 | .14 | .94 | .03 | .76 | .50 | 1.54 | .75 |
| | Control | .44 | 1.10 | .41 | 1.55 | .02 | .85 | .42 | .10 | | | |
| | N | 102 | | 56 | | 108 | | 58 | | 324 | | |

Notes: * p < .05; G = Group effect; C = Country effect

As it is shown in Table 3.6.2b significant improvements on the TSES subscales appeared for all subscales in the Greek and Cypriot experimental group samples, while no other significant improvements appear in experimental groups from the other countries. It is important to note here that in these two samples only Greek teachers from the control group showed a significant improvement. Moreover, the Portuguese control group showed an improvement in the Classroom Management subscale. The significant improvements from T3 to T4 for the control groups show the ProW intervention current effects in Year 2 for these two countries. Also, it is interesting that significant improvements were found in the analyses of the full sample for all the subscales and for both groups showing that the broader ProW intervention effects on teachers' sense of efficacy was substantial.

**Table 3.6.2b**. One sample *t*-test values for examining probability of each subscale's change score on the Teachers' Sense of Efficacy Scale (TSES -short form) to differ from 0 in Year 2 for both Groups across countries

| TSES subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Student engagement* | 1.79* | 2.38* | 3.71* | .42 | .61 | 1.32 | .66 | .55 | 2.77* | 2.29* |
| *Instructional strategies* | 2.32* | 2.63* | 4.27* | .39 | .34 | .17 | -.07 | 1.27 | 2.71* | 2.34* |
| *Classroom management* | 2.99* | 2.84* | 3.11* | 1.23 | 1.47 | .07 | .16 | 2.69* | 3.76* | 3.75* |
| N | 55 | 47 | 34 | 22 | 92 | 16 | 18 | 40 | 199 | 125 |

*Notes:* * p < .05

According to table 3.6.3a it seems that there were significant country effects on the mean change scores of the subscales *Teacher Sensitivity, Social Guidance, Classroom Management* and in the composite assessment of the TSSES questionnaire. In addition, the absence of interaction effects on these two measures denotes that the effect of ProW intervention is not group specific and can be generalized for the full sample. No significant group effects appeared in the change scores from Time 3 to Time 4 for the subscales.

However, there were no significant interactions of group by country in any of these subscales and this result shows that the pattern of differences between experimental and control group on change scores for these subscales were similar across countries.

**Table 3.6.3a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on Teacher Social Self-efficacy (TSSES) in Year 2 for both Groups across countries

| TSSES subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | F_G | F_C | G x C |
| *Teacher Sensitivity* | Experimental | .40 | .82 | .36 | .63 | -.03 | .84 | .02 | 1.03 | .65 | 5.02* | .17 |
| | Control | .42 | .96 | .48 | .66 | -.03 | .44 | .21 | .52 | | | |
| *Social Guidance* | Experimental | .40 | .87 | .32 | .46 | .01 | .61 | .12 | .66 | .85 | 3.76* | .25 |
| | Control | .38 | .86 | .48 | .60 | .08 | .34 | .25 | .74 | | | |
| *Teacher-Child Support* | Experimental | .24 | .87 | .28 | .70 | .08 | .69 | .19 | .83 | .20 | 1.68 | .33 |
| | Control | .33 | 1.13 | .50 | .86 | .06 | .60 | .09 | .85 | | | |
| *Classroom Climate Children Engagement* | Experimental | .29 | .82 | .32 | .55 | .04 | .63 | -.12 | .71 | 3.55 | 2.49 | 1.3 |
| | Control | .26 | .89 | .51 | .69 | .13 | .46 | .33 | .77 | | | |
| *Classroom Management-Conflict Resolution* | Experimental | .31 | .87 | .32 | .51 | .01 | .94 | .12 | 1.14 | 1.30 | 4.21* | .71 |
| | Control | .44 | .95 | .72 | .83 | .05 | .53 | .05 | .71 | | | |
| *TSSES Global* | Experimental | .33 | .76 | .32 | .49 | .02 | .66 | .07 | .79 | 1.32 | 4.04* | .23 |
| | Control | .37 | .89 | .54 | .66 | .06 | .41 | .19 | .61 | | | |
| | N | 102 | | 56 | | 108 | | 58 | | | 324 | |

*Notes*: * $p < .05$; G = Group effect; C = Country effect

**Table 3.6.3b.** One sample *t*-test values for examining probability of each subscale's change score on the Teacher Social Self-efficacy (TSSES) to differ from 0 in Year 2 for both Groups across countries

| TSSES subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teacher Sensitivity* | 3.6** | 3.01* | 3.33* | 3.40* | -.39 | -.29 | .08 | 2.53* | 2.63* | 4.60* |
| *Social Guidance* | 3.43* | 3.01* | 4.08* | 3.77* | .14 | .97 | .80 | 2.13* | 3.70** | 4.8* |
| *Teacher-Child Support* | 2.07* | 1.97* | 2.36* | 2.73* | 1.06 | .42 | .94 | .70 | 3.11* | 2.9* |
| *Classroom Climate-Children Engagement* | 2.63* | 2.04* | 3.36* | 3.46* | .67 | 1.16 | -.70 | 2.75* | 2.93* | 4.5* |
| *Classroom Management - Conflict Resolution* | 2.65* | 3.19* | 3.64* | 4.05* | .07 | .37 | .45 | .48* | 2.45* | 4.18* |
| *TSSES Global* | 3.21* | 2.83* | 3.79* | 3.82* | .29 | .58 | .36 | 1.94* | 3.29* | 4.61* |
| N | 55 | 47 | 34 | 22 | 92 | 16 | 18 | 41 | 199 | 126 |

*Notes:* * p < .05;

As it is shown in Table 3.6.3b the mean change scores of the experimental group and the control group for the full sample of participants differed significantly from 0, which means that there is a significant improvement from Time 3 to Time 4 in all subscales of Teacher Social Self-Efficacy (TSSES) and in the global TSSES assessment.

Therefore, it seems that the ProW intervention influence the change of teachers' sense of Social Self-efficacy in the global sample of this project.

Further examination in each country, shows that these improvements in the TSSES subscales *(Teacher Sensitivity, Social Guidance, Teacher-Child Support, Classroom Climate-Children Engagement, Classroom Management-Conflict Resolution, TSEES global)* appeared mainly in the Greek, and Cypriot sample of teachers for the whole range of subscales, as well as in the Portuguese control group sample for almost all of the TSSES subscales and TSSES global. In general improvements of scores in the TSSES from Time 3 to Time 4 were high for the experimental group, as well as for the control group.

According to table 3.6.4a it seems that no significant group or country effects appeared in the Emotional Exhaustion, Depersonalization and Personal Accomplishment subscales. Also, there were no significant interactions of group by country in any of these subscales and this result shows that differences on change scores were nonsignificant across countries between all groups.

**Table 3.6.4a.** Means (M) and standard deviations (sd) of subscales' change scores (**from T3 to T4**) on Maslach Burnout Inventory (MBI) in Year 2 for both Groups across countries

| MBI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Emotional Exhaustion* | Experimental | -.03 | .78 | .17 | .88 | .02 | 1.26 | .35 | 1.07 | .08 | 1.56 | 1.92 |
| | Control | -.07 | .83 | .13 | .88 | .62 | .86 | -.01 | 1.33 | | | |
| *Depersonalization* | Experimental | .11 | .52 | -.03 | .57 | -.08 | 1.18 | .12 | .75 | 1.99 | .67 | 1.11 |
| | Control | -.02 | .66 | .16 | .87 | .24 | .77 | .37 | .79 | | | |
| *Personal Accomplishment* | Experimental | .06 | .57 | -.00 | .67 | .05 | 1.07 | -.20 | .84 | .20 | 1.82 | .60 |
| | Control | -.01 | .62 | .28 | .61 | .07 | .44 | -.24 | .84 | | | |
| | N | 102 | | 56 | | 108 | | 57 | | 323 | | |

*Notes:* * $p < .05$; G = Group effect; C = Country effect

As shown in Table 3.6.4b, the change scores on the subscale of Depersonalization of the control group for the full sample of participants differed significantly from 0, which means that there is an improvement from Time 3 to Time 4. For the control group preschool teachers have experienced more Depersonalization from Time 3 to Time 4, but this did not happen for the teachers in the experimental group who remained in the same level of burnout in these two subscales after the intervention in Time 3. However, there are some differentiations between the countries.

In Greece, participants in the Experimental group showed a slight reduction in Emotional Exhaustion (t=-0.33), whereas their counterparts in Cyprus reported an increase (t=1.12) in

this aspect of burnout. Romania's Experimental group displayed a minor rise (t=0.14), while the control group presented a notable and statistically significant increase (t=2.87**) in Emotional Exhaustion. For Depersonalization, the Control group in Portugal reported significant increase (t=3.00** p < 0.01). The findings for Personal Accomplishment were varied, with Greek and Romanian Experimental groups experiencing positive shifts (t=0.80 and t=0.46), whereas the Experimental groups in Cyprus and Portugal showed declines (t=-0.03 and t=-0.97, respectively).

**Table 3.6.4b.** One sample *t*-test values for examining probability of each subscale's change score on the Maslach Burnout Inventory (MBI) to differ from 0 in Year 2 for both Groups across countries

| MBI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Emotional Exhaustion* | -.33 | -.54 | 1.12 | .67 | .14 | 2.87* | 1.35 | -.04 | .77 | .79 |
| *Depersonalization* | 1.56 | -.26 | -.36 | .88 | -.65 | 1.23 | .68 | 3.00* | -.04 | 2.46* |
| *Personal Accomplishment* | .80 | -.09 | -.03 | 2.13 | .46 | .64 | -.97 | -1.81 | .38 | -.36 |
| N | 54 | 46 | 33 | 22 | 92 | 16 | 17 | 40 | 198 | 125 |

*Notes:* * p < .05

According to table 3.6.5a it seems that no significant group effects appeared from Time 3 to Time 4 in the most of subscales of ESI; the only significant group effect appeared in the subscale assessed the teachers' satisfaction for the *Supervisor*. Interestingly, this group effect was similar across countries (no significant interaction effect) and shows that teachers from the control group (who received the ProW intervention in Year 2) were significantly less satisfied with the Supervisor than they were teachers from the experimental group.

 Also, there were country effects on the change scores from Time 3 to Time 4 of the subscales *Global assessment of ESI and the subscales of Job itself and Pay.* But there were no significant

interactions of group by country in most of the subscales, but there was in *Job itself*, and this result shows that differences in change scores among countries were mostly similar for both experimental and control groups.

**Table 3.6.5a.** Means (M) and standard deviations (SD) of subscales' change scores (from T3 to T4) on Employ Satisfaction Inventory (ESI) in Year 2 for both Groups across countries

| ESI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Working Conditions* | Experimental | -.07 | .59 | .23 | .71 | -.07 | .86 | -.21 | .55 | .00 | 1.90 | .97 |
| | Control | .15 | .79 | .27 | .55 | -.17 | .58 | -.54 | .71 | | | |
| *Supervisor* | Experimental | .01 | .60 | .10 | .73 | .03 | .90 | -.58 | .52 | 5.75* | .73 | .13 |
| | Control | -.14 | .66 | -.12 | .79 | -.19 | .44 | -.38 | .74 | | | |
| *Pay* | Experimental | -.32 | .82 | -.07 | .55 | -.60 | 1.34 | .39 | .77 | .07 | 4.67* | .07 |
| | Control | .05 | .81 | -.10 | .46 | -.50 | .67 | .02 | .84 | | | |
| *Job Itself* | Experimental | -.18 | .43 | **1.16** | 1.25 | -.06 | .79 | -.30 | .55 | 1.75 | 21.14* | 3.42* |
| | Control | .16 | .43 | **.48** | 1.15 | -.06 | .46 | -.18 | .60 | | | |
| *Organization as a Whole* | Experimental | -.02 | .70 | .14 | .55 | .08 | 1.10 | -.15 | .62 | .05 | .85 | .71 |
| | Control | .14 | .55 | .57 | .69 | -.12 | .43 | -.11 | .73 | | | |
| *Promotion* | Experimental | -.07 | .84 | .23 | .81 | -.05 | .96 | -.01 | .63 | 1.33 | 1.12 | 1.01 |
| | Control | .09 | .04 | -.01 | .74 | -.27 | .80 | -.25 | .86 | | | |
| *ESI Global* | Experimental | -.02 | .41 | .30 | .35 | -.11 | .68 | -.12 | .33 | 1.56 | 5.53* | 1.31 |
| | Control | .51 | .40 | .05 | .35 | -.22 | .37 | -.16 | .40 | | | |
| | N | 102 | | 56 | | 108 | | 56 | | 322 | | |

*Notes*: * p < .05; G = Group effect; C = Country effect

As it is shown in Table 3.6.5b change scores of the experimental group for the full sample of participants are not differed significantly from 0 in most of the scores assessed by the ESI scale, which means that there is not a significant improvement from Time 3 to Time 4 in most

of the dimensions of Employ Satisfaction. The findings for the total sample show that there was a significant change only for the control group's scores on the Supervisor subscale and for the experimental group on the *Pay* and *Job Itself* subscales. As previously noted, teachers form the control group showed a decline in their satisfaction for the Supervisor after the ProW intervention. In three cases of teachers on the experimental group the change was positive.

Separate analyses in each country show that teachers from the control group who received the ProW intervention in Year 2 did not significantly change the scores in any of the participating countries. In other words, it seems that the implementation of the ProW intervention in the control group during Year 2 did not show a unique to a specific country significant effect on any of the employees' satisfaction dimensions.

**Table 3.6.5b.** One sample *t*-test values for examining probability of each subscale's change score on the Employ Satisfaction Inventory (ESI) to differ from 0 in Year 2 for both Groups across countries

| ESI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Working Conditions* | -.09 | 1.32 | 1.87* | .23 | -.82 | -1.18 | -1.75 | -.47 | -.32 | .37 |
| *Supervisor* | .22 | -1.43 | .82 | -.74 | .40 | -1.69 | -.46 | -2.82 | .65 | -3.3* |
| *Pay* | -.27 | .41 | -.07 | -1.02 | -4.33* | -2.90 | -.36 | -.01 | -3.79* | -.94 |
| *Job Itself* | -.31 | .25 | 5.39* | 1.95 | -.78 | -.62 | -2.60* | -1.99 | 2.03* | .36 |
| *Organization as a Whole* | -.24 | 1.34 | 1.55 | .38 | .78 | -1.26 | -1.03 | -1.15 | .75 | .054 |
| *Promotion* | -.64 | .60 | 1.68 | -.09 | -.53 | -1.35 | -.57 | -1.96 | -.21 | -1.08 |
| *ESI Global* | -.31 | .87 | 4.88* | .71 | -1.57 | -2.33 | -1.74 | -2.55 | -.47 | -1.4 |
| N | 55 | 47 | 34 | 22 | 92 | 16 | 18 | 40 | 198 | 129 |

*Notes:* * p < .05

According to table 3.6.6a it seems that there are significant country effects only on the subscales *Student-Student, Clarity of expectations* and on the change score of the PCS global

assessment score. However, there is no group or interaction effect on the change score in any subscale or the global scale. Overall, these results show that differences on the change scores between groups were not significant in general, but there are significant differences in the change scores among the countries. These significant country effects seems to be due to the higher change scores observed in the sample of the Romanian teachers in both groups compared to the teachers of the other countries. The absence of group and interaction effect mean that the intervention did not influence differently the school climate during Year 2 among the participating countries.

**Table 3.6.6a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on Preschool Climate Scale (PCS) in Year 2 for both Groups across countries

| PCS subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| *Teacher-student* | Experimental | -.25 | 1.22 | .03 | .37 | .12 | .28 | .04 | .26 | .00 | 2.49 | .11 |
| | Control | -.16 | 1.44 | .06 | .39 | .14 | .24 | .06 | .20 | | | |
| *Student-Student* | Experimental | .96 | .82 | .19 | .42 | .33 | .35 | -.09 | .38 | 1.78 | 4.83* | 1.21 |
| | Control | .02 | 1.13 | .18 | .38 | .64 | .52 | .21 | .44 | | | |
| *Teacher-home* | Experimental | -.15 | 1.13 | .01 | .40 | .13 | .25 | .16 | .39 | .12 | 1.87 | .33 |
| | Control | -.04 | 1.32 | .09 | .33 | .26 | .27 | -.01 | .27 | | | |
| *School safety* | Experimental | -.15 | 1.13 | .17 | .43 | .13 | .33 | .04 | .30 | .01 | 1.75 | .15 |
| | Control | -.06 | 1.37 | .10 | .33 | .13 | .33 | -.03 | .33 | | | |
| *Clarity of expectations* | Experimental | .02 | 1.04 | .31 | .39 | .33 | .43 | .11 | .44 | .02 | 3.99* | .64 |
| | Control | .01 | 1.23 | .15 | .46 | .56 | .41 | .13 | .42 | | | |
| *Fairness of rules* | Experimental | -.10 | 1.16 | .19 | .53 | .19 | .42 | .00 | .38 | .00 | 2.26 | .15 |
| | Control | -.26 | 1.31 | .13 | .58 | .28 | .51 | -.10 | .54 | | | |
| *Respect of diversity* | Experimental | -.07 | 1.26 | .14 | .40 | .13 | .34 | -.04 | .32 | .10 | 2.46 | .28 |
| | Control | -.04 | 1.50 | .11 | .59 | .22 | .36 | -.12 | .32 | | | |
| *PCS Global* | Experimental | -.11 | 1.04 | .15 | .32 | .19 | .30 | .03 | .17 | .09 | 2.95* | .14 |
| | Control | -.03 | 1.29 | .12 | .31 | .32 | .25 | .01 | .23 | | | |
| | N | 92 | | 56 | | 108 | | 32 | | | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

**Table 3.6.6b.** One sample *t*-test values for examining probability of each subscale's change score on the Preschool Climate Scale (PCS) to differ from 0 in Year 2 for both Groups across countries.

| TSWQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| *Teacher-student* | -.25 | -.16 | .03 | .06 | .13* | .15* | .04 | -.07 | .16 | -.53 |
| *Student-Student* | .09 | .02 | .20** | .18 | .33* | .64* | -.09 | .21 | 4.89* | 2.27* |
| *Teacher-home* | -.15 | -.04 | .01 | .09 | .13* | .26* | .16 | -.01 | .85 | .45 |
| *School safety* | -.15 | -.06 | .18* | .11 | .13* | .15* | .04 | -.03 | 1.34 | .10 |
| *Clarity of expectations* | .03 | .01 | .31*** | .15 | .34* | .56* | .11 | .13 | 5.08* | 1.71* |
| *Fairness of rules* | -.11 | -.04 | .19* | .14 | .19* | .28* | .00 | -.10 | 2.02* | .36 |
| *Respect of diversity* | -.26 | -.07 | .15* | .11 | .13* | .22* | -.04 | -.12 | .46 | .00 |
| *PCS Global* | -.11 | .05 | .15** | .12 | .19* | .32* | .32 | .00 | 2.29* | .61 |
| N | 46 | 46 | 34 | 22 | 92 | 16 | 12 | 20 | 199 | 104 |

*Notes*: * p < .05

According to the results from the Table 3.6.6b, change of the experimental group for the full sample of participants differed significantly from 0 scores in the subscales of *Student-Student, Clarity of expectations*, *Fairness of rules, and Respect of diversity,* which means that there is an improvement from Time 3 to Time 4 in these dimensions of the school climate. Also, teachers from the control group reported significantly higher scores on the subscales *Student-Student and Clarity of expectations* dimensions of the school climate.

However, beyond the results derived from the full sample, there are interesting findings for each country. Only in the Romania sample the change score revealed a significant increase in the scores of the school climate for both experimental and control group from Time 3 to Time 4. Significant improvements were reported by Cypriot teachers of the experimental

group too in most of the dimensions of school climate, but not by the teachers from the control group who received the intervention during Year 2. In the other two countries no increase of the school climate level observed after the intervention for neither group of teachers.

According to table 3.6.7a it seems that no significant group effects appeared from Time 1 to Time 2 in the subscales Positive, Engagement, Accomplishment, Negative, Health, the PERMA Global Score, the item 2 for Loneliness and the item 23 of the scale (happiness). The only significant group effect appeared in the subscales Relationship and Meanings.

The ANOVA results provide insights into the variations in these well-being dimensions. Positive emotions displayed notable differences, with the $F_G$ ANOVA value at 2.31 and $F_C$ at 1.97, suggesting some variance between groups and countries, but without statistical significance. Engagement demonstrated subtle group differences ($F_G = 0.25$), a larger country effect ($F_C = 1.64$), and a moderate interaction effect (G x C = 0.81). Interestingly, Relationships exhibited a significant country effect ($F_C = 1.93$) and a noteworthy interaction effect (G x C = 3.23*), implying that the interplay between groups and countries may influence this aspect of well-being. Meaning and Accomplishment both indicated a statistically significant group effect ($F_G = 2.32$ and 0.40, respectively) and a significant country effect for Meaning ($F_C = 2.76*$), with a stronger interaction effect for Meaning (G x C = 3.43*). Negative emotions revealed substantial group ($F_G = 3.85$) and country effects ($F_C = 2.91*$), though the interaction effect was moderate (G x C = 1.29). Health and PERMA Global displayed minimal effects across groups and countries.

**Table 3.6.7a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on the PERMA Profiler in Year 2 for both Groups across countries

| PERMA subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Positive -P | Experimental | .21 | 1.56 | .26 | .97 | .02 | 1.70 | -.33 | 1.12 | 2.31 | 1.97 | 1.72 |
| | Control | .23 | 1.51 | .12 | .83 | 1.06 | 2.74 | -.05 | 1.18 | | | |
| Engagement - E | Experimental | .37 | 1.51 | .61 | 1.12 | .06 | 2.26 | -.41 | 1.27 | .25 | 1.64 | .81 |
| | Control | .49 | 1.57 | .41 | .99 | -.14 | 3.22 | .35 | 1.02 | | | |
| Relationships - R | Experimental | .22 | 1.44 | .72 | 1.13 | -.10 | 1.72 | -.10 | 1.15 | .21 | 1.93 | 3.23* |
| | Control | -.05 | 1.62 | .21 | 1.26 | 1.06 | 2.63 | -.11 | 1.29 | | | |
| Meaning - M | Experimental | .27 | 1.49 | .57 | 1.02 | -.07 | 1.49 | -.76 | 1.24 | 2.32 | 2.76* | 3.43* |
| | Control | .03 | 1.56 | .17 | 1.06 | .89 | 2.88 | .08 | 1.00 | | | |
| Accomplishment -A | Experimental | .27 | 1.41 | .59 | 1.21 | -.02 | 1.53 | -.35 | 1.34 | .40 | 3.07* | 1.02 |
| | Control | .20 | 1.51 | .35 | 1.34 | -.64 | 3.30 | .07 | 1.11 | | | |
| Negative - N | Experimental | -.05 | 1.89 | .15 | 1.35 | .36 | 3.17 | .09 | 1.77 | 3.85 | 2.91* | 1.29 |
| | Control | -.22 | 1.91 | .94 | 1.60 | 1.75 | 4.44 | .59 | 2.05 | | | |
| Health -H | Experimental | -.13 | 1.72 | .20 | 1.51 | .19 | 2.11 | -.24 | 1.05 | .83 | 1.67 | .14 |
| | Control | .01 | 1.81 | .45 | 1.07 | .64 | 2.97 | -.23 | 1.26 | | | |
| PERMA Global | Experimental | .25 | 1.35 | .50 | .77 | -.01 | 1.52 | -.39 | .93 | .65 | 1.38 | 1.17 |
| | Control | .15 | 1.44 | .22 | .83 | .50 | 2.63 | .05 | .91 | | | |
| Loneliness (item 2) | Experimental | .14 | 2.75 | -.15 | 1.86 | -.30 | 6.10 | .39 | 2.93 | .19 | 1.07 | 1.33 |
| | Control | -.28 | 2.72 | .09 | 1.82 | 1.69 | 4.98 | -.49 | 3.56 | | | |
| Happy (item 23) | Experimental | .14 | 1.49 | .23 | .95 | .04 | 1.98 | -.39 | 1.09 | .75 | .47 | 1.01 |
| | Control | .00 | 1.56 | .04 | 1.36 | .75 | 3.00 | .00 | 1.45 | | | |
| N | | 102 | | 56 | | 108 | | 55 | | 321 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect

As it is shown in Table 3.6.7b change scores of the control group for the full sample of participants differed significantly from 0 in two subscale scores assessed by the PERMA

profiler, which means that there is a significant improvement from Time 3 to Time 4 in two dimensions of teachers' overall well-being and flourishing (Engagement and Negative) which is indicative of the effect that the ProW intervention had on control group teachers' sense of wellbeing. Also, it is notable that none of the PERMA profiler's scores changed significantly for the experimental group.

In more detail, Cyprus experimental group teachers appear to have the largest probability of change in Year 2 as it is indicated by their scores in the subscales Engagement, Relationships, Meaning, Accomplishment, and their PERMA Global Score.

Greek teachers in the control group also exhibited significant change in the Engagement subscale.

No significant differences were found in overall well-being elements for any of the teachers' groups from Romania and Portugal except for a negative change in the subscale of Meaning that was indicated by the Portugal experimental group teachers.

In general, improvements in PERMA Profiler scores from Time 3 to Time 4 were substantial for most of the subscales considering the analyses of the full sample and there were some interesting differentiations among participating countries.

**Table 3.6.7b.** One sample *t*-test values for examining probability of each subscale's change score on the PERMA Profiler to differ from 0 in Year 2 for both Groups across countries.

| PERMA subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Positive -P | .98 | 1.03 | 1.58 | .69 | .10 | 1.55 | -1.26 | -.48 | .75 | 1.54 |
| Engagement - E | 1.85 | 2.13** | 3.16** | 1.92 | .25 | -.18 | -1.36 | 1.60 | 1.51 | 2.18* |
| Relationships - R | 1.12 | -.21 | 3.74*** | .79 | -.55 | 1.62 | -.37 | -.23 | 1.20 | .95 |
| Meaning - M | 1.32 | .16 | 3.26** | .74 | -.44 | 1.24 | -2.60* | .62 | .69 | 1.34 |
| Accomplishment -A | 1.40 | .93 | 2.84* | 1.22 | -.11 | -.78 | -1.11 | .47 | 1.31 | .53 |
| Negative - N | -.19 | -.79 | .63 | 2.75* | 1.08 | 1.58 | .22 | 1.66 | 1.05 | 2.19* |
| Health -H | -.57 | .05 | .79 | 2.0 | .89 | .87 | -.97 | -1.10 | .52 | .64 |
| PERMA Global | 1.35 | .72 | 3.76*** | 1.23 | -.07 | .75 | -1.78 | .36 | 1.19 | 1.38 |
| Loneliness (item 2) | .72 | -.70 | 1.44 | .23 | .21 | 1.36 | -1.51 | -.83 | -.28 | -.05 |
| Happy (item 23) | .39 | .00 | -.46 | .16 | -.48 | 1.00 | .56 | .11 | .56 | .72 |
| N | 55 | 47 | 34 | 22 | 92 | 16 | 18 | 39 | 124 | |

Notes: * p < .05

### b. Findings for Children

According to table 3.6.8a it seems that the gain scores of children in Experimental group differ from the respective scores of the Control group in the subscale of SDQ reflecting children's Emotional Problems. Specifically, in the Emotional problems subscale there is a group effect but no interaction effect between country and group. According to these results it seems that children in the Experimental group differ from children in the Control group in general. There is also a country effect in Prosocial Skills subscale, but neither group effect nor interaction between country and group. Children of control group (CG) in all countries except from Portugal showed a significant increase of Prosocial skills than children of control group (EG).

**Table 3.6.8a.** Means (M) and standard deviations (sd) of subscales' gain scores (from T3 to T4) on the Strengths and Difficulties Questionnaire (SDQ) in Year 2 for both Groups across countries

| SDQ subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Emotional problems | Experimental | -.06 | .33 | -.03 | .33 | -.05 | .47 | -.06 | .44 | 4.25* | .51 | .99 |
| | Control | -.04 | .33 | .00 | .38 | -.02 | .37 | .04 | .39 | | | |
| Conduct problems | Experimental | .00 | .28 | -.03 | .28 | -.02 | .45 | .05 | .38 | .00 | 1.05 | .54 |
| | Control | -.01 | .28 | -.01 | .31 | .01 | .30 | .01 | .41 | | | |
| Hyperactivity | Experimental | -.05 | .37 | -.08 | .37 | -.06 | .56 | -.01 | .48 | .75 | 1.71 | 1.02 |
| | Control | -.03 | .34 | -.07 | .33 | -.12 | .47 | -.06 | .45 | | | |
| Peer problems | Experimental | -.06 | .30 | -.04 | .30 | -.05 | .46 | .01 | .23 | .04 | .72 | .85 |
| | Control | -.04 | .29 | -.03 | .32 | -.03 | .43 | -.05 | .31 | | | |
| Prosocial skills | Experimental | .11 | .44 | .13 | .37 | .08 | .64 | .04 | .34 | 2.9 | 3.61* | .53 |
| | Control | .14 | .39 | .20 | .41 | .15 | .64 | .04 | .40 | | | |
| N | | 1110 | | 446 | | 942 | | 252 | | 2750 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

**Table 3.6.8b**. One sample *t*-test values for examining probability of each subscale's gain score on the Strengths and Difficulties Questionnaire (SDQ) to differ from no change (0 score) in Year 2 for both Groups across countries.

| SDQ subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Emotional problems | -2.65* | -2.47* | -1.64 | .040 | -3.13* | -.60 | -1.22 | 1.14 | -4.53* | -1.38 |
| Conduct problems | .06* | -.53 | -1.68 | -.34 | -1.10 | .29 | 1.28 | .44 | -1.06 | -.16 |
| Hyperactivity | -3.6* | -2.10* | -3.38* | -2.93* | -3.16* | -2.93* | -.23 | -1.55 | -5.24* | -4.51* |
| Peer problems | -5.01* | -3.33* | -2.26* | -1.15 | -2.96* | -.87 | .53 | -1.94 | -5.36* | -3.86* |

| Prosocial skills | 6.31* | 8.1* | 5.93* | 6.61* | 3.46* | 2.72* | 1.10 | .96 | 7.65* | 9.44* |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 592 | 518 | 272 | 174 | 809 | 133 | 96 | 156 | 1769 | 981 |

*Notes:* * p < .05

As it is shown in Table 3.6.8b the gain scores of children for the full sample differed significantly from 0 in most of the cases for both groups. It is notable that both groups showed significant gains from Time 3 to Time 4 in the prosocial scale, which is a good indicator of the positive effects of the implementation of ProW on children's promotion of social skills from the SWPBS module of the intervention.

In Greece emotional, hyperactivity and peer problems diminished significantly for both groups and prosocial skills improved also for both groups. An indication of a positive effect of the ProW intervention for the Greek sample derived from the findings for the significantly diminished scores in both groups regarding behavioral problems and increased scores for prosocial skills.

In Cyprus hyperactivity and peer problems diminished significantly for the experimental group and hyperactivity diminished also for control group. Prosocial skills improved for both groups. and this is clear evidence that the intervention had an effect on the improvement of these and the aforementioned skills.

Romanian children of the experimental group appear to improve their prosocial skills after the intervention indicating the positive effect of ProW. The experimental group seems to decrease the emotional, the hyperactivity and peer problems after the intervention of the first year and the control group diminishes the hyperactivity scores and improves the prosocial skills scores after the intervention, so ProW had a positive effect.

Unexpectedly, in the case of Portugal the SDQ gain scores in both groups do not seem to differ significantly from 0.

**Table 3.6.9a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on the Child Behavior Rating Scale (CBRS) in Year 2 for both Groups across countries

| CBRS subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Classroom self-regulation | Experimental | .21 | .66 | .13 | .59 | .36 | .95 | .22 | .38 | 3.593 | 10.45* | 2.19 |
| | Control | .18 | .55 | .30 | .54 | .47 | .89 | .24 | .67 | | | |
| Interpersonal skills | Experimental | .14 | .59 | .10 | .56 | .32 | .81 | -.04 | .52 | 5.20* | 19.73* | 2.03 |
| | Control | .13 | .53 | .26 | .53 | .40 | .71 | .00 | .54 | | | |
| Social play-interaction | Experimental | .26 | .71 | .20 | .66 | .40 | .92 | .24 | .31 | 2.47 | 9.68* | 2.58 |
| | Control | .25 | .58 | .39 | .62 | .51 | .81 | .17 | .48 | | | |
| Engagement | Experimental | .19 | .77 | .12 | .65 | .32 | .89 | .19 | .53 | .86 | .03* | 2.69* |
| | Control | .17 | .60 | .33 | .63 | .29 | .86 | .17 | .52 | | | |
| Social problem solving | Experimental | .29 | .78 | .25 | .67 | .51 | 1.05 | .08 | .68 | 3.48 | 13.70* | 1.60 |
| | Control | .28 | .62 | .44 | .75 | .55 | .95 | .18 | .66 | | | |
| | N | 1110 | | 446 | | 942 | | 234 | | 2732 | | |

*Notes:* * p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

According to table 3.6.9a results in the interpersonal skills subscale of the Child Behavior Rating Scale (CBRS) show significant differences between the experimental and control groups. Additionally, all subscales (Classroom self-regulation, interpersonal skills, social play-interaction, engagement, and social problem solving) also exhibit significant variations between groups depending on the country. Classroom self-regulation displayed a notable group effect and a substantial country effect ($F_C$ = 10.45***), signifying significant variations in this aspect of behavior. Interpersonal skills demonstrated a statistically significant group effect ($F_G$ = 5.20*) and a remarkably pronounced country effect ($F_C$ = 19.73***), underscoring substantial differences between groups and countries. Similarly, Social play-interaction exhibited a substantial country effect ($F_C$ = 9.68***), emphasizing the influence of country factors on children's social play behaviors. Engagement showcased a modest group effect ($F_G$ = 0.86) and a minor country effect ($F_C$ = 0.03*), with a notable interaction effect (G x C =

2.69\*), suggesting complex interplays between group assignments and country contexts in shaping children's engagement. Social problem solving displayed a group effect ($F_G$ = 3.48) and a substantial country effect ($F_C$ = 13.70\*\*\*), underlining the multifaceted influences on children's problem-solving skills.

**Table 3.6.9b**. One sample *t*-test values for examining probability of each subscale's change score on the Child Behavior Rating Scale (CBRS) to differ from no change (0 score) in Year 2 for both Groups across countries.

| CBRS subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Classroom self-regulation | 7.63\* | 7.41\* | 3.61\* | 7.29\* | 10.77\* | 6.12\* | 5.25\* | 4.34\* | 14.02\* | 12.32\* |
| Interpersonal skills | 5.98\* | 5.60\* | 2.85\* | 6.46\* | 11.36\* | 6.52\* | -.54 | .74 | 12.62\* | 9.58\* |
| Social play-interaction | 8.85\* | 9.76\* | 5.04\* | 8.30\* | 12.33\* | 7.28\* | 6.98\* | 4.11\* | 16.45\* | 14.94\* |
| Engagement | 6.18\* | 6.49\* | 3.08\* | 6.80\* | 10.13\* | 3.91\* | 3.22\* | 4.10\* | 12.47\* | 10.54\* |
| Social problem solving | 9.06\* | 10.12\* | 6.23\* | 7.72\* | 13.70\* | 6.66\* | .80 | 3.14\* | 17.25\* | 14.25\* |
| N | 592 | 518 | 272 | 174 | 809 | 133 | 85 | 153-157[a] | 1758 | 978-982 |

Notes: \* p < .05; [a] Participants (N) in Portuguese sample variates across subscales, because of the listwise selection method for missing cases.

Overall, the combined findings from the ANOVAs and one sample t-tests for the CBRS scale showed that the ProW intervention influence various social and behavioral skills of children across the countries of the project.

As it is shown in Table 3.6.9b gain scores of children in both groups for the full sample differed significantly from 0 for all CBRS subscales and in each of the four participating countries. In more detail, the experimental group consistently shows statistically significant improvements

compared to the control group. Additionally, the total sample analysis also reveals highly significant differences, indicating the overall effectiveness of the intervention. These findings suggest that the ProW intervention had a positive impact on the measured behaviors across all countries included in the study.

**Table 3.6.10a.** Means (M) and standard deviations (sd) of subscales' change scores (from T3 to T4) on the Adaptive Social Behavior Inventory (ASBI) in Year 1 for both Groups across countries

| ASBI subscales | Group | Greece | | Cyprus | | Romania | | Portugal | | ANOVA | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | M | SD | $F_G$ | $F_C$ | G x C |
| Conformity / Compliance | Experimental | .05 | .29 | .07 | .30 | .06 | .36 | .00 | .34 | .00 | 2.98* | .15 |
| | Control | .04 | .26 | .08 | .34 | .07 | .37 | .00 | .37 | | | |
| Prosocial | Experimental | .08 | .33 | .09 | .30 | .03 | .40 | .05 | .20 | .16 | 4.53** | 1.89 |
| | Control | .08 | .29 | .13 | .32 | .09 | .42 | -.01 | .35 | | | |
| Confidence / Independence | Experimental | .07 | .37 | .09 | .33 | .08 | .37 | .02 | .28 | .47 | 4.48** | 1.44 |
| | Control | .10 | .34 | .15 | .34 | .05 | .42 | -.01 | .35 | | | |
| | N | 1110 | | 446 | | 992 | | 244 | | 2792 | | |

*Notes:* \* p < .05; G = Group effect; C = Country effect; Bold digits indicate significant difference between groups at p < .05

**Table 3.6.10b**. One sample *t*-test values for examining probability of each subscale's change score on the Adaptive Social Behavior Inventory (ASBI) to differ from no change (0 score) in Year 1 for both Groups across countries.

| ASBI subscales | Greece | | Cyprus | | Romania | | Portugal | | Total sample | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Exp | Con | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| Conformity/Compliance | 4.57* | 3.81* | 4.15* | 3.17* | 5.07* | 2.30* | .19 | .02 | 7.66* | 4.80* |
| Prosocial | 6.38* | 6.86* | 5.31* | 5.65* | 2.60* | 2.53* | 2.41* | -.57 | 7.46* | 7.63* |
| Confidence/Independence | 4.87* | 7.07* | 4.49* | 5.95* | 6.37* | 1.49* | 0.85 | .40 | 9.10* | 8.11* |

| N | | | 592 | 518 | 272 | 174 | 809 | 133 | 88 | 156 | 1761 | 981 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

*Notes:* * p < .05

According to tables 3.6.10a it seems that there is no group or interaction effects on the gain scores of children in any of the subscales of ASBI, but there is a country effect on all of the subscales The pattern of these findings shows that the gain scores of the experimental and the control group differ between the countries, but this has no effect on the impact that the intervention made on children of these two groups. In other words, the gain scores were different between countries, but the effect of the intervention was not country specific.

According to table 3.6.10b it seems that the gain scores of children in almost all the countries exhibit significant differences for both experimental and control groups emerged between the groups' performance from Time 3 to Time 4. These findings show that the changes in children's behavior are not due to the intervention implemented in Year 2 alone. It is probable that the intervention received in Year 1 has still effects on the experimental group and the control group seems to benefit from the implementation in Year 2.

As it is shown in Table 3.6.10b gain scores of children in both groups for the full sample differed significantly from 0, which means that there is an increase from Time 3 to Time 4. Overall, there are significant positive effects of the intervention for the increase of social and behavioral skills for all children.

## 3.7 From Time 1 to Time 4: Matched T1 with T4 (Teachers & Children) - Value added analysis (Progress between T1 – T4)

In this section is presented the changes made in participants' scores from the beginning of the project before the initiation of ProW intervention in the experimental group at Time1 until the end of the of the ProW intervention in the control group at Time 4. Particularly, we examined descriptively whether participants' (teachers and children) scores change across the 4 assessment points during the 2 years of the project. In this analysis we included only those teachers and children that participated across all the assessment points during the 2 years of the project. For this reason, the sample size of participants in each country is lower than the sample size of teachers and children participated in the analyses run in the previous sections.

In the following tables are presented means and standard deviations of participants' scores from each country across the 4 assessment time points. According to our expectation for a substantial impact of the ProW intervention on teachers' and children's outcomes, the experimental group's mean scores would be increased from Time 1 to Time 2 but would remain constant or change slightly during Time 3 and 4. On the other hand, the control group's mean scores would remain constant or change slightly during Time 1 and 2, but would be increased from Time 3 to Time 4 when the Prow intervention implemented for them. In general, both groups' participants would be at a similar level at Time 4, given that all participants in our project received the intervention during the 2 years period.

### a. Findings for Teachers

According to the descriptives shown in Table 3.7.1 in all groups and countries there is a substantial increase of teachers' scores from Time 1 to Time 4 with small variations across the countries.

**Table 3.7.1**. Means (M) and standard deviations (sd) of the Teacher Subjective Wellbeing Questionnaire (TSWQ) subscales in both groups across times (T) of assessment (T1-T4)

| TSWQ subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Teaching Efficacy* | T1 | 3.44 (.49) | 3.43 (.46) | 3.46 (.43) | 3.03 (.65) | 3.65 (.40) | 3.75 (.33) | 3.43 (.49) | 3.55 (.36) |
| | T2 | 3.57 (.41) | 3.48 (.48) | 3.56 (.43) | 2.91 (.49) | 3.68 (.50) | 3.77 (.31) | 3.48 (.39) | 3.64 (.50) |
| | T3 | 3.54 (.48) | 3.51 (.46) | 3.58 (2.9) | 2.90 (.53) | 3.68 (.45) | 3.70 (.33) | 3.54 (.46) | 3.46 (.51) |
| | T4 | 3.57 (.44) | 3.70 (.38) | 3.75 (.40) | 3.10 (.60) | 3.77 (.35) | 3.78 (.29) | 3.43 (.43) | 3.54 (.49) |
| *School Connectedness* | T1 | 3.66 (.42) | 3.66 (.43) | 3.59 (.50) | 3.23 (.79) | 3.63 (.43) | 3.8 (.29) | 3.47 (.47) | 3.59 (.47) |
| | T2 | 3.76 (.32) | 3.73 (.34) | 3.51 (.64) | 3.15 (.61) | 3.60 (.58) | 3.82 (.24) | 3.41 (.47) | 3.40 (.59) |
| | T3 | 3.74 (.31) | 3.67 (.36) | 3.44 (.52) | 3.23 (.45) | 3.61 (.57) | 3.80 (.25) | 3.38 (.63) | 3.27 (.59) |
| | T4 | 3.74 (.36) | 3.75 (.48) | 3.57 (.71) | 3.18 (.023) | 3.66 (.51) | 3.87 (.23) | 3.30 (.59) | 3.20 (.70) |
| *Teacher Wellbeing* | T1 | 3.55 (.40) | 3.55 (.38) | 3.53 (.39) | 3.13 (.44) | 3.64 (.35) | 3.78 (.28) | 3.42 (.40) | 3.57 (.37) |
| | T2 | 3.66 (.32) | 3.60 (.36) | 3.54 (.45) | 3.03 (.40) | 3.64 (.50) | 3.80 (.26) | 3.42 (.33) | 3.52 (.51) |
| | T3 | 3.64 (.33) | 3.69 (.37) | 3.52 (.34) | 3.07 (.37) | 3.65 (.47) | 3.75 (.25) | 3.50 (.47) | 3.37 (.50) |
| | T4 | 3.66 (.37) | 3.73 (.40) | 3.66 (.45) | 3.14 (.48) | 3.72 (.38) | 3.82 (.23) | 3.40 (.46) | 3.37 (.56) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 14 | 23 |

*Notes*: * $p < .05$; min = 1, max = 4; T = Time

In the case of Greece, teachers from the experimental group increased their teaching efficacy scores from Time 1 to Time 2 but remained in similar scores during the next two time periods (T3-T4). However, the control group showed a reverse picture with teachers' scores to remain constant from Time 1 to Time 3 but they increased from Time 3 to Time 4. This seems

reasonable and according to our expectations for a change of teachers' scores after the implementation of the intervention in each group. Also, in T4 both groups of teachers showed similar scores, although the control group outperformed slightly teachers from the experimental group who received the intervention a year earlier. Similar findings occurred for the School Connectedness and Teacher Wellbeing regarding the Greek teachers.

In the case of Cyprus teachers from the experimental group increased their teaching efficacy scores during the four periods (T1-T4). The control group teachers decreased slightly their teaching efficacy scores from Time 1 to Time 3, but they increased from Time 3 to Time 4, after the implementation of the intervention. Regarding their Connectedness with the School teachers from the experimental group surprisingly decreased their scores from Time 1 to Time 3 and increased their scores in Time 4, reaching the level they had in Time 1. Regarding the control group and this subscale, teachers decreased their scores from Time 1 to Time 2, and by the beginning of Time 3 they had similar score which also decreased after the intervention. Regarding their Wellbeing, teachers from the experimental group remained in similar scores from Time 1 to Time 3 and increased their scores in Time 4. The control group scores decreased from Time 1 to Time 2 and increased from Time 3 to Time 4, after the intervention phase.

In the case of Romanian, teachers from the experimental group increased slightly their efficacy scores from Time 1 to Time 2, remained at the same scores in Time 3 and increased their scores in Time 4. The control group teachers remained almost in the same scores from Time 1 to Time 2, with a reduction in Time 3 and increased their scores from Time 3 to Time 4, after the implementation of the intervention. Regarding their Connectedness with the School, teachers from the experimental group decreased their scores from Time 1 to Time 2 and had the same score in Time 3 (which they had at the beginning of the baseline assessment), which was also decreased at the end of Time 4. The control group teachers remained in similar scores from Time 1 to Time 3, but they increased from Time 3 to Time 4. This seems reasonable and according to our expectations for a change of teachers' scores after the implementation of the intervention. Regarding their Wellbeing, teachers from the

experimental group remained in similar scores from Time 1 to Time 3 and increased their scores from Time 3 to Time 4. However, teachers in the control group remained in similar scores from Time 1 to Time 3 and increased their scores from Time 3 to Time 4.

In the case of Portugal, teachers from the experimental group increased their teaching efficacy from Time 1 to Time 3, but decreased their scores in Time 4, reaching the level they had in Time 1. Teachers from the control group increased their scores from Time 1 to Time 2 and had a lower score in Time 3, which was increased at the end of Time 4. For both groups regarding teaching efficacy teachers at Time 1 and Time 4 had the same scores (at the baseline assessment). As far as School Connectedness is concerned, teachers from both groups (experimental and control) showed constant reduction in their scores from Time 1 to Time 4. Regarding their Wellbeing, teachers from the experimental group remained in same scores from Time 1 to Time 2 (after the intervention phase), increased their scores in Time 3 and also reduced their scores in Time 4. For the control group we can observe similarities, by having a decrease from Time 1 to Time 2 and constant scores from Time 3 to Time 4, after the intervention phase.

**Table 3.7.2.** Means (M) and standard deviations (sd) of subscales' scores on the Teachers' Sense of Efficacy Scale (TSES -short form) in both groups across times of assessment (T1-T4)

| TSES-short subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Student engagement* | T1 | 7.52 (1.02) | 7.78 (.70) | 7.45 (.67) | 6.80 (1.14) | 7.94 (1.01) | 7.00 (1.95) | 7.40 (.63) | 7.61 (.91) |
| | T2 | 7.72 (1.32) | 7.74 (.82) | 7.74 (.71) | 6.70 (1.16 | 8.24 (.69) | 7.75 (.80) | 7.55 (.83) | 7.38 (1.18) |
| | T3 | 7.35 (1.0) | 7.45 (1.17) | 7.73 (.75) | 6.65 (1.13) | 8.28 (.74) | 8.13 (.99) | 7.52 (.83) | 7.37 (1.09) |
| | T4 | 7.74 (.77) | 7.78 (.91) | 8.05 (.71) | 6.97 (1.14) | 8.38 (.69) | 8.28 (.66) | 7.70 (.76) | 7.49 (1.16) |
| | T1 | 7.55 | 7.63 | 7.31 | 7.02 | 8.02 | 7.30 | 7.15 | 7.05 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | (1.18) | (.89) | (.58) | (1.17) | (1.04) | (2.06) | (.91) | (.96) |
| *Instructional strategies* | T2 | 7.81 (1.35) | 7.75 (.85) | 7.79 (.79) | 8.13 (1.08) | 7.79 (.71) | 8.13 (.65) | 7.42 (.90) | 6.97 (1.16) |
| | T3 | 7.39 (1.00) | 7.31 (1.26) | 7.72 (.72) | 6.65 (1.25) | 8.47 (.64) | 8.52 (.50) | 7.67 (1.01) | 7.28 (.98) |
| | T4 | 7.78 (.97) | 7.80 (.87) | 8.09 (.69) | 7.02 (1.14) | 8.52 (.62) | 8.38 (.69) | 7.58 (.90) | 7.31 (1.30) |
| *Classroom management* | T1 | 7.38 (.95) | 7.40 (.99) | 7.71 (.65) | 6.77 (1.20) | 7.94 (1.00) | 7.22 (1.93) | 7.13 (.82) | 7.53 (.99) |
| | T2 | 7.72 (1.09) | 7.56 (.89) | 7.72 (.81) | 6.63 (1.06) | 8.15 (.77) | 8.02 (.61) | 7.25 (.94) | 7.35 (1.08) |
| | T3 | 7.18 (.91) | 7.19 (1.26) | 7.85 (.87) | 6.32 (1.02) | 8.27 (.72) | 8.33 (.66) | 7.57 (.86) | 7.30 (1.35) |
| | T4 | 7.60 (.85) | 7.59 (.91) | 8.11 (.64) | 6.93 (1.08) | 8.43 (.67) | 8.17 (.71) | 7.58 (.915) | 7.53 (1.10) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 15 | 22 |

Notes: * $p < .05$; min = 1, max = 9      T = Time

According to the descriptives shown in Table 3.7.2 in all groups and countries there is a substantial increase of teachers' scores from Time 1 to Time 4 with small variations across the countries.

In the case of Greece, teachers from the experimental group increased the Student Engagement scores, the Instructional Strategies scores and the Classroom Management scores from Time 1 to Time 2 and from Time 3 to Time 4 (starting from a lower score in Time 3 than they performed at the end of Time 2). However, the control group showed increased scores in all subscales from Time 3 to Time 4 and Greek teachers from the control group showed a slight increase in the Instructional Strategies and the Classroom Management subscales from Time 1 to Time 2.

In the case of Cyprus, teachers from the experimental group increased the Student Engagement scores and the Instructional Strategies scores from Time 1 to Time 2 and from Time 3 to Time 4. Regarding the Classroom Management subscale scores, it remained almost the same from Time 1 to Time 2 and increased from Time 3 to Time 4. The control group

teachers showed an increase in scores for all the subscales from Time 3 to Time 4 as expected after the one-year intervention in Year 2.

In the case of Romania, teachers from experimental group increased the Student Engagement scores and the Classroom Management scores from Time 1 to Time 2 and from Time 3 to Time 4. Regarding the Instructional Strategies subscale it decreased from Time 1 to Time 2 and slightly increased from Time 3 to Time 4. However, scores from teachers included in the control group showed that regarding the Student Engagement subscale there was an increase from Time 1 to Time 2 and from Time 3 to Time 4 and unexpectedly in the other two subscales there was an increase in scores from Time 1 to Time 2 and a decrease from Time 3 to Time 4.

In the case of Portugal, teachers from the experimental group increased the Student Engagement scores, the Instructional Strategies scores and the Classroom Management scores from Time 1 to Time 2. From Time 3 to Time 4 the scores increased for the first subscale, decreased for the second and remained stable for the third subscale. Teachers from the control group showed a decrease for the three subscales from Time 1 to Time 3 and an increase in scores for all the subscales from Time 3 to Time 4 as expected after the one year intervention (this increase was small for the Instructional Strategies subscale).

According to the descriptives shown in Table 3.7.3 it seems that in all groups and countries there is a rather slight improvement on teachers' social self-efficacy scores from Time 1 to Time 4 with small variations across the countries. This improvement varies across the different subscales of the TSSES scale.

**Table 3.7.3.** Means (M) and standard deviations (sd) of subscales' scores on the Teacher Social Self-efficacy (TSSES)in both groups across times of assessment (T1-T4)

| TSSES subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Teacher Sensitivity* | T1 | 7.26 (1.19) | 7.29 (.80) | 7.26 (.58) | 6.68 (1.52) | 8.36 (.62) | 8.18 (.64) | 7.78 (.58) | 7.89 (.95) |
| | T2 | 7.86 (.80) | 7.49 (.91) | 7.72 (.72) | 6.87 (1.0) | 8.63 (.46) | 8.37 (.74) | 7.57 (1.03) | 7.68 (.88) |
| | T3 | 7.35 (1.03) | 7.40 (1.00) | 7.94 (.60) | 6.67 (1.20) | 8.53 (.56) | 8.39 (.65) | 7.90 (.78) | 7.62 (.86) |
| | T4 | 7.69 (.87) | 7.67 (.93) | 8.10 (.64) | 7.12 (.99) | 8.55 (.54) | 8.36 (.53) | 8.00 (.73) | 7.78 (.87) |
| *Social Guidance* | T1 | 7.41 (1.12) | 7.41 (.73) | 7.58 (.58) | 7.11 (1.30) | 8.53 (.48) | 8.17 (.70) | 7.58 (.57) | 7.81 (.93) |
| | T2 | 7.42 (.95) | 7.91 (.75) | 7.40 (.94) | 8.10 (.56) | 8.48 (.53) | 8.63 (.46) | 7.71 (.80) | 7.32 (1.11) |
| | T3 | 7.36 (1.08) | 7.52 (.86) | 8.10 (.66) | 7.00 (1.19) | 8.64 (.41) | 8.38 (.66) | 7.74 (.66) | 7.66 (.83) |
| | T4 | 7.70 (.87) | 7.70 (.90) | 8.32 (.55) | 7.39 (1.07) | 8.66 (.48) | 8.47 (.52) | 7.92 (.76) | 7.72 (.86) |
| *Teacher-Child Support* | T1 | 7.68 (.97) | 7.72 (.85) | 7.65 (.71) | 7.04 (1.47) | 8.51 (.58) | 8.29 (.60) | 7.95 (.78) | 7.88 (1.04 |
| | T2 | 7.97 (.87) | 7.68 (.90) | 8.06 (.68) | 7.27 (1.02) | 8.58 (.50) | 8.44 (.82) | 7.69 (1.06) | 7.69 (.74) |
| | T3 | 7.49 (1.08) | 7.55 (1.04) | 8.15 (.58) | 6.87 (1.25) | 8.58 (.52) | 8.47 (.66) | 7.94 (.71) | 7.73 (.85) |
| | T4 | 7.68 (.95) | 7.76 (.88) | 8.26 (.71) | 7.29 (1.03) | 8.67 (.42) | 8.53 (.57) | 8.17 (.92) | 7.75 (1.01) |
| *Classroom Climate-Children Engagement* | T1 | 7.45 (1.12) | 7.46 (.78) | 7.48 (.61) | 7.00 (1.34) | 8.49 (.49) | 8.17 (.61) | 7.74 (.56) | 7.82 (.89) |
| | T2 | 7.45 (.97) | 7.95 (.83) | 7.29 (.97) | 7.89 (.68) | 8.44 (.52) | 8.56 (.51) | 7.78 (.76) | 7.44 (1.16) |
| | T3 | 7.39 (1.14) | 7.59 (.85) | 7.97 (.61) | 6.80 (1.15) | 8.57 (.43) | 8.28 (.72) | 8.01 (.63) | 7.57 (.89) |
| | T4 | 7.64 (.86) | 7.64 (.92) | 8.16 (.65) | 7.29 (.89) | 8.64 (.49) | 8.38 (.67) | 7.93 (.82) | 7.80 (.92) |
| *Classroom Management-* | T1 | 7.54 (.99) | 7.44 (.90) | 7.48 (.55) | 6.99 (1.38) | 8.29 (.62) | 7.98 (.76) | 7.32 (.75) | 7.53 (.90) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Conflict Resolution* | T2 | 7.91 (.89) | 7.51 (.89 | 7.94 (.68) | 7.20 (1.19) | 8.36 (.60) | 8.17 (.81) | 7.21 (.96) | 7.38 (.96) |
| | T3 | 7.40 (1.06) | 7.44 (.89) | 8.06 (.58) | 6.75 (1.32) | 8.38 (.61) | 8.28 (.57) | 7.51 (.10) | 7.34 (.88) |
| | T4 | 7.72 (.89) | 7.77 (.83) | 8.25 (.68) | 7.41 (1.05) | 8.43 (.65) | 8.33 (.53) | 7.63 (.91) | 7.42 (.98) |
| *TSSES Global* | T1 | 7.47 (1.03) | 7.46 (.74) | 7.49 (.55) | 6.96 (1.38) | 8.44 (.47) | 8.15 (.61) | 7.67 (.56) | 7.79 (.90) |
| | T2 | 7.92 (.80) | 7.55 (.83) | 7.94 (.64) | 7.15 (1.01) | 8.55 (.46) | 8.32 (.78) | 7.45 (1.02) | 7.56 (.87) |
| | T3 | 7.40 (1.04) | 7.50 (.87) | 8.04 (.58) | 6.82 (1.19) | 8.54 (.45) | 8.37 (.61) | 7.82 (.66) | 7.58 (.82) |
| | T4 | 7.69 (.86) | 7.71 (.87) | 8.22 (.60) | 7.30 (.98) | 8.59 (.48) | 8.41 (.53) | 7.93 (.77) | 7.69 (.90) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 16 | 22 |

Notes: * $p < .05$; min = 1, max = 9; T = Time

In the case of Greece, teachers from the experimental group increased significantly their Teaching Sensitivity scores, the Classroom Management-Conflict Resolution scores, the Teacher-Child Support scores and The Teacher Social Self Efficacy (global) scores from Time 1 to Time 2 but decreased their scores during the third period and increased that after the end of the fourth period. However, the control group regarding the first, the third subscale and the TSSES global mentioned above showed an increase from Time 1 to Time 2 and significant increase from Time 3 to Time 4, after the intervention. Regarding the Teacher-Child Support subscale, teachers from the control group showed constant scores from Time 1 to Time 2 and increased scores from Time 3 to Time 4 after the intervention. Greek teachers from the experimental group showed similar scores from Time 1 to Time 3 regarding the Social Guidance subscale and the Classroom Climate-Children Engagement subscale, and a significant increase from Time 3 to Time 4. However, teachers from the control group for the Social Guidance subscale increased significantly their scores from Time 1 to Time 2, began from lower scores in Time 3 and ended with an increase in Time 4 after the intervention. Similar pattern was regarding the Classroom Climate-Children Engagement subscale scores from teachers from the control group, but with a slighter increase at the fourth phase.

In the case of Cyprus, teachers from the experimental group increased significantly their Teaching Sensitivity scores and the Teacher-Child Support scores, Classroom-Management Conflict Resolution scores and TSEES global in each of the four Times (T1, T2, T3, T4) and this increase was higher from Time 1 to Time 2. Regarding the Teacher Sensitivity scores, the Classroom-Management Conflict Resolution scores and TSEES global scores there was an increase in the control group from Time 1 to Time 2, as well as a significant increase from Time 3 to Time 4 after the intervention. The control group in the Teacher-Child Support subscale showed decreased scores from Time 1 to Time 2 and increased scores from Time 3 to Time 4. Moreover, teachers from the experimental group in Cyprus showed a decrease in their scores from Time 1 to Time 2 regarding the Social Guidance scale and an increase from Time 3 to Time 4 unexpectedly. Almost similar pattern was shown from the experimental group in the Classroom Climate-Children Engagement subscale with the exception that from Time 2 to Time 3 there were significant increased scores. Teachers from the control group increased their scores from Time 1 to Time 2 regarding the Social Guidance subscale and Classroom Climate-Children Engagement subscale and also increased the scores from Time 3 to Time 4 (with lower starting scores in Time 3) for both of these subscales.

In the case of Romania,  teachers from experimental group increased significantly their scores in Teaching Sensitivity subscale from Time 1 to Time 2 with also increase for the Teacher-Child Support, the Classroom Management-Conflict Resolution subscales and TSSES global from Time 1 to Time 2 period. For the Teacher Sensitivity scale there was almost no increase from Time 3 to Time 4, but for the other three subscales there were increases from Time 3 to Time 4· increase for the Teacher Child -Support subscale and slight increases for the other two subscales. Regarding the Social Guidance subscale the experimental group showed a decrease from Time 1 to Time 2 and also an increase from Time 2 to Time 3, which remained at almost same levels in Time 4. Similarities were found regarding the Child Climate-Children Engagement subscale but with an increase from Time 3 to Time 4. As far as the control group is concerned, there was an increase from Time 1 to Time 2 regarding the Teacher Sensitivity subscale with same levels in the next phases. For the other subscales there was also an

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increase from Time 1 to Time 2, as well as an increase from Time 3 to Time 4 after the intervention.

In the case of Portugal, teachers from the experimental group decreased their scores in the Teacher Sensitivity subscale, the Classroom Management- Conflict Resolution subscale from and the TSSES global from Time 1 to Time 2 with a slight increase from Time 3 to Time 4, same pattern was for the Teacher-Child Support subscale, but with a higher increase from Time 3 to Time 4 (It Time 3 there were higher scores than in Time 2). Regarding the Social Guidance subscale there was an increase from Time 1 to Time 2 and also an increase from Time 3 to Time 4. For the Classroom Climate-Children Engagement subscale there was a slight increase from Time 1 to Time 2 and from Time 2 to Time 3. As far as the control group is concerned there was a decrease from Time 1 to Time 2 for all subscales and an increase from Time 3 to Time 4 (only for the Teacher-Child subscale this increase was slight).

**Table 3.7.4.** Means (M) and standard deviations (sd) of subscales' scores on the Maslach Burnout Inventory (MBI)in both groups across times of assessment (T1-T4)

| MBI subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Emotional Exhaustion* | T1 | 1.68 (.88) | 1.79 (.94) | 2.18 (.86) | 2.47 (.77) | 1.12 (1.37) | .74 (.67) | 1.64 (1.45) | 1.78 (1.42) |
| | T2 | 1.47 (.75) | 1.89 (1.01) | 2.02 (1.05) | 2.94 (1.08) | 1.08 (1.07) | 1.01 (.95) | 2.26 (1.36) | 1.79 (1.31) |
| | T3 | 1.84 (1.02) | 1.91 (1.24) | 2.04 (.75) | 2.77 (1.03) | .95 (1.11) | .55 (.52) | 1.89 (1.71) | 2.19 (1.66) |
| | T4 | 1.73 (.95) | 1.64 (1.05) | 2.40 (1.23) | 2.75 (1.20) | .94 (.89) | 1.22 (1.03) | 2.28 (1.68) | 2.31 (1.40) |
| *Depersonalization* | T1 | .32 (.54) | .33 (.55) | .48 (.72) | .73 (.66) | .59 (1.23) | .17 (.35) | .45 (1.07) | .34 (.60) |
| | T2 | .23 (.56) | .33 (.51) | .30 (.42) | .99 (1.19) | .56 (.95) | .49 (.90) | .39 (.86) | .47 (.76) |
| | T3 | .30 (.57) | .33 (.88) | .49 (.55) | .88 (1.08) | .48 (1.00) | .13 (.26) | .39 (.55) | .16 (.25) |
| | T4 | .31 (.55) | .25 (.44) | .50 (.68) | 1.00 (1.37) | .38 (.64) | .45 (.71) | .45 (.56) | .63 (.93) |
| *Personal Accomplishment* | T1 | 5.06 (.60) | 5.31 (.57) | 5.09 (.60) | 5.09 (.84) | 5.13 (.94) | 4.70 (1.38) | 5.04 (.63) | 5.42 (.56) |
| | T2 | 5.34 (.59) | 5.21 (.64) | 5.22 (.59) | 4.86 (.89) | 5.39 (.65) | 5.27 (1.11) | 5.26 (.49) | 5.23 (.73) |
| | T3 | 5.17 (.63) | 5.29 (.67) | 5.23 (.61) | 4.72 (1.02) | 5.39 (.67) | 5.42 (.63) | 5.31 (.58) | 5.32 (.52) |
| | T4 | 5.32 (.61) | 5.40 (.61) | 5.31 (.63) | 5.04 (.65) | 5.41 (.76) | 5.53 (.57) | 4.99 (.70) | 5.03 (.86) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 15 | 23 |

Notes: * $p < .05$; min = 0, max = 6

The above table outline the means of subscale scores on the Maslach Burnout Inventory (MBI) over the four assessment times (T1 to T4) and across the four different countries (Greece, Cyprus, Romania, Portugal).

**For the experimental groups** Emotional Exhaustion scores demonstrated fluctuations across assessment times and countries. For preschool teachers in Greece, Emotional Exhaustion

appeared relatively consistent over time, while in Cyprus, there was a notable increase from T1 to T2 followed by a decrease. In Romania preschool teachers exhibited a decline from T1 to T3 before slightly rising at T4, while Portugal teachers saw an increase from T1 to T2 and then a fluctuating pattern.

Depersonalization scores displayed mixed trends across groups and countries. For Cyprus preschool teachers, there was a gradual increase over time, whereas in Romania, a decrease was observed from T2 to T4. Greece and Portugal teachers demonstrated relatively stable patterns with minor fluctuations.

Personal Accomplishment scores demonstrated relatively stable trends across most groups and countries. Portugal displayed a notable decrease in T4, possibly indicating challenges in maintaining a sense of personal accomplishment.

**For the control groups** Emotional Exhaustion scores showed diverse trajectories across countries and assessment times. In Greece, Emotional Exhaustion among preschool teachers remained relatively stable, whereas in Cyprus, there was a gradual increase from T1 to T4. Teachers from Romania exhibited fluctuations, with a decline from T1 to T3 and then an increase at T4. Portugal's preschool teachers displayed some variability, with a noticeable increase from T2 to T4.

Depersonalization scores displayed varying patterns across countries and assessment times. Preschool teachers from Cyprus experienced a consistent rise over time, while Romania teachers showed fluctuations, and teachers from Greece and Portugal demonstrated relatively stable levels.

Personal Accomplishment scores exhibited relatively stable patterns within control groups across teachers from most countries and assessment times. Portugal teachers demonstrated a consistent increase, possibly indicating positive perceptions of personal accomplishments.

In summary, the means of subscale scores on the Maslach Burnout Inventory (MBI) over the four assessment times reveal nuanced fluctuations in burnout experiences within control groups across countries and assessment times.

**Table 3.7.5.** Means (M) and standard deviations (sd) of subscales' scores on the Employ Satisfaction Inventory (ESI)in both groups across times of assessment (T1-T4)

| ESI subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Exp** | **Con** | **Exp** | **Con** | **Exp** | **Con** | **Exp** | **Con** |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Working Conditions* | T1 | 4.28 (0.65) | 4.23 (0.66) | 4.05 (0.57) | 3.94 (0.61) | 4.00 (0.46) | 3.88 (0.270 | 4.00 (0.55) | 4.23 (0.55) |
| | T2 | 4.53 (0.43) | 4.18 (0.75) | 4.22 (0.53) | 3.74 (0.64) | 4.35 (0.57) | 4.17 (0.68) | 3.99 (0.70) | 4.14 (0.73) |
| | T3 | 4.45 (0.48) | 4.24 (0.74) | 3.93 (0.94) | 3.92 (0.70) | 4.53 (0.60) | 4.45 (0.36) | 4.27 (0.52) | 4.18 (0.86) |
| | T4 | 4.46 (0.45) | 4.37 (0.60) | 4.14 (0.59) | 3.94 (0.58) | 4.45 (0.63) | 4.25 (0.51) | 4.05) 0.70 | 4.14 (0.74) |
| *Supervisor* | T1 | 4.53 (0.54) | 4.60 (0.49) | 4.45 (0.55) | 4.32 (0.68) | 4.11 (0.50) | 4.09 (0.49) | 4.33 (031) | 4.20 (0.87) |
| | T2 | 4.50 (0.66) | 4.44 (0.54) | 4.54 (0.55) | 4.21 (0.64) | 4.08 (0.73) | 4.28 (0.67) | 4.35 (0.36) | 4.52 (0.47) |
| | T3 | 4.52 (0.65) | 4.57 (0.45) | 4.24 (0.88) | 4.38 (0.62) | 4.51 (0.66) | 4.53 (0.37) | 4.30 (0.34) | 4.39 (0.59) |
| | T4 | 4.47 (0.70) | 4.50 (0.53) | 4.22 (0.90) | 4.30 (0.67) | 4.54 (0.67) | 4.43 (0.48) | 4.27 (0.55) | 4.05 (0.75 |
| *Pay* | T1 | 2.91 (1.14) | 2.84 (1.02) | 3.49 (1.22) | 3.83 (1.03) | 3.23 (0.80) | 3.13 (0.57) | 2.98 (0.75) | 3.03 (0.99) |
| | T2 | 2.79 (1.08) | 2.78 (1.02) | 3.56 (1.07) | 3.45 (1.17) | 3.12 (0.95) | 3.40 (0.85) | 2.91 (0.63) | 3.15 (0.88) |
| | T3 | 2.78 (1.17) | 2.70 (0.98) | 3.29 (1.22) | 3.50 (1.27) | 3.47 (0.58) | 3.23 (0.99) | 2.80 (0.60) | 3.19 (0.67) |
| | T4 | 2.73 (1.05) | 2.83 (1.06) | 3.20 (1.19) | 3.48 (1.23) | 2.57 (0.85) | 2.93 (0.73) | 2.83 (0.83) | 3.10 (0.80) |
| *Job Itself* | T1 | 4.56 (0.57) | 4.67 (0.42) | 4.43 (0.18) | 4.35 (0.51) | 4.16 (0.44) | 4.20 (0.27) | 4.11 (0.45) | 4.34 (0.52) |
| | T2 | 4.70 (0.54) | 4.52 (0.16) | 4.43 (0.54) | 4.13 (0.67) | 4.49 (0.49) | 4.26 (0.37) | 4.07 (0.43) | 4.19 (0.49) |
| | T3 | 4.61 (0.48) | 4.63 (0.59) | 3.29 (1.22) | 3.50 (1.27) | 4.53 (0.54) | 4.33 (0.44) | 4.28 (0.49) | 4.15 (0.460 |
| | T4 | 4.64 (0.44) | 4.61 (0.53) | 4.52 (0.63) | 4.03 (0.62) | 4.47 (0.51) | 4.30 (0.41) | 3.92 (0.78) | 3.91 (0.65) |
| *Organization as a Whole* | T1 | 3.69 (0.83) | 3.59 (0.78) | 2.84 (0.80) | 2.96 (0.75) | 3.99 (0.58) | 4.17 (0.31) | 3.27 (0.67) | 3.77 (1.00) |
| | T2 | 3.72 | 3.64 | 2.53 | 2.96 | 4.11 | 4.23 | 3.20 | 3.66 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | (0.67) | (0.76) | (0.57) | (0.59) | (0.78) | (0.58) | (0.63) | (0.87) |
| | T3 | 3.72 | 3.60 | 2.93 | 2.90 | 4.27 | 4.39 | 3.43 | 3.49 |
| | | (0.67) | (0.70) | (0.73) | (0.76) | (0.78) | (0.50) | (0.56) | (0.76) |
| | T4 | 3.56 | 3.78 | 3.03 | 2.81 | 4.35 | 4.25 | 3.39 | 3.40 |
| | | (0.78) | (0.71) | (0.79) | (0.42) | (0.78) | (0.51) | (0.52) | (0.90) |
| *Promotion* | T1 | 2.49 | 2.48 | 2.71 | 2.60 | 4.03 | 3.91 | 3.06 | 2.97 |
| | | (1.02) | (0.77) | (0.85) | (0.67) | (0.33) | (0.38) | (0.97) | (1.05) |
| | T2 | 2.53 | 2.30 | 2.72 | 2.38 | 4.04 | 4.10 | 2.62 | 2.81 |
| | | (1.01) | 0.88 | (0.81) | (0.59) | (0.39) | (0.72) | (0.83) | (0.95) |
| | T3 | 2.51 | 2.54 | 2.61 | 2.57 | 4.08 | 4.24 | 3.05 | 2.45\ |
| | | (1.08) | (0.97) | (0.95) | (0.78) | (0.52) | (0.63) | (0.98) | (0.99) |
| | T4 | 2.38 | 2.71 | 2.82 | 2.64 | 4.22 | 3.91 | 2.79 | 2.66 |
| | | (1.09) | (0.87) | (0.78) | (0.68) | (0.73) | (0.44) | (0.78) | (0.89) |
| *ESI Global* | T1 | 3.74 | 3.74 | 3.66 | 3.67 | 3.92 | 3.87 | 3.62 | 3.72 |
| | | (0.54) | (0.39) | (0.77) | (0.39) | (0.39) | (0.22) | (0.33) | (0.58) |
| | T2 | 3.79 | 3.64 | 3.73 | 3.51 | 4.09 | 4.08 | 3.62 | 3.37 |
| | | (0.46) | (0.40) | (0.48) | (0.34) | (0.54) | (0.42) | (0.32) | (0.48) |
| | T3 | 3.75 | 3.71 | 3.38 | 3.46 | 4.22 | 4.19 | 3.66 | 3.73 |
| | | (0.53) | (0.42) | (0.53) | (0.51) | (0.50) | (0.28) | (0.32) | (0.48) |
| | T4 | 3.71 | 3.80 | 3.65 | 3.54 | 4.10 | 4.01 | 3.55 | 3.55 |
| | | (0.54) | (0.36) | (0.52) | (0.42) | (0.48) | (0.35) | (0.33) | (0.54) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 16 | 24 |

Notes: * $p < .05$; min = 1, max = 5

The Table 3.7.5. shows that in all countries and for all subscales a single trend is generally observed: there is improvement from T1 to T2 and stability or slight improvement from T3 to T4, or even (in some subscales and countries) slight regression. This was a common finding for both experimental and control groups. An exception is the case of Romania, where both the experimental and control groups show improvements both from T1 to T2 and from T3 to T4.

In the case of Greece, the experimental group increased its scores from T1 to T2 and from T3 to T4 on the *Working Conditions* and *Job itself* subscales (starting with T3 scores lower than T2 scores). In the *Pay, Supervisor* subscales in all comparisons (T1 – T2, T3 – T4, T2 – T3) there was a decrease in initial scores. In the *Organization as a Whole, Promotion, ESI Global* subscales there was an increase in scores from T1 to T2, but a decrease in scores from T3 to T4 (starting with T3 scores lower than T2 scores). In the control group only the

*Organization as a Whole* subscale showed an increase in all comparisons (T1 – T2, T3 – T4, T2 – T3). In the *Supervisor, Job itself* subscales there was an increase in scores from T1 to T2 and a decrease in scores from T3 to T4 with T3 scores being bigger than T2 scores. In the other subscales there was a decrease in scores from T1 to T2 and an increase in scores from T3 to T4, with T3 scores being greater than T2 scores.

In the case of Cyprus, the experimental group increased its scores from T1 to T2 and from T3 to T4 in the *subscales Working Conditions, Promotion, ESI Global*, (starting with T3 scores lower than T2 scores). In the *Job itself* subscale there was a decrease in scores from T1 to T2 and from T3 to T4, with T3 scores being smaller than T2 scores. In the remaining subscales there was an increase in scores from T1 to T2 and a decrease in scores from T3 to T4, with T3 scores being smaller than T2 scores. In the control group, on the *Supervisor, Pay* subscales there was a decrease in scores from T1 to T2 and from T3 to T4, with T3 scores being bigger than T2 scores. In the remaining subscales there was a decrease in scores from T1 to T2 and an increase in scores from T3 to T4, with T3 scores being either higher (*Working Conditions, Job itself, Promotion*) or lower (*Organization as a Whole, ESI Global*) than the T2 scores.

In the case of Romania, the experimental group increased its scores from T1 to T2 and from T3 to T4 in the *Working Conditions, Promotion, Organization as a Whole* subscales. In the *Pay* subscale there was a decrease in scores from T1 to T2 and from T3 to T4. In *the Job itself, ESI Global* subscales there was an increase in scores from T1 to T2 and a decrease in scores from T3 to T4. In the *Supervisor* subscale there was a decrease in scores from T1 to T2 and an increase in scores from T3 to T4. In all subscales T3 scores were higher than T2 scores. In the control group, in the *Promotion, Job itself* subscales there was a decrease in scores from T1 to T2 and from T3 to T4. In the remaining subscales there was an increase in scores from T1 to T2 and a decrease in scores from T3 to T4. In all subscales T3 scores were bigger than T2 scores.

In the case of Portugal, the experimental group decreased its scores from T1 to T2 and from T3 to T4 on *the Working Conditions, Job itself, Organization as a Whole, Promotion, ESI*

*Global* subscales (starting with T3 scores higher than T2 scores). On the *Supervisor* subscale there was a small increase in scores from T1 to T2 but a decrease from T3 to T4, while the *Pay* subscale scores decreased from T1 to T2, but increased from T3 to T4. In the control group, scores decreased from T1 to T2 and from T3 to T4 in the subscales *Working Conditions, Job itself, Organization as a Whole*. In the *Supervisor, Pay* subscales the scores increased from T1 to T2 and decreased from T3 to T4. On the contrary, in the *Promotion* subscale the scores decreased from T1 to T2 and increased from T3 to T4. From all comparisons of the control group T3 scores were bigger than T2 scores in only *Working Conditions, Pay, ESI Global* subscales, while in the remaining subscales they were lower than T2 scores.

**Table 3.7.6.** Means (M) and standard deviations (sd) of subscales' scores on the Preschool Climate Scale (PCS) in both groups across times of assessment (T1-T4)

| PCS subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| *Teacher-student* | T1 | 3.54 (0.74) | 3.51 (1.03) | 3.62 (0.44) | 3.58 (0.43) | 3.71 (0.69) | 3.69 (0.38) | 3.81 (0.17) | 3.93 0.14) |
| | T2 | 3.50 (0.99) | 3.53 (0.72) | 3.90 (0.23) | 3.55 (0.42) | 4.00 (0.00) | 4.00 (0.00) | 3.75 (0.21) | 3.83 (0.23) |
| | T3 | 3.79 (0.58) | 3.07 (1.28) | 3.78 (0.26) | 3.46 (0.48) | 3.86 (0.27) | 3.84 (0.25) | 3.69 (0.38) | 3.86 (0.23) |
| | T4 | 3.42 (1.10) | 3.23 (1.18) | 3.78 (0.35) | 3.44 (0.33) | 4.00 (0.00) | 4.00 (0.00) | 3.74 (0.23) | 3.80 (0.35) |
| *Student-Student* | T1 | 2.95 (0.66) | 3.04 (0.66) | 3.23 (0.37) | 3.10 (0.49) | 4.48 (0.72) | 3.22 (0.44) | 3.36 (0.41) | 3.50 (0.45) |
| | T2 | 3.15 (0.91) | 3.03 (0.55) | 3.43 (0.46) | 3.01 (0.47) | 3.89 (0.35) | 3.75 (0.57) | 3.32 (0.34) | 3.62 (0.43) |
| | T3 | 3.10 (0.49) | 2.77 (0.76) | 3.29 (0.43) | 2.97 (0.57) | 3.60 (0.45) | 3.28 (0.43) | 3.44 (0.33) | 3.45 (0.38) |
| | T4 | 3.07 (0.92) | 3.05 (0.94) | 3.40 (0.44) | 3.16 (0.27) | 3.90 (0.37) | 3.90 (0.37) | 3.36 (0.33) | 3.65 (0.43) |
| *Teacher-home* | T1 | 3.43 (0.71) | 3.37 (0.88) | 3.42 (0.39) | 3.43 (0.42) | 3.67 (0.68) | 3.56 (0.49) | 3.65 (0.20) | 3.82 (0.27) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | T2 | 3.39 (0.89) | 3.37 (0.68) | 3.40 (0.25) | 3.35 (0.37) | 3.99 (0.91) | 3.97 (0.10) | 3.60 (0.33) | 3.85 (0.28) |
| | T3 | 3.66 (0.53) | 2.98 (1.16) | 3.62 (0.39) | 3.38 (0.43) | 3.74 (0.27) | 3.84 (0.18) | 3.78 (0.34) | 3.66 (0.40) |
| | T4 | 3.29 (1.05) | 3.19 (1.06) | 3.62 (0.33) | 3.38 (041) | 3.98 (0.74) | 4.00 (0.00) | 3.74 (0.24) | 3.77 (0.35) |
| *School safety* | T1 | 3.60 (0.73) | 3.34 (0.92) | 3.54 (0.49) | 3.43 (0.46) | 3.73 (0.68) | 3.78 (0.41) | 3.66 (0.30) | 3.83 (0.23) |
| | T2 | 3.51 (1.00) | 3.49 (0.72) | 3.82 (0.31) | 3.44 (0.43) | 3.99 (0.72) | 4.00 (0.00) | 3.65 (0.47) | 3.90 (0.23) |
| | T3 | 3.76 (0.55) | 2.95 (1,16) | 3.66 (0.43) | 3.91 (0.19) | 3.85 (0.32) | 3.91 (0.19) | 3.69 (0.31) | 3.86 (0.23) |
| | T4 | 3.43 (1.16) | 3.17 (1.13) | 3.85 (0.310) | 3.51 (0.50) | 3.98 (0.16) | 4.00 (0.00) | 3.74 (0.27) | 3.83 (0.36) |
| *Clarity of expectations* | T1 | 3.26 (0.71) | 3.17 (0.73) | 3.37 (0.42) | 3.20 (0.45) | 3.54 (0.68) | 3.37 (0.41) | 3.36 (0.43) | 3.43 (0.41) |
| | T2 | 3.39 (0.94) | 3.26 (0.65) | 3.64 (0.44) | 3.27 (0.54) | 3.93 (0.20) | 3.78 (0.48) | 3.51 (0.43) | 3.56 (0.42) |
| | T3 | 3.50 (0.51) | 2.81 (1.00) | 3.46 (0.38) | 3.17 (0.54) | 3.67 (0.39) | 3.46 (0.41) | 3.39 (0.42) | 3.60 (0.46) |
| | T4 | 3.23 (1.07) | 3.11 (1.07) | 3.72 (0.35) | 3.24 (0.53) | 3.97 (0.16) | 4.00 (0.00) | 3.48 (0.40) | 3.80 (0.35) |
| *Fairness of rules* | T1 | 3.39 (0.71) | 3.23 (1.06) | 3.56 (0.45) | 3.40 (0.47) | 3.66 (0.69) | 3.46 (0.48) | 3.45 (0.47) | 3.70 (0.42) |
| | T2 | 3.47 (0.99) | 3.44 (0.35) | 3.91 (0.28) | 3.46 (0.48) | 4.00 (0.00) | 3.93 (0.26) | 3.41 (0.44) | 3.70 (0.48) |
| | T3 | 3.68 (0.16) | 2.93 (1.16) | 3.60 (0.46) | 3.36 (0.48) | 3.77 (0.66) | 3.70 (0.36) | 3.41 (0.44) | 3.65 (0.47) |
| | T4 | 3.36 (1.14) | 3.18 (1.18) | 3.73 (0.55) | 3.36 (0.51) | 3.96 (0.18) | 3.93 (0.95 | 3.45 (0.47) | 3.70 (0.42) |
| *Respect of diversity* | T1 | 3.69 (0.73) | 3.48 (1.06) | 3.67 (0.46) | 3.50 (0.50) | 3.72 (0.68) | 3.70 (0.45) | 3.65 (0.42) | 3.80 (0.35) |
| | T2 | 3.51 (1.01) | 3.57 (1.73) | 3.92 (0.68) | 3.47 (0.48) | 3.98 (0.16) | 4.00 (0.00) | 3.60 (0.39) | 3.85 (0.33) |
| | T3 | 3.81 (0.59) | 3.07 (1.340 | 3.73 (0.42) | 3.60 (0.50) | 3.86 (0.32) | 3.83 (0.31) | 3.65 (0.41) | 3.80 (0.42) |
| | T4 | 3.42 (1.18) | 3.29 (1.19) | 3.87 (0.30) | 3.50 (0.50) | 3.99 (0.11) | 4.00 (0.00) | 3.60 (0.39) | 3.70 (0.48) |
| *PCS Global* | T1 | 3.41 (0.66) | 3.31 (0.86) | 3.49 (0.37) | 3.37 (0.36) | 3.64 (0.66) | 3.54 (0.37) | 3.57 (0.21) | 3.72 (0.26) |
| | T2 | 3.42 | 3.39 | 3.76 | 3.36 | 3.96 | 3.92 | 3.54 | 3.76 |

|  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  | (0.92) | (0.65) | (0.25) | (0.38) | (0.75) | (0.14) | (0.27) | (0.25) |
| T3 | 3.61 | 2.94 | 3.59 | 3.34 | 3.78 | 3.68 | 3.55 | 3.71 |
|  | (0.47) | (1.09) | (0.33) | (0.41) | (0.29) | (0.26) | (0.24) | (0.30) |
| T4 | 3.32 | 3.18 | 3.71 | 3.37 | 3.97 | 3.97 | 3.59 | 3.75 |
|  | (1.06) | (1.08) | (0.28) | (0.40) | (0.10 | (0.64) | (0.21) | (0.33) |
| N | 32 | 32 | 24 | 15 | 85 | 15 | 11 | 10 |

Notes: * p < .05; min = 1, max = 4

The Table 3.7.6. shows that in all countries and for all subscales a common trend is generally observed: there is improvement from T1 to T2 and stability or slight improvement from T3 to T4, or even a regression (in the case of Greek experimental group).This was a common finding for both experimental and control groups. An exception is the case of Romania, where both the experimental and control groups show improvements both from T1 to T2 and from T3 to T4.

In the case of Greece, the experimental group had reduced scores from T1 to T2 and from T3 to T4 in all subscales, except for the *Fairness of rules, Clarity of expectations* and *Student-Student* subscales, in which they had increased scores from T1 to T2 and decreased scores from T3 to T4. In all measurements of the experimental group T3 scores were greater than T2 scores. In the control group in all subscales, thre are increased scores from T1 to T2 and from T3 to T4 with T3 scores being lower than T2 scores.

 In the case of Cyprus, the experimental group had increased scores from T1 to T2 and from T3 to T4 in all subscales, except the *Teacher-home* subscale. In all measurements T3 scores were lower than T2 scores. In the control group, in the *Teacher-student, Teacher-home, Respect of diversity* subscales had decreased scores from T1 to T2 and from T3 to T4. In the *Fairness of rules, Clarity of expectations* subscales we had increased scores from T1 to T2 and from T3 to T4. In the School safety subscale, we found increased values from T1 to T2 and decreased values from T3 to T4. On the contrary, in the *Student-student, PCS Global* subscales we found decreased scores from T1 to T2 and increased scores from T3 to T4. In most subscales T3 scores were lower than T2 scores.

 In the case of Romania, the experimental group had increased scores from T1 to T2 and from T3 to T4 in all subscales, except for the *Student-student* subscale. In all measurements

T3 scores were lower than T2 scores. In the control group, in all subscales we found increased scores from T1 to T2 and from T3 to T4, with T3 scores being lower than T2 scores.

In the case of Portugal, the experimental group had decreased scores from T1 to T2 and from T3 to T4 in the subscales *Student-student, Teacher-home, Fairness of rules, Respect of diversity*. In the *Teacher-student, School safety, PCS Global* subscales we had decreased scores from T1 to T2 and increased from T3 to T4, while in the *Clarity of expectations* subscale had increased scores from T1 to T2 and from T3 to T4. In all the above cases except for the *Clarity of expectations*, *Fairness of rules, Teacher-student* subscales, the T3 scores were higher than the T2 scores. In the control group, in the subscales *Student-student, Teacher-home, Clarity of expectations, Fairness of rules, PCS Global* had increased scores from T1 to T2 and from T3 to T4. In the *School safety, Respect of diversity* subscales we had increased scores from T1 to T2 and decreased scores from T3 to T4. In the Teacher-student subscale we found reduced scores from T1 to T2 and from T3 to T4. In all measurements of the control group the T3 scores were lower than the T2 scores except for the *Clarity of expectations, Teacher-student* subscales.

**Table 3.7.7a.** Means (M) and standard deviations (sd) of subscales' scores on the PERMA Profiler in both groups across times of assessment (T1-T4)

| PERMA subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| Positive -P | T1 | 7.41 (1.43) | 7.61 (1.49) | 7.68 (1.29) | 7.89 (1.17) | 8.29 (1.47) | 7.82 (2.28) | 7.89 (1.01) | 7.77 (1.45) |
| | T2 | 8.05 (1.22) | 7.87 (1.17) | 8.29 (1.01) | 7.40 (1.51) | 8.60 (1.44) | 8.02 (1.76) | 7.77 (1.08) | 7.73 (1.35) |
| | T3 | 7.23 (1.96) | 7.54 (1.60) | 7.87 (1.33) | 7.55 (1.10) | 9.09 (1.19) | 8.18 (2.57) | 8.14 (.97) | 7.89 (1.27) |
| | T4 | 7.66 (1.81) | 7.78 (1.74) | 8.15 (1.42) | 7.73 (1.21) | 9.11 (1.31) | 9.33 (.55) | 7.83 (1.41) | 7.56 (1.46) |
| Engagement - E | T1 | 7.57 (1.39) | 7.52 (1.36) | 7.42 (1.08) | 8.11 (1.12) | 7.69 (1.74) | 7.02 (2.26) | 8.23 (1.13) | 8.12 (1.55) |
| | T2 | 8.15 (1.47) | 7.89 (1.16) | 8.08 (1.39) | 7.80 (1.21) | 7.88 (1.71) | 7.35 (1.74) | 8.06 (1.00) | 7.85 (1.29) |

| Category | Time | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | T3 | 7.18 (1.91) | 7.56 (1.37) | 7.65 (1.40) | 7.75 (.90) | 8.26 (1.72) | 7.75 (2.71) | 8.54 (.92) | 8.00 (1.44) |
| | T4 | 7.85 (1.74) | 8.02 (1.54) | 8.21 (1.38) | 8.24 (1.12) | 8.31 (1.54) | 7.67 (2.06) | 8.27 (1.25) | 8.21 (1.27) |
| Relationships - R | T1 | 7.66 (1.56) | 8.07 (1.70) | 7.79 (1.41) | 7.73 (1.25) | 8.20 (1.54) | 7.84 (2.35) | 8.20 (.89) | 8.15 (1.48) |
| | T2 | 8.11 (1.35) | 8.12 (1.26) | 8.26 (1.15) | 7.27 (1.71) | 8.57 (1.37) | 7.80 (1.77) | 7.58 (1.37) | 8.00 (1.27) |
| | T3 | 7.43 (1.69) | 7.81 (1.65) | 7.71 (1.54) | 7.55 (1.26) | 9.12 (1.25) | 8.11 (2.54) | 8.21 (.82) | 8.14 (1.52) |
| | T4 | 7.81 (1.71) | 7.88 (1.72) | 8.50 (1.11) | 7.84 (1.24) | 9.01 (1.38) | 9.33 (.36) | 8.26 (1.26) | 7.82 (1.61) |
| Meaning - M | T1 | 7.75 (1.38) | 8.08 (1.53) | 7.94 (1.31) | 7.49 (1.34) | 8.38 (1.45) | 7.91 (2.35) | 8.20 (.87) | 8.59 (1.34) |
| | T2 | 8.30 (1.12) | 8.28 (.99) | 8.57 (.84) | 7.15 (1.93) | 8.71 (1.48) | 8.18 (1.80) | 7.94 (1.34) | 8.38 (1.19) |
| | T3 | 7.55 (1.62) | 7.91 (1.53) | 7.99 (1.16) | 7.15 (1.43) | 9.38 (.94) | 8.35 (2.63) | 8.67 (.80) | 8.59 (1.12) |
| | T4 | 7.99 (1.61) | 7.87 (1.75) | 8.53 (1.02) | 7.53 (1.45) | 9.31 (1.19) | 9.38 (.68) | 8.17 (1.40) | 8.54 (.79) |
| Accomplishment - A | T1 | 7.65 (1.43) | 7.82 (1.22) | 7.43 (1.10) | 7.29 (1.11) | 8.17 (1.50) | 7.64 (2.46) | 7.85 (.83) | 8.03 (1.30) |
| | T2 | 8.21 (1.11) | 7.95 (1.18) | 8.19 (.89) | 6.89 (1.54) | 8.53 (1.44) | 7.89 (1.65) | 7.54 (1.29) | 7.59 (1.03) |
| | T3 | 7.23 (1.77) | 7.69 (1.61) | 7.78 (1.28) | 6.89 (1.41) | 9.13 (.93) | 8.02 (2.53) | 8.08 (.96) | 7.85 (1.07) |
| | T4 | 7.85 (1.55) | 7.86 (1.61) | 8.24 (1.24) | 7.38 (1.14) | 9.08 (1.27) | 7.40 (3.30) | 7.89 (1.11) | 7.70 (1.12) |
| Negative - N | T1 | 5.11 (2.09) | 5.21 (2.02) | 5.04 (1.87) | 5.20 (2.13) | 2.23 (2.53) | 1.09 (1.94) | 5.53 (2.35) | 3.97 (1.97) |
| | T2 | 4.65 (2.27) | 4.54 (1.93) | 4.86 (2.19) | 5.58 (2.24) | 2.39 (2.45) | .91 (1.06) | 4.55 (2.07) | 3.86 (1.56) |
| | T3 | 4.10 (2.19) | 4.57 (1.67) | 4.65 (2.05) | 4.84 (1.66) | 1.56 (2.14) | 1.35 (1.56) | 4.75 (2.07) | 3.73 (1.74) |
| | T4 | 4.06 (2.14) | 4.12 (1.96) | 4.96 (1.96) | 5.78 (1.97) | 1.94 (2.26) | 3.22 (3.96) | 4.64 (2.00) | 4.61 (2.02) |
| Health -H | T1 | 7.38 (1.78) | 7.58 (1.62) | 6.99 (1.97) | 7.42 (1.66) | 8.05 (1.60) | 7.15 (2.35) | 7.44 (1.12) | 6.70 (2.75) |
| | T2 | 7.90 (1.60) | 7.45 (1.76) | 7.51 (1.86) | 7.07 (2.12) | 8.08 (1.52) | 7.73 (1.57) | 7.02 (1.51) | 6.33 (1.96) |
| | T3 | 7.13 (2.08) | 7.26 (1.66) | 7.43 (1.91) | 7.18 (1.74) | 8.65 (1.45) | 7.82 (2.54) | 7.67 (1.33) | 6.74 (1.89) |
| | T4 | 7.36 (2.01) | 7.30 (1.97) | 7.60 (1.97) | 7.47 (1.40) | 8.80 (1.39) | 8.58 (1.05) | 7.50 (1.47) | 6.23 (1.91) |
| PERMA Global | T1 | 7.57 (1.30) | 7.85 (1.32) | 7.70 (1.10) | 7.74 (1.03) | 8.17 (1.40) | 7.71 (2.25) | 8.11 (.79) | 8.11 (1.36) |
| | T2 | 8.15 (1.10) | 8.02 (.98) | 8.31 (.84) | 7.37 (1.34) | 8.47 (1.41) | 7.84 (1.69) | 7.84 (1.00) | 7.97 (1.08) |
| | T3 | 7.32 (1.73) | 7.72 (1.47) | 7.87 (1.09) | 7.43 (.94) | 9.01 (1.08) | 8.11 (2.55) | 8.37 (.69) | 8.08 (1.18) |

| | T4 | 7.80 (1.64) | 7.87 (1.63) | 8.34 (1.06) | 7.77 (1.12) | 9.00 (1.22) | 8.72 (.93) | 8.09 (1.15) | 7.96 (1.05) |
|---|---|---|---|---|---|---|---|---|---|
| | N | 39 | 33 | 24 | 15 | 85 | 15 | 16 | 22 |

Notes: * p < .05; min = 0, max = 10

In the above table mean scores on the PERMA Profiler highlight nuanced fluctuations in the experiences of positive and negative emotions, engagement, relationships, meaning, accomplishment, and health among preschool teachers in different countries over the assessment times.

**For preschool teachers in the experimental groups** Positive Emotions showed variations across countries and assessment times. In general, teachers' positive emotions appeared to increase from T1 to T4 in all countries except for Cyprus, where the scores remained relatively stable. Notably, Romania teachers showed a significant increase in positive emotions over time.

Engagement scores demonstrated fluctuations across countries and assessment times. While most countries displayed consistent or slightly increasing engagement scores, Portugal showed a notable decrease from T1 to T2 before recovering. These patterns may reflect changes in teachers' motivation and active involvement in their work.

Relationships scores depicted diverse trends. Preschool teachers in Romania exhibited a steady increase in relationship scores, while Portugal teachers demonstrated an initial decline and subsequent stabilization. Preschool teachers from Greece and Cyprus maintained relatively stable relationship scores over the assessment periods.

Meaning scores also indicated fluctuations across countries and assessment times. Romania and Portugal preschool teachers both displayed consistent increases in meaning scores, while teachers from Greece and Cyprus showed more variable patterns. These trends suggest potential shifts in teachers' sense of purpose and significance in their work.

Accomplishment scores showed mixed patterns. Preschool teachers from Romania and Portugal demonstrated consistent increases in accomplishment scores, whereas Greece and Cyprus displayed more variable trends.

Negative Emotion scores exhibited decreases across countries and assessment times, suggesting a general decline in negative emotions experienced by preschool teachers in the experimental groups.

Health scores showed slight fluctuations, with some countries experiencing minor changes in teachers' perceptions of their health and well-being over time.

Finally, PERMA Global scores, representing an overall assessment of well-being for the experimental group of preschool teachers generally increased across countries and assessment times, indicating an overall positive trend in teachers' psychological well-being.

**For preschool teachers in the control groups** Positive Emotions scores exhibited variations across countries and assessment times. The scores generally increased from T1 to T4, indicating an overall positive trend in the perception of positive emotions among the control groups. Notably, Portugal displayed a significant increase in positive emotions over time, while Greece and Romania showed more stable patterns.

Engagement scores demonstrated fluctuations across countries and assessment times. Overall, the control groups experienced fluctuations in their engagement levels, with varying trajectories across different countries. These variations may reflect changes in teachers' motivation and involvement in their work.

Relationships scores also showed diverse patterns across countries and assessment times. While some countries displayed relatively stable relationship scores, others experienced fluctuations.

Meaning scores exhibited variations across countries and assessment times. Romania and Portugal displayed consistent increases in meaning scores, while Greece and Cyprus showed more variable patterns. These trends suggest potential shifts in teachers' sense of purpose and significance in their work.

Accomplishment scores displayed mixed patterns, with some countries showing consistent increases, and others experiencing fluctuations.

Negative Emotions scores generally decreased across countries and assessment times, indicating a reduction in negative emotions experienced by preschool teachers in the control groups.

Health scores demonstrated slight fluctuations, with some countries experiencing minor changes in teachers' perceptions of their health and well-being over time.

**Table 3.7.7b.** Means (M) and standard deviations (sd) of subscales' scores on the Loneliness and Happiness items of the PERMA Profiler in both groups across times of assessment (T1-T4)

| PERMA Items 12 & 23 | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| Loneliness (item 12) | T1 | 3.56 (3.21) | 3.15 (2.96) | 3.21 (2.73) | 3.53 (2.77) | 5.23 (4.13) | 3.27 (3.83) | 4.06 (3.64) | 2.24 (3.27) |
| | T2 | 3.05 (2.68) | 2.97 (2.11) | 3.08 (3.28) | 3.00 (2.53) | 5.42 (4.11) | 3.87 (3.83) | 3.69 (2.57) | 2.47 (2.87) |
| | T3 | 2.59 (2.42) | 3.15 (2.26) | 2.54 (2.39) | 3.07 (2.52) | 5.08 (4.62) | 3.80 (4.19) | 3.37 (3.28) | 2.52 (3.17) |
| | T4 | 2.95 (2.66) | 2.24 (2.45) | 2.12 (2.09) | 2.67 (2.53) | 4.62 (4.55) | 6.20 (4.57) | 3.62 (3.05) | 2.90 (3.05) |
| Happy (item 23) | T1 | 7.38 (1.56) | 8.00 (1.69) | 7.96 (1.52) | 7.93 (1.62) | 8.28 (1.55) | 8.00 (2.39) | 8.31 (.79) | 8.00 (1.85) |
| | T2 | 8.05 (1.28) | 8.00 (1.25) | 8.46 (.98) | 7.73 (1.44) | 8.52 (1.61) | 7.80 (2.04) | 8.12 (1.31) | 8.27 (1.28) |
| | T3 | 8.05 (1.28) | 8.00 (1.25) | 8.46 (.98) | 7.73 (1.44) | 8.52 (1.61) | 7.80 (2.04) | 8.12 (1.31) | 8.27 (1.28) |
| | T4 | 7.61 (1.95) | 7.82 (1.83) | 8.42 (1.28) | 7.87 (1.73) | 9.14 (1.56) | 9.20 (.77) | 8.12 (1.20) | 7.91 (1.31) |
| N | | 39 | 33 | 24 | 15 | 85 | 15 | 16 | 22 |

Notes: * $p < .05$; min = 0, max = 10

The above table provides valuable information on the levels of loneliness and happiness experienced by preschool teachers in different countries throughout the assessment period.

**Preschool teachers in the experimental group** in the Loneliness (item 12) had scores that varied across countries and assessment times. Overall, there was a general decline in reported levels of loneliness over time, suggesting a potential decrease in feelings of social isolation among preschool teachers in the experimental groups. Notably, Romania exhibited the most

substantial decrease in loneliness scores over the assessment period, while Cyprus and Portugal also showed notable decreases.

Happy (item 23) scores showed variations across countries and assessment times as well. In general, preschool teachers reported high levels of happiness across the assessment times. Romania teachers consistently displayed high happiness scores, with a slight increase from T1 to T2 and then stable levels. Cyprus and Portugal showed moderate fluctuations, with Cyprus experiencing a peak at T2. Greece demonstrated some variation in happiness scores, with a decline from T1 to T4.

**Preschool teachers in the control group** in the Loneliness (item 12) also showed variations across countries and assessment times. Overall, the levels of reported loneliness were relatively consistent or decreased slightly over time, suggesting a generally stable or improving sense of social connectedness among preschool teachers in the control groups. Notably, Romania exhibited a significant increase in loneliness scores from T3 to T4, which could indicate a potential increase in feelings of isolation within that period.

Happy (item 23) scores demonstrated variations across countries and assessment times as well. The control groups generally reported high levels of happiness, with slight fluctuations over the assessment times. Greece, Cyprus, and Portugal displayed relatively consistent happiness scores, with minor changes. Romania experienced a notable increase in happiness scores from T3 to T4, potentially indicating a positive shift in their overall sense of well-being.

Overall, the data suggest a positive trend in terms of reduced loneliness levels and generally high happiness levels among preschool teachers of both groups across the assessment times.

### b. Findings for Children

The children's scores on the Strengths and Difficulties Questionnaire (SDQ) across Time in each country are shown in table 3.7.8. Overall, the data suggest a constant decrease of behavioral problems and substantial improvement of children's prosocial skills. This pattern of fluctuations seems more pronounced in the experimental than in the control group.

**Table 3.7.8**. Means (M) and standard deviations (sd) of the Children's scores on Strength and Difficulties Questionnaire (SDQ)subscales in both groups across times of assessment (T1-T4)

| SDQ subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| Emotional problems | T1 | 1.40 (.44) | 1.25 (.31) | 1.41 (.39) | 1.44 (.41) | 1.36 (.40) | 1.29 (.27) | 1.37 (.36) | 1.38 (.40) |
| | T2 | 1.26 (.35) | 1.18 (.27) | 1.24 (.30) | 1.42 (.41) | 1.35 (.40) | 1.32 (.30) | 1.40 (.40) | 1.25 (.36) |
| | T3 | 1.25 (.36) | 1.16 (.25) | 1.24 (.31) | 1.30 (.36) | 1.26 (.33) | 1.23 (.27) | 1.36 (.45) | 1.30 (.43) |
| | T4 | 1.23 (.38) | 1.16 (.27) | 1.25 (.33) | 1.29 (.31) | 1.20 (.30) | 1.22 (.30) | 1.28 (.35) | 1.35 (.46) |
| Conduct problems | T1 | 1.28 (.34) | 1.25 (.30) | 1.14 (.25) | 1.29 (.46) | 1.49 (.36) | 1.46 (.28) | 1.28 (.36) | 1.44 (.43) |
| | T2 | 1.20 (.34) | 1.21 (.34) | 1.14 (.25) | 1.27 (.41) | 1.82 (.32) | 1.76 (.23) | 1.28 (.31) | 1.30 (.33) |
| | T3 | 1.17 (.31) | 1.20 (.34) | 1.17 (.26) | 1.27 (.43) | 1.44 (.32) | 1.40 (.22) | 1.24 (.33) | 1.37 (.47) |
| | T4 | 1.17 (.36) | 1.18 (.35) | 1.14 (.29) | 1.24 (.39) | 1.41 (.32) | 1.39 (.21) | 1.26 (.31) | 1.37 (.43) |
| Hyperactivity | T1 | 1.62 (.58) | 1.54 (.53) | 1.60 (.52) | 1.61 (.51) | 1.52 (.42) | 1.57 (.35) | 1.76 (.52) | 1.79 (.50) |
| | T2 | 1.47 (.56) | 1.44 (.47) | 1.50 (.51) | 1.59 (.58) | 2.01 (.29) | 2.01 (.29) | 1.71 (.49) | 1.45 (.49) |
| | T3 | 1.36 (.50) | 1.32 (.48) | 1.45 (.47) | 1.50 (.48) | 1.38 (.39) | 1.49 (.38) | 1.69 (.49) | 1.67 (.60) |
| | T4 | 1.29 (.48) | 1.29 (.43) | 1.40 (.50) | 1.42 (.44) | 1.29 (.37) | 1.35 (.31) | 1.65 (.47) | 1.61 (.57) |
| Peer problems | T1 | 1.41 (.41) | 1.38 (.31) | 1.29 (.32) | 1.30 (.28) | 1.45 (.38) | 1.43 (.31) | 1.22 (.21) | 1.26 (.34) |
| | T2 | 1.25 (.30) | 1.29 (.36) | 1.16 (.25) | 1.29 (.33) | 1.73 (.31) | 1.77 (.24) | 1.15 (.21) | 1.18 (.36) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | T3 | 1.28 (.29) | 1.26 (.30) | 1.15 (.27) | 1.28 (.34) | 1.32 (.34) | 1.42 (.29) | 1.16 (.26) | 1.20 .(34) |
| | T4 | 1.24 (.32) | 1.19 (.27) | 1.14 (.25) | 1.20 (.26) | 1.26 (.31) | 1.36 (.31) | 1.18 (.25) | 1.19 (.30) |
| Prosocial skills | T1 | 2.41 (.59) | 2.40 (.45) | 2.56 (.48) | 2.39 (.49) | 2.42 (.48) | 2.41 (.47) | 2.40 (.40) | 2.47 (.54) |
| | T2 | 2.67 (.51) | 2.48 (.47) | 2.72 (.39) | 2.42 (.50) | 2.51 (.47) | 2.34 (.43) | 2.56 (.40) | 2.47 (.46) |
| | T3 | 2.59 (.56) | 2.53 (.48) | 2.68 (.42) | 2.43 (.45) | 2.60 (.44) | 2.44 (.48) | 2.53 (.42) | 2.54 (.48) |
| | T4 | 2.72 (.51) | 2.68 (.39) | 2.80 (.33) | 2.64 (.41) | 2.69 (.44) | 2.63 (.40) | 2.60 (.39) | 2.62 (.41) |
| N | | 132 | 120 | 105 | 71 | 737 | 114 | 68 | 52 |

Notes: * p < .05; min = 1, max = 3

In the case of Greece, children from the experimental group decreased their Emotional, Conduct and Peer Problems, as well as Hyperactivity scores from Time 1 to Time 2 and kept constant scores from Time 3 to Time 4 for Emotional and Conduct Problems for the next two phases. For the other two subscales there was a slight decrease from Time 3 to Time 4. For Prosocial skills experimental group children increased their scores from Time 1 to Time 2 and also from Time 3 to Time 4. However, for the control group there were very slight decreases for the two subscales (Emotional and Conduct problems) and a slight decrease for the other two subscales (Hyperactivity and Peer problems) from Time 1 to Time 2. For the Emotional Problems subscale the scores didn't change from Time 3 to Time 4, but for the other subscales they decreased slightly or very slightly. For Prosocial skills control group children increased their scores from Time 1 to Time 2 and also from Time 3 to Time 4.

In the case of Cyprus, children from the experimental group decreased their scores regarding the Emotional Problems scale, the Hyperactivity and the Peer Problems scale from Time 1 to Time 2 and remained in same levels for the first, second and third scale mentioned above, though also decreased for Hyperactivity scale from Time 3 to Time 4. For Conduct problems scale scores remained in same levels from Time 1 to Time 4. For Prosocial skills experimental group children increased their scores from Time 1 to Time 2 and also from Time 3 to Time 4. Regarding the control group scores in Emotional Problems and Hyperactivity and Peer

Problems scores remained almost in same levels from Time 1 to Time 2 and decreased at the end of Time 4. For the Conduct Problems there was a slight decrease from Time 1 to Time 4. For Prosocial skills control group children increased their scores from Time 1 to Time 2 and also from Time 3 to Time 4.

In the case of Romania, children from the experimental group remained in same levels regarding the Emotional Problems scale from Time 1 to Time 2 and very slightly decreased their scores from Time 3 to Time 4. For the other scales there was an increase from Time 1 to Time 2 and a decrease from Time 3 to Time 4.  For the Prosocial Skills scale there was a decrease from Time 1 to Time 2 and an increase from Time 3 to time 4. Regarding the control group there were constant levels regarding the Emotional Problems scale from Time 1 to Time 2 and from Time 3 to Time 4. For the other two scales (Peer problems and Hyperactivity) there was an increase from Time 1 to Time 2 and a decrease from Time 3 to Time 4. For the Conduct Problems scale there was an increase and reverse for the Prosocial Skills from Time 1 to Time 2.  For Prosocial skills scores improved from Time 3 to Time 4 as far as children from the control group are concerned.

In the case of Portugal children from the experimental group remained almost in same levels from Time 1 to Time 2 and there was a decrease from Time 3 to Time 4. For the Conduct problems scale scores remained almost same from Time 1 to Time 4. For the Hyperactivity scale there was a slight decrease from Time 1 to Time 2 and also for the next two periods. For the Peer Problems scale there was a decrease from Time 1 to Time 2, but almost same levels from Time 3 to Time 4. Regarding Prosocial Skills children's scores remained in same levels from Time 1 to Time 3 but improved from Time 3 to Time 4. As far as the control group is concerned, there was a decrease from Time 1 to Time 2 for all the subscales except from the Prosocial Skills scales were remained stable. Regarding the first subscale there was an increase from Time 3 to Time 4, the second and fourth subscale showed same levels, the Hyperactivity subscale a decrease and the scores in Prosocial skills subscale had an improvement.

**Table 3.7.9**. Means (M) and standard deviations (sd) of the Children's scores on Children's scores on Child Behavior Rating Scale (CBRS) subscales in both groups across times of assessment (T1-T4)

| CBRS subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| Classroom self-regulation | T1 | 3.54 (.96) | 3.56 (.74) | 3.66 (.75) | 3.63 (.67) | 3.72 (.88) | 3.27 (.76) | 3.62 (.90) | 3.72 (.88) |
| | T2 | 4.05 (.83) | 3.71 (.73) | 3.96 (.73) | 3.71 (.67) | 3.97 (.90) | 3.51 (.91) | 3.88 (.65) | 3.90 (.63) |
| | T3 | 4.12 (.90) | 4.04 (.69) | 4.11 (.65) | 3.87 (.69) | 4.15 (.77) | 3.83 (.65) | 3.82 (.56) | 3.70 (.81) |
| | T4 | 4.32 (.81) | 4.25 (.61) | 4.21 (.60) | 4.20 (.62) | 4.50 (.54) | 4.27 (.61) | 4.06 (.51) | 4.06 (.77) |
| Interpersonal skills | T1 | 3.99 (.83) | 4.02 (.67) | 4.14 (.59) | 3.90 (.71) | 3.84 (.67) | 3.73 (.52) | 3.98 (.64) | 3.95 (.79) |
| | T2 | 4.42 (.75) | 4.13 (.64) | 4.39 (.53) | 4.01 (.75) | 3.99 (.71) | 3.73 (.70) | 4.03 (.53) | 3.92 (.55) |
| | T3 | 4.38 (.71) | 4.28 (.66) | 4.32 (.57) | 4.05 (.73) | 4.17 (.63) | 3.91 (.53) | 4.07 (.58) | 3.84 (.75) |
| | T4 | 4.56 (.70) | 4.41 (.62) | 4.39 (.61) | 4.37 (.75) | 4.48 (.54) | 4.30 (.52) | 4.17 (.54) | 3.89 (.77) |
| Social play-interaction | T1 | 3.51 (1.09) | 3.51 (.80) | 3.72 (.80) | 3.58 (.68) | 3.73 (.84) | 3.45 (.71) | 3.65 (.61) | 3.91 (.79) |
| | T2 | 4.10 (.90) | 3.80 (.79) | 4.20 (.70) | 3.68 (.67) | 3.95 (.84) | 3.59 (.80) | 3.93 (.54) | 3.92 (.55) |
| | T3 | 4.15 (.94) | 3.98 (.69) | 4.17 (.69) | 3.71 (.65) | 4.11 (.74) | 3.84 (.63) | 3.82 (.55) | 3.90 (.77) |
| | T4 | 4.36 (.91) | 4.27 (.61) | 4.28 (.62) | 4.14 (.55) | 4.51 (.50) | 4.32 (.47) | 4.09 (.56) | 4.05 (.78) |
| Engagement | T1 | 3.84 (.97) | 3.91 (.77) | 4.04 (.69) | 3.82 (.76) | 3.97 (.81) | 3.59 (.78) | 3.88 (.82) | 4.04 (.91) |
| | T2 | 4.33 (.83) | 3.97 (.83) | 4.32 (.63) | 3.87 (.79) | 4.14 (.89) | 3.80 (.85) | 4.10 (.71) | 4.31 (.71) |
| | T3 | 4.33 (.94) | 4.32 (.67) | 4.33 (.63) | 4.06 (.79) | 4.33 (.73) | 4.11 (.64) | 3.98 (.64) | 4.04 (.76) |
| | T4 | 4.47 (.83) | 4.44 (.61) | 4.45 (.56) | 4.42 (.72) | 4.63 (.50) | 4.36 (.58) | 4.23 (.65) | 4.22 (.75) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | T1 | 3.18 (1.08) | 3.31 (.76) | 3.31 (.77) | 3.14 (.66) | 3.55 (.88) | 3.19 (.82) | 3.23 (.71) | 3.44 (1.03) |
| Social problem solving | T2 | 3.80 (.97) | 3.54 (.78) | 3.75 (.82) | 3.37 (.67) | 3.82 (.91) | 3.38 (.86) | 3.48 (.59) | 3.69 (.60) |
| | T3 | 3.90 (1.04) | 3.80 (.68) | 3.80 (.75) | 3.34 (.68) | 3.92 (.85) | 3.64 (.69) | 3.60 (.59) | 3.33 (.81) |
| | T4 | 4.13 (1.03) | 4.03 (.66) | 4.03 (.71) | 3.86 (.68) | 4.43 (.56) | 4.15 (.64) | 3.65 (.59) | 3.65 (.78) |
| N | | 132 | 120 | 105 | 70 | 737 | 114 | 58 | 46 |

Notes: * p < .05; min = 1, max = 5

The children's scores on the Child Behavior Rating Scale (CBRS) in table 3.7.9 offer valuable insights into the behavioral trends and changes observed in children across different cultural and contextual settings over the assessment period. Overall, the data suggest a positive trajectory of development in various behavioral aspects among children in the experimental groups across the assessment times. For the control groups, children's behavior exhibited relatively stable patterns with minor fluctuations across different behavioral subscales over the assessment times.

In more detail, **children in the experimental groups** had Classroom Self-Regulation scores that exhibited a consistent upward trend across countries and assessment times. This indicates a positive developmental trajectory in children's ability to manage their behavior and emotions within the classroom setting. Notably, Romania and Portugal showed particularly pronounced improvements over the assessment times.

Interpersonal Skills scores also generally increased over time, suggesting positive development in children's ability to interact and communicate with their peers. This upward trend is consistent across countries, with varying degrees of improvement observed.

Social Play-Interaction scores demonstrated a similar upward trend, indicating that children's engagement in social play and interactions improved across the assessment times. This trend reflects positive social development among the children in the experimental groups.

Engagement scores displayed a steady increase across countries and assessment times, reflecting growing levels of involvement and active participation in classroom activities. This

positive trend suggests that children's motivation and enthusiasm for learning and social interactions improved over the four assessment periods.

Social Problem Solving scores generally improved over time, suggesting that children's ability to solve social challenges and conflicts within the classroom context developed positively.

**For children in the control groups** Classroom Self-Regulation Classroom scores exhibited fluctuations over the assessment times within each country. While the scores showed some variations, there wasn't a consistent upward or downward trend across countries. These fluctuations could reflect natural variations in children's self-regulation abilities or other contextual factors.

Interpersonal Skills scores also showed some variations within each country's control group. While there were minor fluctuations, the scores generally remained within a similar range across assessment times. This suggests that children's interpersonal skills were relatively stable over the assessment period for the control groups.

Social Play-Interaction scores demonstrated similar fluctuations within each country's control group. While there were variations, the scores appeared to stabilize or slightly improve over time for most countries, indicating a potential positive trend in children's engagement in social play and interactions.

Engagement scores displayed slight fluctuations within each country's control group. Like the other subscales, the scores remained relatively consistent or slightly improved over time, suggesting that children's engagement in classroom activities and interactions remained relatively stable.

Social Problem Solving scores showed fluctuations as well, with some variations within each country's control group. The scores exhibited minor changes over the assessment times, indicating potential fluctuations in children's social problem-solving abilities.

The Table 3.7.10. shows that in all countries and for all subscales a single trend is generally observed: there is an improvement from T1 to T2 and from T3 to T4. This was a common finding for both experimental and control groups. A slightly exception is the case of Romania, where both the experimental and control groups show improvements in each time comparison, even from T2 to T3.

In the case of Greece, for the experimental group in all 3 subscales there were increased scores from T1 to T2 and from T3 to T4. T2 and T3 scores have minimal deviation from each other. For the control group, increase also observed from T1 to T2 and from T3 to T4, but also from T2 to T3.

In the case of Cyprus, for the experimental group in all 3 subscales there were increased scores from T1 to T2 and from T3 to T4. However, between T2 values and T3 values there was also a decrease in performance. In the control group there were stable scores from T1 to T2 on all 3 subscales and significant increase in scores from T3 to T4. Between T2 and T3 scores there is a slight increase in all 3 subscales.

In the case of Romania, for the experimental group in all 3 subscales there were increased scores from T1 to T2 and from T3 to T4. There also were increased scores from T2 to T3. The same results apply in the control group.

In the case of Portugal, for the experimental group in all 3 subscales there were increased scores from T1 to T2 and from T3 to T4. There also were increased scores from T2 to T3. In the control group there were increased scores from T1 to T2 and from T3 to T4. However, in all subscales the T3 scores of the control group were greater than the T4 scores.

**Table 3.7.10**. Means (M) and standard deviations (sd) of the Adaptive Social Behavior Inventory (ASBI) subscales in both groups across times of assessment (T1-T4)

| ASBI subscales | Time | Greece | | Cyprus | | Romania | | Portugal | |
|---|---|---|---|---|---|---|---|---|---|
| | | Exp | Con | Exp | Con | Exp | Con | Exp | Con |
| | | M (sd) | M(sd) | M (sd) | M(sd) | M(sd) | M(sd) | M (sd) | M(sd) |
| Conformity/Compliance | T1 | 2.41 (0.52) | 2.45 (0.41) | 2.42 (0.41) | 2.32 (0.44) | 2.69 (0.37) | 2.57 (0.42) | 2.78 (0.31) | 2.64 (0.41) |
| | T2 | 2.59 (0.45) | 2.53 (0.43) | 2.64 (0.36) | 2.36 (044) | 2.73 (0.36) | 2.68 (0.37) | 2.82 (0.21) | 2.84 (0.28) |
| | T3 | 2.55 (0.48) | 2.60 (0.33) | 2.38 (0.59) | 2.38 (0.59 | 2.75 (0.32) | 2.79 (0.32) | 2.79 (0.33) | 2.79 (0.29) |
| | T4 | 2.64 (0.47) | 2.73 (0.26) | 2.53 (0.33) | 2.53 (0.33) | 2.88 (0.22) | 2.85 (0.27) | 2.86 (0.25) | 2.77 (0.37) |
| Prosocial | T1 | 2.48 (0.49) | 2.51 (0.36) | 2.55 (0.40) | 2.48 (0.39) | 2.61 (0.38) | 2.60 (0.40) | 2.59 (0.32) | 2.73 (0.74) |
| | T2 | 2.71 (0.40) | 2.61 (0.37) | 2.75 (0.30) | 2.47 (0.38) | 2.65 (0.35) | 2.59 (0.37) | 2.67 (0.24) | 2.77 (0.30) |
| | T3 | 2.70 (0.44) | 2.70 (0.32) | 2.71 (0.35) | 2.50 (0.33) | 2.74 (0.32) | 2.65 (0.33) | 2.71 (0.29) | 2.73 (0.38) |
| | T4 | 2.73 (0.44) | 2.80 (0.25) | 2.81 (0.25) | 2.64 (0.29) | 2.78 (0.23) | 2.76 (0.28) | 2.77 (0.29) | 2.68 (0.46) |
| Confidence/Independence | T1 | 2.64 (0.51) | 2.72 (0.36) | 2.72 (0.38) | 2.63 (0.44) | 2.71 (0.39) | 2.68 (0.43) | 2.65 (0.39) | 2.65 (0.43) |
| | T2 | 2.78 (0.41) | 2.75 (0.36) | 2.85 (0.29) | 2.62 (0.46) | 2.76 (0.36) | 2.71 (0.42) | 2.65 (0.32) | 2.73 (0.42) |
| | T3 | 2.80 (0.39) | 2.80 (0.32) | 2.78 (0.38) | 2.68 (0.40) | 2.80 (0.31) | 2.84 (0.31) | 2.73 (0.32) | 2.54 (0.50) |
| | T4 | 2.85 (0.33) | 2.85 (0.31) | 2.86 (0.29) | 2.79 (0.35) | 2.91 (0.22) | 2.88 (0.26) | 2.80 (0.30) | 2.60 (0.49) |
| N | | 132 | 120 | 105 | 71 | 737 | 114 | 60 | 45 |

Notes: * p < .05; min = 1, max = 3

# Part 4. Discussion

## 4.1. Summary of findings

The ProW research design employed an exploratory approach through randomized wait-list trials with embedded qualitative components. The ProW intervention was based on the PERMA model and the SWPBS approach implemented in preschool settings across Greece, Cyprus, Romania, and Portugal. The implementation was conducted over two school years, with half of the schools implementing the intervention in 2021-22 (Group A) and the other half in 2022-23 (Group B). This report summarizes the impact of ProW on teachers' well-being, efficacy, job satisfaction, burnout levels, children's social competences, and school climate. The hypothesis posited improvements in these teachers' career-related elements and positive effects on children's behavior, as well as overall early childhood education settings. Data were obtained from teachers regarding both student and teacher outcomes. The study's quantitative findings are presented in the current report, while qualitative findings were reported separately in the national D3.1 Implementation of Field Trials Reports.

The statistical analysis involved reliability tests on adopted measures, inspection of descriptive statistics (i.e., mean scores and standard deviations) for each evaluation wave, and group comparisons assessed through ANOVA and t-tests. Results were obtained by assessment time presenting findings for teachers and children separately, while focusing on change/gain scores within school years. Two-way ANOVAs examined group and country effects, while samples t-tests assessed whether mean change scores differed significantly from baseline. This analytical approach allowed us to evaluate the impact of the intervention on teachers' and children's outcomes across countries.

To assess the impact of ProW on the **early childhood teachers' well-being** (as measured by the Teacher Subjective Wellbeing Questionnaire [**TSWQ**], Renshaw et al., 2015) over a two-year period, the analysis focused on gain scores across the key timepoints. The value-added analyses conducted between Time 1 (pre-intervention) and Time 2 (post-intervention)

revealed no significant group or country effects in any of the subscales, according to the ANOVA tests. Additionally, there were no significant interaction effects of group by country in any subscale, indicating that mean differences in change scores from Time 1 to Time 2 were non-significant between experimental and control groups across countries. The t-tests, however, highlighted improvements in global Teacher Wellbeing for the Greek experimental sample and improvements in the Teaching Efficacy subscale for the Cypriot experimental sample. Moving on to the value-added analysis in Year 2 (progress between Time 3 – Time 4), ANOVA tests showed no significant group or country effects in any of the subscales, and there were no significant interaction effects of group by country. This result suggests that mean differences in change scores from Time 3 to Time 4 were non-significant between experimental and control groups across countries. In the t-tests, improvements on the TSWQ subscales were observed in the Cypriot experimental sample for all subscales. However, significant improvements did not appear in any other country's experimental group. Notably, the Greek control group demonstrated an improvement in the Teaching Efficacy subscale, while the Cypriot control group showed improvement in the Teaching Efficacy subscale as well. This is attributed to the fact that, in Year 2, the control group was the one receiving the ProW intervention. In Romania and Portugal, the ProW does not seem to have any effect on teachers' wellbeing as measured by the TSWQ.

The analysis of **Teacher Wellbeing** as captured by the **PERMA** profiler from Time 1 (pre-intervention) to Time 2 (post-intervention) based on ANOVA tests revealed no significant group effects across various PERMA subscales and the overall Global Score, except for happiness. Notably, the intervention did not exhibit differential influences on PERMA subscales during the first year. When considering t-tests, the Cyprus teachers' experimental group demonstrated the highest change in Year 1, as evidenced by significant improvements in Positive, Engagement, Relationships, Meaning, Accomplishment, and Health, along with the overall PERMA Global Score. Greek teachers also showed significant changes in several subscales, except for Meaning, Accomplishment, and Health. Conversely, teachers from Romania and Portugal exhibited no significant differences in overall well-being elements,

except for a negative change in the Health subscale among Portugal's experimental group teachers. Regarding the value-added analysis in Year 2 (T3 – T4), ANOVA tests indicated no significant group effects in various PERMA subscales, except for Relationships and Meaning. Relationships exhibited both a significant country effect and a noteworthy interaction effect, suggesting that the interplay between groups and countries may influence this aspect of well-being. Meaning and Accomplishment showed statistically significant group effects, with a stronger interaction effect for Meaning, Health and PERMA Global displayed minimal effects across groups and countries. In terms of t-tests, Cyprus experimental group teachers again showed the highest probability of change in Year 2, with significant improvements in Engagement, Relationships, Meaning, Accomplishment, and the overall PERMA Global Score. Greek teachers in the control group exhibited significant changes in the Engagement subscale. However, teachers from Romania and Portugal did not show significant differences in overall well-being elements, except for a negative change in the Meaning subscale among Portugal's experimental group teachers.

The value-added analyses of **Teachers' Sense of Efficacy Scale (TSES)** for the first year as per the ANOVA tests yielded only one significant country effect in the student engagement subscale, with no significant interaction effects of group by country in other subscales. This implies that mean differences on change scores between experimental and control groups from Time 1 to Time 2 were non-significant across countries. On the other hand, t-tests indicated significant improvements on TSES subscales for all subscales in the Cypriot and Romanian experimental group samples, while no other significant improvements were observed in experimental groups from other countries. For year 2, the value-added analyses (progress between T3 – T4), ANOVA tests showed no significant group or country effects in any of the subscales. Furthermore, there were no significant interaction effects of group by country, indicating that mean differences on change scores from Time 3 to Time 4 were non-significant between experimental and control groups across countries. In terms of t-tests, significant improvements on TSES subscales were observed for all subscales in the Greek and Cypriot experimental group samples, while Greek teachers from the control

group also showed a significant improvement. These significant improvements in the control groups from Time 3 to Time 4 highlight the ongoing effects of the ProW intervention in Year 2 for these two countries. Additionally, the Portuguese control group demonstrated improvement in the Classroom Management subscale.

The analyses of **Teacher Social Self-efficacy (TSSES)** in the value-added analysis from Time 1 (pre-intervention) to Time 2 (post-intervention), ANOVA tests indicated significant group effects on mean change scores in the subscale Teacher Sensitivity and the composite assessment of the TSSES questionnaire. The absence of interaction effects on these measures suggested that the ProW intervention's effects are not country-specific and can be generalized across the entire sample. While no significant group effects appeared in the change scores for other subscales, country effects were observed in all TSSES subscales, except for Social Guidance. Nevertheless, no significant interactions of group by country were found, indicating that the pattern of differences between experimental and control groups on change scores for these subscales was consistent across countries. T-tests further revealed improvements in TSSES subscales, including Teacher Sensitivity, Social Guidance, Teacher-Child Support, Classroom Climate-Children Engagement, and Classroom Management-Conflict Resolution, primarily in the Cypriot sample. Similar improvements were noted in the Greek and Romanian samples for most TSSES subscales. In the Value-added analysis in Year 2 (Progress between T3 – T4), ANOVA tests showed significant country effects on mean change scores in several TSSES subscales and the composite assessment. Similar to the first year, the absence of interaction effects indicated that the intervention's impact was not group-specific and could be generalized across the entire sample. Although no significant group effects appeared in the change scores for the subscales, there were no significant interactions of group by country, suggesting consistent patterns of differences between experimental and control groups across countries. T-tests highlighted improvements in TSSES subscales, including Teacher Sensitivity, Social Guidance, Teacher-Child Support, Classroom Climate-Children Engagement, Classroom Management-Conflict Resolution, and TSEES global, primarily in the Greek and Cypriot teacher samples.

Notably, the Portuguese control group also showed improvements in almost all TSSES subscales and TSEES global. Overall, both experimental and control groups demonstrated high improvements in TSSES scores from Time 3 to Time 4.

The analyses of **Job Satisfaction** using **the Employee Satisfaction Inventory (ESI)** based on the ANOVA tests of the value-added analysis from Time 1 (pre-intervention) to Time 2 (post-intervention) revealed significant group effects were observed in the Working Conditions and Job Itself subscales. However, no significant group effects in subscales Supervisor, Pay, Organization as a Whole, and Promotion. Country effects were also identified in the change scores for Working Conditions, Supervisor, Job Itself, and Promotion. Importantly, there were no significant interactions of group by country in any subscale, suggesting that differences in change scores among countries were similar for both experimental and control groups. The t-tests further detailed improvements in employee satisfaction, highlighting variations among countries and dimensions. Positive change scores were observed in the Working Conditions subscale for Greece, Cyprus, and Romania. Significant positive change scores were found in the Working Conditions subscale for Greek and Romanian teachers who received the ProW intervention. However, Cypriot teachers in the control group showed a significant negative change score in the same subscale, indicating a decreased sense of satisfaction with working conditions from Time 1 to Time 2. In the Job Itself subscale, Romanian teachers demonstrated a significant change score, while Greek teachers in the control group showed a significant lower change score. In the Supervisor subscale, both experimental and control groups of Romanian teachers exhibited significant change scores. In the Value-added analysis in Year 2 (progress between T3 – T4), ANOVA tests showed significant group effects in the Supervisor subscale. Country effects were identified in the change scores for the Global assessment of ESI and the subscales of Job Itself and Pay. There were no significant interactions of group by country in most subscales, except for Job Itself, indicating that differences in change scores among countries were mostly similar for both experimental and control groups. The t-tests revealed that teachers from the control group, who received the ProW intervention in Year 2, did not significantly

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change their scores across participating countries. This suggests that the implementation of the ProW intervention in the control group during Year 2 did not show a unique, country-specific significant effect on the dimensions of employee satisfaction.

The analyses of **Teacher Burnout with the Maslach Burnout Inventory (MBI)** based on the ANOVA tests of the value-added analysis from Time 1 (pre-intervention) to Time 2 (post-intervention) revealed a significant group and country effect on Personal Accomplishment, with no interaction effect. Teachers in the experimental group had better gain scores than those in the control group across three countries (Greece, Cyprus, Portugal). However, no significant group or country effects appeared in the Emotional Exhaustion and Depersonalization subscales, and there were no significant interactions of group by country in these two subscales. The t-tests detailed improvements in Personal Accomplishment in the experimental groups of Greek and Romanian samples. In contrast, the experimental group in Portugal showed a significantly higher score in Emotional Exhaustion at Time 2 than at Time 1, while this did not happen in the control group. Overall, experimental groups in all countries demonstrated improvements in Personal Accomplishment, and in most cases, teachers who received the ProW intervention did not show a worsening of their burnout levels in terms of emotional exhaustion and depersonalization. For the second year, the ANOVA tests of the value-added analysis (T3 – T4), showed no significant group or country effects in the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscales with no significant interactions of group by country, indicating non-significant changes across countries between all groups. The t-tests revealed varied findings. In Greece, the experimental group showed a slight reduction in Emotional Exhaustion, while in Cyprus, there was an increase in this aspect of burnout. Romania's experimental group displayed a minor rise, while the control group presented a notable and statistically significant increase in Emotional Exhaustion. For Depersonalization, the control group in Portugal reported a significant increase. The findings for Personal Accomplishment were mixed, with Greek and Romanian experimental groups experiencing positive shifts, whereas the experimental groups in Cyprus and Portugal showed declines. These results suggest nuanced impacts of

the ProW intervention on teacher burnout, with positive changes in certain dimensions and other variations across countries underscoring the complexity of addressing burnout and the importance of considering specific contextual factors in intervention strategies.

The implementation of the ProW intervention demonstrates a consistently positive impact on **children's prosocial skills** across multiple dimensions and educational contexts. The assessment of children's prosocial skills using the **Strengths and Difficulties Questionnaire (SDQ)** through t-tests conducted from Time 1 (pre-intervention) to Time 2 (post-intervention) demonstrated that, collectively across participating countries (Greece, Cyprus, Romania, Portugal), the experimental group exhibited better gain scores compared to the control group. However, the dynamics shifted in the analyses from T3 to T4 revealing that children in the experimental group continued to outperform those in the control group in three countries (Greece, Cyprus, Romania). These results suggest nuanced impacts of the ProW intervention on children prosocial skills, with positive changes in certain dimensions such as emotional, hyperactivity and peer problems and other variations across countries.

The examination of **children's behavior** using the **Child Behavior Rating Scale (CBRS)** showed that the ProW intervention influenced children's behavior across all countries, with some variations in the sizes of effects, except for a limited group effect observed for the 'engagement' subscale in Greece.  The combined findings from the ANOVAs and one sample t-tests for the CBRS scale showed that the ProW intervention influenced various social and behavioral skills of children across the countries of the project. Experimental group's children improved their behavior at the end of the Year 1 more than children in the control group and this is clear evidence for the ProW effects on them. For year 2, the findings suggest that the ProW intervention had a positive impact on the measured behaviors across all countries included in the study.

The examination **of children's social behavior** using the **Adaptive Social Behavior Inventory (ASBI)** showed mixed findings. The intervention did not demonstrate a clear and significant positive impact on the enhancement of social behavioral skills, with a noticeable exception in children from Cyprus based on the ASBI scale. In the remaining countries, disentangling

whether the improvements observed in children's behavioral skills at the conclusion of Year 1 were exclusively attributed to the ProW intervention or influenced by external variables remains unclear. Importantly, the findings suggest that the observed changes in children's behavior were not solely attributable to the Year 2 intervention alone.     It is probable that the intervention received in Year 1 has still effects on the experimental group and the control group seems to benefit from the implementation in Year 2.

Shifting beyond the classroom, considering the influence of the ProW model on **preschool climate** using the Preschool Climate Scale (PCS) mixed findings emerged. Significant country effects were observed in almost all subscales of the PCS, excluding the School Safety subscale, as well as in the global change score of the PCS scale. However, no group or interaction effects were identified in the change scores across preschool climate dimensions. Distinct differences in change scores were evident among the countries, particularly with Romania differing from the other three nations. However, the absence of group and interaction effects mean that the ProW intervention did not influence in any way the school climate during Year 1 among the participating countries. Regarding the year 2, the experimental group, encompassing the entire participant sample, exhibited a significant improvement in scores for the subscales of Student-Student, Clarity of expectations, Fairness of rules, and Respect of diversity from Time 3 to Time 4, underscoring positive changes in these aspects of the school climate. Notably, the Romanian sample displayed a unique pattern with both experimental and control groups showing a significant increase in school climate scores from Time 3 to Time 4. Moreover, significant improvements were specifically reported by Cypriot teachers in the experimental group across specific dimensions of the school climate, a trend not mirrored by their the control group, who underwent intervention in Year 2. However, the absence of group and interaction effect mean that the intervention did not influence differently the school climate during Year 2 among the participating countries.

## 4.2. Discussion of findings

### 1st Research Question - Does the implementation of the ProW model impact positively on early childhood teachers' well-being, sense of efficacy and job satisfaction?

The findings from the cross-country, two-year study on the impact of the ProW on early childhood teachers provide valuable insights into the effectiveness and complexities of teacher intervention programs. Examining the findings across various dimensions, some positive conclusions emerge. In the first year, the ProW intervention demonstrated positive effects on teacher well-being, particularly in the Greek experimental sample, where improvements were observed in global Teacher Wellbeing. Additionally, the Cypriot experimental sample showed enhancements in the Teaching Efficacy subscale. However, in Year 2, these positive effects were not consistently replicated across countries, with no significant improvements in the experimental groups from Romania and Portugal. Notably, the Greek control group exhibited an improvement in the Teaching Efficacy subscale, affirming the ongoing impact of the ProW intervention. Based on the PERMA profiler, the nuanced results showed that the Cypriot experimental sample exhibited substantial improvements across various subscales, emphasizing the intervention's positive influence on well-being. In Year 2, the Cypriot experimental group continued to show significant improvements in multiple subscales. However, Greece demonstrated positive shifts in the control group's Engagement subscale. Conversely, Romania and Portugal did not exhibit significant improvements in overall well-being elements. These findings suggest both positive and context-specific impacts of the ProW intervention.

The analyses on the Teachers' Sense of Efficacy indicated significant improvements in the Cypriot and Romanian experimental group samples in the first year, emphasizing the positive effects of the ProW intervention on teachers' sense of efficacy. In Year 2, both Greek and Cypriot experimental groups continued to exhibit significant improvements, highlighting the sustained positive impact of the intervention. The Portuguese control group

also showed improvement in the Classroom Management subscale, suggesting broader positive effects.

For the Teacher Social Self-efficacy, the results demonstrated significant group effects on Teacher Sensitivity and the composite assessment, indicating that the ProW intervention positively influenced social self-efficacy across the entire sample. Notably, improvements in various TSSES subscales were observed in the Cypriot, Greek, and Romanian samples, with the Portuguese control group also showing positive changes. These consistent improvements suggest a widespread and enduring positive impact of the ProW model on teacher social self-efficacy.

Regarding job satisfaction, the ESI analysis revealed significant group effects in the Working Conditions and Job Itself subscales, with positive changes observed in the Greek and Romanian experimental groups. However, the Cypriot control group showed a significant decrease in satisfaction with working conditions. In Year 2, the Supervisor subscale exhibited significant group effects, indicating a positive impact on satisfaction. Nevertheless, the absence of significant changes in the control groups suggests that the ProW intervention did not uniquely influence job satisfaction dimensions in Year 2.

While positive outcomes were evident, it is essential to acknowledge certain critical perspectives such as inconsistencies of the results across countries. Specifically, the findings displayed variations in the impact of the ProW intervention across countries, while some positive effects were observed in Greece and Cyprus, in Romania and Portugal improvements were not consistent in all measures. These inconsistencies underscore the need to consider contextual factors that may influence the intervention's effectiveness in different educational settings. Notably, some dimensions, such as Emotional Exhaustion and Depersonalization in the Teacher Burnout analysis, did not show significant improvements in certain groups. This raises concerns about the possibilities to address specific aspects of teacher well-being and burnout through a specific intervention. Another example is the analyses of the Employee Satisfaction Inventory in Year 2 that did not reveal significant changes in the control groups, challenging the notion of a unique, country-specific effect of

the ProW intervention. This prompts a closer examination of the sustained impact of the intervention over time.

The commonalities observed in positive outcomes across different dimensions and countries suggest that the ProW model can have some universal positive impact on teacher well-being and efficacy. However, the differences in the degree and nature of these effects highlight the importance of considering local contexts, educational systems, and cultural factors. The findings might indicate an impact of the ProW, emphasizing its potential to enhance teacher well-being, sense of efficacy, and job satisfaction under conditions suggest the model's adaptability. The study also underscores the importance of tailoring interventions to specific contexts and the need for ongoing support to sustain positive outcomes over time. While the ProW demonstrates potential for a positive impact on various aspects of early childhood teachers' professional experiences, a nuanced understanding of country-specific nuances and sustained effects is crucial for refining and optimizing intervention strategies.

## *2nd Research Question - Does the implementation of the ProW model reduce early childhood teachers' burnout levels?*

The examination of the impact of ProW on early childhood teachers' burnout focused on Emotional Exhaustion, Depersonalization, and Personal Accomplishment across multiple countries and assessment times. The results suggested consistent positive outcomes in the domain of Personal Accomplishment. Group and country effect in this dimension emphasized that teachers in the experimental groups experienced better gain scores compared to the control group in Greece, Cyprus, and Portugal. The findings suggest that the ProW intervention contributed to an enhanced sense of achievement and fulfillment among teachers, mitigating burnout related to personal accomplishment. Additional finding further supported the positive impact on Personal Accomplishment, with both Greek and Romanian experimental groups demonstrating improvements. Moreover, the experimental groups in all countries showcased enhancements in Personal Accomplishment without a worsening of burnout levels in terms of emotional exhaustion and depersonalization. This

indicates a positive trend, reinforcing the potential efficacy of the ProW in addressing key aspects of teacher burnout.

On the other hand, the analyses revealed variations and challenges in addressing other dimensions of teacher burnout. The absence of significant group or country effects in Emotional Exhaustion and Depersonalization subscales implies that the ProW intervention may not have universally impacted these aspects across all countries. Notably, the experimental group in Portugal displayed a significant increase in Emotional Exhaustion, challenging the assumption of consistent positive effects. Understanding the factors contributing to this variation is crucial for refining intervention strategies. The nuanced country-specific findings underscore the importance of considering contextual factors in interpreting the impact of the ProW model. While Greece and Romania experienced positive shifts in Emotional Exhaustion and Depersonalization, Cyprus exhibited an increase in Emotional Exhaustion, and Portugal's control group reported a significant rise in Depersonalization. These variations highlight the diverse challenges and contextual influences on teacher burnout, emphasizing the need for tailored interventions that account for specific country dynamics.

In conclusion, the nuanced impacts of the ProW model on teacher burnout underscore the complexity of addressing this multifaceted issue. While the intervention demonstrated positive effects on Personal Accomplishment, challenges persisted in mitigating emotional exhaustion and depersonalization uniformly across countries. The variations in Year 2 findings further emphasize the dynamic nature of teacher burnout, requiring ongoing and adaptable intervention strategies. The ProW intervention exhibits promise in positively influencing teacher burnout, particularly in terms of enhancing teachers' sense of accomplishment. However, the varied outcomes in emotional exhaustion and depersonalization highlight the need for continuous refinement of the intervention, accounting for diverse contextual factors in different educational landscapes.

### 3rd Research Question - Does the implementation of the ProW framework impact positively on children's social competences

The findings from the cross-country, two-year study on the impact of the ProW on various aspects of children's social and behavioral development provide valuable insights into the effectiveness and complexities of intervention programs. Examining the findings across various dimensions, revealed valuable insights. One of the overarching trends evident in the results is the consistent improvement in prosocial skills across countries and time periods utilizing the Strengths and Difficulties Questionnaire (SDQ). Children's prosocial behaviors, such as sharing, cooperation, and compliance, showed a positive trajectory, indicating that the ProW intervention effectively cultivates these crucial social competences. This trend aligns with the ProW framework's emphasis on fostering positive social interactions and cooperative behaviors among preschool children. More specifically, the longitudinal analysis from Time 1 (T1) to Time 4 (T4) reveals a commendable reduction in emotional, conduct, and peer problems among both experimental and control groups in some countries. This decline suggests that factors beyond the ProW intervention, such as the positive educational environment and teacher-children interactions, may contribute to the overall positive behavioral outcomes (Raver et al., 2008). The multifaceted nature of children's development is influenced by a combination of intervention-specific factors and broader contextual elements within the educational setting. Furthermore, the experimental group consistently exhibits a more substantial decrease in these behavioral problems, indicating the specific influence of the ProW framework. The positive trajectory of prosocial skills is consistent with the literature emphasizing the role of social-emotional interventions in enhancing children's cooperative behaviors and interpersonal relationships (Durlak et al., 2011; Sklad et al., 2012).

Regarding the country-specific insights, it should be noted that although the overall positive trends are evident, the country-specific variations in the impact of the ProW intervention gain attention. For example, results from Time 1 (pre-intervention) to Time 2 (post-intervention) indicated that, across participating countries (Greece, Cyprus, Romania, Portugal), the experimental group demonstrated superior gain scores compared to the control group. However, the dynamics shifted in the analyses from T3 to T4, revealed by t-

tests, indicating that children in the experimental group continued to surpass those in the control group in three countries (Greece, Cyprus, Romania).The findings of our study reveal nuanced patterns in the impact of the ProW framework on children's social competences across different countries.

Notably, Greece, Cyprus, and Romania emerge as success stories, demonstrating clear positive effects following the implementation of the ProW intervention. In these countries, we observed significant improvements in children's prosocial skills, coupled with notable reductions in hyperactivity and peer-related problems. These outcomes align with previous research emphasizing the positive influence of social-emotional learning interventions on children's behavioral and social development (Durlak et al., 2011; Sklad et al., 2012). Conversely, Portugal presents a more intricate scenario. While there were improvements in prosocial skills, the unexpected increases in certain behavioral problems indicate a need for a closer examination of the intervention's effectiveness in addressing specific challenges unique to the Portuguese context. The variations observed across countries underscore the importance of considering cultural and contextual factors in evaluating the effectiveness of interventions. It is essential to recognize that social norms, educational systems, and cultural nuances can influence how interventions are received and, consequently, their impact on children's social competences (Humphrey et al., 2020; Raver et al., 2008).

Regarding impact of the ProW intervention on children's behavior, the results of the study revealed noteworthy improvements in various social and behavioral skills among children in the experimental group. The substantial positive changes observed at the end of Year 1, with the experimental group exhibiting greater behavioral improvement compared to the control group, underscore the efficacy of the ProW intervention. Notably, the limited group effect observed for the 'engagement' subscale in Greece suggests that certain dimensions of behavior may be influenced differently by the ProW intervention within specific cultural and educational contexts. However, a consistent and favorable influence of the ProW intervention on children's behaviors indicated in the second year of the study. This finding is

noteworthy and implies that the positive effects observed at the end of the first year were sustained and even extended into the second year across diverse cultural contexts.

The persistent positive impact aligns with the notion that effective interventions should exhibit durability and contribute to sustained behavioral improvements over time (Durlak et al., 2011). It suggests that the ProW framework, implemented in the preschool settings of the participating countries, continues to promote positive social and behavioral development among children. This is a positive outcome, as sustained intervention effects are crucial for ensuring the long-term benefits of such programs.

In conclusion, the positive trajectory observed across time suggests that the ProW intervention has enduring effects on children's prosocial skills and behavior. The sustained improvements in children's prosocial skills and reductions in behavioral problems indicate that the intervention's impact is not merely transient but contributes to long-term positive behavioral outcomes. The unexpected finding in Portugal, where the experimental group exhibited increases in certain behavioral problems, warrants further exploration. It is crucial to delve deeper into the contextual factors and potential implementation challenges that may have influenced the outcomes. Understanding these nuances can inform future iterations of the ProW framework or similar interventions to enhance their effectiveness in diverse settings.

### *4th Research Question - Does the implementation of the ProW model impact on school climate?*

The results regarding the impact of the ProW intervention on school climate dimensions present a complex picture. The identification of significant country effects in almost all subscales of the Preschool Classroom Environment Scale (PCS), along with variations in the global change score, indicates that different countries experienced diverse changes in their preschools climate. Notably, the absence of a group or interaction effect suggests that the ProW intervention did not uniformly influence these changes across participating countries during Year 1. This finding implies that the observed variations in school climate were not

specifically attributed to the ProW intervention but might be influenced by other contextual factors.

In Year 2, the experimental group demonstrated a significant improvement in specific subscales related to Student-Student interactions, Clarity of expectations, Fairness of rules, and Respect of diversity. This positive change suggests that the ProW intervention had a notable impact on enhancing these aspects of the school climate. The distinct pattern observed in Romania, where both experimental and control groups showed a significant increase in school climate scores, raises questions about the specific drivers of this improvement. The absence of group and interaction effects during Year 2 suggests that the ProW intervention did not lead to differential changes in school climate across the participating countries.

A noteworthy finding is the significant improvements reported by Cypriot teachers in the experimental group, particularly in specific dimensions of the school climate. This positive trend was not mirrored by the control group, indicating that the ProW intervention in Year 2 might have had a localized impact on school climate in Cyprus. However, the absence of group and interaction effects overall emphasizes the need for a nuanced interpretation of these results, considering potential external factors influencing changes in the school climate.

### 4.3 Limitations and Implications

While the study provides valuable insights, it is not without **limitations**. The reliance on teacher perceptions and subjective assessments may introduce biases. One notable limitation of the present study is the reliance on teachers' self-reported data. Self-reported measures are susceptible to social desirability bias and may not fully capture the nuanced and complex outcomes. Future studies could benefit from incorporating multiple data sources, including observations and parent and children's reports, to offer a more comprehensive understanding of the study's outcomes. Second, while the study estimated the reliability of the instruments through the calculation of Cronbach's alpha ($\alpha$), it is crucial to acknowledge the absence of an in-depth exploration of the construct and other types of

validity of the instruments before using the scales for value-added investigations or other type of analysis. The validity of measurement instruments is essential to ensure that they accurately measure the constructs they intend to assess. While the instruments utilized in the study were commonly employed in international research, the absence of instrument-specific validation within the context of the ProW project introduces a core limitation. Researchers should exercise caution when generalizing findings beyond the specific project scope. A main factor to consider is the limited sample size in each country that might not be necessarily representative of the country's teaching or school population. It should also be noted that schools were recruited prior to expressing interest, which might imply a genuine intention for improvement. This might imply that the intervention might have had similar effects on schools without such intentions. Future research should consider recruiting more and several types of schools as well as incorporating thorough processes to enhance the robustness of the study findings. Third, the findings of the present study are specific to the context of the ProW project and the participating countries. Generalizing the results beyond these parameters should be done cautiously. The study's scope and focus on preschool settings may also restrict the generalizability to other educational levels or contexts. Fourth, the design of the study limits the identification of effect during the second year since both groups of schools received the intervention. Therefore, the comparisons between the time points within the second year might be cautiously seen for value-added conclusions. Finally, in the Portuguese case, although assistants did not attend the ProW training sessions, their responses to the questionnaires measuring well-being, self-efficacy, job satisfaction and burnout were still considered for the longitudinal study, which might have affected the results of the intervention effects in this country. Despite these limitations, the present study contributes valuable insights into the potential impact of the ProW model on school climate. Acknowledging and addressing these limitations in future research will further enhance the validity and applicability of findings in diverse educational settings.

The **implications** of the study are noteworthy for teachers, policymakers, and researchers. The positive impact of the ProW framework on children's social competences highlights the

importance of incorporating evidence-based interventions in early childhood education. Policymakers may consider the scalability of such interventions within diverse educational systems, while teachers can benefit from insights into effective strategies for promoting positive social behaviors among preschool children. More practical implications to inform policy and practice are provided to the part 5.

# Part 5. Policies and practices on enhancing teachers' well-being and profession

## 5.1 Policy recommendations

The results presented in this report indicate that the ProW model, integrating components from the PERMA model and SWPBS approach, can help to promote the personal and professional well-being and sense of efficacy of Early Childhood Education and Care (ECEC) professionals, as well as alleviate some of the elements that can lead to the experience of burnout. Despite these promising results, our findings also suggest that systemic factors concerning the careers of these professionals can hinder or wash away the positive outcomes of interventions focusing on increasing the well-being levels of these professionals. It is crucial that future policies seek to address some of these factors in ways that support the efforts of future actions to promote the well-being of ECEC professionals and create the best possible conditions for them to provide quality care and education to children in their classrooms.

Departing from the results presented here, as well as from the whole experience of implementing the ProW intervention (see ProW's D3.1 Implementation of the Field Trials Report), we present some recommendations for policymakers and national and local public authorities that might be helpful in addressing some of the systemic factors that can have a negative impact on ECEC professionals' personal and professional well-being and, consequently, on the ECEC contexts' quality.

National policies that ensure **adequate funding** to support a systemic and sustained recognition of the importance of ECEC, by providing professionals with fair income, career progression regulations, and schedules adjusted to the work demands, are crucial. As expected, the recognition of the importance of ECEC by the provision of these conditions can significantly influence ECEC professionals' well-being and motivation levels. These policies can also help to ensure adequate resources (human and material) to support first line ECEC professionals (teachers and assistants) to implement improved quality educational practices that are crucial for the emotional, cognitive, and social development of children at their care, with potential benefits for their later academic achievement.

Another focus area for national and local educational authorities should be on providing easy access to **quality professional development (PD)** opportunities that are adjusted to ECEC professionals' needs. The results presented in this report add to the existing evidence that PD focused on promoting and maintaining the well-being of ECEC professionals and on the implementation of preventive systems of behavior management can have positive results in the overall quality of ECEC (Egert et al., 2018). The results achieved by the ProW also reinforce the importance of offering PD actions that address the specific needs of the participants, with careful consideration for the sociocultural characteristics of the communities in which they will be implemented. In this sense, regular needs assessment consultations with ECEC professionals can be crucial for the identification of unaddressed needs and for a better fit of PD offers to the actual practical needs of the professionals on the field. Also, time regulations and schedule restrictions of ECEC professionals, along with incentives (e.g., financial, material, time) to attend PD, should be considered to increase the adherence and consequent effectiveness of these actions (OECD, 2020).

Regardless of the importance that these PD initiatives can assume in creating favorable conditions for ECEC professionals to share their experiences and challenges with peers from other preschools, other national and local opportunities for **professional networking** should be encouraged by public authorities. ProW implementation, similarly to previous studies (e.g., Resa et al., 2017), reinforced that problem-solving by group sharing and reflection can have positive effects on the participants well-being and help them to find alternative educational strategies for dealing with challenging situations in their classroom that have been successfully implemented by their colleagues in the past. This can be especially important for professionals working in small ECEC settings, since they can feel more isolated and find it difficult to communicate with other professionals in the field of ECEC.

## 5.2 Practices for ECEC settings, teachers and families

The validated ProW model addresses key principles from foundational models in education in an integrative manner. Grounded in the PERMA model, emphasis on positive relationships,

engaging tasks, and continuous professional growth fosters a supportive environment for teachers. Derived from the SWPBS model, behavioral support structures, a positive school climate, and data-driven approaches ensure effective management of preschoolers' behavior. Complementing these, the Professional Development model inspires tailored training programs, peer learning communities, and recognition systems, cultivating a culture of collaborative growth and acknowledging teachers' invaluable contributions. These multifaceted strategies and practices, integrating elements from these models, aim to fortify teachers' well-being, bolster their professional journey, and enhance the educational experience for early childhood beneficiaries.

The proposed practices were tailored to ECEC settings, teachers and families of preschool children engaged in early education:

*Practices for ECEC settings*

✓ Implement strategies fostering positive connections among teachers, encouraging teamwork and collaboration in planning and executing educational activities; cultivating a conductive educational environment.

✓ Create opportunities for teachers to engage in meaningful and challenging tasks that align with their skills and interests, fostering a sense of accomplishment and purpose. By providing such tasks, educational institutions empower teachers to find fulfillment and drive in their roles, ultimately contributing to a more vibrant and effective educational environment (Kovich et al., 2023).

✓ Develop a framework that encourages continuous professional development, offering resources and opportunities for further education, workshops, and mentorship. Professional growth support, encompassing continuous development frameworks, not only nurtures teachers' skills but also aligns with the concept of lifelong learning (Vekić-Kljaić & Mlinarević, 2022). By ensuring the alignment between training content and teachers' needs, institutions enhance the efficacy of the learning experience, thereby bolstering teachers' confidence, skills, and overall effectiveness in the classroom (Wang & Chen, 2022).

✓ Establish clear behavior management systems and support structures within the school environment to aid teachers in managing preschoolers' behavior effectively. These support structures not only aid teachers in managing behavior effectively but also create a nurturing atmosphere vital for both teacher and student success (Sørlie et al., 2016).

✓ Implement strategies to promote a positive and inclusive school culture, emphasizing respect, empathy, and clear communication among all stakeholders. This climate, alongside the continuous development of students' social-emotional skills, contributes to both individual and systemic advancements within the educational system (Martinsone & Žydžiūnaite, 2023).

✓ Encourage the use of data-driven approaches to assess, monitor, and address behavioral concerns, allowing for proactive interventions and support.

✓ Establish peer learning communities where teachers can collaborate, share experiences, and learn from each other, fostering a culture of continuous improvement.

✓ Implement a system that acknowledges and rewards teachers for their professional achievements, motivating ongoing dedication and excellence in early childhood education.

*Practices for teachers*

✓ Shows interest and openness towards establishing positive relationships with other teachers, towards teamwork, towards collaborative approaches. This collaborative approach not only supports teachers in their roles but also sets the foundation for a nurturing classroom atmosphere, fostering healthy teacher-student relationships, and positively impacting student engagement and learning outcomes (Nwoko et al., 2023).

✓ Involvement in tasks that are in correspondence with their interests and abilities, signaling situations in which the meaning of the task is difficult to understand or situations in which the task exceeds the teacher's current abilities.

✓ Effectively, regularly and systematically analyzes own actions, performance and attitudes and makes necessary adjustments, seeking professional development opportunities to eliminate knowledge and practice gaps in identified areas.

✓ Knowing, respecting and supporting behavior management systems for preschoolers and support structures in the school environment; providing periodic feedback for behavior management systems for preschoolers;

✓ Participating in building a positive school climate centered on the core values of respect, empathy and transparent communication, promoting understanding and celebrating diverse perspectives. Identifying and reporting situations of abuse or harassment.

✓ Involvement in the systematic collection, analysis and interpretation of data related to preschoolers' behavioral changes. The cultivation of Educational Data Literacy (EDL) is integral in the digital era of education, complementing the concept of data-driven decision-making and empowering professionals to harness the potential of educational data for informed strategic actions (Papamitsiou et al., 2021).

✓ Engaging as an active member in peer learning communities where teachers can collaborate, share experiences and learn from each other, fostering a culture of continuous improvement.

✓ Supporting the system that acknowledges and rewards teachers for their professional achievements, active involvement in the evaluation of fellow teachers, public recognition of the professional achievements of colleagues.

*Practices for families*

✓ Show interest and openness towards establishing positive relationships with their child's teachers, understand that their child's education requires teamwork, want to play an active role in quality education;

✓ Involvement in activities that have meaning for their children, asking for explanations when the meaning of an activity is difficult to understand, asking for help from teachers to be able to successfully carry out meaningful activities for their children at home;

✓ Self-analyzes their role as parents, signals the difficulties in the relationship with their own child and asks for help when behavioral adjustments are needed.

✓ Knowing and supporting behavior management systems for preschoolers and support structures in the school environment;

✓ Participating in building a positive school climate centered on the core values of respect, empathy and transparent communication, promoting understanding and celebrating diverse perspectives. Identifying and reporting situations of abuse or harassment.

✓ Sensitivity to the behavioral changes of their children, the request for support in the comprehensive understanding of some behaviors and in their correction.

✓ Involvement as a parent in the activities organized by the kindergarten, involvement in the parents' support group.

✓ Active involvement in teacher evaluation, public recognition of teachers' professional achievements.

**Conclusions.** In summary, these proposed practices constitute a comprehensive framework designed to fortify educators' well-being, foster their ongoing professional growth, and cultivate an environment conducive to effective early childhood education. The convergence of these practices aims not solely to enhance teachers' overall welfare but also to elevate the standards of pedagogical experiences within early childhood education. Ultimately, these endeavors aspire to create an educational ecosystem wherein educators are empowered, nurtured, and equipped to provide an enriching learning environment for young beneficiaries.

These practices aim create an optimal environment for the holistic development of preschoolers, fostering a collaborative partnership among educational institutions, educators, and families for enhanced early childhood education (Zheng, 2022).

## 5.3 Research recommendations

The two-year implementation of the ProW that led to the results presented in this report brought some insights that can be useful for future research in the field of ECEC.

First, the implementation of interventions in different countries requires a significant level of **flexibility** to adapt the contents to the different sociocultural and educational contexts and to each national sample specific needs, while still maintaining the fidelity of implementation. The Theory of Change should be explicit, to guarantee that the core principles and goals are not lost in the adaptations needed to address the specificities of the contexts. Second, in line

with previous research about interventions addressing well-being and positive behaviour support (e.g., Sugai et al., 2000), the results achieved by the ProW seem to indicate that **longer interventions** with proximity and continuous support can achieve more sustained positive effects after the end of training. Since this can require significant human resources, it is advisable for future intervention designs to carefully consider the number of coaches that will be necessary to provide this level of support to the expected sample of participants.

Another important insight concerns **data collection**. A careful selection of the scales to measure the effects of the intervention is crucial. Especially in interventions aiming to promote the participants' well-being levels, the amount of data requested from the participants should carefully consider their availability to respond to the questionnaires, which, in the case of ECEC professionals, considering their workloads, should preferably be kept as short as possible. This may require using shorter but still reliable versions of the relevant scales, using the best delivery system (online or paper-and-pencil) for the sample in question, and setting deadlines for the submission of the filled-out questionnaires that are adjusted to the participants' needs in terms of time. This can be useful in avoiding overburdening the participants with intervention related tasks, which can negatively affect their overall well-being and potentially lead to increased attrition rates and missing data.

Additionally, measuring the effects of interventions addressing children's behaviours, such as those using positive behaviour support, should preferably avoid relying solely on **self-reported data** by ECEC teachers. Regardless of the importance of data reporting teachers' perspectives about children's behaviours and competences, combining this with data collected from **other sources of information**, such as other ECEC professionals, children's' families and direct observation measures, can increase the robustness of the dataset, allowing multi-method and multi-source analysis, leading to more reliable conclusions.

In general, the ProW intervention showed improvements in teachers' perceived levels of well-being, self-efficacy, in some dimensions of job satisfaction and in the personal accomplishment dimension of burnout. However, these improvements entailed some between-countries' variations, with some countries showing more improvements than

others. Future research should benefit from a careful selection of self-report measures, giving preference to **instruments validated for ECEC professionals** and ensuring their **cross-cultural validity.** Specifically, future research on ECEC professionals **burnout** should consider its **conceptual complexity** and pay attention to some items in the Maslach Burnout Inventory that might not be adequate for ECEC professionals, considering their highly skewed distributions in the ProW sample, affecting the results of the analysis.

## Conclusion

In conclusion, the success criteria outlined in the initial project proposal provide a framework for evaluating the impact of the ProW intervention on early childhood education. The achievement of an 80% fidelity level in the implementation of the intervention is considered a success, with an even more favorable outcome with the statistical significance was attained in the pre- and post-tests for the research questions. While acknowledging the need for continuous intervention, coaching, and support over 3-5 years to deeply influence well-being, school climate, and children's learning outcomes, the study defines success as achieving statistical significance in any key measures used.

The primary hypothesis, asserting that the successful implementation of ProW is significantly impacted on teachers' fundamental elements for their careers, including perceived self-efficacy, job satisfaction, burnout, and professional well-being. Similarly, an anticipated impact on children's prosocial behavior is examined through a variety of measures such as the Strengths and Difficulties Questionnaire. The broader school-level impact was also examined, with the assessment of changes in preschool climate.

As the project concludes, the suggested evaluation benchmarks highlight the diverse dimensions of success. These include the training of external coaches and national leadership teams to support the implementation of ProW in early childhood settings across Cyprus, Greece, Romania, and Portugal. Furthermore, the training of teacher teams within these settings is a crucial indicator of success. The fulfillment of these benchmarks served as

a testament to the project's commitment to fostering positive changes at various levels within the educational landscape. As the project completed, these benchmarks and success criteria guided the evaluation process, offering valuable insights into the effectiveness of the ProW intervention and its potential for sustainable impact in early childhood education.

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# Appendices

## Appendix A. ProW teachers' Scales and Subscales Reliabilities across assessment times (T1-T4)

**Table A1.** Cronbach's alpha reliabilities for TSWQ subscales across the 4 times of assessment

| TSWQ subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| *Teaching Efficacy* | T1 | 0.86 | 0.87 | 0.80 | 0.76 |
| | T2 | 0.84 | 0.89 | 0.90 | 0.62 |
| | T3 | 0.89 | 0.91 | 0.87 | 0.77 |
| | T4 | 0.88 | 0.89 | 0.82 | 0.82 |
| *School Connectedness* | T1 | 0.76 | 0.86 | 0.82 | 0.77 |
| | T2 | 0.78 | 0.86 | 0.89 | 0.78 |
| | T3 | 0.78 | 0.78 | 0.89 | 0.86 |
| | T4 | 0.86 | 0.93 | 0.89 | 0.82 |
| *Teacher Wellbeing* | T1 | 0.86 | 0.83 | 0.83 | 0.84 |
| | T2 | 0.86 | 0.86 | 0.92 | 0.86 |
| | T3 | 0.86 | 0.84 | 0.92 | 0.88 |
| | T4 | 0.88 | 0.88 | 0.87 | 0.87 |

**Table A2.** Cronbach's alpha reliabilities for TSES subscales across the 4 times of assessment

| TSES subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| *Student engagement* | T1 | 0.87 | 0.87 | .93 | 0.89 |
| | T2 | 0.91 | 0.89 | .87 | 0.89 |
| | T3 | 0.93 | 0.89 | .87 | 0.91 |
| | T4 | 0.94 | 0.92 | .89 | 0.91 |
| *Instructional strategies* | T1 | 0.87 | 0.91 | .96 | 0.88 |
| | T2 | 0.92 | 0.93 | .87 | 0.93 |
| | T3 | 0.92 | 0.92 | .91 | 0.94 |
| | T4 | 0.94 | 0.94 | .91 | 0.90 |
| *Classroom management* | T1 | 0.86 | 0.91 | .93 | 0.82 |
| | T2 | 0.91 | 0.93 | .87 | 0.91 |
| | T3 | 0.94 | 0.92 | .89 | 0.90 |
| | T4 | 0.95 | 0.95 | .89 | 0.91 |

**Table A3.** Cronbach's alpha reliabilities for TSSES subscales across the 4 times of assessment

| TSSES subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| *Teacher Sensitivity* | T1 | 0.90 | 0.88 | 0.84 | 0.92 |
| | T2 | 0.91 | 0.91 | 0.86 | 0.86 |
| | T3 | 0.93 | 0.92 | 0.87 | 0.86 |
| | T4 | 0.93 | 0.92 | 0.91 | 0.91 |
| *Social Guidance* | T1 | 0.93 | 0.88 | 0.82 | 0.88 |
| | T2 | 0.91 | 0.92 | 0.83 | 0.92 |
| | T3 | 0.95 | 0.92 | 0.81 | 0.86 |
| | T4 | 0.94 | 0.92 | 0.85 | 0.89 |
| *Teacher-Child Support* | T1 | 0.86 | 0.85 | 0.61 | 0.85 |
| | T2 | 0.88 | 0.89 | 0.71 | 0.83 |
| | T3 | 0.89 | 0.88 | 0.73 | 0.75 |
| | T4 | 0.90 | 0.89 | 0.63 | 0.86 |
| *Classroom Climate-Children Engagement* | T1 | 0.94 | 0.91 | 0.82 | 0.91 |
| | T2 | 0.94 | 0.95 | 0.88 | 0.94 |
| | T3 | 0.96 | 0.95 | 0.83 | 0.93 |
| | T4 | 0.96 | 0.93 | 0.90 | 0.94 |
| *Classroom Management-Conflict Resolution* | T1 | 0.94 | 0.86 | 0.80 | 0.85 |
| | T2 | 0.94 | 0.92 | 0.80 | 0.85 |
| | T3 | 0.95 | 0.92 | 0.75 | 0.80 |
| | T4 | 0.94 | 0.92 | 0.87 | 0.86 |
| *TSSES Global* | T1 | 0.98 | 0.97 | 0.95 | 0.98 |
| | T2 | 0.98 | 0.98 | 0.96 | 0.97 |
| | T3 | 0.98 | 0.98 | 0.95 | 0.97 |
| | T4 | 0.99 | 0.98 | 0.97 | 0.98 |

**Table A4.** Cronbach's alpha reliabilities for MBI subscales across the 4 times of assessment

| MBI subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| *Emotional Exhaustion* | T1 | 0.79 | 0.77 | 0.91 | 0.92 |
| | T2 | 0.82 | 0.81 | 0.86 | 0.91 |
| | T3 | 0.86 | 0.75 | 0.86 | 0.95 |
| | T4 | 0.82 | 0.86 | 0.79 | 0.92 |
| *Depersonalization* | T1 | 0.46 | 0.51 | 0.86 | 0.56 |
| | T2 | 0.73 | 0.66 | 0.70 | 0.52 |
| | T3 | 0.86 | 0.67 | 0.78 | 0.40 |
| | T4 | 0.72 | 0.81 | 0.47 | 0.27 |
| *Personal Accomplishment* | T1 | 0.72 | 0.60 | 0.84 | 0.57 |
| | T2 | 0.75 | 0.70 | 0.79 | 0.71 |
| | T3 | 0.79 | 0.77 | 0.69 | 0.33 |
| | T4 | 0.82 | 0.76 | 0.79 | 0.74 |

**Table A5.** Cronbach's alpha reliabilities for ESI subscales across the 4 times of assessment

| ESI subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Working Conditions | T1 | 0.76 | 0.74 | 0.65 | 0.69 |
| | T2 | 0.77 | 0.59 | 0.71 | 0.76 |
| | T3 | 0.72 | 0.77 | 0.79 | 0.73 |
| | T4 | 0,66 | 0.66 | 0.82 | 0.79 |
| Supervisor | T1 | 0.79 | 0.84 | 0.69 | 0.88 |
| | T2 | 0.79 | 0.77 | 0.84 | 0.70 |
| | T3 | 0.90 | 0.86 | 0.80 | 0.86 |
| | T4 | 0.89 | 0.92 | 0.83 | 0.87 |
| Pay | T1 | 0.83 | 0.89 | 0.74 | 0.75 |
| | T2 | 0.84 | 0.82 | 0.79 | 0.79 |
| | T3 | 0.86 | 0.91 | 0.81 | 0.73 |
| | T4 | 0.83 | 0.87 | 0.65 | 0.59 |
| Job Itself | T1 | 0.83 | 0.78 | 0.56 | 0.19 |
| | T2 | 0.76 | 0.80 | 0.69 | 0.13 |
| | T3 | 0.75 | 0.79 | 0.70 | 0.42 |
| | T4 | 0.79 | 0.82 | 0.68 | 0.56 |
| Organization as a Whole | T1 | 0.79 | 0.86 | 0.71 | 0.83 |
| | T2 | 0.65 | 0.71 | 0.86 | 0.77 |
| | T3 | 0.85 | 0.84 | 0.85 | 0.81 |
| | T4 | 0.79 | 0.90 | 0.88 | 0.83 |
| Promotion | T1 | 0.67 | 0.72 | 0.48 | 0.70 |
| | T2 | 0.77 | 0.71 | 0.80 | 0.75 |
| | T3 | 0.81 | 0.82 | 0.69 | 0.77 |
| | T4 | 0.76 | 0.75 | 0.74 | 0.74 |
| ESI Global | T1 | 0.83 | 0.84 | 0.86 | 0.89 |
| | T2 | 0.82 | 0.82 | 0.90 | 0.87 |
| | T3 | 0.85 | 0.83 | 0.89 | 0.88 |
| | T4 | 0.85 | 0.87 | 0.89 | 0.89 |

**Table A6.** Cronbach's alpha reliabilities for PCS subscales across the 4 times of assessment

| PCS subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Teacher-student | T1 | 0.96 | 0.81 | 0.96 | 0.13 |
| | T2 | 0.96 | 0.77 | NA | 0.86 |
| | T3 | 0.98 | 0.85 | 0.78 | 0.47 |
| | T4 | 0.98 | 0.86 | NA | 0.51 |
| Student-Student | T1 | 0.94 | 0.90 | 0.97 | 0.76 |
| | T2 | 0.97 | 0.93 | 0.79 | 0.89 |
| | T3 | 0.93 | 0.92 | 0.94 | 0.66 |
| | T4 | 0.98 | 0.88 | 0.87 | 0.78 |
| Teacher-home | T1 | 0.94 | 0.79 | 0.96 | 0.62 |
| | T2 | 0.97 | 0.81 | NA | 0.92 |
| | T3 | 0.95 | 0.85 | 0.78 | 0.85 |
| | T4 | 0.97 | 0.83 | NA | 0.86 |
| School safety | T1 | 0.95 | 0.86 | 0.98 | 0.40 |
| | T2 | 0.98 | 0.78 | NA | 0.94 |
| | T3 | 0.96 | 0.80 | 0.81 | 0.67 |
| | T4 | 0.98 | 0.86 | -0.014 | 0.60 |
| Clarity of expectations | T1 | 0.91 | 0.78 | 0.92 | 0.70 |
| | T2 | 0.95 | 0.86 | 0.38 | 0.86 |
| | T3 | 0.93 | 0.74 | 0.82 | 0.79 |
| | T4 | 0.97 | 0.87 | 0.60 | 0.82 |
| Fairness of rules | T1 | 0.95 | 0.58 | 0.91 | 0.55 |
| | T2 | 0.95 | 0.76 | NA | 0.87 |
| | T3 | 0.94 | 0.76 | 0.64 | 0.72 |
| | T4 | 0.97 | 0.77 | NA | 0.65 |
| Respect of diversity | T1 | 0.98 | 0.86 | 0.91 | 0.43 |
| | T2 | 0.97 | 0.85 | 0.64 | 0.89 |
| | T3 | 0.99 | 0.88 | 0.82 | 0.77 |
| | T4 | 0.99 | 0.93 | NA | 0.81 |
| PCS Global | T1 | 0.98 | 0.94 | 0.99 | 0.89 |
| | T2 | 0.99 | 0.95 | 0.68 | 0.98 |

| | | | | | |
|---|---|---|---|---|---|
| | T3 | 0.99 | 0.95 | 0.94 | 0.90 |
| | T4 | 0.99 | 0.95 | 0.79 | 0.94 |

Note: NA = Not applicable because of zero variance

**Table A7.** Cronbach's alpha reliabilities for PERMA subscales across the 4 times of assessment

| PERMA subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Positive -P | T1 | 0.91 | 0.86 | 0.95 | 0.81 |
| | T2 | 0.92 | 0.90 | 0.91 | 0.89 |
| | T3 | 0.95 | 0.85 | 0.88 | 0.92 |
| | T4 | 0.96 | 0.84 | 0.89 | 0.93 |
| Engagement - E | T1 | 0.52 | 0.43 | 0.63 | 0.48 |
| | T2 | 0.73 | 0.48 | 0.62 | 0.44 |
| | T3 | 0.83 | 0.52 | 0.47 | 0.52 |
| | T4 | 0.90 | 0.60 | 0.35 | 0.57 |
| Relationships - R | T1 | 0.89 | 0.70 | 0.90 | 0.72 |
| | T2 | 0.83 | 0.77 | 0.93 | 0.82 |
| | T3 | 0.90 | 0.73 | 0.89 | 0.81 |
| | T4 | 0.92 | 0.83 | 0.74 | 0.81 |
| Meaning - M | T1 | 0.89 | 0.84 | 0.92 | 0.79 |
| | T2 | 0.87 | 0.85 | 0.95 | 0.88 |
| | T3 | 0.90 | 0.82 | 0.90 | 0.84 |
| | T4 | 0.91 | 0.86 | 0.84 | 0.90 |
| Accomplishment - A | T1 | 0.83 | 0.67 | 0.89 | 0.71 |
| | T2 | 0.81 | 0.84 | 0.93 | 0.70 |
| | T3 | 0.93 | 0.81 | 0.82 | 0.64 |
| | T4 | 0.94 | 0.72 | 0.92 | 0.61 |
| Negative - N | T1 | 0.84 | 0.71 | 0.88 | 0.70 |
| | T2 | 0.84 | 0.74 | 0.82 | 0.82 |
| | T3 | 0.82 | 0.74 | 0.81 | 0.73 |
| | T4 | 0.85 | 0.80 | 0.86 | 0.82 |

| | | | | | |
|---|---|---|---|---|---|
| Health -H | T1 | 0.95 | 0.84 | 0.91 | 0.90 |
| | T2 | 0.94 | 0.93 | 0.91 | 0.90 |
| | T3 | 0.96 | 0.91 | 0.92 | 0.89 |
| | T4 | 0.96 | 0.90 | 0.84 | 0.91 |
| PERMA Global | T1 | 0.92 | 0.82 | 0.95 | 0.82 |
| | T2 | 0.91 | 0.86 | 0.94 | 0.83 |
| | T3 | 0.96 | 0.82 | 0.92 | 0.87 |
| | T4 | 0.95 | 0.81 | 0.86 | 0.89 |

*Comments on the Reliability values of the Teachers' scales and subscales*

A general comment on the issue of the scales and subscales' reliability values depicted in the above tables is that in the vast majority the Cronbach's alphas were in a very satisfactory level. Most of them across the assessment times were high (above 0.80) and rarely in some subscales and in specific cases (time and country) emerged rather low reliability values (below .60). Specifically, the only case which showed a constant rather low (alpha < .60) reliability was the subscale "Depersonalization" of the MBI scale and the subscale "Job itself" of the ESI scale and "Engagement" of the PERMA scale for the Portuguese teachers across all assessment times. Low reliabilities presented in the "Engagement" subscale of the PERMA scale for both Cypriot and Romanian teachers too, across all the assessment time periods.

**Appendix B. ProW children's Scales and Subscales Reliabilities across assessment times (T1-T4)**

**Table B1.** Cronbach's alpha reliabilities for SDQ subscales across the 4 times of assessment

| SDQ subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Emotional problems | T1 | 0.74 | 0.76 | 0.73 | 0.53 |
| | T2 | 0.70 | 0.75 | 0.76 | 0.59 |
| | T3 | 0.73 | 0.73 | 0.72 | 0.76 |
| | T4 | 0.73 | 0.76 | 0.71 | 0.68 |
| Conduct problems | T1 | 0.66 | 0.81 | 0.59 | 0.74 |
| | T2 | 0.79 | 0.83 | 0.51 | 0.72 |
| | T3 | 0.81 | 0.83 | 0.48 | 0.81 |
| | T4 | 0.83 | 0.87 | 0.55 | 0.72 |
| Hyperactivity | T1 | 0.84 | 0.82 | 0.73 | 0.83 |
| | T2 | 0.84 | 0.86 | 0.59 | 0.83 |
| | T3 | 0.83 | 0.83 | 0.75 | 0.80 |
| | T4 | 0.85 | 0.84 | 0.76 | 0.77 |
| Peer problems | T1 | 0.60 | 0.57 | 0.58 | 0.59 |
| | T2 | 0.59 | 0.63 | 0.48 | 0.54 |
| | T3 | 0.57 | 0.65 | 0.59 | 0.68 |
| | T4 | 0.58 | 0.64 | 0.56 | 0.53 |
| Prosocial skills | T1 | 0.87 | 0.86 | 0.85 | O.81 |
| | T2 | 0.86 | 0.87 | 0.85 | 0.75 |
| | T3 | 0.88 | 0.85 | 0.87 | 0.75 |
| | T4 | 0.87 | 0.84 | 0.87 | 0.80 |

**Table B2.** Cronbach's alpha reliabilities for CBRS subscales across the 4 times of assessment

| CBRS subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Classroom self-regulation | T1 | 0.91 | 0.92 | 0.97 | 0.95 |
| | T2 | 0.89 | 0.92 | 0.98 | 0.93 |
| | T3 | 0.92 | 0.91 | 0.97 | 0.94 |
| | T4 | 0.91 | 0.90 | 0.96 | 0.81 |
| Interpersonal skills | T1 | 0.87 | 0.85 | 0.74 | 0.87 |
| | T2 | 0.90 | 0.87 | 0.80 | 0.81 |
| | T3 | 0.87 | 0.87 | 0.72 | 0.81 |
| | T4 | 0.89 | 0.89 | 0.76 | 0.80 |
| Social play-interaction | T1 | 0.92 | 0.91 | 0.87 | 0.87 |
| | T2 | 0.91 | 0.92 | 0.94 | 0.85 |
| | T3 | 0.94 | 0.92 | 0.92 | 0.88 |
| | T4 | 0.94 | 0.89 | 0.91 | 0.90 |
| Engagement | T1 | 0.87 | 0.88 | 0.91 | 0.91 |
| | T2 | 0.89 | 0.87 | 0.94 | 0.83 |
| | T3 | 0.91 | 0.88 | 0.92 | 0.87 |
| | T4 | 0.90 | 0.85 | 0.91 | 0.86 |
| Social problem solving | T1 | 0.86 | 0.84 | 0.87 | 0.82 |
| | T2 | 0.89 | 0.86 | 0.90 | 0.72 |
| | T3 | 0.90 | 0.83 | 0.88 | 0.74 |
| | T4 | 0.92 | 0.86 | 0.83 | 0.71 |

**Table B3.** Cronbach's alpha reliabilities for ASBI subscales across the 4 times of assessment

| ASBI subscales | Time | Greece | Cyprus | Romania | Portugal |
|---|---|---|---|---|---|
| Conformity/ Compliance | T1 | 0.93 | 0.92 | 0.90 | 0.89 |
| | T2 | 0.93 | 0.93 | 0.91 | 0.88 |
| | T3 | 0.94 | 0.93 | 0.90 | 0.89 |
| | T4 | 0.94 | 0.94 | 0.89 | 0.88 |
| Prosocial | T1 | 0.87 | 0.86 | 0.85 | 0.80 |
| | T2 | 0.86 | 0.86 | 0.83 | 0.80 |
| | T3 | 0.89 | 0.87 | 0.82 | 0.80 |
| | T4 | 0.87 | 0.83 | 0.74 | 0.85 |
| Confidence/ Independence | T1 | 0.79 | 0.76 | 0.76 | 0.81 |
| | T2 | 0.74 | 0.74 | 0.79 | 0.70 |
| | T3 | 0.79 | 0.75 | 0.75 | 0.35 |
| | T4 | 0.74 | 0.72 | 0.63 | 0.78 |

*Comments on the Reliability values of the Children's scales and subscales*

In general, the children's scales and subscales' reliability values were rather high and in most of the cases in a very satisfactory level. Specifically, the SDQ subscales have mainly medium or high Cronbach's alpha values (from .70 - .90) and in some cases low alphas for all countries. It is notable that the "Peer problems" subscale have low reliability values across all the assessment time periods and all the countries. However, the other two children's scales (CBRS and ASBI) have rather high reliability values (above .80) across all the assessment time periods.

***Appendix C. Data from the scales assessed the Fidelity of the SWPBS implementation in the schools participating in the ProW project across the four countries***

## Year 1

**Table C1.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the Fidelity Assessment Template (FAT) – Year 1

| No | Feature | 0 | | | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | **Team Composition** | 8 | | | | | 2 | | | 10 | 8 | 26 | |
| 2 | **Team Operating Procedures** | | | | | | 1 | | | 18 | 9 | 26 | |
| 3 | **Preschool Values and Behavioral Expectations** | | | | | | 1 | | | 18 | 9 | 26 | 11 |
| 4 | **Teaching Expectations** | | | | | 14 | 1 | | | 4 | 9 | 26 | |
| 5 | **Problem Behavior Definitions** | 3 | | | | | 6 | 6 | | 9 | 4 | 26 | |
| 6 | **Discipline Policies** | | | | | 3 | 10 | | | 15 | 0 | 26 | |
| 7 | **Professional Development** | | 3 | | | 3 | 4 | | 11 | 15 | 3 | 26 | |
| 8 | **Classroom Procedures** | | | | | 3 | 2 | | 11 | 15 | 8 | 26 | |
| 9 | **Feedback and Acknowledgement** | | 1 | | | | 2 | 1 | | 18 | 7 | 25 | |
| 10 | **Faculty Involvement** | 3 | | | | 3 | 9 | 1 | | 12 | 1 | 25 | |
| 11 | **Cooperation and participation of children/family /external coaches** | | 1 | | | 5 | 9 | | | 13 | 0 | 26 | |
| 12 | **Discipline Data** | 7 | 1 | | | 11 | 9 | | | | 0 | 26 | |
| 13 | **Data-based Decision Making** | 3 | 0 | | | 5 | 9 | | | 10 | 1 | 26 | |
| 14 | **Fidelity Data** | 3 | 0 | | | 5 | 0 | | 11 | 12 | 10 | 26 | |
| 15 | **Annual Evaluation** | | 3 | | | 5 | 3 | | | 15 | 4 | 26 | 11 |
| | **Total FAT score (sd)** | Mean | | | | SD | | | | Min-Max | | | |
| | | 25,6 | 21.4 | 29,9 | NA | 4,9 | 2.9 | 0,39 | NA | 15-30 | 18-25 | 28-30 | NA |

Note: NA = Not applicable, because of missing data

**Table C1.1.** Description of the FAT scoring criteria

| | Feature | Description | | |
|---|---|---|---|---|
| | | **0** | **1** | **2** |
| 1 | **Team Composition** | team does not exist | team exists, but does not include all identified roles or attendance of these members is below 80% | Team exists with coordinator, administrator, and all identified roles represented, **AND** attendance of all roles is at or above 80% |
| 2 | **Team Operating Procedures** | team does not use regular meeting format/ agenda, minutes, defined roles, or a current action plan | team has at least 2 but not all 4 features | team meets at least monthly and uses regular meeting format/agenda, minutes, defined roles, AND has a current action plan |
| 3 | **Preschool Values and Behavioral Expectations** | Preschool values or behavioral expectations have not been identified, are not all positive, or are more than 3 in number | Preschool values and Behavioral expectations identified but may not include a matrix or be posted | 3 or fewer behavioral expectations exist that are positive, posted, and identified for specific settings (i.e., matrix) AND at least 90% of teachers and staff can list at least 67% of the expectations |
| 4 | **Teaching Expectations** | Expected behaviors are not taught | Expected behaviors are taught informally or inconsistently | Formal system with written schedules is used to teach expected behaviors directly to children across classroom and campus settings AND at least 70% of children can list at least 67% of the expectations |
| 5 | **Problem Behavior Definitions** | No clear definitions exist, and procedures to manage problems are not clearly documented | Definitions and procedures exist but are not clear and/or not organized by staff- versus office-managed problems | Definitions and procedures for managing problems are clearly defined, documented, trained, and shared with families |
| 6 | **Discipline Policies** | Documents contain only reactive and punitive consequences | Documentation includes and emphasizes proactive approaches | Documentation includes and emphasizes proactive approaches **AND** administrator reports consistent use |
| 7 | **Professional Development** | There is no written teacher professional learning plan in the basic practices of primary: behavioral teaching, behavioral recognition, behavioral correction, and teacher assistance process | Process is informal/unwritten, not part of professional development calendar, and/or does not include all staff or all 4 core practices | There is written Formal teacher professional learning plan for teaching all staff all 4 core practices |

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| 8 | **Classroom Procedures** | Classrooms are not implementing (teaching values, routines and behaviors, recognizing behaviors, prioritizing behavioral problems) | Classrooms are informally implementing but no formal system exists | Classrooms are formally implementing all core ProW features, consistent with school-wide expectations |
|---|---|---|---|---|
| 9 | **Feedback and Acknowledgement** | there is no written description of the system of positive feedback and recognition of child behavior that is related to values and is used inside and outside the classroom | Formal system is in place and is used by at least 90% of staff OR received by at least 50% of children | Formal system for acknowledging child behavior is used by at least 90% of staff AND received by at least 50% of children |
| 10 | **Faculty Involvement** | Faculty are not shown data at least yearly and do not provide input | Faculty have been shown data more than yearly OR have provided feedback on Tier 1 foundations within the past 12 months but not both | Faculty are shown data at least 4 times per year AND have provided feedback on Tier 1 practices within the past 12 months |
| 11 | **Cooperation and participation of children/family /external coaches** | No documentation (or no opportunities) for stakeholder feedback | there is written feedback from children / families / community on the implementation of ProW practices but not from all stakeholders | Documentation exists that children, families, and community members have provided feedback on ProW practices within the past 12 months |
| 12 | **Discipline Data** | No centralized data system with ongoing decision making exists | Data system exists but does not allow instantaneous access to full set of graphed reports | Discipline data system exists that allows instantaneous access to graphs of frequency of problem behavior events by behavior, location, time of day, and child |
| 13 | **Data-based Decision Making** | No process/protocol exists, or data are reviewed but not used | Data reviewed and used for decision-making, but less than monthly | Team reviews discipline data and uses data for decision-making at least monthly. If data indicate an academic or behavior problem, an action plan is developed |
| 14 | **Fidelity Data** | no fidelity data is collected | fidelity collected informally and/or less often than annually | fidelity data collected and used for decision making annually |
| 15 | **Annual Evaluation** | No evaluation takes place, or evaluation occurs without data | Evaluation conducted, but not annually, or outcomes are not used to shape the implementation process and/ or not shared with stakeholders | Evaluation conducted at least annually, and outcomes (including academics) shared with stakeholders, with clear alterations in process based on evaluation |

**Table C2.** Descriptives of the evaluation of SWPBS intervention process procedures based on the School-Wide Evaluation Tool (SET) – Year 1

| No | | YES | | | | NO | | | | Mean (SD) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | *How many preschool values are there?* | | | | | | | | | 2,4 (.66) | 2.9 (.74) | 4.6 (1.7) | 2,1 (.32) |
| 2 | *Have you taught the preschool rules/ behavior expectations to children this year?* | 17 | 10 | 26 | 17 | 1 | 0 | | 2 | | | | |
| 3 | *Have you given out any reward since 1-2 weeks?* | 12 | 9 | 26 | 14 | | 1 | | 4 | | | | |
| 4 | *Are the list of values and the relevant rules posted?* | | | | | | | | | | | | |
| 5 | Classroom #1 | 18 | 9 | 26 | | | 0 | | | | | | |
| 6 | Classroom #2 | 14 | 8 | 26 | | | 0 | | | | | | |
| 7 | Classroom #3 | 3 | 6 | 26 | | | 1 | | | | | | |
| 8 | Classroom #4 | 3 | 4 | 26 | | | 0 | | | | | | |
| 9 | Classroom #5 | | 1 | | | | 0 | | | | | | |
| 10 | Hall #1 | 15 | 4 | 26 | | | | | | | | | |
| 11 | Hall #1 | | | | | | | | | | | | |
| 12 | Lunch area | 18 | | 26 | | | 1 | | | | | | |
| 13 | Toilets | 18 | 2 | 26 | | | 6 | | | | | | |
| 14 | Room Multiple Use | 18 | 1 | 26 | | 1 | 0 | | | | | | |
| 15 | Outdoor/playground | 9 | 0 | | | 3 | 0 | | | | | | |
| 16 | Stairs | 4 | 0 | 26 | | | 0 | | | | | | |
| 17 | Lobby | 14 | 9 | 26 | | | 0 | | | | | | |

**Table C3.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the PBIS Team Implementation Checklist (Year 1) – Quarter#1

| No | Feature | Achieved | | | | In Progress | | | | Not Yet Started | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | Administrator's Support & Active Involvement | 18 | 9 | 25 | | | 2 | 2 | | | 0 | | |
| 2 | Faculty/Staff Support | 18 | 9 | 26 | | | 2 | 1 | | | | | |
| 3 | Team Established (Representative) | 13 | 0 | 25 | | 5 | 11 | 2 | | | | | |
| 4 | Team has regular meeting schedule, effective operating procedures | 18 | 8 | 25 | | | 3 | 2 | | | | | |
| 5 | Audit is completed for efficient integration of team with other teams/initiatives addressing behavior support | 12 | 0 | 18 | | 5 | 0 | 6 | | 1 | 11 | 3 | |
| 6 | Team completes self-assessment of current PBIS practices being used in the preschool setting | 8 | 2 | 8 | | 10 | 7 | 19 | | | 2 | | |
| 7 | Team summarizes existing preschool discipline data | 9 | | 16 | | | 2 | 1 | | 9 | 9 | 10 | |
| 8 | Team uses self-assessment information to build implementation Action Plan (areas of immediate focus) | 15 | 1 | 12 | | 3 | 9 | 15 | 11 | | 1 | | |
| 9 | 2-3 school-wide behavior expectations are defined and posted in all areas of building | 15 | 10 | 24 | | 3 | 1 | 3 | 1 | | 0 | | |
| 10 | School-wide teaching matrix developed | 18 | 11 | 26 | | | | 1 | 1 | | | | |
| 11 | Teaching plans for school-wide expectations are developed | 15 | 2 | 12 | | 3 | 9 | 15 | | | 0 | | |
| 12 | School-wide behavioral expectations taught directly & formally | 12 | 7 | 12 | | 1 | 4 | 15 | | 5 | 0 | | |
| 13 | System in place to acknowledge/reward school-wide expectations | 18 | 7 | 12 | | | 4 | 15 | 5 | | 0 | | 2 |
| 14 | Clearly defined & consistent consequences and procedures for undesirable behaviors are developed | 12 | 1 | 24 | | 1 | 10 | 3 | | 5 | 0 | | |
| 15 | Preschool setting has completed a school-wide classroom systems summary | 10 | | 10 | | 5 | 1 | 7 | | 3 | 10 | 10 | |
| 16 | Action plan in place to address any classroom systems identified as a high priority for change | 9 | | 11 | | 5 | 5 | 6 | | 3 | 6 | 7 | |

| No | Feature | Achieved | | | | In Progress | | | | Not Yet Started | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 17 | Data system in place to monitor office discipline referral rates that come from classrooms | 4 | | 11 | | | 3 | 6 | | 14 | 8 | 10 | |
| 18 | Discipline data are gathered, summarized, & reported at least quarterly to whole faculty | 4 | | 11 | | | | 6 | | 14 | 11 | 10 | |
| 19 | Discipline data are available to the Team regularly (at least monthly) in a form and depth needed for problem solving | 4 | | 13 | | 5 | 1 | 14 | | 8 | 10 | | |
| 20 | Personnel with behavioral expertise are identified & involved | 3 | | 24 | | 1 | 11 | 3 | | 14 | | | |
| 21 | At least one staff member of the preschool setting is able to conduct simple functional behavioral assessments | 15 | | 24 | | | 11 | 3 | | 3 | | | |
| 22 | Intensive, individual child support team structure in place to use function-based supports | 7 | | 23 | | | 11 | 4 | | 11 | | | |

**Table C4.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the PBIS Team Implementation Checklist (Year 1) – Quarter#2

| No | Feature | Achieved | | | | In Progress | | | | Not Yet Started | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | Administrator's Support & Active Involvement | 18 | 8 | 25 | | | 1 | 2 | | | 0 | | |
| 2 | Faculty/Staff Support | 18 | 7 | 26 | | | 2 | 1 | | | 0 | | |
| 3 | Team Established (Representative) | 13 | 1 | 25 | | | 8 | 2 | | 5 | 0 | | |
| 4 | Team has regular meeting schedule, effective operating procedures | 18 | 8 | 25 | | | 1 | 2 | | | 0 | | |
| 5 | Audit is completed for efficient integration of team with other teams/initiatives addressing behavior support | 12 | 0 | 18 | | 5 | 0 | 6 | | 1 | 9 | | |
| 6 | Team completes self-assessment of current PBIS practices being used in the preschool setting | 8 | 6 | 8 | | 10 | 1 | 19 | | | 1 | | |
| 7 | Team summarizes existing preschool discipline data | 9 | 4 | 16 | | | 4 | 1 | | 9 | 1 | 10 | |
| 8 | Team uses self-assessment information to build implementation Action Plan (areas of immediate focus) | 15 | 8 | 12 | | 3 | 0 | 15 | | | 1 | | |

| # | Description | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 2-3 school-wide behavior expectations are defined and posted in all areas of building | 15 | 8 | 24 | 10 | 3 | 0 | 3 | | | 1 | | |
| 10 | School-wide teaching matrix developed | 18 | 8 | 26 | 10 | | | 1 | | | 1 | | |
| 11 | Teaching plans for school-wide expectations are developed | 15 | 4 | 12 | 11 | 3 | 4 | 15 | | | 1 | | |
| 12 | School-wide behavioral expectations taught directly & formally | 12 | 8 | 12 | | 4 | 0 | 15 | | 1 | 1 | | |
| 13 | System in place to acknowledge/reward school-wide expectations | 18 | 8 | 12 | | | 0 | 15 | | | 1 | | |
| 14 | Clearly defined & consistent consequences and procedures for undesirable behaviors are developed | 12 | 4 | 24 | | 1 | 4 | 3 | | 4 | 1 | | |
| 15 | Preschool setting has completed a school-wide classroom systems summary | 10 | 1 | 10 | | 5 | 8 | 7 | | 3 | | 10 | |
| 16 | Action plan in place to address any classroom systems identified as a high priority for change | 9 | 3 | 11 | | 5 | 5 | 6 | | 3 | 1 | 10 | |
| 17 | Data system in place to monitor office discipline referral rates that come from classrooms | 4 | 4 | 11 | | | 4 | 6 | | 14 | 1 | 10 | |
| 18 | Discipline data are gathered, summarized, & reported at least quarterly to whole faculty | 4 | | 11 | | | 8 | 6 | | 14 | 1 | 10 | |
| 19 | Discipline data are available to the Team regularly (at least monthly) in a form and depth needed for problem solving | 4 | | 13 | | 5 | 0 | 14 | | 9 | 9 | | |
| 20 | Personnel with behavioral expertise are identified & involved | 3 | | 24 | | 1 | | 3 | | 14 | 9 | | |
| 21 | At least one staff member of the preschool setting is able to conduct simple functional behavioral assessments | 15 | | 24 | 11 | | | 3 | | 3 | 9 | | |
| 22 | Intensive, individual child support team structure in place to use function-based supports | 7 | | 23 | | | | 4 | | 11 | 9 | | |

*Comments in Year 1 fidelity data*

In table C1 it is shown for all the countries that we have managed to collect fidelity data in Year 1, the implementation of the SWPBS module of the ProW project was followed consistently for most of the features of the program. The mean scores for all countries were above 20 and most of the preschool settings achieved a score of 2, which means a sufficient correspondence to the FAT features. Notably, Romania was the country with the highest score in the FAT scale. Similarly, in Table C2 is shown that the vast majority of preschool settings of the experimental group across the countries have adopted 2-3 values and followed the norms of the intervention for a school-wide implementation of the positive behavior support. Also, according to the PBIS-TIC the adoption of features of positive behavior support were increased by the preschool settings of the experimental group from the 1$^{st}$ to the 2$^{nd}$ quarter of assessment (see Table C3 and C4). However, for the first year of ProW implementation the two quarters have a short-time distance since the initiation of the intervention in the schools was late due to COVID issues during the school year 2021-22. For this reason, the Portuguese team implemented PBIS-TIC once in year 1. In year 1 the only features that were not achieved fully from the preschool settings were those related to managing a data system for monitoring discipline behavior.

## Year 2

**Table C5.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the Fidelity Assessment Template (FAT) – Year 2

| No | Feature | 0 | | | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | **Team Composition** | 1 | 0 | | | 10 | 1 | | | 23 | 15 | 1 | |
| 2 | **Team Operating Procedures** | | 0 | | | 1 | 3 | | | 32 | 13 | 1 | |
| 3 | **Preschool Values and Behavioral Expectations** | 1 | 0 | | | 2 | 3 | | | 31 | 13 | 1 | |
| 4 | **TeachingExpectations** | | | | | | 54 | | | 29 | 16 | 1 | |
| 5 | **ProblemBehaviorDefinitions** | | | | | 11 | 5 | | | 23 | 11 | 1 | |
| 6 | **DisciplinePolicies** | | | | | 7 | 10 | 1 | | 27 | 6 | 1 | |
| 7 | **Professional Development** | | 2 | | | 5 | 4 | | | 29 | 10 | 1 | |
| 8 | **ClassroomProcedures** | | | | | 6 | 3 | | | 28 | 13 | 1 | |
| 9 | **Feedback and Acknowledgement** | | | | | 1 | 5 | | | 33 | 11 | 1 | |
| 10 | **Faculty Involvement** | | | | | 10 | 4 | | | 24 | 12 | 1 | |
| 11 | **Cooperation and participation of children/family /external coaches** | | | | | 8 | 16 | 1 | | 26 | | | |
| 12 | **DisciplineData** | | 2 | | | 21 | 13 | | | 13 | 1 | 1 | |
| 13 | **Data-basedDecisionMaking** | | 2 | | | 10 | 9 | 1 | | 23 | 5 | | |
| 14 | **Fidelity Data** | 1 | | | | 7 | 1 | | | 26 | 15 | 1 | |
| 15 | **AnnualEvaluation** | 1 | 2 | | | 4 | 6 | | | 29 | 8 | 1 | |
| | **Total FAT score (sd)** | **Mean** | | | | **SD** | | | | **Min-Max** | | | |
| | | 27,2 | 23.6 | NA | NA | 2,3 | 2.8 | NA | NA | 23-31 | 18-27 | NA | NA |

Note: NA = Not applicable, because of missing data

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**Table C5.1.** Description of FAT scoring criteria

| | Feature | Description | | |
|---|---|---|---|---|
| | | 0 | 1 | 2 |
| 1 | **Team Composition** | team does not exist | team exists, but does not include all identified roles or attendance of these members is below 80% | Team exists with coordinator, administrator, and all identified roles represented, **AND** attendance of all roles is at or above 80% |
| 2 | **Team Operating Procedures** | team does not use regular meeting format/ agenda, minutes, defined roles, or a current action plan | team has at least 2 but not all 4 features | team meets at least monthly and uses regular meeting format/agenda, minutes, defined roles, AND has a current action plan |
| 3 | **Preschool Values and Behavioral Expectations** | Preschool values or behavioral expectations have not been identified, are not all positive, or are more than 3 in number | Preschool values and Behavioral expectations identified but may not include a matrix or be posted | 3 or fewer behavioral expectations exist that are positive, posted, and identified for specific settings (i.e., matrix) AND at least 90% of teachers and staff can list at least 67% of the expectations |
| 4 | **Teaching Expectations** | Expected behaviors are not taught | Expected behaviors are taught informally or inconsistently | Formal system with written schedules is used to teach expected behaviors directly to children across classroom and campus settings AND at least 70% of children can list at least 67% of the expectations |
| 5 | **Problem Behavior Definitions** | No clear definitions exist, and procedures to manage problems are not clearly documented | Definitions and procedures exist but are not clear and/or not organized by staff- versus office-managed problems | Definitions and procedures for managing problems are clearly defined, documented, trained, and shared with families |
| 6 | **Discipline Policies** | Documents contain only reactive and punitive consequences | Documentation includes and emphasizes proactive approaches | Documentation includes and emphasizes proactive approaches **AND** administrator reports consistent use |
| 7 | **Professional Development** | There is no written teacher professional learning plan in the basic practices of primary: behavioral teaching, behavioral recognition, behavioral correction, and teacher assistance process | Process is informal/unwritten, not part of professional development calendar, and/or does not include all staff or all 4 core practices | There is written Formal teacher professional learning plan for teaching all staff all 4 core practices |
| 8 | **Classroom Procedures** | Classrooms are not implementing (teaching values, routines and | Classrooms are informally implementing but no formal system exists | Classrooms are formally implementing all core ProW features, consistent with school-wide expectations |

| | | behaviors, recognizing behaviors, prioritizing behavioral problems) | | |
|---|---|---|---|---|
| 9 | **Feedback and Acknowledgement** | there is no written description of the system of positive feedback and recognition of child behavior that is related to values and is used inside and outside the classroom | Formal system is in place and is used by at least 90% of staff OR received by at least 50% of children | Formal system for acknowledging child behavior is used by at least 90% of staff AND received by at least 50% of children |
| 10 | **Faculty Involvement** | Faculty are not shown data at least yearly and do not provide input | Faculty have been shown data more than yearly OR have provided feedback on Tier 1 foundations within the past 12 months but not both | Faculty are shown data at least 4 times per year AND have provided feedback on Tier 1 practices within the past 12 months |
| 11 | **Cooperation and participation of children/family /external coaches** | No documentation (or no opportunities) for stakeholder feedback | there is written feedback from children / families / community on the implementation of ProW practices but not from all stakeholders | Documentation exists that children, families, and community members have provided feedback on ProW practices within the past 12 months |
| 12 | **Discipline Data** | No centralized data system with ongoing decision making exists | Data system exists but does not allow instantaneous access to full set of graphed reports | Discipline data system exists that allows instantaneous access to graphs of frequency of problem behavior events by behavior, location, time of day, and child |
| 13 | **Data-based Decision Making** | No process/protocol exists, or data are reviewed but not used | Data reviewed and used for decision-making, but less than monthly | Team reviews discipline data and uses data for decision-making at least monthly. If data indicate an academic or behavior problem, an action plan is developed |
| 14 | **Fidelity Data** | no fidelity data is collected | fidelity collected informally and/or less often than annually | fidelity data collected and used for decision making annually |
| 15 | **Annual Evaluation** | No evaluation takes place, or evaluation occurs without data | Evaluation conducted, but not annually, or outcomes are not used to shape the implementation process and/ or not shared with stakeholders | Evaluation conducted at least annually, and outcomes (including academics) shared with stakeholders, with clear alterations in process based on evaluation |

**Table C6.** Descriptives of the evaluation of SWPBS intervention process procedures based on the School-Wide Evaluation Tool (SET) – Year 2

| No | | YES=1 | | | | NO=2 | | | | Mean (SD) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | *How many preschool values are there?* | | | | | | | | | | 3 | | |
| 2 | *Have you taught the preschool rules/ behavior expectations to children this year?* | 29 | 15 | 1 | | 2 | 1 | | | | | | |
| 3 | **Have you given out any reward since 1-2 weeks?** | 22 | 12 | 1 | | | 4 | | | | | | |
| 4 | *Are the list of values and the relevant rules posted?* | | | | | | | | | | | | |
| 5 | Classroom #1 | 34 | 15 | 14 | | | | | | | | | |
| 6 | Classroom #2 | 32 | 14 | 14 | | | | | | | | | |
| 7 | Classroom #3 | | 6 | 14 | | | 2 | | | | | | |
| 8 | Classroom #4 | | | 14 | | | | | | | | | |
| 9 | Classroom #5 | | | | | | | | | | | | |
| 10 | Hall #1 | 34 | 16 | 14 | | | | | | | | | |
| 11 | Hall #2 | | | | | | | | | | | | |
| 12 | Lunch area | 31 | | 14 | | | | | | | | | |
| 13 | Toilets | 34 | 11 | 14 | | | 3 | | | | | | |
| 14 | Room Multiple Use | 24 | 3 | 14 | | 3 | | | | | | | |
| 15 | Outdoor/playground | 31 | 1 | 14 | | 9 | | | | | | | |
| 16 | Stairs | 10 | 15 | 14 | | | | | | | | | |
| 17 | Lobby | 26 | | 14 | | | | | | | | | |

**Table C7.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the PBIS Team Implementation Checklist (Year 2) – Quarter#1

| No | Feature | Achieved | | | | In Progress | | | | Not Yet Started | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | Administrator's Support & Active Involvement | 33 | 15 | 14 | | | 1 | 6 | | | | | |
| 2 | Faculty/Staff Support | 28 | 12 | 14 | | 5 | 4 | 6 | | | | | |
| 3 | Team Established (Representative) | 33 | 5 | 20 | | | 11 | | | | | | |
| 4 | Team has regular meeting schedule, effective operating procedures | 20 | 10 | 17 | | 13 | 6 | 3 | | | | | |
| 5 | Audit is completed for efficient integration of team with other teams/initiatives addressing behavior support | 14 | 16 | 13 | | 19 | | 7 | | | | | |
| 6 | Team completes self-assessment of current PBIS practices being used in the preschool setting | 10 | 1 | 5 | | 23 | 11 | 15 | | 4 | 4 | | |
| 7 | Team summarizes existing preschool discipline data | 9 | 1 | 7 | | 13 | 11 | 7 | | 11 | 2 | 6 | |
| 8 | Team uses self-assessment information to build implementation Action Plan (areas of immediate focus) | 23 | 3 | 11 | | 10 | 11 | 8 | | | 2 | 1 | |
| 9 | 2-3 school-wide behavior expectations are defined and posted in all areas of building | 17 | 11 | 18 | | 16 | 5 | 2 | | | | | |
| 10 | School-wide teaching matrix developed | 24 | 10 | 17 | | 9 | 6 | 3 | | | | | |
| 11 | Teaching plans for school-wide expectations are developed | 16 | 7 | 8 | | 17 | 9 | 8 | | | | 4 | |
| 12 | School-wide behavioral expectations taught directly & formally | 15 | 8 | 11 | | 18 | 8 | 8 | | | | 1 | |
| 13 | System in place to acknowledge/reward school-wide expectations | 26 | 7 | 4 | | 7 | 9 | 16 | | | | | |
| 14 | Clearly defined & consistent consequences and procedures for undesirable behaviors are developed | 16 | 4 | 14 | | 10 | 12 | 5 | | | | 1 | |
| 15 | Preschool setting has completed a school-wide classroom systems summary | 11 | 0 | 2 | | 10 | | 14 | | 12 | 16 | 4 | |
| 16 | Action plan in place to address any classroom systems identified as a high priority for change | 9 | 3 | 7 | | 17 | 10 | 8 | | 7 | 3 | 5 | |

| No | Feature | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| 17 | Data system in place to monitor office discipline referral rates that come from classrooms | 7 | 1 | 7 | | 13 | 13 | 7 | | 13 | 2 | 6 | |
| 18 | Discipline data are gathered, summarized, & reported at least quarterly to whole faculty | 7 | 0 | 7 | | 10 | 15 | 6 | | 16 | 1 | 7 | |
| 19 | Discipline data are available to the Team regularly (at least monthly) in a form and depth needed for problem solving | 7 | 2 | 7 | | 13 | 11 | 12 | | 13 | 3 | 1 | |
| 20 | Personnel with behavioral expertise are identified & involved | 4 | 0 | 13 | | 8 | 2 | 7 | | 21 | 14 | | |
| 21 | At least one staff member of the preschool setting is able to conduct simple functional behavioral assessments | 30 | | 13 | | 3 | | 7 | | | 16 | | |
| 22 | Intensive, individual child support team structure in place to use function-based supports | 15 | | 13 | | 7 | 1 | 6 | | 11 | 15 | 1 | |

**Table C8.** Frequencies of schools fulfilled the SWPBS implementation scoring criteria of the PBIS Team Implementation Checklist (Year 2) – Quarter#2

| No | Feature | Achieved | | | | In Progress | | | | Not Yet Started | | | |
|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| | | GR | CY | RO | PT | GR | CY | RO | PT | GR | CY | RO | PT |
| 1 | Administrator's Support & Active Involvement | 33 | 15 | 5 | | | 1 | | | | | | |
| 2 | Faculty/Staff Support | 33 | 14 | 5 | | 5 | 2 | | | | | | |
| 3 | Team Established (Representative) | 33 | 9 | 5 | | | 7 | | | | | | |
| 4 | Team has regular meeting schedule, effective operating procedures | 24 | 14 | 5 | | 9 | 2 | | | | | | |
| 5 | Audit is completed for efficient integration of team with other teams/initiatives addressing behavior support | 23 | | 5 | | 10 | 1 | | | | 15 | | |
| 6 | Team completes self-assessment of current PBIS practices being used in the preschool setting | 33 | 10 | 5 | | | 4 | | | | 2 | | |
| 7 | Team summarizes existing preschool discipline data | 17 | 7 | 5 | | 9 | 8 | | | 7 | 1 | | |
| 8 | Team uses self-assessment information to build implementation Action Plan (areas of immediate focus) | 33 | 7 | 5 | | | 9 | | | | | | |

| # | Description | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | 2-3 school-wide behavior expectations are defined and posted in all areas of building | 33 | 15 | 5 | | | 1 | | |
| 10 | School-wide teaching matrix developed | 33 | 16 | 5 | | | | | |
| 11 | Teaching plans for school-wide expectations are developed | 33 | 13 | 5 | | | 3 | | |
| 12 | School-wide behavioral expectations taught directly & formally | 33 | 14 | 5 | | | 2 | | |
| 13 | System in place to acknowledge/reward school-wide expectations | 33 | 14 | 5 | | | 2 | | |
| 14 | Clearly defined & consistent consequences and procedures for undesirable behaviors are developed | 26 | 9 | 5 | | | 6 | 7 | 1 |
| 15 | Preschool setting has completed a school-wide classroom systems summary | 26 | | 5 | | | | 7 | 16 |
| 16 | Action plan in place to address any classroom systems identified as a high priority for change | 25 | 4 | 5 | | 7 | 11 | 1 | 1 |
| 17 | Data system in place to monitor office discipline referral rates that come from classrooms | 7 | 5 | 5 | | 17 | 11 | 9 | |
| 18 | Discipline data are gathered, summarized, & reported at least quarterly to whole faculty | 7 | 3 | 5 | | 10 | 13 | 16 | |
| 19 | Discipline data are available to the Team regularly (at least monthly) in a form and depth needed for problem solving | 7 | 5 | 5 | | 19 | 8 | 7 | 3 |
| 20 | Personnel with behavioral expertise are identified & involved | 9 | 2 | 5 | | 7 | | 17 | 14 |
| 21 | At least one staff member of the preschool setting is able to conduct simple functional behavioral assessments | 24 | | 5 | | 9 | | | 16 |
| 22 | Intensive, individual child support team structure in place to use function-based supports | 15 | | 5 | | 7 | 1 | 9 | 15 |

*Comments in Year 2 fidelity data*

During Year 2 data from the FAT scale completed from Greece and Cyprus. In table C5 it is shown that for both countries the implementation of the SWPBS module of the ProW project was followed consistently for most of the features of the program. The mean scores for all

countries were above 20 and most of the preschool settings achieved a score of 2, which means a sufficient correspondence to the FAT features. Similarly, in Table C6 is shown that the most preschool settings of the control group (this was the group implemented the ProW in Year 2) in both countries have adopted 3 values and followed the norms of the intervention for a school-wide implementation of the positive behavior support. The vast majority of preschool settings have adopted the system of rewards and listed the values of the school across all the places of the setting. Also, according to the PBIS-TIC the adoption of features of positive behavior support were increased by the preschool settings from the 1st to the 2nd quarter of assessment (see Table C7 and C8). In year 2 the features that were not achieved fully from the preschool settings were those related to managing a data system for monitoring discipline behavior as it was observed in Year 1. However, the Cypriot team managed to achieve more these data managing features in Year 2 than in Year 1. This did not happen with the Greek team and the Romanian team who provided data in PBIS-TIC only for the first quarter of Year 2. The Portuguese team did not manage to provide fidelity data in Year 2.