



Evaluation of the HAND:ET System

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1 Introduction

This report describes the results of the external evaluation of the EU Erasmus+ project "HAND in HAND: Empowering Teachers Across Europe to Deal with Social, Emotional and Diversity Related Career Challenges (HAND:ET)". In Chapter 2, we first describe the project, the objectives, the design and in particular the core concepts and tools on which the HAND:ET system is based (adapted reprint from Kozina & Vršnik Perše, 2014). Chapter 3 explains the evaluation strategy, while Chapter 4 discusses the development of evaluation tools, including self-report measures and their psychometric properties. Results are presented in two parts: Part I examines the experimental outcome evaluation (Chapter 5), comparing changes in measured SEDA competencies (socio-emotional competencies and diversity awareness) between T1 and T2 for control and experimental groups. Part II focuses on evaluating the HAND:ET system from participants' perspectives. Chapter 6 presents findings from closed questions in post-test evaluation questionnaires, targeting participants' ratings of program quality, usefulness, and perceived changes in their lives and work. Chapter 7 explores responses to open-ended questions, addressing positive aspects of the program and suggestions for improvement. Chapter 8 analyzes focus group interviews, covering perceived learning outcomes, positive aspects of the HAND:ET System, possibilities for improvement, and perceived challenges. Furthermore, results from the Control School questionnaire are presented. Chapter 9 discusses the findings presented in Chapters 6, 7, and 8. Finally, Chapter 10 shortly summarizes findings from both parts, discusses implications and offers conclusions and recommendations.

This report contains parts of **Kozina, A. (2024). Empowering Teachers Across Europe to Deal with Social, Emotional and Diversity Related Challenges, Volume 1: Experimentation Perspectives. Waxman.** The book is available open access under the license (CC BY-NC-SA). However, the analyses and results described in this report also represent a complementation in some cases. For example, we repeated the quantitative analyses with imputed missing values, analysed additional questions from the focus group interviews with HAND:ET participants as well as responses to the questionnaires for the control group schools.

2 Conceptual Framework of the „HAND in HAND: Empowering Teachers Across Europe to Deal with Social, Emotional and Diversity Related Career Challenges (HAND:ET)“ System

The HAND:ET project is a policy experimentation project bringing 11 partners from 7 countries together: the Educational Research Institute, Slovenia (ERI), Mid Sweden University, Sweden (MIUN), Aarhus University, Denmark (AU), Institute for Social Research – Zagreb, Croatia (ISRZ), University of Graz, Austria (Uni Graz), Universidade de Lisboa, Portugal (ULisboa), Leibniz Institute for Research and Information in Education, Germany (DIPF), Ministry of Education, Slovenia (MES), Ministry of Science and Education, Croatia (MSE), Board of Education of Styria, Austria (BES), and Network of Education Policy Centers (NEPC). The experiment is led by ERI and a delegation of public authorities in all countries conducting the field trial experiment (Slovenia, Croatia, Sweden, Austria, Portugal) with knowledge-based support from AU (Denmark) and MIUN (Sweden). The project’s innovative approach is closely aligned with the state of the art and supported by empirical data in the field, ensuring its relevance and potential for ground-breaking advancements. It has been subject to strict evaluation procedures and assessment development.

As a policy experiment, the HAND:ET project aims to provide policy-oriented research evidence to better understand the individual, school and system-level factors needed to support the enhancement of teachers’ SEDA competencies (socio-emotional competencies and diversity awareness) as key factors for supporting and navigating teachers’ professional careers. Accordingly, the HAND:ET project seeks to importantly contribute to the formation of a comprehensive EU teacher policy, spanning all stages of their professional careers. The project focuses on in-service teachers by supporting their development of SEDA competencies to empower them to deal with the complexity of everyday working life with ever more diverse classrooms and enable them to deal flexibly with new challenges by offering the HAND:ET programme as a set of innovative participatory activities and learning experiences that – together with regular / continuous supervision, monitoring and support – form the HAND:ET system (see Figure 2.1).

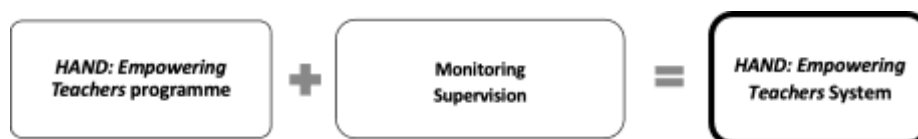


Figure 2.1: *The HAND:ET system: whole-school-whole-year support system*

The HAND:ET project hypothesises that the professional development programme to empower teachers in an innovative holistic HAND:ET system will lead to an improvement of teachers’ SEDA competencies. This HAND:ET system represents an innovative solution that equips teachers to help them navigate the challenges of their day-to-day work in ever more diverse classrooms, with a simultaneous focus on highlighting the importance of teachers’ well-being and self-care. By innovatively integrating the DA with the SE competencies, the HAND:ET programme provides teachers with competencies to meet the challenges of teaching in diverse societies, preventing them from leaving the profession too early, empowering them to monitor and plan their career and supporting their own well-being as well as that of their students. The innovation of the HAND:ET system lies in five elements: (1) the content, by bringing together and interconnecting SE competencies and DA; (2) the process: ongoing support in the form of supervision and monitoring; (3)

the form: the process spanning the entire school year; (4) the participatory development: the participants are actively involved in developing the programme and system; and (5) the whole-team approach: apart from teachers at the same school, principals and school counsellors are involved in the HAND:ET system with a shorter version of the HAND:ET programme.

The project's timeline followed three stages: conceptualisation, the field trial experiment, and evaluation. In the conceptualisation phase, the core concepts, the HAND:ET programme, and the assessment (selection of suitable measures) were developed. Attention was paid to ensuring the alignment of all three. Development of the core concepts was the result of two processes: a) research team expertise; and b) literature reviews (see e.g., Pikić-Jugović et al., 2023). The development of the HAND:ET programme (activities to support the SEDA competencies in school staff) was intertwined with a Train-the-Trainers process. This was training to prepare the trainers to deliver the HAND:ET programme to the school staff. It supported trainers' SEDA competencies and clarified details about the implementation process (see Kozina, 2024). The assessment concentrated on a comprehensive overview of existing SEDA measures and a careful selection of those covering the core concept addressed by the HAND:ET system. All three processes in the conceptualisation phase supported the creation of the HAND:ET system that was tested in the field trial experiments. In the mentioned experiments, all countries implementing them (Austria, Croatia, Portugal, Slovenia, Sweden) invited schools to participate. The schools participating in the experiment were randomly allocated to either the experimental or the control group. Central to the experiment's design, schools had to agree on their participation in either condition (experimental or control). This design enables us to test the effectiveness of the HAND:ET system in promoting SEDA competencies. Namely, to compare the changes in the same competencies from before implementing the HAND:ET system (pre-test) to after implementing the system (post-test) in a group of teachers (and other school staff) who took part in the experiment (experimental group) with a group of teachers (and other school staff) who did not participate (the control group). In the last stage, the project is focused on the evaluation on one hand and the development of policy guidelines on the other (see Figure 2.2).

Based on its policy experimentation results, the project intends to provide European Union (EU) and country-specific recommendations addressing contemporary structural problems of the teaching profession in an evidence-based way.

In the following, we describe the Core Concepts and basic tools the HAND:ET system is based on.

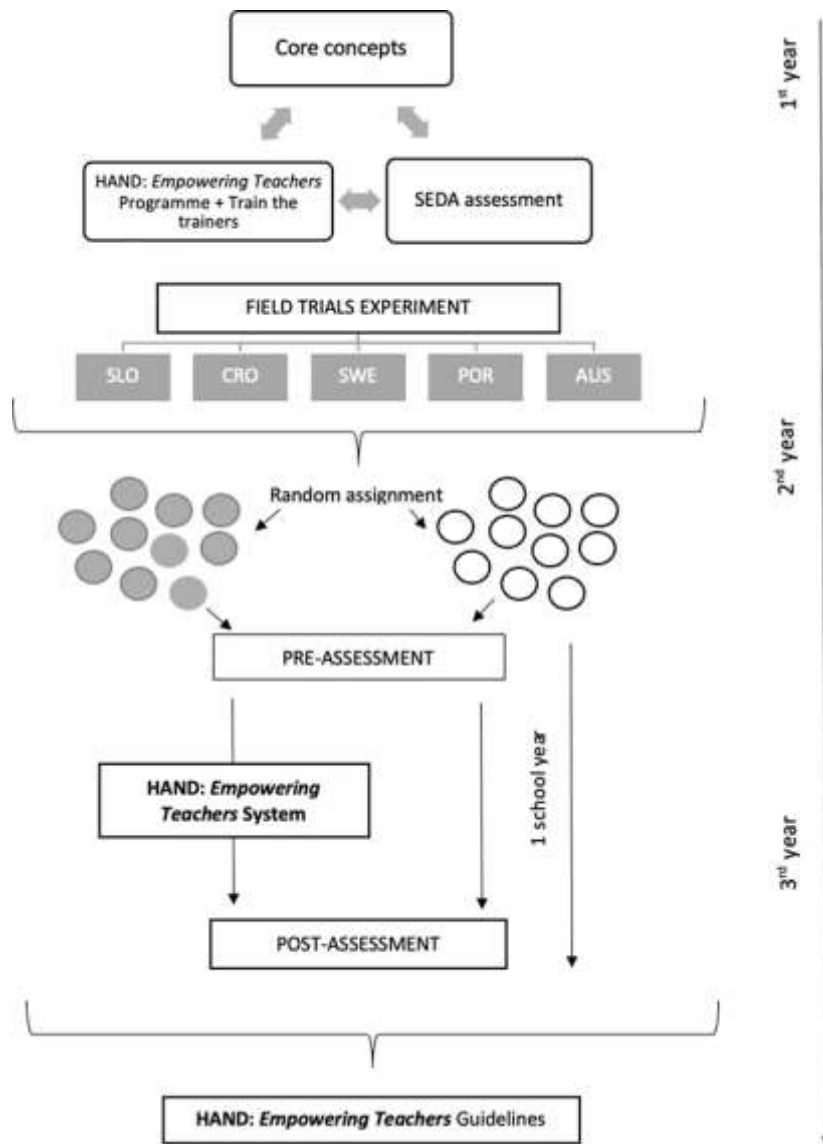


Figure 2.2: HAND:ET experimental design

2.1 The Core Concepts

The core concepts of the HAND:ET project are teachers' SE (socio-emotional) competencies as well as DA (diversity awareness).

Social and Emotional Competencies

The backbone of the conceptual framework is provided by the CASEL (Collaborative for Academic, Social, and Emotional Learning, 2003) definition of social and emotional learning. Social and emotional learning encompasses the processes through which individuals attain and effectively apply the knowledge, attitudes and skills necessary to identify and manage their emotions, understand others' perspectives and show empathy to others, set and achieve positive goals, develop and sustain positive relationships, and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning, 2003). Defined as five interrelated sets of cognitive, affective and behavioural competencies, SE competencies are self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The first two competencies are referred to as emotional

competencies and the last three as social competencies (Lawlor, 2016). Based on the understanding of social and emotional processes and their contextual embeddedness from the experiences of the HAND project (Kozina, 2020), the definitions in the HAND:ET project were upgraded to:

Self-awareness is the ability to recognise one's emotions, bodily sensations and thoughts and their influence on how we respond. This includes having a sober, accepting/recognising way of looking at oneself; and the will and continuing wish to work on establishing all of it. Self-awareness is reflected in being present in your body, thoughts and feelings in a non-judgmental manner, e.g., being mindful.

Self-management is the ability to regulate one's emotions, bodily sensations, and thoughts and their influence on how we react. As stated, one must first be self-aware and aware of the connection between how we are and how we feel, and with how we react, before these very domains can be regulated (Galla et al., 2012; Greco et al., 2011).

Social awareness is the ability to take on the perspective of and to have empathy and compassion for others from diverse backgrounds and cultures, to understand, accept and recognise social and ethical norms of behaviour, to be aware of cultural synergies overcoming the self / other binary and making space for different points of view, also recognising the influence and importance of the family, school and community.

Relationship skills are the ability to establish and maintain constructive relationships and the will to persist, even when it seems impossible to maintain them. It is important to stress the will to persist because these skills are especially challenged and needed in difficult times. This includes the ability to accept personal and social responsibility and go into a relationship with personal presence, aware that in a constructive relationship individuals need to establish a synergy between taking care of their integrity and taking care of the group (Juil & Jensen, 2002). Since the project targets teachers in their hierarchical relationship with students, the concept of relational competencies was included. Relational competencies are defined as professionals' ability to 'see' the individual child on its own terms and attune their (teachers') behaviour accordingly without giving up leadership, as well as the ability to be authentic in their (teachers') contact with the student. They are also defined as professionals' ability and will to take full responsibility for the quality of the relationship (Juil & Jensen, 2002).

Responsible decision-making is the ability to make constructive and respectful choices about personal behaviour and social interactions based on a consideration of ethical standards, safety concerns, social norms, a realistic evaluation of the consequences of various actions, and the well-being of self and others (Collaborative for Academic, Social, and Emotional Learning, 2003). In addition, both the HAND and the HAND:ET projects emphasise the importance of the knowledge of social groups and their products and practices beyond self / other, and knowledge about asymmetrical and global cultural processes (e.g., unequal positions). It is also vital to comprehend and excel in all of the aforementioned areas in the context of DA.

Diversity Awareness

DA was conceptualised in the HAND:ET project in line with the concepts of intersectionality, critical consciousness and social justice. DA in this sense is the first and a necessary step towards social justice.

As a multidimensional competence, DA encompasses cognition, affect and behaviour. It assumes a combination of the knowledge, skills and attitudes needed to prepare teachers and students to live in socio-culturally diverse societies (Auernheimer, 2003; Pikic-Jugovic et al., 2023). It can be defined as a person's acknowledgment of culture and social context variables (socially constructed variables) like class, race, ethnicity, gender, sexual orientation, physical ability, and religion (Mosley-Howard et al., 2011) and the role they play in lives with regard to opportunities and life outcomes (Fraser, 1997). In the HAND:ET project, DA has been conceptualised together with critical consciousness as

competencies that can be learned and can hold transformative potential for social justice in education. More specifically, diversity and equality as two principles of social justice are reflected in two competencies of teachers – DA and critical consciousness – that lead to social justice in schools (Pikic-Jugovic et al., 2023).

In addition to DA, intersectionality has been emphasised. The educational process is considered a context in which inequalities or differences based on various factors often surface. These factors represent various social categories such as gender, race, ethnicity, class, but it is most often a matter of explaining differences based on a single factor alone. Intersectionality, on the other hand, takes a different approach, arguing that the different life chances of individuals are collectively influenced by multiple social categories, which are therefore co-constituted and interrelated. The multiple interconnectedness of different traits or social categories allows people to hold multiple identities at once. These can further help or hinder us in terms of creating life opportunities (Mladenovic, 2016). Intersectionality also shows how the interplay and interaction of identity dimensions creates specific forms of discrimination that are overlooked (Crenshaw, 1991). This allows us to understand real inequalities in greater depth and not just as individual experiences. It is not enough to justify differences based on three basic potential sources of (non)power – race, class and gender – because there are many different combinations of sources of (non)power. For example, gender does not exist by itself, but always interacts with other dimensions and only in this way creates a certain identity of an individual (Mladenovic, 2016). The aim of the activities in the HAND:ET project was for the teachers to become aware of the differences reflected in various positions in relation to social power in classrooms, in schools and in society as a whole.

The Interconnectedness of the Core Concepts

In the HAND:ET project, a further step was taken while discussing the interconnectedness of the core concepts, with particular focus being paid to the interconnectedness of SE competencies and DA. This step was made based solely on theoretical considerations and project group discussion and has not (yet) been tested empirically. Our understanding of the core concepts and their interconnectedness rests on two premises:

a) Hierarchical structure with self-awareness as a starting point: Self-awareness at the same time fuels social awareness and self-management. Further, self-management and social awareness together lead to relationship skills. In turn, social awareness and relationship skills together lead to DA. Finally, DA leads to responsible decision-making. In short, self-awareness and self-management are a starting point that leads to DA (and responsible decision-making) via social awareness and relationship skills. Emotional competencies, self-awareness and self-management are also recognised in the literature as a foundation for social competencies, social-awareness and relationship skills (Lawlor, 2016). Moreover, from a practical point of view, activities that promote self-awareness, e.g., sustained attention, also benefit self-management (Lawlor, 2016).

b) The two-dimensional structure with SE competencies on one level (practical consciousness, classroom level) and DA (associated with the processes of identity and intersectionality, out of classroom level) being on a higher level of reflectivity. This also means that SE competencies (the first level) are a prerequisite for DA (the second level). We can also label the two levels as levels of awareness: self-awareness, social awareness, DA (what) and the level of behaving: relationship skills, responsible decision-making (how).

The two premises fed the two integration models developed by the HAND:ET project group, one conceptual model (based on the first premise) and one process model (based on the second premise).

The conceptual model represents the interconnectedness of emotional competencies (a starting point), social competencies (as a mediator) and DA in such a way that progress in any of these triggers progress in the other two. The process model divides the level of awareness (what) and the level of acting (how). The overall goal or an output is responsible decision-making and subsequently social justice.

2.2 The Tools

Through the conceptualisation process aligned with development of the HAND:ET programme, three central tools have been identified: mindfulness, empathic curiosity, and reflection. These tools are used to support the above-mentioned core concepts.

Mindfulness

Mindfulness is unbiased present-centred awareness accompanied by states of clarity and compassion (Kabat-Zinn, 1990; Maloney et al., 2016). It incorporates self-awareness with a core characteristic of being open, receptive and non-judgmental (Kabat-Zinn, 1990; Brown & Ryan, 2003). Mindfulness practices are hence in line with the processes of social and emotional learning and teaching in schools (Lawlor, 2016). A state of mindfulness can be cultivated by practising moment-to-moment awareness of objects, body sensations and emotions, and accepting them as they are, without judging or trying to change them (Maloney et al., 2016). Mindfulness techniques most frequently focus on the awareness of breathing or physical sensations in the body (e.g., body scan), ‘inner’ or meditation-based exercises, and sometimes on greater awareness of the body in movement (e.g., yoga, walking meditation) (Kabat-Zinn, 1990), ‘body’ or yoga-based exercises. There are documented benefits of mindfulness for one’s own well-being as well as for relationships with others (Brown & Ryan, 2003).

In the HAND:ET project, we are focused on the role mindfulness plays in teaching, more specifically, mindfulness as the ability of a teacher to focus and stabilise awareness of the present moment and to be aware of their patterns of behaviour and reactions while under pressure. It can be understood as a tool for: a) fostering SE competencies on one side; and b) DA on the other.

Mindfulness and SE competencies

Greenberg (2014) proposed a conceptual framework concerning how mindfulness can promote the development of SE competencies in the following way. Self-awareness involves understanding the nature of the mind, especially its transient quality, focusing attention, and establishing mental space to delve into present-moment emotions, values and motivation. Self-management encompasses emotional regulation where the acceptance of negative emotions promotes reflective rather than reactive emotional control, alongside inhibitory control and the purposeful deployment of attention to achieve goals. Social awareness entails empathy and compassion since focusing attention not only attunes oneself but also extends to others, creating the necessary conditions for adopting the perspective of others. Relationship skills cover a sequence of mindful listening, thoughtful dialogue, and effective conflict management. Responsible decision-making involves presenting facts objectively, devoid of judgment, and making ethical choices rooted in awareness and compassion. Mindfulness disengages individuals from automatic thoughts, habits and unhealthy behaviours and can thus play a significant role in fostering self-determined behaviour regulation. In addition, it directly contributes to well-being and satisfaction by the higher quality or moment-to-moment experiences.

Mindfulness and DA

Much of the work in diversity research has looked at training multiculturally competent teachers and transforming the curriculum to embody multiculturalism. Nevertheless, a gap remains between conceptual understandings of diversity and teachers’ actual abilities to respond to challenging encounters with respect to diversity. One possible support mechanism available for teachers in

challenging situations is mindfulness (Roeser et al., 2012). In the HAND:ET project, we have used mindfulness as a tool as well as a starting point for mindful teaching (Frank et al., 2016). Mindfulness in teaching may be described by two components: intrapersonal and interpersonal. The intrapersonal dimension of mindfulness taps mindfulness directed to one's own experience. The interpersonal dimension considers one's own awareness and behaviour towards others. More specifically, it is described as: a) listening with full awareness; b) present-centred awareness of emotions experienced by the self and others in interaction; c) openness, acceptance and receptivity to others' thoughts and feelings; d) self-regulation that includes low emotional and behavioural reactivity and low automaticity in responses to the everyday behaviour of others; and e) compassion to self and to others (Duncan et al., 2009; Frank et al., 2016). As such, the interpersonal dimension is reflected in the second tool used in the programme: empathic curiosity.

Empathic Curiosity

Empathic curiosity is underpinned by the core skills of empathetic listening and maintaining a curious attitude (McEvoy et al., 2014). As we engage in empathic curiosity, we try to actively tune into the experiences of people as they are experiencing them in the here and now. The value of this empathic curiosity may be reinforced when speaking to people about their current concerns, as they perceive them in the present flow of their thoughts, emotions, feelings and sensations (McEvoy et al., 2014). Naturally, empathic curiosity (empathy, as well as compassion to the self and to others) is supported by mindfulness (Greenberg, 2014; Sahdra et al., 2011; Schonert-Reichl et al., 2015).

In the project group we have established that empathic curiosity consists of three interrelated skills: (1) to express; (2) to share; and (3) to listen. These are the three skills with which the dialogue can be trained and conducted. As such, in the HAND:ET programme empathic curiosity was practised through dialogue exercises and the practice and use of personal language. In the initial conceptual understanding of HAND:ET, empathic curiosity was described as a bridge or tool connecting emotional competencies (self-awareness, self-management) with social competencies (social awareness, relationship skills) on one hand and simultaneously representing an umbrella concept for social competencies (for social awareness, social management and diversity awareness). Nevertheless, progressing through the HAND:ET Train-the-Trainers programme we found that empathic curiosity is a tool that fosters all social and emotional competencies as well as diversity awareness since it is equally important to practise empathic curiosity toward oneself as it is towards others. The value of empathic curiosity is that it opens up spaces to support both SE competencies and DA, for the individual that experiences it (e.g., receiving it in the form of being listened to with empathy and curiosity) as well as for the one practising it (e.g., listening to the other with openness, curiosity and empathy).

Reflection, Monitoring and Supervision

A high level of reflection is not only essential for preparing teacher candidates but also for in-service teachers, enabling them to make effective instructional decisions and fostering self-awareness regarding their teaching perspectives and attitudes (Slade et al., 2019). All activities in the HAND:ET project were followed by different types of questions for reflection in order to support the development of personal language and self-awareness on one hand as well as to support social and diversity awareness in the groups on the other. While practising mindfulness and empathic curiosity, reflection was the one tool that facilitated individual change through the use of personal language. When an individual uses personal language, they speak from their own perspective, without judgment of their experience. While talking in personal language, self-awareness and self-management are supported and when being listened to while talking in personal language one feels that they are being valued more. In the safety of being accepted as you are as a talker and as a listener, a space is created in which social-awareness and relationship skills can be practised together with the practising of

diversity awareness. Shapiro et al. (2019) describe personal language for the inner experience as one of the bridges between mindfulness and empathic curiosity. With teachers broadening personal language through their own experience, they model the use in the interpersonal relationship (with either students or colleagues). In this sense, the personal experience (and supervision process) of the trainer (and teachers) is crucial (for more, see Kozina, 2024). The importance of reflection is also highlighted in research on obstacles to the successful development of DA among teachers (Gay & Kirkland, 2003). For example, with regard to practising DA, teachers report feeling shame or guilt over past (non-personal) oppressions or injustice or even denying that problems exist with inequality / race / marginalisation in society (Gay & Kirkland, 2003). The use of reflection and personal language can create a bridge in initially identifying these feelings along with by being approached by others with empathy while expressing them. Reflection was also used in the monitoring / supervision process and formed an important part of the HAND:ET system in terms of helping the trainers / teachers to recognise the prejudices, preconceptions and behavioural patterns that become activated while under pressure.

3 Assessment Strategy for the External Evaluation of the HAND:ET project

A formal evaluation is described as “the systematic application of social research procedures in assessing the conceptualization and design, implementation, and utility of social intervention programs” (Rossi & Freeman, 1993).

Scriven (1967) introduced the distinction between formative and summative evaluation according to the function of the evaluation. In his definition, formative evaluation focuses on improvement and is typically carried out during implementation of the programme, whereas summative evaluation aims to assess the overall effectiveness and outcomes and is thus mostly carried out at the end of a programme. However, this conceptualisation does not capture the full range of evaluation approaches. For example, summative evaluation focused on potential effects can be conducted at earlier stages of a programme, and a formative approach can be applied at the end of a programme with the intention of improving further development. Chen (1996, 2015) therefore proposed a classification system that crosses two evaluation criteria, formative (“improvement”) and summative (“assessment”) with the programme phases “process” and “outcome”, resulting in four fundamental evaluation categories.

Traditionally, evaluation approaches put a strong emphasis on rigorous experimental designs (Alkin, 2004; Mertens, 2008) and therewith on summative outcome evaluations. However, this approach attracted criticism for its narrow perspective (e.g., Guba & Lincoln, 1989; Stake, 1975). Stake (1975, 1980), for example, stressed the importance of considering participants' perspectives to improve the communication with them and for a deeper understanding of an intervention's effects (see also Vieluf et al., 2020). In the evaluation of the HAND:ET system we accordingly did not exclusively focus on an experimental approach, but also wanted to give room for the subjective perspective of the participants (i.e., teachers, principals, other school staff) and consider formative aspects, taking both quantitative and qualitative approaches into account. Regarding Chen's (1996, 2015) classification, our approach combines a summative and formative outcome evaluation. Specifically, it combines the following elements: (1) a randomised control group experiment with a pre and a post measurement was established to determine if the HAND:ET system had been effective in achieving its purpose, namely enhancing the SEDA competencies (quantitative approach). Alongside the experimental aspect, (2) semi-structured focus group interviews were held with participants. These interviews were complemented with questions in the evaluation questionnaire that directly asked for the participants' experiences and views with respect to the HAND:ET system (predominantly a qualitative approach).

The use of multiple methods has another advantage apart from covering different perspectives and goals of evaluation (formative vs. summative). There are different levels of teacher training success, as outlined in Lipowsky's (2010) model. The first level describes participants' reactions such as acceptance or satisfaction. The second level refers to learning gains, e.g., in terms of knowledge and competencies. The third level describes the effects on classroom behaviour and the fourth level the effects on students. The HAND:ET system is clearly focused on teacher competencies, levels 3 and 4 are not the core of the evaluation. Nonetheless, the combination of different methods might allow us to detect effects on different levels and possibly also to uncover more subtle effects that would remain undetected in a purely experimental-based evaluation.

3.1 Summative Outcome Evaluation

We used self-report questionnaire scales to measure the relevant constructs and understand the HAND:ET system's effects on SEDA competencies in the summative outcome evaluation. Self-report measures hold several advantages, such as time efficiency, ease of administration, objectivity and comparability (Paulhus & Vazire, 2007). A further argument for using self-report scales was the

availability of validated and established measures for the Core Constructs we are aiming at in the HAND:ET system (see Chapter 2 in this report). Still, these self-report measures also have disadvantages, such as susceptibility to unconscious or conscious manipulation (i.e., social desirability bias, acquiescence bias, extreme responding, central tendency bias; see Bogner & Landrock, 2015). For this reason, some of the self-report scales were to be supplemented by scales where selected SEDA competencies of participants are rated by colleagues (i.e., other-reports) and sociometric measures to look at the structures among colleagues in terms of teacher cooperation. However, this ultimately did not proceed due to data protection concerns in some countries.

We not only relied on the questionnaires to assess the participants' perception of their own SEDA competencies, but also had the participants evaluate the HAND:ET system to complement the experimental results (see Part I of this report) with the participants' perspective on the programme. On top of the post-test questionnaire, the focus group interviews were an important source of information about how the participants evaluated the programme and had experienced the training. This should also give us some indication for understanding the results concerning effectiveness (see Part II of this report).

3.2 Formative Outcome Evaluation

The focus group interviews referred to in the paragraph above served several purposes. In addition to better understanding the results related to effectiveness and gaining insight into the participants' experiences, we used them formatively to identify levers for possible improvements of the HAND:ET system in the future.

The post-test questionnaire was a further source of information for the formative outcome evaluation. In the questionnaire, we also asked participants how they thought the HAND:ET system could be improved. In contrast to the focus group interviews, we expected less comprehensive and detailed information from the questionnaire. Nevertheless, at the same time, we would be able to obtain data from a larger number of participants, whereas the focus group interviews could only be conducted with a smaller subgroup.

3.3 Measures for the Evaluation

In the section below, we first present the assessment instruments we compiled to measure the impact of the HAND:ET system on SEDA competencies as part of the summative outcome evaluation. These instruments also provide insights into the participants' subjective evaluation of the programme and offer potential levers for improving the HAND:ET programme. Finally, we present the focus group interviews, which hold a dual purpose: first, to complement the summative outcome evaluation with participants' views and, second, to provide information to assist with the refinement of the HAND:ET programmes, thereby contributing to the formative outcome evaluation.

Development of the HAND:ET Pre- and Post-Test Questionnaires

Self-report scales are a set of statements or questions that respondents are asked to rate themselves on a selected characteristic such as the personal ability to recognise one's own emotions and bodily sensations, or the ability to adopt the perspective of others.

In selecting the questionnaire scales for assessing the programme's effectiveness, we followed the Core Concepts defined in the HAND:ET project (see Chapter 2 of this report and Kozina, 2024). According to the Core Concepts, all HAND:ET partners proposed self-report scales to measure SEDA competencies. One requirement was that only instruments which had already been validated and established in the literature should be used, and that preference should be given to instruments already available in several language versions relevant to HAND:ET. The resulting set of instruments was

then ranked by all partners with regard to priority for the evaluation of the HAND:ET project. With the help of this ranking and the requirement that the complete questionnaire should take no more than 30 minutes to complete, the scales listed in Table 4.2 were selected for the pre- and post-test survey to experimentally test the effectiveness of the HAND:ET system. With these specifications and procedures, it was possible to capture several important sub-aspects for each competence area, but not to comprehensively cover the SEDA competencies. The partner ranking and further discussions in the project consortium stressed the importance of mindfulness as a tool for fostering SEDA competencies. Therefore, constructs like self-awareness or mindfulness in the classroom which are particularly close to the training content and techniques were given more attention.

Although we considered that as many relevant translations as possible should be available while selecting the instruments, most of the questionnaire scales that were chosen had to be translated for some and, in many cases, for all countries. The translation process followed this procedure: The partners responsible for conducting the field trials translated the instruments into the required language and then had them translated back into English by translators. The evaluation team then systematically compared the two English versions and reported any potentially problematic translations back to the field trial partners so that the translation could be adapted accordingly.

In addition to the self-report scales on SEDA competencies (pre- and post-test questionnaire), we included questions on teacher training and professional development in SEDA competencies, as well as professional experience and previous experience with mindfulness in the pre-test questionnaire for purposes of implementation control. In the post-test questionnaire, we included questions on the use of elements of the HAND:ET training in personal and professional daily life during the programme and a question on the intention to use the HAND:ET elements in the future. The post-test questionnaire also included questions on the perceived effects of the programme and a subjective evaluation of the quality of the HAND:ET system as a whole and of different aspects such as the exercises or the theoretical content. Finally, the questionnaire contained two open-ended questions about positive aspects of the HAND:ET system and possibilities for improving it.

Focus Group Interviews

We used the focus group interview method in which participants engage in guided discussions, responding to questions as they interact with each other and their contributions are interrelated (e.g., Vaughn et al., 1996). For the focus group interviews, structured guidelines were developed to interview six participants from each training group in each of the five field trial countries. These interviews took place after the post-test survey and the responsible partners could decide whether to conduct them face-to-face or online. For participants in the control groups, we performed an online survey with open-ended questions instead of interviews since only a few aspects were to be collected, such as whether SEDA support measures were implemented in the duration of the HAND:ET system or whether there had been any extraordinary incidents/changes at the school. Participants were asked, among other things, what they liked, what they found problematic and what ideas they had for improving the face-to-face and online training sessions. They were also asked what they had learned from the programme and whether they had used the HAND:ET exercises or techniques outside of the training sessions (see Chapter 8 of this report for a presentation of the results of the focus group interviews).

In addition to conducting focus group interviews with participants from the training groups, we administered an online questionnaire with open-ended questions to coordinators of the control group schools. The control group questionnaire consisted of five open-ended questions. Participants were asked to explain their school's motivations for participating in the HAND:ET programme, share any significant events or changes observed in the past year, or report any school activities supporting SEDA competencies. Additionally, they were invited to provide any further comments (results are presented in Chapter 8).

4 Developing the Assessment for the External Evaluation of the HAND:ET Empowering Teachers System

The pre-test pursued two consecutive goals. First, the quality of the questionnaire scales measuring SEDA competencies was to be evaluated, and then in a second step only the measurement instruments that had worked well across all five field trial countries were used to determine the efficacy of the HAND:ET system (see Chapter 5 of this report for a description of the results of the experimental evaluation).

4.1 Research Questions for the Pre-Test Data Analysis

In order to assess the quality of the self-report scales used to evaluate HAND:ET's effectiveness, we investigated whether (1) the scales used are sufficiently reliable (i.e., $>.60$, see section 4.3.3) and whether (2) the dimensional structure in all five countries corresponds to the dimensionality described in the literature.

4.2 Methods

Participants. In total, we collected data from $N = 1207$ teachers, principals, other school staff and trainers from the five participating countries (see Table 4.1). The participants' average age was 44 years overall and female participants accounted for 90% of the full sample.

Table 4.1 Pre-test (T1) sample sizes and demographic characteristics of the participants

		Overall	Austria	Croatia	Portugal	Slovenia	Sweden
Sample Size	<i>N</i>	1207	168	255	276	264	244
	<i>Teachers</i>	910	132	198	207	205	168
	<i>Principals</i>	69	25	9	4	22	9
	<i>Other School Staff</i>	193	4	40	57	29	63
	<i>HAND:ET Trainers</i>	35	7	8	8	8	4
Age	<i>M (SD)</i>	44(9)	42(11)	43(9)	50(8)	42(8)	45(11)
Gender	<i>%female</i>	90	90	95	92	93	78

Note. *M* = Mean, *SD* = standard deviation

Measures. The Pre-test (T1) Questionnaire encompassed 14 scales measuring SEDA competencies (see Table 4.2). The different groups of participants (i.e., teachers, principals, other school staff, HAND:ET trainers) were each given only those scales appropriate for their context. Consequently, teachers were presented with all scales, while the other participant groups were provided with a sub-sample of them (see Table 4.2).

For the evaluation of emotional competencies, we focused strongly on the self-awareness aspect and instruments that directly target mindfulness. First, we employed the Mindful Attention Awareness Scale (Brown & Ryan, 2003), which contains 15 items. An example item is, "I could be experiencing

some emotion and not be conscious of it until sometime later”. We also used the Observe subscale from the Kentucky Inventory of Mindfulness Skills (Baer et al., 2004), which comprises seven items. For example, participants were asked to respond to statements such as, “I pay attention to how my emotions affect my thoughts and behaviour”. To cover self-awareness and mindfulness in our participants’ daily school experience, we used the Mindfulness in Teaching Scale (Rank et al., 2016), which measures intrapersonal and interpersonal aspects of mindfulness in the classroom. The Intrapersonal subscale consists of nine items, including statements like, “When I am in the classroom, I have difficulty staying focused on what is happening in the present”. The Interpersonal subscale comprises five items, such as, “I am aware of how my moods affect the way I treat my students”.

As regards self-management, we employed the subscale Emotional Self-Efficacy from the Self-Efficacy Questionnaire for Children (Muris, 2001), comprising eight items. An example question is, “How well do you succeed in cheering yourself up when an unpleasant event has happened?”. Next to emotional self-efficacy we addressed well-being, burnout and work-related strain that, while not competencies themselves, are very crucial indicators of insufficient self-management capacities. To assess overall well-being, we incorporated the WHO-5 Well-Being Index (Topp et al., 2015), made up of five items, such as “I have felt calm and relaxed”.

To address burnout, we used the Shirom-Melamed Burnout Questionnaire (Shirom & Melamed, 2006), which includes three subscales: Physical Fatigue (6 items; e.g., “I felt physically drained”), Cognitive Weariness (5 items; e.g., “I had difficulty concentrating”) and Emotional Exhaustion (3 items; e.g., “I felt I am unable to be sensitive to the needs of the students”).

Finally, we employed the Psychological Strain in Work Contexts Scale (Mohr et al., 2006), comprising two dimensions: Cognitive Strain (3 items, e.g., “Even at home I often think of my problems at work”) and Emotional Strain (4 items, e.g., “When I come home tired after work, I feel rather irritable”).

Moving on to social competencies, we utilised measures for empathy and the teachers’ relational competence. To assess empathy, we selected four out of five subscales from the Empathy Assessment Inventory (Gerdes et al., 2010): Affective Response (e.g., “I feel happy myself when I see someone receive a gift that makes them happy”; 5 items), Affective Mentalising (e.g., “I can accurately describe what someone is feeling when they experience strong emotions”; 4 items), Perspective Taking (e.g., “I consider other people’s points of view in discussions”; 5 items) and Self-Other Awareness (e.g., “I can tell the difference between someone else’s feelings and my own”; 4 items).

We also employed the Teacher’s Relational Competence Scale (Vidmar & Kerman, 2016) in an adapted version, as used in the HAND:ET predecessor project (see Roczen et al., 2020), made up of 9 items such as, “When a student behaves or expresses in an inappropriate or unsuitable way, I try to understand what lies under his/her behaviour or words”.

Consisting of eight items, the Teacher Cooperation Scale (OECD, 2017) was used to address collaboration among teachers. For instance, participants were asked, “On average, how often do you observe other teachers’ classes and provide feedback in this school?”.

To assess diversity awareness, we included measures covering the teachers’ self-efficacy for and their beliefs regarding dealing with classroom diversity, their self-assessed flexibility and openness to diversity and their views on social hierarchy. The Self-Efficacy for Classroom Diversity scale (OECD, 2019) contains five items such as “I can adapt my teaching to the diversity of students”.

We further used the Beliefs regarding Dealing with Classroom Diversity scale (OECD, 2019; adapted from Hachfeld et al., 2011), comprising nine items. We decided on this shortened version that was employed in PISA 2018 where it was modelled as one-dimensional. In that version, the original sub-dimensions Multicultural Beliefs (6 items; “It is important for students to learn that people from other

cultures can have different values”) and Egalitarian Beliefs (3 items “In the classroom, it is important that students of different origins recognise the similarities that exist between them”) were regarded as two facets of a one-dimensional construct.

We also employed an adapted scale from the ICU Teacher Tool (Denson et al., 2017), Flexibility/Openness to Cultural Diversity, which combines items addressing adaptability/flexibility and openness to cultural diversity with four items. An example statement is, “I feel comfortable around people with diverse backgrounds”.

To capture participants' perspectives on social hierarchy and group dominance, we used the short version of the Social Dominance Orientation Scale (Pratto et al., 1994), consisting of four items. An example item from this scale is, “In setting priorities, we must consider all groups”.

Procedure. The pre-test questionnaire was answered online by the participants (in both the experimental and control group) in the week prior to the start of the HAND:ET programme.

Analyses. We performed the following analyses: On the item level, we analysed descriptive statistics such as frequencies and missing values for the purposes of data cleaning. We used the internal consistency of scales (Cronbach’s alpha) as a reliability measure. We further computed descriptive statistics for the scales, i.e., scale means and standard deviations. These analyses were performed with R (version 4.3.1; R Core Team, 2023) and the R-package psych (Revelle, 2023).

Regarding the dimensionality structure of the scales, we first inspected Scree Plots from exploratory factor analyses (EFAs). Principal axis factor analysis was used as the extraction method. For most scales, we used EFA for continuous indicators – if the number of response categories was less than five, EFA for categorical indicators was employed. These analyses were performed with the R-package psych (Revelle, 2023). We further conducted confirmatory factor analyses (CFAs) to examine whether the composition of the scales was consistent with the literature. Therefore, we initially defined the respective model based on the dimensions reported in the literature. If necessary, modification indices were used to identify the best fitting models in the five participating countries. As with EFA, we specified CFA models for continuous indicators (using the MLR estimator) – if the number of response categories was less than five, CFA for categorical indicators was used (with the WLSMW estimator). CFA analyses were carried out with the Mplus Software (Muthén & Muthén, 1998–2022).

4.3 Results

The scale and subscale distributions (the scale mean value was computed if the participant had responded to at least half the items) and percentages of missing values from all 14 self-report scales, as well as the scales’ internal consistency and exploratory factor analysis results, are presented in Table 4.2.

Table 4.2 Overview of self-report questionnaire scales used in the Pre- and Post-test Questionnaires

Measures	Subscale	# Items	Teachers	Principals	Other school staff	HAND:ET trainers	EFA	Range	Cronbach's α	Missings (%)	Distribution M (SD)
Emotional Competences											
Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004)	Observe	7	✓	✓	✓	✓	✓	1 - 5	.81 - .85	0.00 (AUT, HRV, SVN, SWE) - 0.01 (PRT)	3.73 (0.62) - 3.93 (0.58)
Mindful Attention Awareness Scale (Brown & Ryan, 2003)		15	✓	✓	✓	✓	✓	1 - 6	.88 - .90	0.00 (AUT, HRV, PRT, SVN) - 0.01 (SWE)	2.86 (0.73) - 3.07 (0.77)
Mindfulness in Teaching Scale (Rank, Jennings, & Greenberg, 2016)	Intrapersonal	9	✓	-	-	-	✓	1 - 5	.81 - .87	0.00 (HRV, PRT, SVN) - 0.03 (SWE)	3.88 (0.53) - 4.16 (0.51)
	Interpersonal	5	✓	-	-	-	✓	1 - 5	.53 - .71	0.00 (HRV, PRT, SVN) - 0.03 (SWE)	3.70 (0.62) - 4.16 (0.54)
WHO-5 Well-Being Index (Topp et al., 2015)		5	✓	✓	✓	✓	✓	1 - 6	.86 - .91	0.00 (AUT, SVN) - 0.01 (HRV, PRT, SWE)	3.42 (1.07) - 4.11 (0.99)
Shirom-Melamed Burnout Questionnaire (Shirom & Melamed, 2006)	Physical fatigue	6	✓	-	✓	-	✓	1 - 7	.94 - .97	0.00 (AUT, PRT, SVN) - 0.03 (SWE)	3.04 (1.25) - 3.88 (1.27)
	Cognitive weariness	5	✓	-	✓	-	✓	1 - 7	.90 - .95	0.00 (AUT, HRV, SVN) - 0.04 (SWE)	3.14 (1.41) - 3.59 (1.37)
	Emotional exhaustion	3	✓	-	✓	-	✓	1 - 7	.87 - .95	0.00 (AUT, HRV, PRT, SVN) - 0.04 (SWE)	2.12 (1.12) - 2.59 (1.19)
Self-Efficacy Questionnaire for Children (Muris, 2001)		8	✓	✓	✓	✓	✓	1 - 5	.81 - .88	0.00 (HRV, PRT, SVN) - 0.01 (AUT, SWE)	3.19 (0.61) - 3.32 (0.66)
Psychological Strain in Work Contexts Scale (Mohr et al., 2006)	Cognitive strain	3 (4)	✓	✓	✓	✓	✓	1 - 6	.74 - .86	0.00 (HRV) - 1.79 (SWE)	3.81 (1.52) - 4.48 (1.46)
	Emotional strain	4	✓	✓	✓	✓	✓	1 - 6	.77 - .87	0.00 (HRV) - 1.79 (SWE)	2.76 (1.17) - 3.66 (1.21)
Social Competences											
Empathy Assessment Inventory (Gerdes, Segal, & Lietz, 2010)	Affective response	5	✓	✓	✓	✓	✓	1 - 6	.63 - .72	0.00 (HRV, PRT, SVN) - 0.01 (AUT, SWE)	4.52 (0.74) - 5.14 (0.62)
	Affective mentalizing	4	✓	✓	✓	✓	✓	1 - 6	.72 - .84	0.00 (HRV, PRT, SVN) - 0.01 (AUT, SWE)	4.31 (0.82) - 4.67 (0.57)
	Perspective taking	5	✓	✓	✓	✓	✓	1 - 6	.67 - .82	0.00 (HRV, PRT, SVN) - 0.01 (AUT, SWE)	4.50 (0.73) - 4.65 (0.69)
Teacher's Relational Competence Scale (adapted from Vidmar & Kerman, 2016)	Self-other awareness	4	✓	✓	✓	✓	✓	1 - 6	.63 - .97	0.00 (HRV, PRT, SVN) - 0.01 (AUT, SWE)	4.32 (0.70) - 4.50 (0.70)
		6 (7)	✓	-	-	-	*	1 - 5	.79 - .88	0.00 (HRV, PRT, SVN) - 0.02 (SWE)	3.83 (0.54) - 4.00 (0.59)
Diversity Awareness											
Teacher self-efficacy for classroom diversity (OECD, 2019)		5	✓	-	-	-	✓	1 - 4	.81 - .91	0.00 (HRV) - 1.79 (SWE)	3.17 (0.38) - 3.32 (0.44)
Beliefs regarding dealing with classroom diversity (adapted from Hachfeld et al., 2011; OECD 2019)	Multicultural beliefs	6	✓	-	-	-	✓	1 - 4	.83 - .89	0.00 (HRV) - 1.79 (SWE)	3.43 (0.41) - 3.71 (0.34)
	Egalitarian beliefs	3	✓	-	-	-	✓	1 - 4	.83 - .91	0.00 (HRV) - 1.79 (SWE)	3.38 (0.51) - 3.72 (0.40)
ICU Teacher Tool (adapted from Denson et al., 2017)	Flexibility/Openness to Diversity	4	✓	✓	✓	✓	✓	1 - 6	.78 - .86	0.00 (HRV, SVN) - 0.01 (AUT, PRT, SWE)	4.65 (0.91) - 5.18 (0.68)
Social dominance orientation (short version; Pratto et al., 1994)		4	✓	✓	✓	✓	✓	1 - 10	.49 - .66	0.00 (HRV, PRT, SVN) - 0.02 (SWE)	2.25 (1.33) - 4.60 (1.41)
Teacher Cooperation											
Teacher cooperation (OECD, 2017)		8	✓	-	-	-	✓	1 - 6	.72 - .81	0.00 (HRV) - 5.36 (SWE)	3.38 (0.86) - 4.33 (0.82)

Note: Measures printed in gray font were excluded for the pre-post analyses. In the "range" column, the possible response range for each scale is displayed, so that the mean values in "distribution M (SD)" columns can be interpreted in relation to it. The values in the column "Missings" are based on the respective teacher samples, as the samples for the other participant groups are in some cases very small. In Austria, the online survey was implemented in a way that a question could only be answered if the previous one had been completed - therefore there are no omissions in the Austrian sample, only drop-outs. AUT = Austria, HRV = Croatia, PRT = Portugal, SVN = Slovenia, SWE = Sweden. * Score plot shows different number of dimensions as compared to literature. If items were removed as part of the CFA modeling process, the "Items" column lists the number of items for the revised scale, the initial number of items is presented in brackets. The descriptors provided in this table refer to the revised versions of the scales that will be used for the experimental outcome evaluation.

The number of missing values for the scales is very low in all countries (see Table 4.2), ranging from 0 to 5.4%. As regards the scale distributions, the mean values of positively worded scales are generally relatively high. The scales with the highest mean values (relative to the maximum possible value) are Beliefs regarding Dealing with classroom diversity ($M = 3.41 - 3.71$) and Flexibility/Openness to Diversity ($M = 4.65 - 5.18$). Hence, the distributions for positively worded scales – especially the latter – are skewed.

Overall, the internal consistencies of the self-reported questionnaire scales are reasonable (DeVellis, 2003; Taber, 2018), showing a Cronbach's alpha above .60 in most scales for all countries. There were two exceptions, namely the Social Dominance Orientation scale, which reveals the lowest internal consistency of all scales across the countries, with internal consistencies below .60 in Austria ($\alpha = .54$) and in Portugal ($\alpha = .49$). Similarly, the subscale Interpersonal Mindfulness from the scale Mindfulness in Teaching also shows internal consistencies below .60 in Austria ($\alpha = .53$) and Portugal ($\alpha = .57$).

Regarding the structure of the scales, the results of the exploratory factor analyses (see Table 4.2) confirm that all of the scales' dimensionality corresponded to the structure described in the relevant literature.

The results of the confirmatory factor analyses, fit indices and corresponding modifications of the models are presented in Table 4.3. The CFA models for the scales Burnout, Teacher Self-Efficacy for classroom diversity, and Social Dominance Orientation showed an acceptable fit across countries without needing further adjustments. For the remaining scales, however, a model modification was required to achieve a satisfactory fit in all countries. In most cases, this entailed that residual covariances be allowed, specifically in the scales of Mindfulness – Observe, Mindful Attention Awareness, Mindfulness in Teaching, Wellbeing, Emotional Self-Efficacy, Empathy, Flexibility/Openness to Diversity, and Teacher Cooperation. The Beliefs regarding Dealing with Classroom Diversity scale, which had been anticipated to be unidimensional according to the version used in PISA 2018 (OECD, 2019), showed a much better fit for a two-dimensional model, as is consistent with the structure from the original scale (Hachfeld et al., 2011). The respective subdimensions are Multicultural beliefs and Egalitarian beliefs. Finally, the models for the scales Strain in Work Contexts and Relational Competence were optimised by removing one item each.

Overall, after the model was adjusted as described, the final models show an adequate fit in the majority of countries for most fit indices (Table 4.3). Specifically, most of the emotional competencies scales (i.e., Mindfulness – Observe, Mindful Attention Awareness, Mindfulness in Teaching, Wellbeing, and Emotional Self-Efficacy) show a good fit in all or most countries. The remaining emotional competencies scales, the social competencies scales and the diversity awareness scales have an adequate fit in most countries, albeit for several scales the RMSEA often indicates an unsatisfactory fit in most or all countries, i.e., Burnout, Strain in Work Contexts, Relational Competence, Teacher Self-Efficacy for Classroom Diversity, Beliefs Regarding Dealing with Classroom Diversity, and Social Dominance Orientation. With regard to the latter, an unsatisfactory fit is also indicated by the CFI and TLI.

Table 4.3 Confirmatory factor analysis results for self-report questionnaire scales

Measures	Model dimensions	Modifications	CFI	TLI	RMSEA	SRMR
Emotional Competences						
Kentucky Inventory of Mindfulness Skills – Subscale Observe (Baer, Smith, & Allen, 2004)	1	Allowing for residual covariances	✓	✓	✓	✓
Mindful Attention Awareness Scale (Brown & Ryan, 2003)	1	Allowing for residual covariances	✓	.88 (SVN)	✓	✓
Mindfulness in Teaching Scale (Rank, Jennings, & Greenberg, 2016)	2	Allowing for residual covariances (AUT, HRV)	✓	✓	✓	✓
WHO-5 Well-Being Index (Topp et al., 2015)	1	Allowing for residual covariances (PRT, SVN, HRV)	✓	✓	✓	✓
Shirom-Melamed Burnout Questionnaire – Subscale Emotional Self-Efficacy (Shirom & Melamed, 2006)	3	No modifications	✓	✓	.09 (HRV); .09 (SVN)	✓
Self-Efficacy Questionnaire for Children (Muris, 2001)	1	Allowing for residual covariances	✓	✓	.09 (PRT)	✓
Psychological Strain in Work Contexts Scale (Mohr et al., 2006)	2	Item 6 removed	.88 (HRV)	.80 (HRV)	.14 (HRV); .10 (PRT)	✓
Social Competences						
Empathy Assessment Inventory (Gerdes, Segal, & Lietz, 2010)	4	Allowing for residual covariances	.88 (AUT)	.85 (AUT); .88 (HRV); .87 (PRT); .88 (SVN); .87 (SWE)	✓	✓
Teacher's Relational Competence Scale (adapted from Vidmar & Kerman, 2016)	1	One dimension instead of two; item 5 removed	✓	.87 (SWE)	.09 (AUT); .10 (SWE)	✓
Diversity Awareness						
Teacher self-efficacy for classroom diversity (OECD, 2019)	2	No modifications	✓	✓	.25 (AUT); .15 (HRV); .25 (POR); .18 (SVN); .21 (SWE)	.09 (PRT)
Beliefs regarding dealing with classroom diversity (OECD, 2019; adapted from Hachfield et al., 2011)	2	Two dimensions instead of one (consistent with the original scale)	✓	✓	.10 (HRV); .12 (PRT); .12 (SVN); .21 (SWE)	✓
ICU Teacher Tool – Subscale Flexibility/Openness to Diversity (adapted from Denson et al., 2017)	1	Allowing for residual covariances (different model per country)	✓	.88 (AUT) .76 (SVN)	.11 (SVN)	✓
Social dominance orientation (short version; Pratto et al., 1994)	1	No modifications	.85 (AUT); .85 (PRT); .77 (SVN)	.55 (AUT); .56 (PRT); .31 (SVN)	.20 (AUT); .12 (PRT); .22 (SVN)	✓
Teacher Cooperation						
Teacher cooperation (OECD, 2017)	1	Allowing for residual covariances (different model per country)	.84 (SVN)	.88 (AUT); .76 (SVN)	.11 (SVN)	✓

Note: The ✓ indicates good fit indices in all countries following the cut-off values: CFI ≥ .90; TLI ≥ .90; RMSEA ≤ .06; SRMR ≤ .08. The countries that did not meet the cut-off values are noted in parenthesis with their corresponding values. AUT = Austria, HRV = Croatia, PRT = Portugal, SVN = Slovenia, SWE = Sweden.

4.4 Discussion

The aim of this chapter was to assess the quality of the self-report scales chosen for the experimental outcome evaluation with respect to reliability and dimensionality.

We found the reliability of the scales was generally acceptable or good, with a threshold above 0.6, in all participating countries and for almost every subscale, except two. Regarding the structure of the instruments, we aimed to confirm whether the dimensionality described in the literature was consistent for all of the constructs across the five language versions. As concerns the majority of constructs and all five language versions, we established that the mentioned dimensionality may indeed be confirmed. Minor adaptations to national contexts were required for many of the scales. This highlights the importance of considering cultural and linguistic differences in the development and use of measurement instruments. It is worth noting that some of the model fit indices, particularly the RMSEA, exceeded the threshold for acceptable values for a number of scales and countries. Nonetheless, it is important to acknowledge that our samples were relatively small, which according to prior research (Kenny et al., 2015) can have a negative impact on the RMSEA.

Considering the findings on reliability and structure together, some scales had to be revised as a consequence of the analyses: Instead of measuring Beliefs regarding Dealing with Classroom Diversity as a one-dimensional construct (OECD, 2019), we now distinguish two sub-dimensions, like in the original instrument (Hachfeld et al., 2011). The scales Psychological Strain in Work Contexts (subscale Cognitive strain) and Relational Competence were shortened by one item, each as a result of the CFA modelling. The Mindfulness in Teaching – Interpersonal Mindfulness subscale had insufficient reliabilities in two countries. However, we decided to retain the scale due to its generally good reliability in the remaining countries and good CFA model fit across the countries. The only instrument that will not be employed in the experimental outcome evaluation is the Social Dominance Orientation scale, which exhibited low internal consistency in all countries (notably in Austria and Portugal) and an unsatisfactory CFA model fit.

In relation to the psychometric test of the instruments, we conclude that the self-report scales we chose to measure SEDA competencies generally performed well in all five language versions, making them – when taking the adaptations and limitations described above into account – well-suited to the experiment-based evaluation of the HAND:ET system.

PART I – RESULTS FROM THE EXPERIMENTAL OUTCOME EVALUATION

One central aim of the evaluation of the HAND:ET system was to examine the effectiveness of the programme. We looked at how far the HAND:ET system had helped foster the SEDA competencies of teachers. In Part I of this report, a quantitative analysis of the differences between the control and experimental groups is presented with regard to changes in measured SEDA competencies between T1 and T2.

5 Effectiveness of the HAND:ET system – results from the experimental evaluation

To estimate the HAND:ET system's causal effects, the study used an experimental design with two groups: (A) a control group without an intervention; and (B) a group where teachers, principals and other school staff participated in the training. The full scope of the system was applied to teachers, whereas principals and other schools staff participated in a shorter version of the training. For details of the HAND:ET system, see Kozina (2024). In the control and experimental group, a pre-measurement was conducted. This data was also used to confirm the quality of the scales to be used in the experimental evaluation (see Chapter 4 in this report), next to estimating the HAND:ET system's effects. The experimental groups of teachers, principals and school staff then participated in the HAND:ET system, followed by a post-measurement after they finished the HAND:ET programme. A post-measurement was also conducted in the control group with a similar distance to the pre-measurement as for the experimental groups. The programme was implemented in five different countries, and we have a 2 (groups) x 2 (time points) design within each country.

The central intention of the evaluation described in this chapter was to examine the effectiveness of the HAND:ET system. We looked at how far the HAND:ET system had helped foster the SEDA competencies of teachers. In this chapter, a quantitative analysis of the differences between the control and experimental groups is presented with regard to changes in measured SEDA competencies between T1 and T2. Our main research question is: Do the changes in SEDA competencies and teacher cooperation between T1 and T2 differ significantly between the control and experimental groups? Specifically, we are interested in the following: Do we observe a bigger increase in the SEDA competencies of teachers between the two measurement points in the experimental group than in the control group in all countries involved in the experiment (Austria, Croatia, Portugal, Slovenia, Sweden)?

5.1 Methods¹

School Selection and Condition Assignment

At the commencement of the HAND:ET project, the target population was established as primary and lower secondary schools. Nevertheless, varying contexts require adaptations and flexibility to make practical implementation of the HAND:ET system feasible. The inclusion of specific features of different education systems led to a focus on particular target groups in each country. In Austria, the focus was on schools with students in grades 1 to 4, in Croatia on those with students in grades 1 to 8, in Portugal on those with students in grades 1 to 12, in Slovenia on those with students in grades 1 to 9 while in Sweden on those with students in grades 4 to 9.

The school recruitment process started with a presentation of the HAND:ET project through various channels. This included sending project descriptions to schools, presenting the HAND:ET project at several events, contacting schools which the project teams had previously been in contact with. Schools then contacted the HAND:ET partners in charge of the implementation if they were interested in participating. An information meeting was held for all interested schools to explain the content of the HAND:ET project, the objectives and implementation of the HAND:ET programme, and the schools' tasks related to participation. The schools were also informed that, if they agreed to participate, they would have to follow the random allocation to experimental / control conditions. No

¹ The study's design, desired sample size, constructs measured, hypothesised effects, and planned analyses were preregistered on Open Science Framework prior to any data being collected (<https://doi.org/10.17605/OSF.IO/TRNFX>).

group changes were allowed after the randomisation. The recruitment process was more difficult in some countries, creating some challenges to the regular procedures and leading to a smaller sample size than expected in Austria.

The random allocation to conditions was conducted consistently in all five countries: Austria, Croatia, Portugal, Slovenia and Sweden. For this purpose, each country gave the evaluation team a list of schools that had agreed to participate. This list also contained the number of teachers and other school staff who were willing to participate. Schools were randomly assigned to the two groups based on this list, taking the number of teachers in each group into account. The evaluation team tried to balance the number of teachers in the control and experimental groups as they formed the basis for evaluating the programme. The groups of principals and other school staff were too diverse across countries, yet also too small to be statistically analysed. Therefore, this chapter concentrates solely on teacher effects.

Description of the Sample

Overall, 959 teachers responded to the questionnaires. In the text below, participants refer to respondents of the questionnaire. Further, the number of schools included varied by country. In Austria, 32 schools participated with 1–18 participants per school, in Croatia 18 schools with 7–24 participants per school, in Portugal 16 schools with 4–27 participants per school, in Slovenia 21 schools with 4–15 participants per school, and in Sweden 9 schools with 14–56 participants per school.

A detailed presentation of the participants is provided in Table 5.1. In general, we see a fall in responding to the questionnaire between T1 and T2 in each country. It is most pronounced in Sweden and the least so in Slovenia.

We also observe a larger drop-out rate in responding to the questionnaire in the experimental group across the countries. Given that we are interested in the differences between T1 and T2 concerning selected constructs, only those who participated at both points in time were included in the analyses. This led to a total sample size of 667 teachers across the countries. The control group is bigger than the experimental group in Austria and Croatia, and vice versa in Portugal and Sweden. In Slovenia, the sample sizes of the two groups are balanced.

Table 5.1 Number of participants by role, group, time point and country

	Austria		Croatia		Portugal		Slovenia		Sweden	
	Control	Experimental	Control	Experimental	Control	Experimental	Control	Experimental	Control	Experimental
Teachers										
T1 only	16	22	19	21	19	29	12	8	54	37
T1 and T2	53	41	84	74	66	93	92	93	36	41
T2 only	2	2	9	3	3	1	2	1	6	14
Principals										
T1 only	1	6	1	1	0	1	0	0	3	2
T1 and T2	12	6	2	5	2	1	8	14	2	2
T2 only	0	0	1	0	0	0	0	0	1	2
Other school staff										
T1 only	0	1	10	4	6	17	0	0	15	23
T1 and T2	3	0	11	15	7	27	14	15	3	22
T2 only	0	0	3	0	2	0	0	0	1	3
Total	87	78	140	123	105	169	128	131	121	146

In addition, Table 5.2 shows the characteristics of the teachers who participated at both time points by country.

Table 5.2 Characteristics of the teachers participating at both time points by group and country

	Austria		Croatia		Portugal		Slovenia		Sweden	
	Control	Experimental	Control	Experimental	Control	Experimental	Control	Experimental	Control	Experimental
Age (<i>M</i>)	39.8	40.2	41.4	44.4	49.3	50.7	41.1	42.3	46.9	44.6
Age (<i>SD</i>)	9.5	10.7	9.0	8.6	6.2	6.4	7.4	7.6	11.1	10.7
Gender (% female)	96	88	95	96	97	92	92	96	86	87
Years of teaching experience (<i>M</i>)	9.6	11.3	14.6	17.8	25.2	26.0	14.8	15.7	17.0	14.7
Years of teaching experience (<i>SD</i>)	9.9	11.2	9.5	9.5	6.6	7.1	9.2	8.6	12.0	9.0

Instruments

The assessment instruments, item examples and scale properties are detailed in Chapter 4 of this report. In the summative outcome evaluation, we considered the following constructs as indicators of the different SEDA competencies:

Emotional Competencies – Self Awareness

- Kentucky Inventory of Mindfulness Skills, Subscale Observe
- Mindful Attention Awareness Scale
- Mindfulness in Teaching Scale, Subscale Intrapersonal Mindfulness
- Mindfulness in Teaching Scale, Subscale Interpersonal Mindfulness

Emotional Competencies – Self Management

- WHO-5 Well-Being Index
- Self-Efficacy Questionnaire for Children, Subscale Emotional Self-Efficacy
- Shirom-Melamed Burnout Questionnaire, Subscale Physical Fatigue
- Shirom-Melamed Burnout Questionnaire, Subscale Cognitive Weariness
- Shirom-Melamed Burnout Questionnaire, Subscale Emotional Exhaustion
- Psychological Strain in Work Contexts Scale, Subscale Cognitive Strain
- Psychological Strain in Work Contexts Scale, Subscale Emotional Strain

Social Competencies – Social Awareness

- Empathy Assessment Inventory, Subscale Affective Response
- Empathy Assessment Inventory, Subscale Affective Mentalising
- Empathy Assessment Inventory, Subscale Perspective Taking
- Empathy Assessment Inventory, Subscale Self-Other Awareness

Social Competencies – Relational Competence

- Teacher's Relational Competence Scale (adapted)
- Teacher Cooperation
- Alongside these scales, teachers' feeling of closeness with their colleagues was measured using one item. The item had a graphical response format in the form of two circles, representing different intensities of closeness. One circle represented the respondent and the other his / her colleagues. The circles ranged from no overlap to almost complete overlap. Teachers had to choose one of the seven diagrams that best represents their closeness to their colleagues. The same item was also used to measure their closeness with their students.

Diversity Awareness

- Teacher Self-Efficacy for Classroom Diversity
- Beliefs Regarding Dealing with Classroom Diversity (adapted), Subscale Multicultural Beliefs
- Beliefs Regarding Dealing with Classroom Diversity (adapted), Subscale Egalitarian Beliefs
- ICU Teacher Tool (adapted), Subscale Flexibility / Openness to Diversity

The scales' psychometric characteristics were evaluated based on results for T1. We checked the dimensionality, internal consistency and validity. The results of the scales included in the questionnaires are shown in Chapter 4 of this report. The scale *Social Dominance Orientation* was excluded based on its poor psychometric properties in T1. The reliability was also checked for the same scales in T2. Most scales exhibited good reliability, higher than $\alpha = 0.70$ (DeVellis, 2003; Taber, 2018). The exceptions were three (sub)scales in Austria, one in Croatia, two in Slovenia, and four in Sweden where the reliability ranged between $\alpha = 0.60$ and 0.70 . Only two scales in Portugal exhibited poor reliability at T2 below $\alpha = 0.60$.

Data Collection, Cleaning and Analysis

The data at both time points were collected online using LimeSurvey (<https://www.limesurvey.org/>). After the data had been downloaded, duplicate cases needed to be removed. Unless there were special instructions from the countries, the more complete or later entry was usually retained.

The scale score for each participant at each point in time was computed as the arithmetic mean of responses to the items of a scale measuring a SEDA construct. A scale value was only computed if responses for at least half the items of a scale were available. No overall scale score was computed for multidimensional constructs. Subscales were treated as separate scales in the analysis. To assess the effects of the HAND:ET system, we compared changes in the SEDA constructs across groups of individuals. For this, we calculated the difference score for each participant in a certain outcome variable before and after the treatment (i.e., the scale score at T2 minus the scale score at T1). This difference was used as a dependent variable in the regression analysis. The independent variable reflected the condition to which the individuals had been assigned. The control group served as the reference group.

The data collected for the HAND:ET project have a multilevel structure with teachers being nested within schools, and schools being nested within education systems or countries. This is important to consider in our methodology because teachers within the same school share unobserved characteristics which might influence our statistical analysis. Correcting standard errors for clustering is advised if either the sampling or treatment assignment is performed on the level of the clusters. This was the case with HAND:ET as the assignment to conditions was implemented on the school level. In practice, however, we faced some challenges in accounting for clustering. The varying number of groups (schools) in countries (i.e., between 9 and 32 schools) meant it was impossible to use multi-level modelling². In addition, the number of teachers varied greatly from school to school. We had schools with 1 to 56 participants. Therefore, we solely analysed effects on the individual level. Accordingly, we used linear regression analyses to allow us to predict changes in outcome variables with treatment assignment on the individual level. Apart from the regressing results, we provide information on effect sizes of the differences between the groups. The effect sizes were calculated as Cohen's *d* effect size measure (for more information on effect sizes, see Lakens, 2013).

The hypothesis testing was one-sided since we were testing for the expected effects. In some cases, we expected scale values to increase (e.g., mindfulness, empathy, cooperation), while in others we anticipated them to decrease (e.g., burnout, psychological strain).

In addition to the complete cases analysis, we present results using multiple imputation in Appendix. We only imputed the difference score for each of the outcome variables five times. The imputation was done using predictive mean matching with the R package *mice* (van Buuren and Groothuis-Oudshoorn, 2011).

Descriptive analyses and analyses for scale construction were carried out with IBM SPSS Statistics Version 24 for Windows (IBM Corporation, 2016). We performed all regression analyses using the R statistical programming environment (R Core Team, 2022). Since the national contexts differ and the trainings were implemented by national trainers, all analyses were conducted separately for each country and the effects exhibited considerable heterogeneity among the countries.

5.2 Results

In this section, we present results of quantitative analysis of the questionnaire scales regarding the HAND:ET system's effectiveness. We present the effect size of the difference between the groups. The effect size is based on the changes we observed in the control and experimental groups. In short, we present the effect size of the difference in the change scores between the groups. A table providing

² According to Maas and Hox (2005), multilevel modelling requires at least about 20 cases on the highest level.

complete information on all the differences between the conditions and the average changes in the scale scores in groups for all countries can be found in the appendix (see *Table A.1*). The scales are grouped by overarching SEDA constituents. We first outline the results for emotional competencies, those for social competencies and, finally, those for diversity awareness.

Results for Emotional Competencies

Self-Awareness

Self-awareness was measured using four scales. The effect sizes are presented in Figure 5.1. We find only one significant effect among these scales, namely for *Mindfulness Skills-Observe* in Austria ($t = 2.07, p = 0.021, d = 0.44$), Croatia ($t = 1.95, p = 0.027, d = 0.31$) and Sweden ($t = 3.28, p = 0.001, d = 0.74$). In these countries, the increase in scores between T2 and T1 for *Mindfulness Skills-Observe* was significantly higher in the experimental group than in the control group. The size of the effect is small in Croatia and Austria, and medium in Sweden.

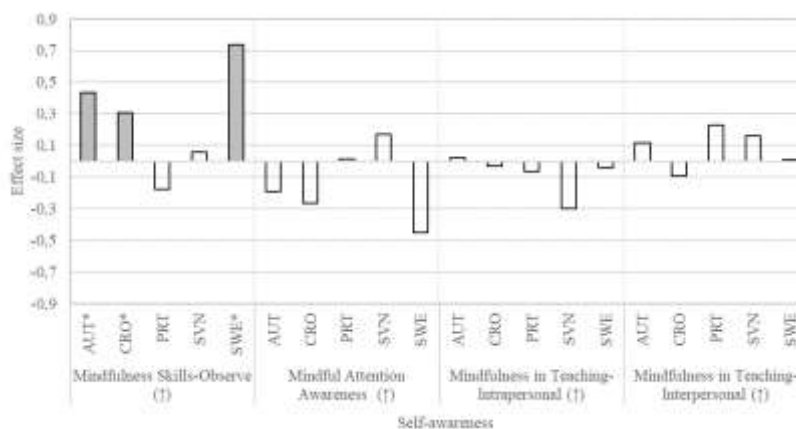


Figure 5.1 Effect sizes (Cohen's d) of the differences between the groups over time for the scales measuring self-awareness.

Note: the sign (□) following the scale name on the x-axis points in the direction of the hypothesised effect. * next to the country abbreviation and grey bars indicate a significant difference. AUT=Austria, CRO=Croatia, PRT=Portugal, SVN=Slovenia, SWE=Sweden.

Self-Management

We have seven indicators for self-management as one component of emotional competencies. In the first two, the *WHO-5 Well-Being Index* and *Emotional Self-Efficacy* scales, the expected effect represents an increase in the scale. The remaining two constructs, *Burnout*, and *Psychological Strain in the Work Context* are represented by three and two subscales, respectively. For these five subscales, we expected a decrease in the scale scores. The results are presented in Figure 5.2.

We find an effect for *Well-Being* with the experimental group exhibiting a significantly stronger increase in the scale scores compared to the control group in Slovenia ($t = 3.60, p = 0.000, d = 0.53$) and Sweden ($t = 1.68, p = 0.049, d = 0.38$). The effect sizes were medium and small, respectively.

For all subscales of *Burnout*, we establish significant effects in Croatia, Slovenia and Sweden. *Burnout-Physical Fatigue* decreased significantly more in the experimental compared to the control group in Croatia ($t = -2.11, p = 0.018, d = -0.34$) and Slovenia ($t = -3.96, p = 0.000, d = -0.58$).

Burnout-Cognitive Weariness exhibited an effect in line with the hypotheses in Slovenia ($t = -3.22, p = 0.001, d = -0.47$) and *Burnout-Emotional Exhaustion* in Slovenia ($t = -3.31, p = 0.001, d = -0.49$) and

Sweden ($t = -2.53, p = 0.007, d = -0.58$). The effects on *Burnout-Physical Fatigue* in Slovenia and *Burnout- Emotional Exhaustion* in Sweden are medium, while the other effects

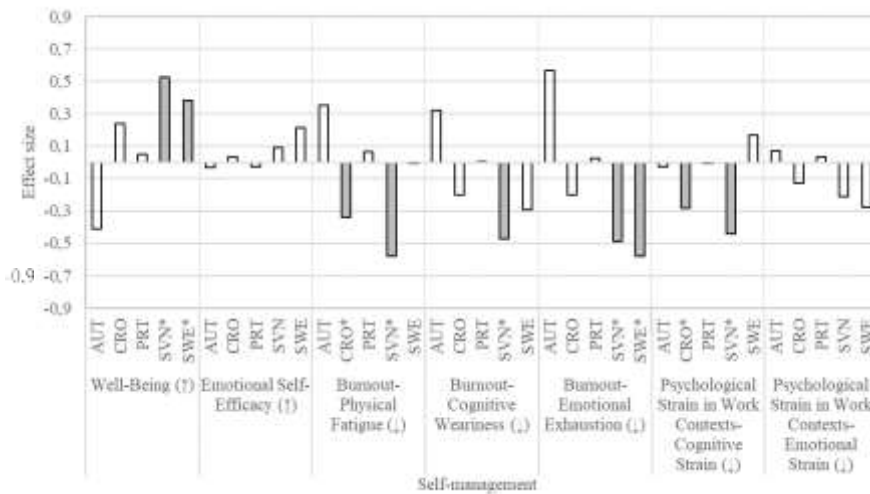


Figure 5.2 Effect sizes (Cohen's d) of the differences between the groups over time for scales assessing self-management

Note: the sign (□) or (□) following the scale name on the x-axis points in the direction of the hypothesised effect. * next to the country abbreviation and grey bars indicate a significant difference. AUT=Austria, CRO=Croatia, PRT=Portugal, SVN=Slovenia, SWE=Sweden.

In addition, we find a significant effect in the *Psychological Strain in Work Contexts* subscales. The *Cognitive Strain* subscale showed a significant effect in Croatia ($t = -1.78, p = 0.039, d = -0.28$) and Slovenia ($t = -3.00, p = 0.002, d = -0.44$), and the *Emotional Strain* subscale a significant effect in Sweden ($t = -1.72, p = 0.041, d = -0.45$). All effects were small.

Results for Social Competencies

Social Awareness and Relationship Skills

Social awareness is represented by scales measuring a teacher's social awareness and relationship skills. The results are presented in Figure 5.3.

For social awareness and relationship skills we establish at least one significant effect in each (sub)scale for at least one country with the exception of the *Empathy-Perspective Taking* subscale. Significant effects are observed in the subscales measuring *Empathy*. The *Affective Response* and the *Affective Mentalising* subscales revealed a significant effect in line with our hypotheses in Sweden (*Empathy-Affective Response*: $t = 2.07, p = 0.021, d = 0.48$; *Empathy-Affective Mentalising*: $t = 1.89, p = 0.032, d = 0.43$) and the later also in Portugal ($t = 2.02, p = 0.022, d = 0.33$).

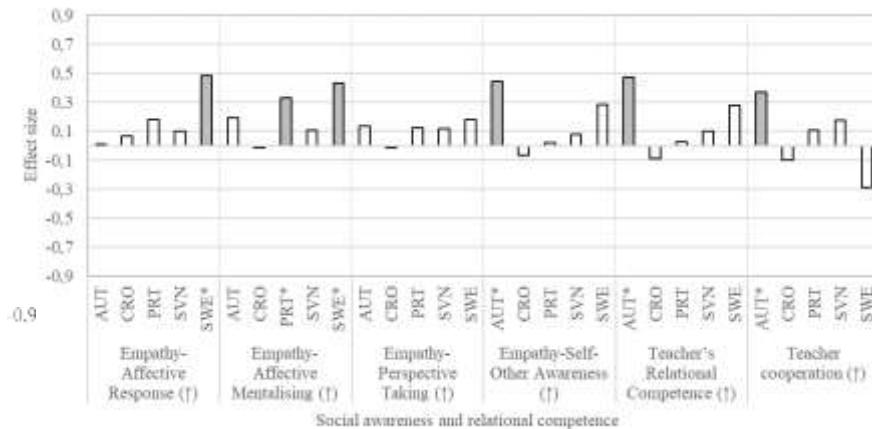


Figure 5.3 Effect sizes (Cohen's *d*) of the differences between the groups over time for scales assessing a teacher's social awareness and relationship skills

Note: the sign (□) following the scale name on the x-axis points in the direction of the hypothesised effect. * next to the country abbreviation and grey bars indicate a significant difference. AUT=Austria, CRO=Croatia, PRT=Portugal, SVN=Slovenia, SWE=Sweden.

Another significant effect in line with the hypotheses was exhibited by the *Empathy* subscales *Self-Other Awareness*, *Teacher's Relational Competence* and *Teacher Cooperation* in Austria (*Empathy-Self-Other Awareness*: $t = 2.15, p = 0.017, d = 0.44$; *Teacher's Relational Competence*: $t = 2.22, p = 0.015, d = 0.47$; *Teacher Co-operation*: $t = 1.77, p = 0.040, d = 0.34$). All the effects are small in size.

The mean change in the closeness of relationships with other teachers (as measured by the graphic scale) reveals that the felt connectedness increased more in the experimental group than in the control group in each country. Still, the change was only significant in Austria ($t = 1.79, p = 0.038, d = 0.37$). Further, the closeness of the relationship was also measured in the same graphic way for students. The teachers indicated how close they felt to their students. Here, we observe an increase in connectedness as well in all countries but Croatia, albeit the changes between groups are not significant.

Results for Diversity Awareness

Diversity awareness was measured with four (sub)scales. The results are presented in Figure 5.4.

There are no significant effects in line with our hypotheses for the *Teacher Self-Efficacy for Classroom Diversity* scale and *Beliefs Classroom Diversity-Multi-cultural*. Significant effects in the subscale *Beliefs Classroom Diversity-Egalitarian* are manifested in Slovenia, where the beliefs of the experimental group increased significantly more than in the control group ($t = 2.19, p = 0.015, d = 0.32$).

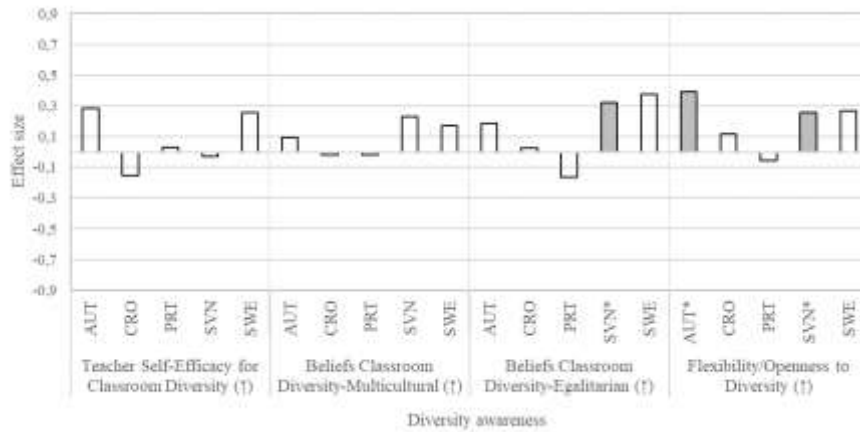


Figure 5.4 Effect sizes (Cohen's *d*) of the differences between the groups over time for scales assessing a teacher's diversity awareness

Note: the sign (□) following the scale name on the x-axis points in the direction of the hypothesised effect. * next to the country abbreviation and grey bars indicate a significant difference. AUT=Austria, CRO=Croatia, PRT=Portugal, SVN=Slovenia, SWE=Sweden.

The *Flexibility / Openness to Diversity* scale exhibited significant effects conforming with our expectations in Austria ($t = 1.86, p = 0.033, d = 0.39$) and Slovenia ($t = 1.74, p = 0.041, d = 0.26$). All the significant effects are small in size.

5.3 Discussion

The HAND:ET system was implemented in five countries with the goal of empowering teachers to deal with the challenges they encounter at work by helping them improve their SEDA competencies. Whether this goal was accomplished was evaluated using an experimental design comparing two groups, an experimental and a control group. This chapter presents the results of the comparisons of changes in the SEDA outcomes as measured with questionnaire scales related to teachers in the control and experimental groups.

The results showed varying effects between the countries and we thus start by summarising them on the country level.

In Austria, we find single effects in the social, emotional and diversity awareness scales. In the emotional component, the only significant effect was found in the scale *Mindfulness Skills- Observe*, that forms part of self-awareness. We find no significant effects for the self-management scales. In the social component, we find significant effects in the *Self-Other Awareness* subscale of empathy, *Teacher's Relational Competence* and *Teacher Cooperation* scales. For diversity awareness, we observe positive effects of the system in the scale *Flexibility / Openness to Diversity*. In total, there are five significant effects, all the effect sizes are small, yet many of them are close to medium. To sum up, the most significant effects in Austria are seen in the constructs of social competencies.

In Croatia, we find three significant effects of the HAND:ET system. The first one is in the self-awareness part of the emotional competencies and relates to the scale *Mindfulness Skills-Observe*. The second and third form part of self-management. The *Burnout* subscale of *Physical Fatigue* and the *Cognitive Strain* part of *Psychological Strain in Work Contexts* showed significant positive effects in the experimental group compared to the control group. In conclusion, in Croatia all the effects are in the emotional competencies constructs and the effect size is small.

In Portugal, there was only one significant effect. *Affective Mentalising*, which is a subscale of *Empathy*, increased significantly more in the experimental than in the control group. The effect size is small.

In Slovenia, the HAND:ET system had the most positive effects for teachers' SEDA competencies. Seven scales showed a significant increase / decrease between the experimental and control groups. Most of the significant effects relate to the self-management component of emotional competencies. Significant effects were present in the *Well-Being* scale, all three subscales of *Burnout*, and the *Cognitive Strain* component of *Psychological Strain in Work Contexts* scale. In addition, the other two scales were from diversity awareness, namely *Beliefs Classroom Diversity-Egalitarian* and *Flexibility / Openness to Diversity*. All the effects in self-management are around the cut-off for medium size and for diversity awareness the effects are small.

In Sweden the most significant effects were found for the self-management component of emotional competencies and social awareness with relational competence. They pertain to *Well-Being*, a subscale of *Burnout (Emotional exhaustion)*, and two subscales of *Empathy (Affective Response and Mentalising)*. Moreover, the results showed a significant effect in one scale (*Mindfulness Skills-Observe*) representing self-awareness constructs. The effect sizes are around the cut-off to be medium.

The results show that the effects vary substantially across the five countries, suggesting effect-heterogeneity on the system level. The heterogeneity may partly be explained by the fact that different trainers implemented the programme in different school systems. Although the trainers underwent the same Train-the-Trainer education (see Kozina, 2024), each person brings in their own individual characteristics. For example, the trainers had varying previous experience with such training. Some were very experienced with the type and content, while others were completely new. In addition, in a few countries dropouts occurred in the group of trainers and the trainers had to be replaced without extensive training (see Kozina, 2024).

The countries also applied different school recruiting process and the target population was not identical. The characteristics of the five school systems as well as specific school characteristics may have played an additional role. The school samples were small and unrepresentative of the target population for each country.

The data arising from the HAND:ET system have some technical limitations linked to the small sample size. In intervention studies of this type, a lot of effort and resources are needed to implement the training, especially as a whole-year process, and support the teachers to use the material in their daily routine and while teaching. This is why they cannot be implemented on a large scale. There is a trade-off between the sample size and the implementation possibilities. In our case, it could be that smaller effects could not be detected because of the small sample size. Related to this, the non-responding to the questionnaires in both time points played an important role in some countries too as it further reduced the sample size.

Yet, it is very important that the trainings are to a certain extent implemented equally in each country. Even though the trainers have some flexibility to alter and adjust some parts of the exercises, emphasis is given to fidelity to the programme (Lund Nielsen, 2020). The 'active ingredients' of the system need to remain the same. The most consistent result across the countries, the scale where we find an effect in three countries, is the self-awareness scale *Mindfulness Skills-Observe*. This scale measures a particular aspect of mindfulness. More specifically, the items in the questionnaire ask whether participants commonly observe, notice or attend to various stimuli, including internal phenomena (cognitions, bodily sensations) and external phenomena (sounds, smells). Practising this kind of unjudgmental observing is a central element of the HAND:ET training. It seems that the HAND:ET training succeeded in supporting the development of this aspect of mindfulness.

Further, we find positive effects in aspects of emotional and social competencies, and diversity awareness. The HAND:ET system showed positive effects especially in the self-management component

of emotional competencies. Also in terms of size, the effects found in emotional competencies were the largest. There were some effect sizes that were small, but failed to be detected as significant in each of the construct categories. These would most probably be detected in larger samples. Even though no consistent large effects were found for any construct, we still find the HAND:ET system was responsible for meaningful positive effects.

PART II - EVALUATION OF THE HAND:ET SYSTEM FROM THE PARTICIPANTS' PERSPECTIVE

The evaluation of HAND:ET was centred on the experimental testing of hypothesised HAND:ET programme effects, specifically whether the HAND:ET programme leads to an improvement in SEDA competencies. This experimental summative outcome evaluation (see Chapter 5) should be complemented by different methodological approaches to include participants' experiences and perceptions in the summative outcome evaluation and for formative purposes. Specifically, participants' subjective assessments can give us information about their acceptance of the programme, their subjective perception of the programme's effects, possibly explain experimentally found effects, and help to further improve this and similar programmes. The aim of this second part of the Evaluation Report is to describe this complementary part of the HAND:ET evaluation. With a view to providing a comprehensive overview of the participants' perspectives, we collected and analysed data from the closed (Chapter 6) and open-ended questions (Chapter 7) in the post-test evaluation questionnaire that was completed after the HAND:ET programme had ended. The questions addressed the evaluation of the HAND:ET system, subjectively perceived changes and suggestions for improvement. In addition, we analysed some of the responses obtained through focus group interviews (Chapter 8). The results of these three chapters are discussed together in Chapter 9.

6 Participants' Evaluation – Results from closed questions in the Evaluation Questionnaire

To explore participants' perceptions of the program, we included closed-ended questions that addressed two main areas. On one hand, we asked participants to rate the quality of the program and how useful they found it. On the other hand, we inquired about possible changes participants perceived in their lives and work after participating in the program.

6.1 Methods

Participants

Among the participants in the experimental group, 356 answered at least one of the closed-ended questions included in the post-test evaluation questionnaire. Specifically, 43 participants from Austria, 75 from Croatia, 90 from Portugal, 94 from Slovenia, and 54 from Sweden. The vast majority of participants were women (92 %).

Instruments

In the post-test evaluation questionnaire, we included two types of questions referring to evaluation of the HAND:ET system from the participants' perspective. We first directly asked for an assessment of different quality aspects of the HAND:ET system. Second, we asked participants about changes during the HAND:ET system as an indication of the subjective effectiveness of HAND:ET.

To assess the perceived quality of the HAND:ET system, we used the following questions already used in the evaluation of the predecessor project of HAND:ET (see Vieluf et al., 2020). One question asking for an overall rating of the HAND:ET system using a 4-point scale ranging from “poor” to “very good”. We included another question concentrated on the usefulness of the HAND:ET system, allowing participants to rate it on a 4-point scale ranging from “very useful” to “not useful”. To explore the participants' feedback in greater depth, another question asked them to rate different aspects of the programme, including elements like the presentation of theory during the training sessions. The rating options here were “poor”, “fair”, “good” and “excellent”.

To assess subjectively perceived changes that might have occurred during the programme, we employed the following questions adapted from Singer and colleagues (2016). One question asked participants about changes in their lifestyle (e.g., regarding their physical activity, diet, or drug use) throughout the duration of the HAND:ET system, using five response options ranging from “much less” to “much more”. In addition, a question inquired about whether the programme had changed the person with regard to relationships with their colleagues and the relationships with their students. The answer categories were “yes” and “no”. Furthermore, the questionnaire contained a question using opposing statements from which the participants had to choose one (e.g., “more optimistic” or “more pessimistic”) to describe themselves now in comparison with the period before the HAND:ET system (adapted from Singer et al., 2016) and a question exploring participants' intentions to use specific programme elements in the future, such as “physical exercises / mindful movement”.

Procedure

The post-test evaluation questionnaire was completed by all participants (from both the experimental and control groups) after the HAND:ET system had been completed, whereby the questions about the perceived quality of the programme and possible changes were only presented to the participants in the experimental group. The survey was conducted online.

Analysis

The closed questions from the post-test evaluation questionnaire described above were analysed descriptively with the statistical software R (R Core Team, 2023).

6.2 Results

Participants' assessment of the quality of the programme

We asked participants to assess the quality of the HAND:ET system by looking at their overall perception of the programme and its perceived usefulness. Table 6.1 shows the means and standard deviations overall and by country. For both aspects, participants mostly reported positive perceptions. Regarding the overall evaluation of the programme, the participants perceived the programme as good ($N = 349$). Specifically, 47.8 % of participants assessed the programme as very good, 36.1 % as good, 13.8 % as fair and 2.3 % as poor. Looking at individual countries, participants in Slovenia evaluated the programme most positively ($M = 3.84$), while participants in Austria ($M = 2.72$) reported the least positive perceptions. In addition, when asking participants about perceived usefulness ($N = 351$), most participants held a positive view (43.9 % found it very useful, 30.5 % quite useful, 22.5 % somewhat useful, and 3.1 % not useful). At the country level, participants from Slovenia ($M = 3.56$) and Portugal ($M = 3.55$) perceived the usefulness of the programme more positively, compared with participants from Austria, who had the least positive usefulness perception ($M = 2.37$). Nevertheless, the overall perception and perceived usefulness is still positive among all countries.

Table 6.1 Mean and standard deviations of participants' perceptions about the program and its usefulness.

Question	Levels	Overall	AUT	CRO	PRT	SVN	SWE
Overall, I would evaluate the HAND program as...	1: poor	3.29	2.72	3.21	3.39	3.84	2.77
	4: very good	(.79)	(.83)	(.78)	(.71)	(.43)	(.72)
To what extent did you find the HAND:ET program useful for your work?	1: not useful	3.15	2.37	2.93	3.55	3.56	2.69
	4: very useful	(.88)	(.79)	(.87)	(.72)	(.67)	(.78)

Participants were also asked to rate various aspects of the HAND:ET system from “poor” to “excellent” ($N = 356$). Figure 6.1 shows the percentage of responses for each aspect rated. Overall, most participants reported positive perceptions of the different aspects of the programme, with the

percentage of “good” or “excellent” responses ranging from 73 % to 94 %. The aspects rated most highly by participants referred to the trainers’ ability: the ability to relate positively to participants ($M = 3.59$), the ability to lead the practical activities ($M = 3.58$), and the ability to lead the discussion and reflection of the training ($M = 3.54$). The aspects that were rated comparatively lower by the participants (although still predominantly positive) were the support for the implementation of the programme elements in the school ($M = 3.03$), and the connection between the theoretical input and the practical activities during the training ($M = 3.14$).

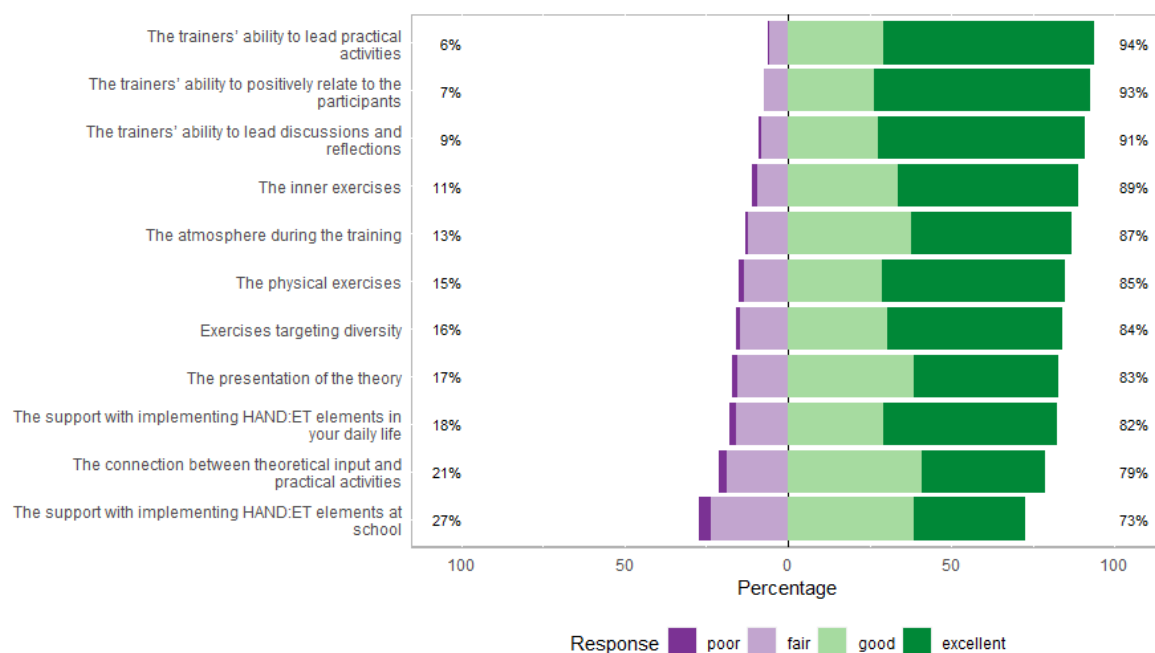


Figure 6.1 Percentage of responses from participants’ assessments of various aspects of the HAND:ET programme (see Appendix 6A for results by country)

Changes perceived by participants during the programme

We asked participants how they thought the HAND:ET system had affected aspects of their life and work. First, we asked participants whether they had perceived changes regarding certain aspects of their lives compared to before taking part in the programme. Figure 6.2 shows the percentage of responses for each aspect of participants’ lives from “doing it much less” to “doing it much more”. In each case, most participants reported that there had been no change in the specific area. However, while looking at the answers indicating change the aspects in which participants reported a tendency of them doing “somewhat more” or “much more” were self-care (40 %, $M = 3.35$), spending time with people they care about (40 %, $M = 3.41$), feeling cheerful (38 %, $M = 3.33$), and helping others (33 %, $M = 3.36$). On the contrary, the aspects where participants reported that they tend to do “somewhat less” or “much less” were arguing with other people (36 %, $M = 2.59$), smoking (20 %, $M = 2.65$), and consuming drugs or alcohol (25 %, $M = 2.57$). Finally, we also asked participants whether they believed that the HAND:ET system had changed the way they relate to others, specifically their colleagues and students. About 46.9 % of the participants ($N = 167$) reported that the programme had changed the way they relate to their colleagues (AUT: $N = 17$; CRO: $N = 40$; PRT: $N = 37$; SVN: $N = 47$; SWE: $N = 26$), while 50.3 % ($N = 179$) reported it had changed the way they relate to the students (AUT: $N = 14$; CRO: $N = 38$; PRT: $N = 53$; SVN: $N = 57$; SWE: $N = 17$).

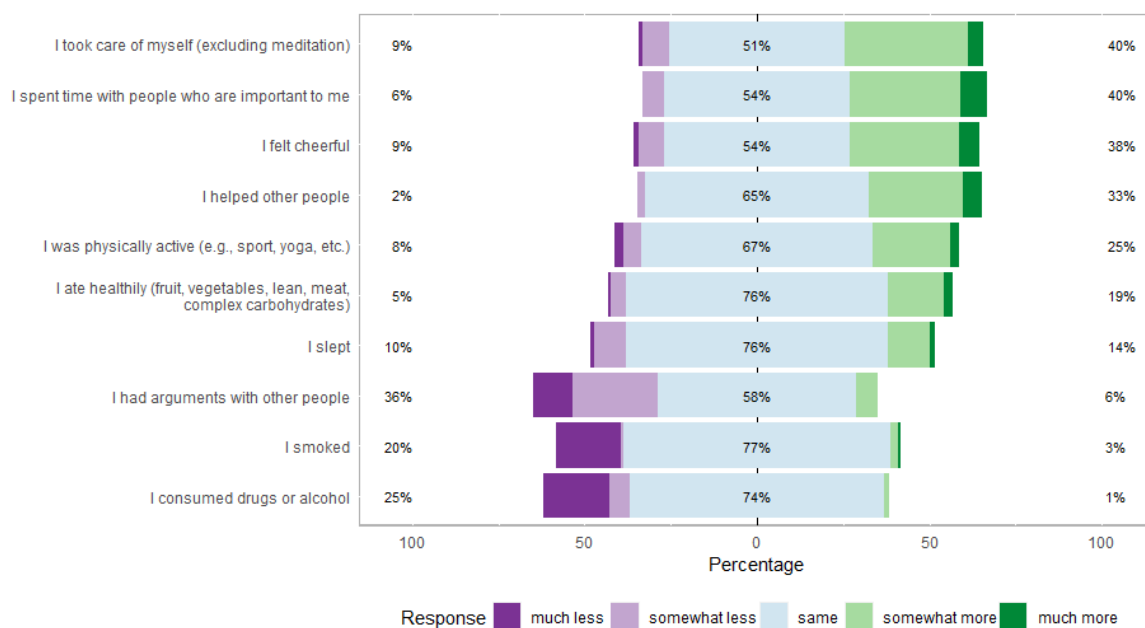


Figure 6.2: Percentage of responses about possible changes in the participants' way of life during the HAND:ET system compared to before (see Appendix 6B for results by country)

Finally, when we asked participants which elements from the programme they are planning to implement in the future. Overall, the majority of participants reported that they wanted to implement elements from the programme. Particularly, the highest number of participants indicated that they wanted to implement different elements in their private life (i.e., breathing meditation, body scan, and body exercises/mindful movement). Regarding the empathetic listening techniques, slightly higher percentage of participants indicated they will be implementing it with their students. On the contrary, the lowest percentages for all elements concern the use of the techniques with colleagues. Regarding the specific elements, overall the empathetic listening has the highest percentages, ranging from 54.8% with colleagues to 80.3% with students, while body exercises/mindful movement has the lowest percentages between 8.2% with colleagues and 70.8% in private life. These tendencies remain across all individual countries, except for Austria and Sweden in regards to the emphatic listening techniques, which has higher percentage in the implementation in private life than with students.

Table 6.2 Mean and standard deviations of participants' report using elements from the programme in the future.

Elements	Overall (N=356)	AUT (N=43)	CRO (N=75)	PRT (N=90)	SVN (N=94)	SWE (N=54)
Breathing meditation [in private life]	282 (79%)	26 (61%)	56 (75%)	77 (86%)	86 (60%)	37 (69%)
Breathing meditation [with students]	235 (66%)	19 (44%)	48 (64%)	71 (79%)	72 (77%)	25 (46%)
Breathing meditation [with colleagues]	55 (15%)	4 (9%)	6 (8%)	23 (26%)	17 (18%)	5 (9%)
Body scan [in private life]	259 (73%)	20 (47%)	57 (76%)	63 (70%)	84 (89%)	35 (65%)
Body scan [with students]	159 (45%)	16 (37%)	38 (51%)	42 (47%)	47 (50%)	16 (30%)
Body scan [with colleagues]	32 (10%)	4 (9%)	4 (5%)	12 (13%)	6 (6%)	6 (11%)
Body exercises/mindful movement [in private life]	252 (71%)	25 (58%)	51 (68%)	65 (72%)	76 (81%)	35 (65%)
Body exercises/mindful movement [with students]	194 (55%)	24 (56%)	40 (53%)	54 (60%)	59 (63%)	17 (31%)
Body exercises/mindful movement [with colleagues]	29 (8%)	4 (9%)	3 (4%)	15 (17%)	3 (3%)	4 (7%)
Emphatic listening techniques [in private life]	256 (72%)	27 (63%)	53 (71%)	65 (72%)	70 (74%)	41 (76%)
Emphatic listening techniques [with students]	286 (80%)	24 (56%)	63 (84%)	73 (81%)	89 (95%)	37 (69%)
Emphatic listening techniques [with colleagues]	195 (55%)	20 (47%)	41 (55%)	51 (57%)	58 (62%)	25 (46%)

7 Participants' Evaluation – Results from the open questions in the Evaluation Questionnaire

7.1 Methods

Procedure

As with the closed questions from the post-test evaluation questionnaire, open questions on positive aspects and possibilities for improvement were only presented to the participants in the experimental group. The survey was conducted online.

Analysis

The examination of the open responses followed a thematic qualitative content analysis approach, as outlined by Kuckartz (2016). Inductive coding was used, whereby codes were derived directly from the interview material. These codes were then grouped into thematic categories. For further clarity, the occurrences within these thematic categories were counted and selected quotes from the interviews were included to illustrate each theme. See Appendix 7A and 7B for an overview of the overall results and by country.

7.2 Results

Positive characteristics of the HAND:ET system from the participants' perspective

Overall, 1,065 statements from 365 different participants regarding positive aspects of the HAND:ET system were given (AUT: 107, CRO: 248, PRT: 160, SVN: 388, SWE: 232; statements with insufficient information for interpretation had been excluded before). The analysis resulted in 1203 coded segments (some statements were classified in more than one category).

The participants liked the focus on and development of their socio-emotional competencies (AUT: 28, CRO: 56, PRT: 32, SVN: 105, SWE: 33). The positive aspects the participants mentioned in this area may be summarised in four categories, with the first two relating to emotional competencies and the latter two to social competencies according to the CASEL model (2013).

- (1) Self-awareness (n = 97): This included general statements on self-awareness (“improved self-awareness”, SWE), awareness of the body and bodily reactions (“attention to changes in the body”, SVN), awareness of inner processes like emotions and thoughts and reflecting on them, or “listening to myself” (CRO).
- (2) Self-management (n = 95): The participants also liked dealing with the topics of regulating emotions and stress management (e.g., “emotional control”, CRO).
- (3) Social awareness/empathy (n = 26): The participants liked or recognised developments in the field of empathy as well, such as “seeing things from others’ perspectives” (CRO).
- (4) Relationship and communication skills (n = 36): Participants also commented on (the improvement of) communicative skills (e.g., “better communication”, SVN).

Another topic was Mindfulness (AUT: 6, CRO: 33, PRT: 11, SVN: 42, SWE: 5). Next to the concrete exercises and techniques used in the training, participants appreciated the focus given to general attitudes and competencies related to mindfulness. These included general statements on mindfulness (n = 25, e.g., “mindfulness”), on awareness (n = 16, e.g., “learning to be aware of my surroundings”, PRT), statements about acceptance (n = 17, e.g., “acceptance of self and others”, SVN), about

focusing on the present moment (n = 17, “That we are here and now”, PRT), about gratefulness as well as positivity (n = 13, “to be grateful for your body and your senses”, SWE), about openness (n = 6, e.g., “openness towards all aspects of life and work”, CRO) and on withholding judgement (n = 3, e.g., “raised awareness about the importance of not judging”, CRO).

Although the participants also mentioned learning about diversity awareness as a positive aspect (AUT: 3, CRO: 12, PRT: 1, SVN: 6, SWE: 3; e.g., “understanding diversity”, CRO), far fewer statements addressed this area of competency compared to socio-emotional competencies.

Looking directly at the exercises and techniques that were taught, many participants mentioned these as positive aspects of the HAND:ET programme (AUT: 24, CRO: 37, PRT: 15, SVN: 42, SWE: 51). Some statements addressed the specific exercises on a general level (n = 24; for example, just “the mindfulness exercises”, AUT). Participants liked the dialogue exercises (n = 71). In particular, empathetic / active listening was often mentioned (n = 67). The inner exercises were also stated as positive (n = 63), including the body scans (n = 17). Finally, the physical and movement exercises were appreciated by some as well (n = 11). Participants also liked the practical applicability of the HAND:ET system (AUT: 2, CRO: 11, PRT: 23, SVN: 16, SWE: 16). First, many statements (n = 34) addressed its general practical applicability (e.g., “we can practise with family, friends, personally and professionally”, PRT). Another 34 statements showed that the practical applicability in the school context was appreciated (e.g., “practical exercises I can apply in class”, CRO; “techniques to help students”, PRT).

The context and the atmosphere of the training sessions was also mentioned as a positive aspect of the whole programme (AUT: 5, CRO: 10, PRT: 2, SVN: 22, SWE: 13). There were more general statements (n = 36, e.g., “a very pleasant atmosphere”, AUT) and more specific answers pointing out that a safe space had been created during the sessions (n = 16). Participants stated, for example, that in the sessions they “[were] allowed to say [their] opinion and allowed to be who [they] really are” (AUT).

Adding to that, several organisational aspects were seen as positive (AUT: 1, CRO: 2, PRT: 5, SVN: 9, SWE: 17). For instance, the “provision of documents / books with ideas for practice” (PRT) was appreciated, but also the “[b]eautiful choice of location and the good food” (SVN). Many statements (n = 27) were generally positive concerning the trainers who ran the sessions (AUT: 5, CRO: 9, PRT: 4, SVN: 7, SWE: 2; e.g., “great trainers”, CRO).

The participants appreciated the community, connectedness and improved relationships brought about by the programme (AUT: 20, HRV: 38, PRT: 14, SVN: 61, SWE: 54). Most of the statements were directed at the participants’ colleagues (from their own schools; n = 62). Specifically, they mentioned improved relationships with colleagues including getting to know new colleagues, a feeling of connectedness and closeness among the own colleagues (e.g., “better connection with my colleagues”, HRV) including appreciating spending time with them and having time to communicate with them due to the programme as well as teamwork and cooperation among colleagues. Next to improved relationships and connectedness with fellow teachers (and other school staff), the participants saw the possibility to socialize, network and get to know colleagues from other schools as a positive aspect of the programme (n = 36; e.g., “to meet participants from other schools in the project”, SWE) and some also stated a general improvement of relationships (n = 10; e.g., “it contributes to improving interpersonal, intergroup and other relationships”, PRT). The participants liked that the HAND:ET system gave them the possibility for sharing experiences, ideas, information and feelings (n = 52) and they valued the experience of connectedness and community in their training groups (n = 27).

Further, the participants appreciated the training’s focus on self-care, personal well-being and teacher empowerment (AUT: 9, CRO: 24, PRT: 24, SVN: 47, SWE: 17). Sixteen answers generally addressed these topics (e.g., “empowering”, CRO). Several statements (n = 16) were appreciative of the focus on

the self (e.g., “focusing on oneself”, CRO). In 28 statements, self-development was pointed out as something positive (e.g., “personal growth”, SVN). The focus on “taking care of yourself” or “self-care” was appreciated in 22 statements. Similarly, 12 statements addressed “taking time for yourself” (AUT) as positive. The focus on teacher empowerment was additionally expressed as a positive characteristic (n = 29, “caring about feelings and problems of teachers”, CRO).

Finally, some statements expressed a general appraisal of the HAND:ET system (AUT: 4, CRO: 16, PRT: 29, SVN: 31, SWE: 21) in the fields of theory and knowledge (n = 24), exercises in general (n = 20), learning something new (n = 13), the mixture of theory and exercises (n = 8), the relevance of the content (n = 8), and other general positive aspects (n = 28, e.g., “a new perspective of working with students”, CRO).

Possibilities for Improving the HAND:ET system from the Participants’ Perspective

When participants were asked which aspects of the HAND:ET system could be improved, we obtained 727 suggestions (AUT: 83, CRO: 168, PRT: 119, SVN: 206, SWE: 151). Among all the answers, 36 fragments were excluded either because they did not contain suggestions but more of a general positive evaluation (e.g., “it was great!”, SVN; “think it was fine as it is”, SWE; n = 20), or because they contained insufficient information to interpret them (e.g., “mindset”, SWE; “technology”, SWE; n = 17). The coded responses refer mainly to three aspects: the sessions’ content and exercises, the overall programme implementation, and the sessions’ modality.

Most suggestions referred to the sessions’ content (AUT: 16, CRO: 52, PRT: 34, SVN: 27, SWE: 38). In this regard, the most mentioned aspect was the lack of transfer or integration of the content into the school context or their daily lives (AUT: 9, CRO: 21, PRT: 17, SVN: 9, SWE: 13; e.g., “the link between education and usefulness in the profession”, SWE; “an action plan on how to apply what you have learned in practice”, SVN). Other aspects that were mentioned included: (1) more exchange of experiences (n = 24; “more opportunities to exchange concrete experiences” (CRO), for example by taking advantage of the project’s international dimension (n = 9): “to hear about how it is in the other countries” (SWE); (2) more access to the materials (n = 18) “printed manual that contains all of the exercises and explanations” (CRO); (3) shorter sessions (n = 16): “for my own part, it would have been better with shorter sessions” (SWE); (4) more theoretical input (n = 14; “a more in-depth theory”, SVN) or (5) less of it (n = 13; “less theory”, PRT); (6) more information on specific topics (n = 9): particularly about diversity (n = 6): “go deeper into the area of diversity” (SWE); (7) the alignment of concepts (n = 2): “term alignment” (SVN); and (8) more video materials (n = 1); and (9) the lack of a connection between theory and practice (n = 1).

A second main aspect that was mentioned for improvement suggestions were the exercises (AUT: 25, CRO: 32, PRT: 33, SVN: 28, SWE: 25). Concretely, the main comment was that more practical / mindfulness exercises could be included in the programme (n = 86; e.g., “implementation of more practical exercises, for example, more practical sessions”, PRT), particularly more meditation and relaxation (n = 11), physical activities (n = 5), reflections (n = 3), emotional awareness (n = 2), focus attention (n = 1), listening (n = 1) and body scan (n = 1). Moreover, some participants mentioned they would like greater variety in the exercises as it sometimes felt repetitive (n = 42; “more variety in the different exercises”, SWE). On the contrary, fewer participants mentioned that they would like shorter or fewer exercises (n = 15; e.g., “keeping the exercises shorter”, AUT), specifically less empathic listening (n = 5), reflections (n = 2), body scan (n = 2), discussions (n = 2) and meditation (n = 1).

The third main topic drawing recommendations was the overall programme implementation (AUT: 30, CRO: 47, PRT: 32, SVN: 101, SWE: 47). Here, the most frequent suggestions concerned the programme’s length (AUT: 3, CRO: 16, PRT: 19, SVN: 73, SWE: 9). Specifically, participants expressed that they would like to have a more extended programme or a continuous programme (n =

99), either by continuing it as a long-term offer in schools (n = 56; e.g., “continuing the project as lifelong education”, CRO), or having more meetings (n = 15) or greater time (n = 11; e.g., “make the training more extended in time to promote more regular practice”, PRT), as well as providing for the programme’s greater dissemination in the educational context (n = 15; e.g., “continuation of the programme and extending it to more clusters and schools”, PRT). In comparison, fewer participants expressed that they would have liked a shorter programme or fewer sessions (n = 21; e.g., “a shorter, but more intense programme, for example, the whole weekend”, CRO; “perhaps the training could be compressed into a few days less”, SWE).

Regarding other aspects of the overall programme implementation, participants also mentioned things regarding the organisation, such as: (1) inconvenient scheduling (n = 43), due to incompatibility with school work (n = 15), daily schedule (n = 7) or private life (n = 5; e.g., “place the training days during times when you are less stressed, for example NOT the first days before the start of the semester”, SWE; “whole days and not afternoons where you have to rush somewhere to relax”, AUT); (2) better choice of the training place (n = 31), for example, in nature / outdoors (n = 11) or a remote location (n = 9) where they could focus better (e.g., “carrying out exercises in nature and not in a closed space” SVN; “a change of location, the university room is impractical, especially for the meditation and mindfulness exercises”, AUT; “organise the programme on weekends in some spa, mountains or at the sea”, CRO); and (3) general better planning and structure (n = 9; e.g., “a clear schedule for when the meetings will be, so that it is easier to plan the semester”, SWE).

Other general aspects of the program implementation were (1) improvement of trainers’ skills (n = 19), for example, receiving greater instruction / guidance (n = 7; e.g., “guidance from the face-to-face trainer”, PRT), creating a fun and safe space (n = 5; e.g., “more sensitive use of empathetic listening”, AUT), or more fun training (n = 4; e.g., “more fun” and “more interesting PowerPoints”, SWE); (2) forming better groups (n = 18), by increasing rotation among the groups (n = 7; e.g., “rotate and blend groups more”, SWE), reducing their size (n = 5; e.g., “working in smaller groups”, CRO), or creating more diverse groups (n = 5; e.g., “more people from different areas”, CRO); (3) the lack of clarity about the programme’s goals (n = 9; e.g., “a clearer explanation of what the purpose of this education was in the first place; it seems to me that because it was never really stated why we were there, that everyone created a different picture of the purpose of this education”, SVN); (4) better adaption to the context (n = 4; e.g., “adjustment to the Croatian social and educational context”, CRO); (5) the lack of attendance (n = 3); and (6) a trial session before commencing the programme (n = 1).

Finally, the third main theme was the modality of the sessions (AUT: 12, CRO: 37, PRT: 20, SVN: 50, SWE: 41). Here, most suggestions referred to having more in-person meetings instead of online meetings (n = 151). Some participants explicitly mentioned that the type of content meant the online meetings did not fit the goal of the sessions, for example, due to possible distractions (e.g., “more in-person trainings – it’s not possible to concentrate on relaxation exercises in online sessions”, CRO). On the contrary, fewer participants said they would like more online sessions (n = 3; e.g., “online is better”, AUT), and a few believed the online sessions could be improved (n = 6), for instance by shortening them (e.g., “the online sessions could be shorter and serve as a reminder of what we did in person”, CRO), or making them more interesting (e.g., “more programmes in remote meetings. It was always the same”, SVN).

8 Participants' Evaluation – Results from the Focus Group Interviews

Focus group interviews were used to gain insight into the school staff's perspective on the HAND:ET system, its quality, its effectiveness and possibilities for improvement. In this chapter we will address perceived learning outcomes, positive aspects of the HAND:ET system, possibilities for improvement, and perceived challenges. Furthermore, results from the Control School questionnaire are presented. The (interview) procedure, sample, methods of analysis and results are described below.

8.1 Methods

Procedure

Teachers, principals and school counsellors who participated in the HAND:ET system were group-interviewed by two representatives of the HAND:ET national partners (but not by those who had served as trainers). The partners also decided whether the focus group interviews were to take place online (AUT, PRT, SVN) or face to face (CRO, SWE). All of the focus group interviews took place 1 to 2 weeks after the last day of training.

Following the focus group approach (Vaughn et al., 1996), the participants were guided by a specific set of questions that encouraged them to interact and exchange ideas. These questions ensured that the interviews remained programme-focused while still offering flexibility for interviewees to express their viewpoints. The interview guidelines consisted of seven open questions with various sub-questions. In the framework of this chapter, only answers to the question “What did you learn from the HAND:ET programme?” (with the follow-up questions “What did you learn from the HAND:ET programme in your professional life?” and “What did you learn from the HAND:ET programme for your personal life?”) were analysed to complement the analyses of the open-ended questions from the post-test evaluation questionnaire. The interviewers gave the participants room to answer this and all the other questions. To document the participants' responses, the focus group interviews were audio recorded and transcribed. We used a “smooth verbatim transcript” as the transcribing method, which included a transfer word by word but without utterances and decorating words. Short-cut expressions as well as dialects were translated into standard language (Mayring, 2014). After that, the transcriptions were translated into English for further analysis.

In addition to the focus group interviews that we carried out with participants from the training groups, we also surveyed the coordinators of the control group schools about the HAND:ET programme using an online questionnaire with open-ended questions. The results of the analysis of the corresponding responses are also presented in this chapter. The control group questionnaire used in our study comprised five open-ended questions: Participants were asked to describe their school's reasons for joining the HAND in HAND program. They were also prompted to share any notable events or changes observed in the past year as well as possible activities supporting SEDA competencies. Finally, they were given the opportunity for additional comments.

Participants

The groups for the interviews were built according to the training groups such that persons who were trained together were also interviewed together. In this chapter, we are only analysing the teachers' answers.³ Therefore, below we merely describe the focus groups made up of teachers.

³ In Portugal, teachers and other school staff were mixed, meaning that the answers of other school staff are included, but not separately analysed.

In Austria, a total of 11 participants took part in the focus group interviews, organised into 5 groups. Group 1 consisted of three teachers, group 2 of two teachers, group 3 of four teachers, and group 4 of two teachers.

In Croatia, the focus group interviews involved 15 participants in three groups. Group 1 contained four teachers, Group 2 six teachers and Group 3 five teachers.

In Portugal, the focus group interviews involved a total of 19 participants in 5 groups. Group 1 had four teachers, Group 2 had two teachers and a school psychologist, Group 3 had two teachers, Group 4 had six teachers while Group 5 had two teachers and two school psychologists.

In Slovenia, focus group interviews were conducted with a total of 21 participants in four groups. Group 1 consisted of six teachers and Group 2 of five teachers, whereas Groups 3 and 4 had five teachers each.

In Sweden, the focus group interviews involved a total of 27 participants in 5 groups. The first three groups consisted of five teachers each, while Groups 4 and 5 had six teachers each.

As regards the control groups, we received completed questionnaires from 10 Austrian and Croatian schools each, from 3 Portuguese and Swedish schools each and from 11 Slovenian Schools. The school coordinators were the school principals in many cases, but not in all.

Analysis

Similar to the analysis of the open-ended questions in the evaluation questionnaire, the analysis of the responses to the semi-structured focus group interviews followed a thematic qualitative content analysis approach based on Kuckartz (2016). We used inductive coding, i.e., codes were developed from the material. Subsequently, the codes were summarised to form thematic categories. Finally, we counted the interviews in which the thematic categories appeared and selected quotes to illustrate the various themes. In this chapter, only results concerning the interviews with teachers of the experimental group are reported.

8.2 Results – Perceived Learning Outcomes

A large part (over 80 %) of the learning outcomes described by the teachers may be summarised under SEDA competencies. Among the SEDA competencies, over 95 % of the learning outcomes mentioned relate to socio-emotional competencies and only a small proportion to diversity awareness. In addition to the competencies, when asked about what they had learned, the participants reported using the HAND:ET elements in different areas of their professional life, but chiefly for work with students.

About half the statements in the focus group interviews referred to general learning effects without reference to a specific area of life. When interviewers explicitly asked about learning in individual areas, or the participants specified this themselves, about 70 % of the answers pertained to the professional and 30 % to the private sphere. See Appendix 8.2A for an overview of the overall results and by country.

Socio-Emotional Competencies

In terms of socio-emotional competencies as described in the CASEL model (2013), participants reported having learned almost twice as much in the area of emotional competencies (self-awareness and self-management) than in the area of social competencies (social awareness and relationship skills).

Emotional Competencies

With respect to emotional competencies, participants reported learning effects for self-management about three times as often as for self-awareness.

Self-awareness. Learning outcomes that can be attributed to self-awareness were mentioned in almost every focus group in every country (AUT: 3/4, CRO: 3/3, PRT: 3/5, SVN: 4/4, SWE: 4/5). In some interviews, especially those in Portugal, a generally increased self-awareness was described. Further, participants stated that after having completed the HAND:ET system they were more aware of their emotions (e.g., “I learned to ask myself how I feel, how certain things are affecting me”, SVN), of the body, and also to feel emotions or stress in the body (e.g., “Ok, alright. I feel that now. That the stress, yes, that I feel it inside. Ok, either, I don’t know, I’m getting red in the face, or, or, I start to, I don’t know, snort or something”, AUT). Linked to this, some teachers also mentioned greater awareness of when breaks are needed. According to CASEL, recognising one’s own strengths and being confident also pertains to a person’s self-awareness. Participants in several focus groups (CRO: 2/3, PRT: 1/5, SVN: 1/4) expressed that they felt “more confident” and stronger, as illustrated by one Croatian teacher’s statement: “I actually feel stronger in certain situations, when I encounter some new situations or problems, I feel as if I can face them more calmly”.

Self-management. Learning outcomes related to self-management were highlighted in all the countries and nearly all the focus groups (AUT⁴: 3/4, CRO: 2/3, PRT: 5/5, SVN: 4/4, SWE: 5/5).

The most important theme within self-management was relaxing or calming down. Teachers described how the HAND:ET system had helped them to relax (e.g., “in those moments when I need it, I can quickly use techniques to ease the situation, not requiring three days to relax, but rather using techniques that I have learned to help me in that moment”, SVN) or to stay calm in challenging situations. In individual focus groups from Austria (1/4) and Portugal (1/5), participants reported that they now consciously take time for themselves; similarly, in Swedish focus groups (2/5), teachers mentioned having used the strategy “take it easy” to calm down in challenging situations. Similarly, in certain focus groups teachers mentioned having learned to “prioritise our well-being” (AUT: 1/4, CRO: 1/3, SVN: 1/4). Moreover, in Swedish focus groups (3/5) teachers reported having successfully used the body scan exercises to help them sleep better. Individual participants from Sweden (1/5) also described how techniques from the HAND:ET programme had assisted them to “become more alert”, “replenish” and obtain “new energy”.

Teachers not only described which self-management goals they had achieved, i.e., becoming calmer and relaxed but also which self-management skills they had learned, namely different aspects of mindfulness. The aspect most often described in this context is “to be present in the moment” (AUT: 2/4, CRO: 2/3, SVN: 3/4, SWE: 2/5). Some participants specified concentrating on breathing to achieve this focus (“and now, you just breathe for example, and I just breathe and nothing else”, AUT). Further, the importance of focusing attention on the self was stressed in the Slovenian (4/4) and Croatian (2/3) focus groups. Several teachers explained how the focus on the self is the basis for other aspects, for example constructive relationships or communication, as illustrated in a statement by a Slovenian teacher: “It was interesting that we were guided to think about how we feel and to consider ourselves. For example, if you’re agitated, you need rest. Normally, we only focus on what the students need. It never occurs to us to realise that we may also be agitated, and that’s why the students might be too”. Similarly, the participants reflected on how to balance focusing on oneself and on aspects outside the self, for instance “In the rush of things, that I don’t forget about myself and always keep a portion of my attention on my feelings and how I’m doing. [. . .] Not forgetting about myself while doing other things” (SVN). Teachers also reported that they had learned to judge less (e.g., “not to judge immediately. Not even myself, because I can be very critical of myself as well”, SVN) and

⁴ This notation means that the respective theme was mentioned in three out of the four focus groups in Austria.

accept things as they are (e.g., “In our work, you can’t be everywhere all the time, and to actually be on everything and solve everything. So that’s the way it is, but I think all of us who have become teachers know that you know that you can do more if you want to, but to also feel that you have done enough. That’s good”, SWE). Individual participants also mentioned “empathic curiosity” and being “more open” as well as a stronger focus on the positive side of things.

Social Competencies

In the CASEL framework (2013), social competencies are composed of social awareness and relationship skills. While social awareness primarily refers to empathy, relationship skills address establishing and maintaining constructive relationships, including communicative and conflict resolving competencies. According to CASEL, the model’s components overlap and shape each other – this is also shown in the participants’ responses: the specific term most frequently mentioned as a learning outcome across all SEDA competency areas was “empathic listening”, and thereby connect the two areas of social competencies.

Social awareness. “Empathy” or “empathetic” as the core of social awareness was very often mentioned as a learning outcome, albeit in the vast majority of cases in combination with “listening” (see the next section on relationship skills). Beyond this combination, in a few focus groups in Portugal (2/5) and Slovenia (2/4) individual participants reported now putting themselves more in the perspective of their students, for example, a Slovenian participant stated “I often think about how the child felt in that situation” and a Portuguese participant explained “I have become more alert to situations within the classroom, observing my students and trying to understand the motive of some behaviours and go beyond academic teaching”.

Relationship Skills. In the area of relationship skills, about 70 % of the answers can be classified as learning effects in the area of (empathetic) listening. The other two topics in this area were (1) conflict resolution, and (2) the exchange and connectedness among teachers.

“Empathetic listening” or just “listening” as the most frequently mentioned learning outcome was described in most focus groups and also by several teachers in each group (AUT: 3/4, CRO: 2/3, SVN: 4/4, SWE: 5/5). Interestingly, and in contrast, listening and also other aspects of communication were not mentioned in the Portuguese focus groups. Teachers stated that they had learned “to simply listen and not make any comments” (AUT) and “to listen, pay attention, truly hear” (SVN). Participants explained that they had refrained from always trying to directly provide solutions. In many cases, it was also described how this mere listening and realisation that one’s counterpart wishes to be heard and understood is perceived as disburdening. For example, a teacher from Austria expressed “you save yourself a lot”; “it feels good” is how one Swedish teacher referred to it. Further, for some teachers giving up interposed questions and comments also means giving up control over the course of the conversation. A Slovenian teacher described it as follows: “previously, I wanted to achieve that they tell me what I wanted to hear, but now I was a bit disappointed when they didn’t say exactly that. However, I managed to lead them to talk and express what they wanted to say. Listening has been the most significant improvement for me”. Individual teachers also noted the other side of listening; namely, heightened awareness of “being heard” by others, such as what an Austrian teacher described “And where I also notice (. . .), well, if I talk now and every time someone interrupts me or tries. Where I think to myself: let me finish for once”.

Teachers in the focus groups in Croatia (2/3), Slovenia (3/4) and Sweden (2/5) reported having learned to deal with conflicts better. The importance of listening was also repeatedly mentioned in this context. Specifically, participants mentioned listening and withholding reaction, “let it cool down a bit” (SWE). Further, listening instead of “go in and control the situation and feeling a need to defend”. The technique of empathetic listening was also used as a tool in conflict mediation between students (see the section on application below). Finally, empathetic listening additionally seemed to help

resolve conflicts in private relationships, as illustrated by one Swedish teacher's statement: "I forced myself to really listen, then I could hear what she was saying. But then we talked about what empathetic listening is so she can also think about it now. Most often, the conflicts do not become so great when you really listen". Another repeatedly mentioned aspect (SVN) in the area of conflict resolution was an improved capacity to "say no".

Moreover, teachers in the Austrian focus groups (2/4) pointed out as learnings outcomes that they had now more exchange: "sometimes, I just go to a colleague for a moment and say, "Wow, are they also like this with you today? ". Individual teachers also referred to a better climate and improved connected- ness among teachers.

Diversity Awareness

Participants in multiple focus groups from four countries (CRO: 2/3, PRT: 1/5, SVN: 1/4, SWE: 1/5) reported learning effects in the area of diversity aware- ness. Although in Croatia a number of participants in several focus groups described what they had learned in this area, in the other countries there are only statements from a single person in just one interview each. In the focus group interviews held in Croatia and Slovenia, participants reported having learned about diversity and being prepared for the growing diversity in schools. For example, one teacher from Croatia stated, "So we meet more and more different people. From different cultures, from different professions, with different attitudes and opinions. We also know all that, of course, but this allowed us to look at it differently, somehow deeper". In a Portuguese focus group, a participant mentioned that they had learned how to use HAND:ET exercises to address diversity with the students: "We have a lot of culturalism in our school, we have kids coming from different countries and we were able to work with the students on the importance of difference". In the focus group with Swedish participants, a teacher described how the diversity exercises during the HAND:ET system had led to increased self-awareness regarding prejudice against groups of people: "But then I probably also learned a little about myself when we reflected on these walks [], so I still realise that I hold prejudices".

Application of the HAND:ET Elements in Professional Life

When the participants were asked what they had learned from the HAND:ET system, practical application was mentioned in several focus groups in four countries (AUT: 1/4, PRT: 4/5, SVN: 2/4, SWE: 3/5). Teachers in Portugal and Sweden made comparatively high numbers of statements about its practical application.

As regards areas of life where the HAND:ET elements had been used, use with students was mentioned more often than the other aspects combined (AUT: 1/4, PRT: 4/5, SVN: 2/4, SWE: 2/5). In a few focus groups, teachers ex- pressed surprise at the effectiveness and acceptance of these exercises. One teacher from Austria, for example, shared their initial skepticism, saying, "When I did it, I then noticed that the children also accepted it very well. Although at the beginning, my opinion was that the quietness would never work, especially not with this group, or especially not with so many. But it worked very well, so, yes".

The use with students was very diverse. Teachers mainly reported having worked with mindfulness exercises and empathetic listening techniques, albeit the use of diversity awareness exercises and materials was also mentioned once. The exercises were used, for instance, to calm down the class. They were also successfully used with students with special needs, as a participant from Portugal described, "I have learnt that even with children with special educational needs it is also possible to work and slowly reach them".

Further, conflict mediation between students via use of empathetic listening was reported. For example, a teacher from Sweden elaborated, "So, it's often in those conflict management situations partly to kind of get the children to listen to each other. To calm down before they explain what has

happened and then use empathetic listening to sort of find out what has happened and how. You can see how to solve it so that you can act in the right way as well”.

Empathetic listening was also reported from another perspective, namely that teachers were listening better instead of trying to control the situation with questions and solutions, as a Slovenian participant explained: “I feel that I’ve become better at listening. As a class teacher, if something happens in the class, I used to proactively ask a thousand questions to the students involved, not even letting them tell their whole story. Now, I handle such situations differently; I listen first, and then if something isn’t clear, I ask additional questions”. In the focus group interviews in Portugal, attention was paid to the use of meditation exercises to promote socio-emotional competencies and assist with calming down, also for students with special needs. The use of listening techniques was not reported here. In the Slovenian and Swedish focus group interviews the focus was in contrast on these (in the Austrian interview only the general success and acceptance of unspecified exercises was mentioned).

In one group in Portugal and another group in Sweden, participants noted that they had used insights and techniques from HAND:ET with parents. While most attention in the first was on providing activities that parents were invited to join, in the second it was on applying active listening techniques in meetings with parents.

In several focus group interviews, the practical use of HAND:ET elements with colleagues was mentioned (PRT: 2/5, SWE: 1/5). Participants from Portuguese focus groups described having organised activities among colleagues, for example: “We also worked with the rest of the teachers and other staff, we created a space to do meditation once a week in the school and I noticed a difference in people’s attitude in terms of being calmer and more patient. It was a fantastic experience”. The main theme in the Swedish focus group was listening in meetings with colleagues.

8.3 Results – Positive Aspects of the HAND:ET System

During the focus group interviews we asked participants how would they evaluate the HAND:ET system, and we specifically addressed the positive aspects in the onsite and online sessions. See Appendix 8.3A for an overview of the overall results and by country.

In terms of general positive aspects of the HAND:ET system, participants mostly mentioned the trainers (AUT: 4/4, CRO: 3/3, SVN: 4/4): “And as far as the trainers are concerned, I found that very cool. So, they were always very well prepared, both in the practical exercises and in the theoretical abstracts, that we went through” (AUS). Other positive aspects that were mentioned were the focus on the individual and teacher development (AUT: 1/4, CRO: 3/3, SWE: 2/5): “But it's been good. An advantage and that it has been fun with a project where the focus is on the teachers' development [...]” (SWE). As well as, the mixture of theory and exercises (AUT: 2/4, SVN: 1/4, SWE: 1/5), the mixture of online and onsite sessions (AUT: 1/4, SVN: 1/4), and the active listening exercises (AUT: 1/4).

Onsite sessions

Concerning how participants evaluate the onsite sessions, there is an overall positive perception and appraisal mentioned across all countries (AUT: 3/4, CRO: 2/3, PRT: 1/5, SVN: 4/4, SWE: 2/5): “I mean, everything was just as it should be, and honestly, I can't think of anything that needs improvement; it was truly outstanding” (SVN). Regarding specific aspects reported by participants as positive from the onsite sessions, the community and relationships were frequently mentioned across most focus groups in all countries (AUT: 4/4, CRO: 2/3, PRT: 5/5, SVN: 4/4, SWE: 5/5): “The sessions went very well and allowed me to get to know my colleagues better” (PRT). Particularly, as it created a feeling of connection within the group (AUT: 4/4, CRO: 1/3, PRT: 5/5, SVN: 4/4, SWE: 3/5), it allowed sharing experiences (AUT: 3/4, CRO: 1/3, SVN: 4/4, SWE: 5/5), and it make it easier to engage in the activities in a group (AUT: 1/4, PRT: 2/5, 1/5).

Other frequently mentioned positive aspect from the onsite sessions were the exercises and techniques (AUT: 2/4, CRO: 3/3, PRT: 1/5, SVN: 4/4, SWE: 5/5): “There were benefits in every way related to both breathing exercises and physical activities and empathic listening and diversity that we experienced and observed through different exercises” (CRO). In relation to this, participants also reported that they appreciate learning and practising new things (CRO: 2/3, PRT: 2/5, SVN: 3/4, SWE: 2/5): “I liked this new information, new research, new knowledge that we didn't have the chance to hear anywhere because even though we are teachers we don't really read, maybe I don't participate in some discussions and the trainers presented a lot of new findings that were discovered in the world and science of sociology.” (CRO).

Among other aspects that were perceived as positive from the onsite trainings were the atmosphere of the onsite trainings (AUT: 2/4, CRO: 2/3, SVN: 2/4): “That was one thing, and it was always such a positive atmosphere. Was very, very pleasant, very quiet.” (AUS); as well as the dynamic and practical nature (PRT: 4/5, SWE: 1/5): “The face-to-face sessions went very well, they were more dynamic and more practical.” (PRT). In addition, some participants mentioned the establishment of a safe space (CRO: 2/3, SVN: 4/4) in which they could express themselves: “Yes, sometimes you felt uncomfortable, but that discomfort quickly transformed into relaxation and a sense of trust within the group, which allowed us to share certain things about ourselves that we wouldn't easily disclose to strangers.” (SVN); and the advantage of an onsite session for complete disconnect and better focus (CRO: 1/3, PRT: 1/5, SVN: 2/4, SWE: 5/5): “Then it was better with the physical meetings, as we got like the whole day. It's better to stay focused then too.” (SWE). Moreover, for participants in Croatia the focus on self-care, well-being and empowerment was brought up in all focus group interviews (3/3): “ [...] [Hand] was organized in such a way that it actually mattered to someone what you had to eat. Such care, which I experienced as well-being and the desire to make the participants really feel good, was truly indescribable to me. Very valuable, [...]” (CRO).

Finally, in a few focus groups some organisational aspects from the onsite training were perceived as positive. In general, they were perceived as well-prepared and organized in most countries (AUT: 2/4, SVN: 2/4, SWE: 1/5): “I enjoyed the fact that it was very well-structured and well-guided.” (SVN). Moreover, specifically for Slovenia, the location of the trainings was very appreciated (3/4): “Yes, the location does its bit too, the locations were really well chosen, in nature. You drove there, it was something, you already felt the "wow" and the relaxation, and the fresh air, and that also adds to it.” (SVN)

Online sessions

In view of the online sessions specifically, across most of the countries general appraisals were reported (AUT: 1/4, CRO: 1/3, SVN: 3/4, SWE: 1/5): “Overall, it was positive.” (SVN). Specifically, the aspect that was mentioned as most positive regarding the online sessions was that they were more convenient (AUT: 2/4, CRO: 2/3, PRT: 5/5, SVN: 1/4, SWE: 2/5), as they were perceived as comfortable: “It works better and is more comfortable to have meetings online if you are at home, as well and not at work. It feels safer.” (SWE) and no commuting was needed: “The online sessions allowed me to avoid travelling” (PRT). In addition, in most countries the online sessions were also perceived as a good reminder and opportunity of keeping in contact (AUT: 2/4, SVN: 4/4, SWE: 2/5): “Otherwise, as we discussed at the last meeting, these online trainings were fine, at least to maintain some continuity and not lose touch. Some connection is still preserved, and you build some bonds, making you feel more familiar within the group. To some extent, it's better than nothing” (SVN).

Finally, other positive aspects that were mentioned in a few instances regarding the online meetings were that they served well for meditation and relaxing exercises (CRO: 1/3, SVN: 2/4, SWE: 3/5), especially after a work day: “I thought it was very relaxing, as well to be able to sit in a body scan or to do body exercises like that when you have finished working. It's been around three o'clock when students have just been dropped off. Then there is always the aspect of doing it digitally and

physically. But no, I thought it was nice to calm and land a bit like that after a day at work” (SWE). Participants also enjoyed the break-out rooms with colleagues (CRO: 1/3, SVN: 2/4): “[...] break-out rooms were great for me, the best part was talking to my colleagues” (CRO), and in Slovenia the music during the session was also appreciated (1/4): “And I really enjoyed the music at the end. I always looked forward to it” (SVN).

8.4 Results – Possibilities for Improvement the HAND:ET System

During the focus group interviews, we inquired about participants' evaluation of the HAND:ET program, particularly which aspects they considered that could be improved in both the onsite and online sessions. Refer to Appendix 8.4A for an overview of the overall findings and by country.

Regarding the possibilities for improvement in general for the HAND:ET system, there was a notorious preference for onsite sessions rather than online (AUT: 2/4, CRO: 3/3, PRT: 5/5, SVN: 3/4, SWE: 5/5): “I would prefer more in-person sessions rather than online via Zoom.” (SVN). Moreover, in some countries (AUT: 2/4, PRT: 3/5, SVN: 1/4), it was suggested that the online sessions should be used for theoretical input, while the exercises should be carried out in the onsite sessions: “Online sessions are more for the more theoretical part, I agree with my colleagues. When we have practical activities, we prefer face-to-face sessions” (PRT). In addition, a Croatian focus group suggested having asynchronous material: “I would agree. Maybe make some tutorials for the exercises that are recorded or the theory in written form, so that we can decide when we have time to look at it, if something must be online” (CRO).

Other general remarks were that participants wished more applicability in the school context (AUT: 2/4, CRO: 1/3, PTR: 1/5, SWE: 3/5): “[...] I wish there were more examples that we could come up with so that they would apply to us in our work in subject teaching or classroom teaching” (CRO); as well as more exchange and discussion opportunities (AUT: 3/4, CRO: 2/3), for example with the other countries: “es, and my suggestions would be to contact teachers from other countries” (CRO).

Finally, in some focus group interviews, participants mentioned that they would prefer to have fewer sessions overall, perhaps with more intensive focus on the material (AUT: 1/4, CRO: 2/3, SWE: 1/5): “In my opinion, there should be greater concentration and a slightly faster change of content, which means fewer meetings” (CRO).

Onsite sessions

In terms of the improvement suggestions specifically for the onsite sessions, a topic that came often were the group dynamics (AUT: 3/4, CRO: 1/3), as in some cases participants wished that more people from the same school was included: “from my side I have to say to myself/ I of course have to say, I might have wished, that maybe more people from my school had participated, that one says, ok, one could perhaps have included the school a bit more concretely” (AUS), or in other cases they felt that not all participants were equally engaged: “I have the impression that some participants in our program did not take his exercises seriously” (CRO).

Furthermore, in the focus group from Austria and Slovenia was the long commuting (AUT: 3/4, SVN: 3/4): “However, from my location, some of the venues were quite a drive away, so having more local venues could be more convenient” (SVN). In this regard, in the focus groups from Croatia and Slovenia (CRO: 1/3, SVN: 2/4), it was suggested that the training should be carried out with an overnight stay, for example during a weekend: “It just crossed my mind that it could be possible to have a weekend package, Friday, and Saturday. In the past, during my long years in education, there

were weekend workshops, and I don't know if they still exist. Having a Saturday session could be a welcome addition, and after the meeting, we could have informal gatherings somewhere. Some workshops could extend with practical exercises [...]" (SVN). Moreover, in a few focus group interviews, participants reported inconvenient scheduling of the sessions (SVN: 1/4, SWE: 2/5): "Collaboration with the school when scheduling the meetings so that it is not in the middle of the national exams. At the same time, it is a good day when there is no activity, but the national exams were a tremendous stress because then you sat there and knew that now my students need me [...]" (SWE).

Other suggestions for improvement that were mentioned were regarding the amount and frequency of the onsite sessions. On the one hand, some participants preferred shorter sessions (AUT: 1/4, CRO: 2/3, PRT: 1/5): "The only thing is that we were there from say 9 a.m. until say 3 or 4 p.m., so after lunch we would all be a little sleepy. We have quite a long break and it seems it will never come to an end. If it were to be done again in the future, maybe organize that time after lunch differently. I don't know if others have that impression as if we had worked all day. Everything was wonderful, beautiful, but maybe it could have", while some participants mentioned they would like more sessions (CRO: 2/3, SVN: 2/4): "The only thing I would change is to add more, let's say two or three online sessions to be in-person" (CRO).

Concerning the sessions' content and exercises of the onsite sessions, a few participants preferred less theoretical input (CRO: 1/3, SWE: 1/5): "Sometimes it was a bit long theoretical sessions [...]" (SWE), as well as more exercises and techniques (AUT: 1/4, CRO: 2/3, SVN: 1/4): "I think that the exercises should be included a little more, that mindfulness, precisely because of this duration, so that it brings us back to focus" (CRO). In a few instances from one Austrian focus group, it was mentioned that exercises were too long, and that they would like less body scan exercises: "So, that has to be shorter. Shorter, more concise and shorter, because otherwise you can't stand it, you automatically digress then and you no longer concentrate on breathing and where it flows and where you felt it or, whether you [feel it] or not. That doesn't work" (AUS); "So, for me, personally, less bodyscans" (AUS). In addition, in one focus group from Croatia, it was suggested to improve the allocation of the exercises throughout the day: "It also seems to me that that part of the morning is quite active, we work a lot, exercise and think and relax with exercise and listen to information, and then lunch comes, then a light dessert, coffee, relaxing on the terrace, we didn't feel like moving" (CRO).

Finally, in an Austrian focus group, participants reported that the place where the onsite sessions took place was not comfortable to carry out the exercises: "especially not in a room where the floor is incredibly hard on such a thin yoga mat (laughs), it's fundamentally not relaxing" (AUS); and in a Croatian focus group, it was expressed that they wished more adaptation of the contents to the context: "Let's say some topics. I know that it is a European project, but perhaps some things should be adapted to the country where it is implemented. We now have a lot of immigrants, that's how it is now, but in the beginning [when the project started] it wasn't exactly like that. Those kinds of racial differences, we don't have that, that's why some topics weren't applicable to us. And it was noticed in the group that we were not focused [...]" (CRO).

Online sessions

In regard to the online sessions, several suggestions for improvement were related to restrictions due to the remote nature of the meetings. A very often mentioned aspect across all countries was the difficulty to engage during the sessions (AUT: 4/4, CRO: 3/3, PRT: 5/5, SVN: 4/4, SWE: 4/5), as there might be other distractions: "Perhaps, as we mentioned in the last meeting, remote sessions were more challenging. There were more distracting factors, and you couldn't fully immerse yourself in the topic during that hour and a half when we gathered online" (SVN). In relation to this, participants mentioned that the online sessions were not completely adequate for the type of exercises or topics in the programme (AUT: 3/4, CRO: 1/3, PRT: 3/5, SVN: 2/4, SWE: 3/5): "Since we work a lot with

emotional learning and feelings, body language is an important part and eye contact and things like that, you do not get the same feeling for it digitally. But if you really want to get into understanding the feeling part, you need to sit in the same room as those you are going to interact with” (SWE). Moreover, in several instances, participants reported that the success of the online sessions also depended on appropriate conditions (AUT: 1/4, CRO: 2/3, SVN: 4/4, SWE: 4/5), particularly due to an adequate place or due to technical issues: “And of course, some technical problems and you can't connect. That's a bit annoying, let's say” (SVN). In addition, in most countries participants reported that the scheduling was not very convenient (AUT: 1/4, CRO: 3/3, SVN: 3/4, SWE: 4/5): ““You also don't have much energy with development after a full day at work. We have had the digital meetings after the school day when you are tired and drained. You can't do anything at the end of the day. You also know that we have one of those jobs where there are no breaks, so performing 110 percent all day is hard” (SWE).

Other aspects that were mentioned as limitations of the online sessions were that participants had less communication and interactions among the training group, particularly in Portugal (AUT: 2/4, CRO: 1/3, PRT: 5/5, SVN: 1/4, SWE: 3/5). Some participants perceived the online sessions as tedious and repetitive (AUT: 1/4, SVN: 3/4, SWE: 4/5): “Yes, the online stuff was rather tedious for me, too” (AUS). In addition, they wished more theoretical input in the online sessions, instead of practical exercises (AUT: 2/4, PRT: 3/5). Interestingly, there were contradictory results in regards to the sessions' length, as some expressed that they would like longer sessions (PRT: 2/5, SWE: 1/4), while others preferred less or shorter sessions (CRO: 1/3, SWE: 1/5)

Among the aspects that were mentioned just in few instances, in one Austrian focus group there was a preference for shorter exercises in the online sessions: “But they in the end shortened it anyway and they should have done that actual/ for me personally, I think for everyone, right from the beginning, it should have been shorter [...]” (AUS); and smaller groups: “Hm (...) I think, it (...) would be interesting to know, how the whole thing would have evolved, if our group hadn't shrunk so much. If it then had functioned a little better if you were together again and again with the other people?” (AUS). Finally, one person from Sweden wanted less group work, and more focus on self-work: “Then maybe more focus on yourself and not so much for group conversations” (SWE); and one participant from Croatia perceived that there was not enough time to discuss in the breakout rooms: “It even happened that we didn't have enough time to say everything in those few minutes” (CRO).

8.5 Results –Perceived Challenges

After analysing the challenges that participants reported during their participation in the HAND:ET system, there are three main big topics that surged: challenges with exercises, personal challenges and organisational challenges. See Appendix 8.5A for an overview of the overall results and by country.

Concerning the challenges reported with exercises, the most mentioned issue were the mindfulness and body scans exercises (AUT: 2/4, CRO: 1/3, SVN: 1/4), as some participants indicated that they felt that those type of exercises did not fit them well: “[...] personally found it very difficult to deal with body scans for example, but I'm just not the type” (AUS), or that it took time to get into the right state: “I also found the mindfulness exercises and the body scan challenging. I found it very difficult at the beginning to focus, to calm down. However, when I managed to do it, I was really proud of myself, although it took time” (SVN). The second most challenging exercises to the participants was the empathetic listening (SVN: 1/4, SWE: 1/5), as they reported not being used to listening to other without interrupting: “Personally, I realized, as did many in the group, that it was difficult to listen to others, we jump into the conversation, etc. Some things you definitely become aware of again” (SVN). Other specific exercises that were mentioned as challenging by few participants were the “staring exercise” (SVN: 1/4) and the “prejudices exercise” (SVN: 1/4). In addition, some participants reported

that exercises could trigger uncomfortable feelings (SVN: 1/4) or that they were incompatible with their own religious beliefs (SWE: 1/5).

Regarding the personal challenges faced by participants during the programme, the most mentioned was the difficulty to open with strangers (SVN: 3/4, SWE: 2/5): “Talking for 2 minutes is hard regardless, but talking 2 minutes with someone you don't know very well is really hard” (SWE). Other personal challenges that were mentioned by a few participants were difficulties to concentrate (SVN: 1/4), the balance between time invested and perceived benefits (SWE: 1/5), and the difficulty regarding time restrictions when talking (SVN: 1/4).

Finally, in regards to the organisational challenges, participants in Slovenia mentioned that it was difficult to find replacement for teachers in the schools (SVN: 2/4): “In our case, there was always a sense of panic when there were so many substitutions. It happened throughout the week, sometimes even more, and I think that was the maximum the school leadership allowed” (SVN), connected to the feasibility of regular attendance (SVN: 1/4): “[...] But attending in person every month or spending a whole day away, I don't think it would be feasible for us” (SVN).

8.6 Results – Control Schools

Regarding the question why the school participated in the HAND:ET programme (see Table 8.1), some school coordinators referred to the *content of the programme that was positively evaluated in general*. Some said that it fitted the school development strategy, a few said that the topic or the project was interesting.

Many answers were directed to *SEDA as content*, some coordinators said they wanted to promote SEDA in their schools and recognized the importance of SEDA. Furthermore, the focus on wellbeing and mental health was appreciated. A few said they wanted assistance in dealing with diversity, others that they wanted to promote connectedness in the team and one coordinator said that they wanted to work with mindfulness.

Several coordinators said that they liked the *focus on teachers working on themselves* and that teachers were *empowered for challenges*, respectively.

Finally, a few persons said that they participated because their principal had suggested it, because it was free of charge or because they had good experiences with the project leaders.

Table 8.1 Number of mentions for each code and subcodes from control school coordinators' responses regarding the reasons why the school participated in the HAND:ET programme

Code	Subcodes	Overall	AUT	HRV	PRT	SVN	SWE	Example
content positively evaluated in general	Fit with general school development strategy	5	1	2	1	0	1	"Our school often works to promote the socio-emotional competences of teachers and students, and it seemed like an opportunity to improve our strategies." PRT
	interesting topic/content	2	2	0	0	0	1	"a very interesting topic" AUT
	interesting project	1	0	0	0	0	1	"the project sounded interesting and [I] wanted to participate" SWE
SEDA as content	dealing w diversity	2	0	1	0	1	0	"We are a very large and diverse school, and in our interactions with pupils and parents we often find ourselves in not knowing about how to talk, how to act" SVN
	promoting connectedness and cooperation in the school	2	1	0	0	1	0	"To rebuild and to strengthen the team!" AUT
	focus on mindfulness	1	1	0	0	0	0	"After some changes in the school in recent years, I wanted to do with the whole team a mindfulness training " AUT
	need for focus on wellbeing /mental health	6	3	2	0	1	0	"Because of the interest that teachers had in working on their mental health and becoming aware of their personal and teacher competencies" HRV
	importance of content / SEDA	6	1	2	1	2	0	"There isn't much training in the area and we think it's very important to take part." PRT
	developing SEDA	6	0	1	0	5	0	"To promote and develop socio-emotional and intercultural competences." SVN
	focus on the teachers / work on themselves	2	0	0	0	2	0	"We wanted to join the programme because it was presented in such a way that teachers would work on themselves " SVN
empowering teachers for challenges	4	0	3	0	1	0	"believed that it would be beneficial to support and empower teachers in these challenging times" HRV	
principal suggested it	2	1	1	0	0	0	"Our principal suggested it " HRV	
Free of charge	2	0	1	1	0	0	"Training in this area is rarely available free of charge for teachers, so let's not miss the opportunity to do it." PRT	
good experiences with /expertise of project leaders	2	0	1	0	1	0	" [...] And, of course, because of the expertise of the organizers. " HRV	

As regards the questions on (exceptional) occurrences, changes or activities (see Table 8.2), some coordinators mentioned *changes in school staff or school management*. Many coordinators said that they were involved in some kind of *school-intern SEDA activity*, for example organizing workshops on non-violence. There were also several schools where trainings on other topics took place. Overall, individual school coordinators described various *positively evaluated occurrences* and developments, namely that their own school had received awards, that there were positive experiences with parents,

that international exchanges took place with other schools, that there were no conflicts, and that the school climate or the performance level of the students had improved.

The school coordinators also reported numerous negatively evaluated events and developments, both with parents, among the school staff, and with students. With respect to *negative occurrences and developments involving students*, most often mentioned were students with mental health issues and violence by or among students. As far as *negative occurrences and developments involving teachers* are concerned, a growing burden and challenges for school staff was most often mentioned. In connection with this, increased mental health issues among school staff were specified. In addition, lower motivation and dissatisfaction as well as (in the case of Portugal) teacher strikes were mentioned. Single coordinators said that there were conflicts among teachers or conflicts with single teachers and one person stated that there were a lowered acceptance of including students with special needs to the classrooms. A few coordinators said about *negative incidents with parents* that there were also more mental health problems among parents and that there had been conflictive situations with parents.

Furthermore, in one school, there had been a medical emergency. In terms of developments due to incidents and changes outside of school, some coordinators mentioned the school shooting in Serbia, as well as issues related to the aftermath of the Covid pandemic. Several coordinators also stated that there had not been any unexpected developments or occurrences.

Table 8.2 Number of mentions for each code and subcodes from control school coordinators' responses regarding (unexpected) events, changes and developments during the time of the HAND:ET programme

Code	Subcodes	Overall	AUT	CRO	PRT	SVN	SWE	Example
changes in school staff and management	changes in school staff - substitutions of teachers	6	3	1	0	2	0	“Permanent sick leave, substitutions“ AUT
	change in school management	3	1	2	0	0	0	“At the beginning of the school year, a new principal took office” HRV
school intern training - SEDA		24	4	7	1	10	2	“workshops on non-violence, where we talked to students about what violence is, acceptance of diversity, how to react when we are in trouble, how to be better towards others, what we can contribute as individuals to improve our own and others' well-being” SVN
positive changes/ events	school got awards (MINT)	5	1	3	0	1	0	“our school was awarded many certificates this year” AUT
	school intern training - general	10	3	1	0	2	3	“We participate in a research [...] [on] education for sustainable development” SWE
	positive situations with parents	1	0	1	0	0	0	“Some provide feedback that they are satisfied with our work, especially in the field of education” HRV
	exchange with other schools	1	0	0	0	1	0	“We've seen some amazing things happen at our school. Most of them positive [e.g.,] Erasmus+ [meetings with other schools]” SVN

Table 8.2 Number of mentions for each code and subcodes from control school coordinators' responses regarding (unexpected) events, changes and developments during the time of the HAND:ET programme (continued)

Code	Subcodes	Overall	AUT	CRO	PRT	SVN	SWE	Example
	no conflicts	1	1	0	0	0	0	"There were hardly any conflicts among the students and none among the school staff." AUT
	improved school climate	2	0	0	0	1	1	"Maybe not unexpected, but I experience a higher degree of cooperation and care between the staff." SWE
	better achievement in grades 1-3	1	0	0	0	0	1	"Higher objective fulfillment in grades 1-3 this academic year." SWE
negative changes / events - parents	more mental health problems parents	2	1	1	0	0	0	"However, what we also observe is that certain mental health difficulties are becoming more common among parents " HRV
	conflicts with parents	2	0	2	0	0	0	"Conflicts between parents and school staff are more frequent, and there are also disagreements among parents who attempt to resolve classroom situations on social media", HRV
negative changes / events - teachers	growing burden/challenges for school staff	6	1	4	0	1	0	"With the growing demands in terms of challenges presented by students and parents, as well as increased administrative tasks, there is a rising burden on educational professionals" HRV
	more mental health issues school staff	3	1	1	0	1	0	"teachers are burdened, often tired and overwhelmed" AUT
	lower teacher motivation dissatisfaction	2	0	0	1	1	0	"teachers are demotivated." PRT
	strike	2	0	0	2	0	0	"This has been a year with a lot of stoppages due to the teachers' strike" PRT
	conflicts among teachers	2	0	2	0	0	0	"Disagreements and resentments among school staff have also become more common" HRV
	conflicts with single teachers	1	0	1	0	0	0	"there are individuals who 'rock the boat' instead of 'rowing' it " HRV
	less tolerance for inclusion	1	0	1	0	0	0	"Additionally, there has been a noticeable decrease in tolerance for accepting children with additional needs into classrooms " HRV
negative changes /events - students	students with problems/ mental health issues	14	1	5	0	8	0	"Children show more self-injurious behaviour, more distress, anxiety, behavioural deviance" SVN
	violence/threats by students	4	0	1	0	3	0	"We deal a lot with violence, especially psychological and online violence. What happens online is often transferred to the school environment.", SVN

Table 8.2 Number of mentions for each code and subcodes from control school coordinators' responses regarding (unexpected) events, changes and developments during the time of the HAND:ET programme (continued)

Code	Subcodes	Overall	AUT	CRO	PRT	SVN	SWE	Example
Medical emergency		1	1	0	0	0	0	"there was a medical emergency" AUT

negative changes /events - outside of school	School shooting in Serbia	3	0	0	0	3	0	“Concerns about what is happening in Serbia, both among students and teachers.” SVN
	Post Covid pandemic related issues	5	1	3	0	1	0	“This is the first post-pandemic year in which educators have been exposed to various additional negative aspects of everyday work, including high stress and job demands due to complex life circumstances“ HRV
No		16	4	2	4	5	1	“No, not beyond what normally happens during a school year.“ SWE

When asked whether there was anything else that the school coordinators wanted to tell (see Table 8.3), some said that they were interested in further cooperation, some said that they regretted to only be part of the control group and some said that they were already looking forward to the HAND:ET control school event.

Table 8.3 Number of mentions for each code from control school coordinators’ responses to the question whether there was anything else they wanted to tell the HAND:ET team.

Code	Overall	AUT	HRV	PRT	SVN	SWE	Example
questionnaires as opportunity for reflection	1	0	0	0	1	0	“While answering the questionnaires, I often thought about my own identity and the way I react and experience events“ SVN
support of external institutions needed	1	0	1	0	0	0	“The educational system is becoming increasingly demanding, [...] the support of external institutions, associations, and similar organizations would be of great significance“ HRV
interested in further cooperation / continuation	6	0	1	2	3	0	“I would love for you to keep us informed about the possibility of further collaboration“ HRV
thank you	5	1	2	0	2	0	“Thank you for giving us the opportunity to participate.“ SVN
regretting to be part of control group	4	0	1	0	3	0	“We regret that we were (only) selected for the control group, as we were ready to learn new skills and gain new experience.“ SVN
looking forward to hand control school event	3	1	2	0	0	0	“We are looking forward to the one-day training “ HRV
no	7	1	3	1	2	0	-

A few persons thanked the project teams for the possibility to be part of HAND:ET. One person said that the questionnaire gave them an opportunity for reflection and another underlined the (continued) need of support from external organisations/institutions. Finally, some coordinators stated that they had nothing else to tell.

9 Evaluation from the Participants' Perspective – Discussion

One aim of this second part of the Evaluation Report was to present analyses to complement the experimental outcome evaluation outlined in Part I as a basis for drawing conclusions about the overall quality of the HAND:ET programme and its elements. More specifically, the summative outcome evaluation should be complemented by the participants' assessment of the quality of the programme (e.g., by judging its usefulness, the quality of the overall programme as well as individual aspects, and by describing characteristics viewed as positive) and the programme's effectiveness (by assessing subjectively perceived changes brought about by the programme).

A second aim was to add a formative perspective to the summative one: by asking the participants if they had any suggestions for improving the HAND:ET system, we can derive recommendations for optimising future programmes for promoting SEDA competencies. Results with respect to these aims are discussed below before we present some limitations. Finally, conclusions are made in relation to the HAND:ET system.

The participants' evaluation of the quality of the HAND:ET system. Analysis of the closed questions from the post-test evaluation questionnaire shows the HAND:ET system was evaluated very positively by the participants. The programme was rated as (very) good or (very) useful by the vast majority of participants. Individual aspects of the programme were all rated as good or excellent by a very clear majority, with the trainers and the atmosphere being rated particularly positively and the combination of theoretical input and practical activities as well as the support in implementing the HAND:ET elements being rated somewhat less positively (the rating of specific exercises was in between). A deeper insight into what the participants saw as positive in the HAND:ET system can be gained by analysing the positive aspects they specified in the questionnaire. Participants liked (and most frequently mentioned) the programme's focus on different aspects of socio-emotional competencies. In comparison, diversity awareness and related aspects were rarely mentioned. Participants also appreciated the sense of community, connectedness and opportunity for exchange that the programme provided. Participants liked the different exercises of the programme, notably those related to listening. They also appreciated the focus on teacher well-being and empowerment, the practical applicability, the trainers, the atmosphere and the organisation of the training sessions.

The effectiveness of the HAND:ET system from the participants' perspective – perceived changes and learning outcomes. In both the closed questions of the post-test evaluation questionnaire and in the interviews, participants reported having perceived changes due to HAND:ET and a wide range of learning outcomes. When asked whether their relationships with colleagues or students had changed following the programme, about half the participants indicated "yes". Further, among participants who reported changes in their lifestyle as compared to before, there was a perceived increase in spending time with loved ones, practising self-care, feeling cheerful, and helping others. Conversely, participants reported doing activities like arguing with others, smoking, and consuming drugs or alcohol less frequently after having participated in the HAND:ET system.

In the focus group interviews, the participants reported which learning effects they perceived. A large part of these learning effects could be classified in the area of SEDA competencies and a smaller part in the area of application of the HAND:ET elements in school. While almost all perceived SEDA learning effects could be categorised under socio-emotional competencies, only a few statements fell into the area of diversity awareness. In many focus groups, participants reported increased self-awareness, e.g., in relation to body sensations or emotions. In the area of self-management, learning effects such as the ability to calm down and relax were described. Various aspects of mindfulness, especially focusing on the present moment and focusing (partly) on the self, as a self-management

technique were also mentioned. In the area of social skills, the central focus was on communication, particularly empathetic listening, which was the most frequently mentioned learning outcome overall. Interestingly, this was not mentioned in the Portuguese focus groups. The practical application in school, e.g., in conflict resolution, to calm the class down or in conversations with students, on the other hand, was mentioned quite often in the Portuguese (and also Swedish) focus groups.

Possibilities to improve the HAND:ET system from the participants' perspective. As far as recommendations for improving the programme are concerned, the participants attributed a positive value to the programme and accordingly suggested that it should be expanded and widely disseminated in the educational context. On the other hand, the participants' suggestions highlight the importance of considering different aspects of the programme implementation to make it more convenient for them, such as taking the school workload and schedule into account, and making it more exciting and attractive, for example, by implementing the training in an appealing location. Moreover, participants expressed that they appreciated the practical exercises and would like to learn a greater variety of practical techniques, which is in line with the need that they expressed for better integration of the learned content into their school work and personal life. Finally, there was a notable preference for delivering the programme through in-person meetings.

Perceived challenges. Participants in the HAND:ET system reported challenges falling into three main categories: challenges with exercises, personal challenges, and organizational challenges. Concerning exercises, mindfulness and body scan exercises were often cited as difficult, with some participants feeling they didn't fit well or took time to get into the right state. Empathetic listening was also mentioned as challenging due to participants not being used to listening without interrupting. Specific exercises were reported as challenging by a few participants. Some participants also experienced discomfort or conflicts with their religious beliefs triggered by certain exercises. Regarding personal challenges, the difficulty of opening up with strangers was frequently mentioned, particularly during activities requiring interaction. Other personal challenges included difficulties concentrating, balancing time invested versus perceived benefits, and managing time restrictions during discussions. In terms of organizational challenges, some participants highlighted difficulties related to finding replacements for teachers in schools. Feasibility of regular attendance was also mentioned as a challenge, with concerns about the time and resources required for in-person sessions.

Control Schools. From the control school coordinators we did not receive any feedback on the HAND:ET programme itself, but we received particularly important information on what happened there during the HAND:ET period. The control school coordinators participated in the HAND:ET programme for various reasons, including its positively evaluated content, alignment with school development strategies, and interest in promoting SEDA and mental health. Some joined based on the free-of-charge nature or positive experiences with project leaders. Notably, almost 40% reported some kind of SEDA activity in their school during HAND:ET. They furthermore reported both positive and negative occurrences and developments within their schools. Positive aspects included receiving awards, positive parent interactions, and improved school climate or student performance. Negative aspects involved mental health issues and violence among students, growing challenges and mental health issues among teachers, conflicts among staff, decreased acceptance of students with special needs, and problematic interactions with parents. External incidents like the school shooting in Serbia and post-Covid pandemic issues were mentioned. Some coordinators expressed interest in further cooperation, regret for being part of the control group, or gratitude for the opportunity, while others emphasized the need for continued support from external organizations.

Limitations. First, we found a clear imbalance between socio-emotional competencies on one hand and diversity awareness on the other. Among aspects perceived as positive as well as among the reported learning effects, the vast majority of competencies or topics are attributed to socio-emotional competencies and only very few to diversity awareness aspects. Yet, the aim of the programme was to promote these areas of competency to a similar extent. One possible explanation could be that the

project team's expertise and experience in promoting socio-emotional competencies and conducting mindfulness-based trainings is more pronounced than with the diversity awareness content.

Another limitation revealed by the results refers to some clear differences between the countries, which especially became apparent in the interview analysis. Overall, the results for the closed and open questions in the questionnaire and from the interviews are comparable and show great similarities across the countries. Nevertheless, some clear differences also emerged. For example, “(empathetic) listening” was the most often described learning affect in all countries except for Portugal where, in contrast, no communication-related learning outcomes were described at all. Further, diversity awareness, which was hardly mentioned at all, was described comparatively often as a learning outcome in Croatia. Differences between the countries should be expected as the education systems differ and in part the target populations do as well. The differences may indicate that the trainings were successfully adapted to different needs, but might also show that in some places the programme's “active ingredients” or key elements (see Nielsen, 2020) were not implemented in a comparable way in every country. A contributing factor may have been that the Train-the-Trainers education had to take place online instead of in-person as planned due to the COVID-19 pandemic. This may have led to the trainers engaging less intensively with the content than would have happened with face-to-face training.

Finally, a limitation concerns our choice of instruments – we deliberately only considered subjective reports and statements of the participants in order to bring their perspective more strongly into the evaluation. Still, it is important to point out that these assessments are affected by biases such as social desirability or expectancy effects (cf. Bogner & Landrock, 2015), especially with regard to perceived changes. In addition, the questions analysed for this chapter were more focused on positive aspects and only gave an opportunity to report on problems and difficulties to a limited extent .

10 External Evaluation of the HAND:ET system - Conclusions and Recommendations

The results from the experimental evaluation show that there are programme effects in each partner country, however the effects vary substantially across the five countries. In Austria, the most significant effects (3) are seen in the constructs of social competencies. In Croatia all the effects (5) are in the emotional competencies constructs. In Portugal, there was only one significant effect for the Empathy subscale ‘Affective Mentalising’. In Slovenia, the HAND:ET system had the most positive effects for teachers’ SEDA competencies (7). Most of the significant effects relate to the self-management component of emotional competencies. In Sweden the most significant effects (5) were found for the self-management component of emotional competencies and social awareness with relational competence.

As regards the participants’ view on HAND:ET, participants expressed high regard for the programme, noting its quality, usefulness, and positive impact on various aspects. They appreciated the focus on socio-emotional competencies, the exercises, atmosphere, and emphasis on teacher well-being and possibility for exchange. The system was perceived as effective in bringing about changes especially in the fields of self-awareness and self-management including stress reduction. Mindfulness techniques were highlighted for their effectiveness in improving well-being. Empathetic listening stood out as a significant learning outcome in social competencies. Participants reported successfully applying HAND:ET elements in various areas of life, particularly in school settings and with students. In these results, too, we found some clear differences between countries, for example with regard to empathic listening as a learning outcome. As discussed in Chapters 5 and 9, these differences reflect different national contexts but also point to differences in implementation (see also Kozina, 2024).

Challenges reported by participants fell into three main categories: exercises, personal, and organizational. Difficulties with certain exercises, particularly mindfulness and empathetic listening, were noted, along with personal challenges such as discomfort with opening up to strangers and managing time constraints. Organizational challenges included difficulties in finding replacements for teachers and feasibility of regular attendance.

Participants furthermore provided recommendations for improving the programme, suggesting expansion and wider dissemination in educational contexts. They also highlighted the importance of considering logistical factors such as school workload and schedule, as well as making the training more engaging and attractive, potentially by hosting sessions in appealing locations. Participants expressed a desire for a greater variety of practical exercises and better integration of the content into their school work and personal lives. Additionally, they showed a preference for in-person meetings.

Feedback from control school coordinators highlighted various positive and negative occurrences within their schools during the HAND:ET period. Positive aspects included receiving awards, positive parent interactions, and improved school climate or student performance. Negative aspects involved issues such as mental health challenges and conflicts among staff and students. Some coordinators expressed interest in further cooperation, while others emphasized the need for continued support from external organizations. The control school results indicate that with a relatively low number of schools per sample, individual events could have a significant influence on the results. The comparatively frequent mention of parallel SEDA activities by control schools seems particularly noteworthy in this context, which may have led to an underestimation of effects in some cases.

In summary, it can be stated that HAND:ET offers many strengths, that the content meets with great demand and interest from teachers, and that teachers find the programme useful, helpful and easy to apply in practice. Furthermore, they report learning results in several SEDA fields with a focus on socio-emotional competencies. The effectiveness of the programme has been (partly) shown experimentally across national contexts, although the extent of effectiveness varies and the effects differ from country to country.

Despite the programme's strengths, there are thus several areas for improvement and consideration in future iterations of the HAND:ET system or similar programmes. These stem from both the limitations we identified (see Chapter 9), namely possible differences between countries (see Chapter 5 and Chapter 9) in implementation of the programme and an imbalance between the promotion of socio-emotional competencies and diversity awareness, and the participants' suggestions for improvement. We offer the following specific recommendations to improve future programmes:

- For this kind of intervention study, the HAND:ET system was a comparatively comprehensive intervention. Yet, to ensure sustainable effects and meet the needs of teachers the programme should be anchored in schools on a long-term basis and implemented on a wider scale. Such long-term implementation should include providing teachers with ongoing supervision to successfully implement what they have learned in school. This would require even more comprehensive trainer education, complemented by continuous supervision.
- Similar programmes should be designed to be flexible and adapted to contexts to accommodate specific needs, school workloads and schedules.
- In-person training is clearly preferable to online sessions, ideally in attractive training locations that allow teachers to fully concentrate on the training and to be able to distance themselves from their daily school routine.
- The socio-emotional and diversity-related approaches should be more strongly integrated with each other, also by implementing a greater variety of practical exercises.

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Appendix

Appendix 5A. Mean change score (M) by group (ex=experimental, con=control), the t-statistic (t) its significance (p), and Cohen's d (d) by country for complete cases

Scale	Austria					Croatia					Portugal				
	M(ex)	M(con)	t	p	d	M(ex)	M(con)	t	p	d	M(ex)	M(con)	t	p	d
Mindfulness Skills-Observe	0.10	-0.21	2.07	0.021	0.44	0.09	-0.09	1.95	0.027	0.31	0.00	0.11	-1.09	0.861	-0.17
Mindful Attention Awareness	-0.14	-0.02	-0.92	0.821	-0.19	0.01	0.17	-1.66	0.951	-0.26	0.23	0.22	0.09	0.464	0.01
Mindfulness in Teaching-Intrapersonal	0.03	0.02	0.10	0.460	0.02	-0.09	-0.08	-0.20	0.579	-0.03	0.04	0.07	-0.39	0.651	-0.06
Mindfulness in Teaching-Interpersonal	0.05	-0.03	0.58	0.281	0.12	-0.09	-0.04	-0.59	0.722	-0.09	0.15	0.01	1.41	0.080	0.23
Well-being	0.22	0.66	-1.93	0.972	-0.41	0.15	-0.08	1.48	0.071	0.24	0.15	0.10	0.32	0.374	0.05
Emotional Self-Efficacy	0.15	0.17	-0.16	0.563	-0.03	0.09	0.07	0.21	0.415	0.03	0.11	0.13	-0.16	0.564	-0.03
Burnout-Physical Fatigue	-0.08	-0.59	1.70	0.953	0.35	-0.06	0.33	-2.11	0.018	-0.34	0.11	0.03	0.42	0.661	0.07
Burnout-Cognitive Weariness	-0.01	-0.45	1.54	0.937	0.32	-0.11	0.11	-1.25	0.106	-0.20	-0.09	-0.10	0.04	0.514	0.01
Burnout-Emotional Exhaustion	0.33	-0.46	2.77	0.997	0.57	-0.16	0.04	-1.25	0.107	-0.20	0.02	-0.01	0.15	0.560	0.02
Psychological Strain in Work Contexts-Cognitive Strain	-0.38	-0.35	-0.12	0.454	-0.02	-0.14	0.17	-1.78	0.039	-0.28	-0.14	-0.14	-0.02	0.491	0.00
Psychological Strain in Work Contexts-Emotional Strain	-0.23	-0.33	0.36	0.640	0.07	-0.11	0.02	-0.80	0.213	-0.13	-0.16	-0.20	0.21	0.584	0.03
Empathy-Affective Response	0.02	0.02	0.06	0.477	0.01	0.02	-0.01	0.41	0.340	0.07	0.14	0.03	1.10	0.138	0.18
Empathy-Affective Mentalising	0.15	0.04	0.91	0.182	0.19	-0.02	-0.01	-0.08	0.532	-0.01	0.30	0.09	2.02	0.022	0.33
Empathy-Perspective Taking	0.13	0.05	0.63	0.264	0.13	0.00	0.01	-0.07	0.529	-0.01	0.21	0.13	0.75	0.226	0.12
Empathy-Self-Other Awareness	0.34	0.08	2.15	0.017	0.44	0.07	0.11	-0.40	0.655	-0.06	0.20	0.19	0.14	0.444	0.02
Teacher's Relational Competence	0.21	-0.02	2.22	0.015	0.47	-0.06	-0.02	-0.55	0.707	-0.09	0.07	0.05	0.17	0.431	0.03
Teacher cooperation	0.28	-0.01	1.77	0.040	0.37	-0.09	-0.02	-0.62	0.732	-0.10	0.15	0.07	0.67	0.252	0.11
Teacher Self-Efficacy for Classroom Diversity	0.18	0.05	1.35	0.091	0.29	-0.01	0.06	-0.94	0.826	-0.15	0.06	0.04	0.17	0.432	0.03
Beliefs Classroom Diversity-Multicultural	-0.04	-0.07	0.45	0.327	0.09	-0.04	-0.03	-0.11	0.542	-0.02	0.03	0.03	-0.11	0.543	-0.02
Beliefs Classroom Diversity-Egalitarian	0.08	-0.01	0.88	0.190	0.19	-0.04	-0.05	0.17	0.433	0.03	-0.03	0.05	-1.00	0.841	-0.16
Flexibility/Openness to Diversity	0.27	0.00	1.86	0.033	0.39	-0.02	-0.09	0.73	0.233	0.12	-0.01	0.03	-0.34	0.634	-0.06
Feeling of Closeness to Colleagues	-0.06	0.46	1.79	0.038	0.37	-0.01	-0.18	-0.78	0.220	-0.12	-0.08	0.05	0.64	0.263	0.10
Feeling of Closeness to Students	-0.08	0.15	0.89	0.188	0.19	0.15	-0.21	-2.11	0.98	-0.34	-0.02	0.14	0.85	0.198	0.14

Appendix 5A. Mean change score (M) by group (ex=experimental, con=control), the t-statistic (t) its significance (p), and Cohen's d (d) by country for complete cases (continued)

Scale	Slovenia				Sweden					
	M(ex)	M(con)	t	p	d	M(ex)	M(con)	t	p	d
Mindfulness Skills-Observe	0.09	0.06	0.39	0.348	0.06	0.04	-0.37	3.28	0.001	0.74
Mindful Attention Awareness	0.14	0.04	1.15	0.125	0.17	0.05	0.28	-1.96	0.973	-0.45
Mindfulness in Teaching-Intrapersonal	-0.09	0.05	-2.01	0.977	-0.30	-0.09	-0.07	-0.18	0.570	-0.04
Mindfulness in Teaching-Interpersonal	-0.01	-0.09	1.08	0.141	0.16	0.02	0.01	0.03	0.488	0.01
Well-being	0.19	-0.32	3.60	0.000	0.53	-0.51	-0.90	1.68	0.049	0.38
Emotional Self-Efficacy	0.07	0.03	0.62	0.269	0.09	0.02	-0.09	0.93	0.178	0.22
Burnout-Physical Fatigue	-0.27	0.38	-3.96	0.000	-0.58	0.27	0.28	-0.02	0.494	0.00
Burnout-Cognitive Weariness	-0.20	0.32	-3.22	0.001	-0.47	0.04	0.33	-1.27	0.104	-0.29
Burnout-Emotional Exhaustion	-0.22	0.37	-3.31	0.001	-0.49	-0.19	0.39	-2.53	0.007	-0.58
Psychological Strain in Work Contexts-Cognitive Strain	-0.40	0.14	-3.00	0.002	-0.44	-0.06	-0.27	0.74	0.769	0.17
Psychological Strain in Work Contexts-Emotional Strain	0.01	0.24	-1.43	0.078	-0.21	0.10	0.38	-1.18	0.120	-0.28
Empathy-Affective Response	0.02	-0.05	0.68	0.249	0.10	0.23	-0.09	2.07	0.021	0.48
Empathy-Affective Mentalising	0.05	-0.01	0.73	0.234	0.11	0.28	0.01	1.89	0.032	0.43
Empathy-Perspective Taking	0.04	-0.04	0.79	0.216	0.12	0.02	-0.11	0.77	0.223	0.18
Empathy-Self-Other Awareness	0.06	0.01	0.53	0.299	0.08	0.18	-0.02	1.25	0.108	0.28
Teacher's Relational Competence	0.01	-0.04	0.68	0.250	0.10	0.08	-0.07	1.20	0.117	0.28
Teacher cooperation	0.10	-0.01	1.18	0.119	0.17	-0.25	-0.07	-1.21	0.885	-0.29
Teacher Self-Efficacy for Classroom Diversity	-0.04	-0.02	-0.21	0.585	-0.03	0.11	0.01	1.10	0.137	0.26
Beliefs Classroom Diversity-Multicultural	0.03	-0.11	1.56	0.060	0.23	0.00	-0.06	0.72	0.237	0.17
Beliefs Classroom Diversity-Egalitarian	0.09	-0.10	2.19	0.015	0.32	0.09	-0.09	1.61	0.056	0.37
Flexibility/Openness to Diversity	0.10	-0.19	1.74	0.041	0.26	0.09	-0.09	1.16	0.124	0.27
Feeling of Closeness to Colleagues	-0.02	0.19	0.94	0.175	0.14	0.21	-0.21	1.13	0.131	0.27
Feeling of Closeness to Students	-0.17	0.06	1.26	0.105	0.19	-0.10	-0.34	0.84	0.201	0.19

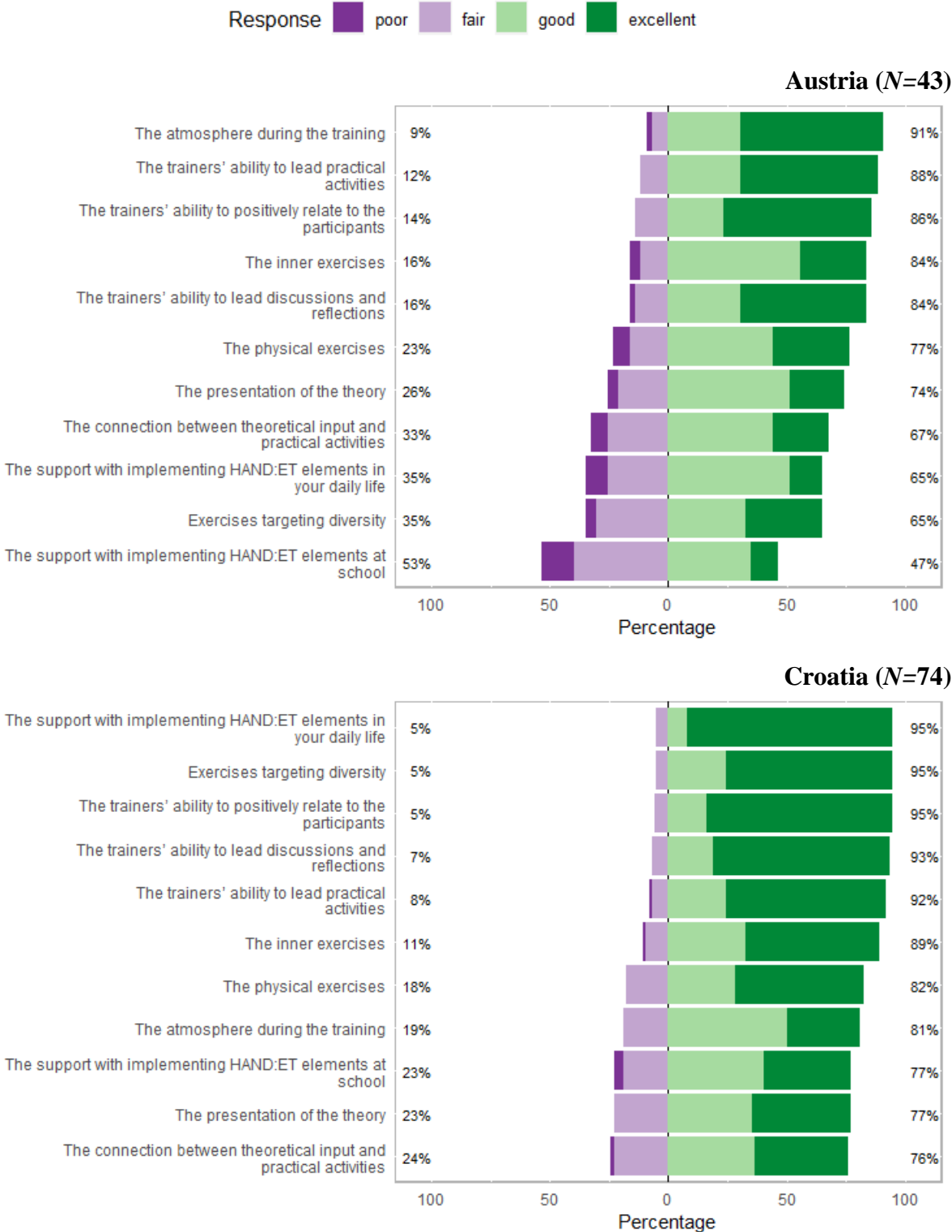
Appendix 5B. Mean change score (M) by group (ex=experimental, con=control), the t-statistic (t) its significance (p) by country for imputed cases

Scale	Austria			Croatia			Portugal		
	M(ex)	M(con)	p	M(ex)	M(con)	p	M(ex)	M(con)	p
Mindfulness Skills-Observe	0.12	-0.14	1.94 0.026	0.04	-0.08	1.27 0.102	-0.01	0.11	-1.11 0.867
Mindful Attention Awareness	-0.16	0.00	-1.15 0.875	0.09	0.09	-0.04 0.516	0.25	0.23	0.11 0.454
Mindfulness in Teaching-Intrapersonal	0.00	0.02	-0.24 0.594	-0.08	-0.07	-0.12 0.549	0.09	0.07	0.26 0.398
Mindfulness in Teaching-Interpersonal	0.02	-0.02	0.31 0.380	-0.10	0.02	-1.43 0.923	0.19	0.02	1.81 0.035
Well-being	0.31	0.55	-1.07 0.859	0.10	-0.15	1.63 0.051	0.19	0.09	0.65 0.257
Emotional Self-Efficacy	0.17	0.14	0.31 0.623	0.05	0.08	-0.42 0.339	0.15	0.06	0.72 0.764
Burnout-Physical Fatigue	-0.21	-0.47	1.00 0.842	0.02	0.35	-1.55 0.060	0.00	0.17	-0.74 0.229
Burnout-Cognitive Weariness	-0.11	-0.38	0.97 0.835	-0.11	0.15	-1.50 0.066	-0.09	-0.05	-0.16 0.436
Burnout-Emotional Exhaustion	0.17	-0.32	1.74 0.041	-0.17	0.06	-1.56 0.941	-0.07	0.05	-0.69 0.756
Psychological Strain in Work Contexts-Cognitive Strain	-0.58	-0.26	-1.34 0.090	-0.02	0.26	-1.56 0.060	-0.19	-0.19	0.00 0.500
Psychological Strain in Work Contexts-Emotional Strain	-0.29	-0.27	-0.10 0.459	-0.05	0.11	-0.96 0.169	-0.25	-0.08	-0.95 0.171
Empathy-Affective Response	0.00	0.03	-0.24 0.594	-0.01	-0.02	0.17 0.434	0.18	0.00	1.68 0.047
Empathy-Affective Mentalising	0.17	0.07	0.87 0.193	-0.03	0.01	-0.50 0.693	0.36	0.10	2.36 0.009
Empathy-Perspective Taking	0.11	0.07	0.32 0.374	-0.04	0.05	-0.94 0.827	0.25	0.10	1.47 0.071
Empathy-Self-Other Awareness	0.26	0.11	1.26 0.105	0.00	0.11	-1.16 0.876	0.22	0.17	0.43 0.333
Teacher's Relational Competence	0.08	-0.06	1.33 0.091	-0.07	-0.01	-0.66 0.747	0.12	0.05	1.10 0.136
Teacher cooperation	0.17	-0.12	1.72 0.043	-0.09	-0.03	-0.43 0.666	0.14	0.08	0.58 0.282
Teacher Self-Efficacy for Classroom Diversity	0.11	0.01	1.00 0.158	-0.04	0.05	-1.14 0.874	0.07	0.01	0.82 0.205
Beliefs Classroom Diversity-Multicultural	-0.06	-0.05	-0.08 0.534	-0.04	-0.01	-0.36 0.639	0.05	-0.01	1.23 0.110
Beliefs Classroom Diversity-Egalitarian	0.02	-0.03	0.60 0.274	-0.06	-0.06	-0.02 0.507	0.01	-0.01	0.21 0.416
Flexibility/Openness to Diversity	0.24	0.00	1.70 0.045	-0.07	-0.05	-0.21 0.584	-0.01	0.04	-0.56 0.712
Feeling of Closeness to Colleagues	0.25	-0.03	0.85 0.199	-0.20	-0.05	-0.58 0.718	0.15	0.03	0.57 0.285
Feeling of Closeness to Students	-0.08	-0.07	-0.06 0.522	-0.14	0.09	-1.42 0.921	0.16	-0.03	0.99 0.16

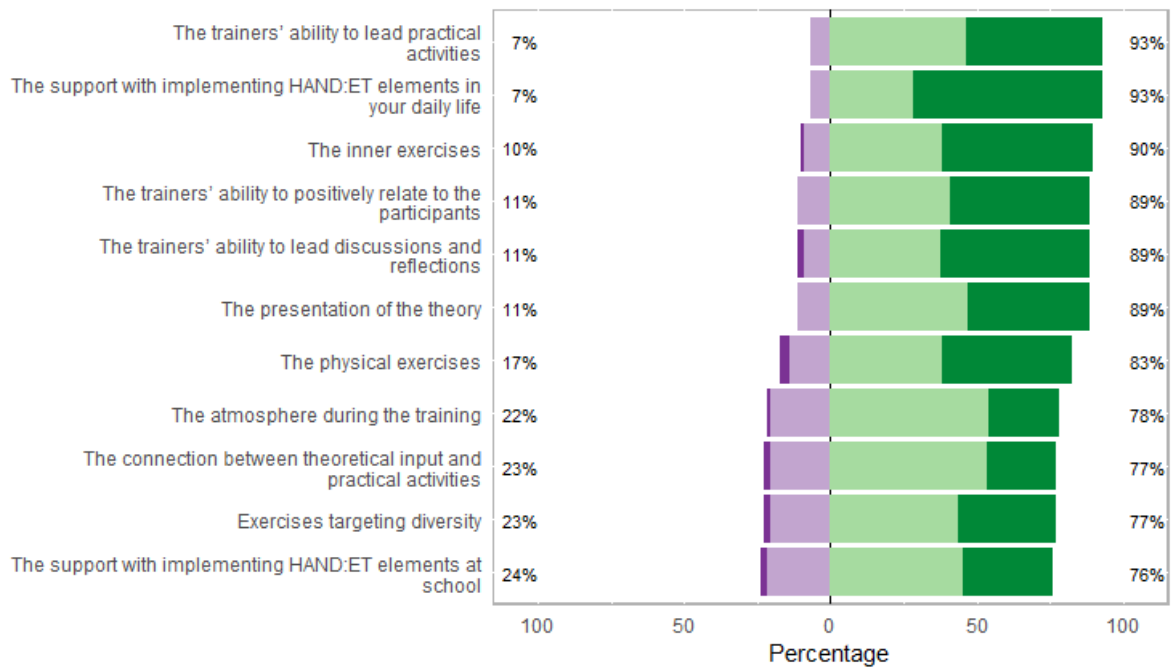
Appendix 5B. Mean change score (M) by group (ex=experimental, con=control), the t-statistic (t) its significance (p) by country for imputed cases (continued)

Scale	Slovenia			Sweden				
	M(ex)	M(con)	t	M(ex)	M(con)	t	p	
Mindfulness Skills-Observe	0.07	0.06	0.12	0.453	-0.01	-0.18	1.68	0.047
Mindful Attention Awareness	0.15	0.04	1.14	0.128	-0.01	0.09	-0.99	0.839
Mindfulness in Teaching-Intrapersonal	-0.11	0.05	-2.34	0.990	0.00	-0.01	0.07	0.474
Mindfulness in Teaching-Interpersonal	-0.04	-0.06	0.40	0.343	0.04	-0.02	0.55	0.291
Well-being	0.19	-0.28	3.35	0.000	-0.44	-0.71	1.79	0.037
Emotional Self-Efficacy	0.08	0.03	0.63	0.736	-0.01	-0.02	0.04	0.516
Burnout-Physical Fatigue	-0.29	0.32	-3.73	0.000	0.19	0.14	0.22	0.588
Burnout-Cognitive Weariness	-0.20	0.26	-2.77	0.003	0.08	0.22	-0.65	0.258
Burnout-Emotional Exhaustion	-0.22	0.33	-3.12	0.999	-0.06	0.14	-1.21	0.886
Psychological Strain in Work Contexts-Cognitive Strain	-0.47	0.07	-2.90	0.002	-0.15	-0.16	0.05	0.519
Psychological Strain in Work Contexts-Emotional Strain	-0.03	0.19	-1.30	0.097	0.13	0.25	-0.72	0.235
Empathy-Affective Response	-0.01	-0.04	0.31	0.378	0.09	0.00	0.81	0.209
Empathy-Affective Mentalising	0.06	-0.04	1.03	0.151	0.13	0.02	1.03	0.152
Empathy-Perspective Taking	0.03	-0.05	0.83	0.202	-0.01	-0.01	0.04	0.486
Empathy-Self-Other Awareness	0.04	-0.01	0.52	0.303	0.15	0.07	0.59	0.276
Teacher's Relational Competence	-0.01	-0.03	0.32	0.375	0.01	-0.07	0.94	0.173
Teacher cooperation	0.10	-0.08	1.78	0.037	-0.14	-0.13	-0.08	0.530
Teacher Self-Efficacy for Classroom Diversity	-0.06	-0.03	-0.27	0.605	0.08	0.06	0.38	0.352
Beliefs Classroom Diversity-Multicultural	0.02	-0.09	1.21	0.112	0.01	-0.01	0.25	0.399
Beliefs Classroom Diversity-Egalitarian	0.08	-0.07	1.58	0.057	0.03	-0.07	1.36	0.087
Flexibility/Openness to Diversity	0.09	-0.21	1.83	0.034	0.04	-0.02	0.52	0.300
Feeling of Closeness to Colleagues	0.23	-0.08	1.31	0.096	0.06	0.01	0.15	0.439
Feeling of Closeness to Students	0.07	-0.21	1.52	0.064	-0.18	-0.41	1.06	0.144

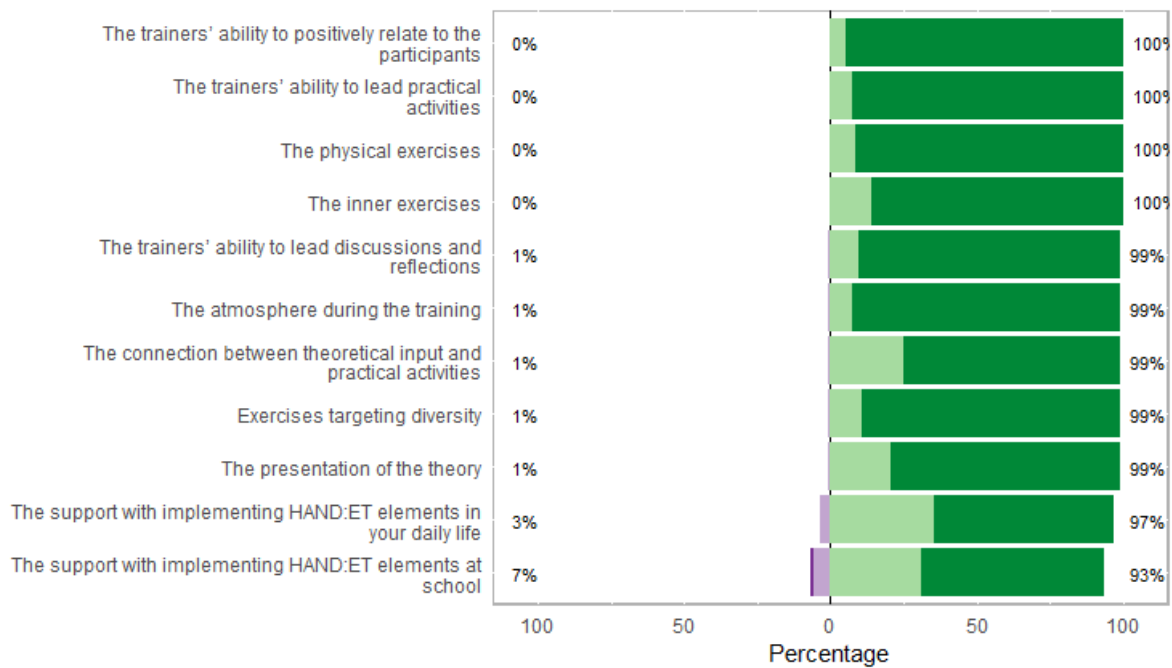
Appendix 6A. Percentage of responses from participants' assessments of various aspects of the HAND:ET programme by country



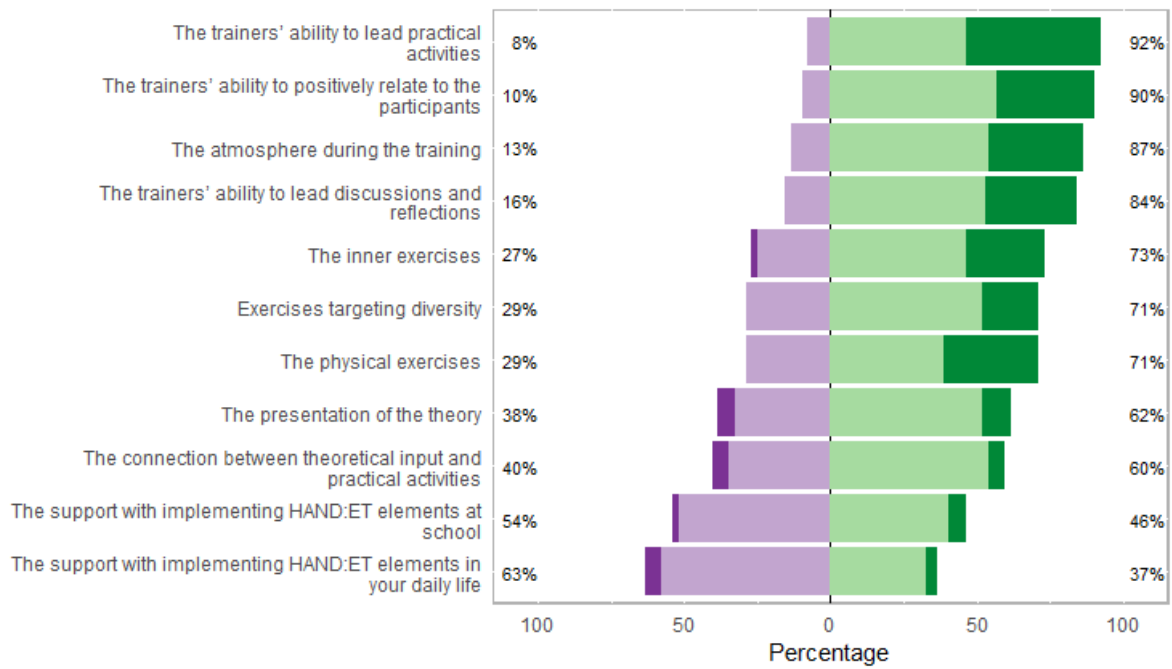
Portugal (N=88)



Slovenia (N=93)



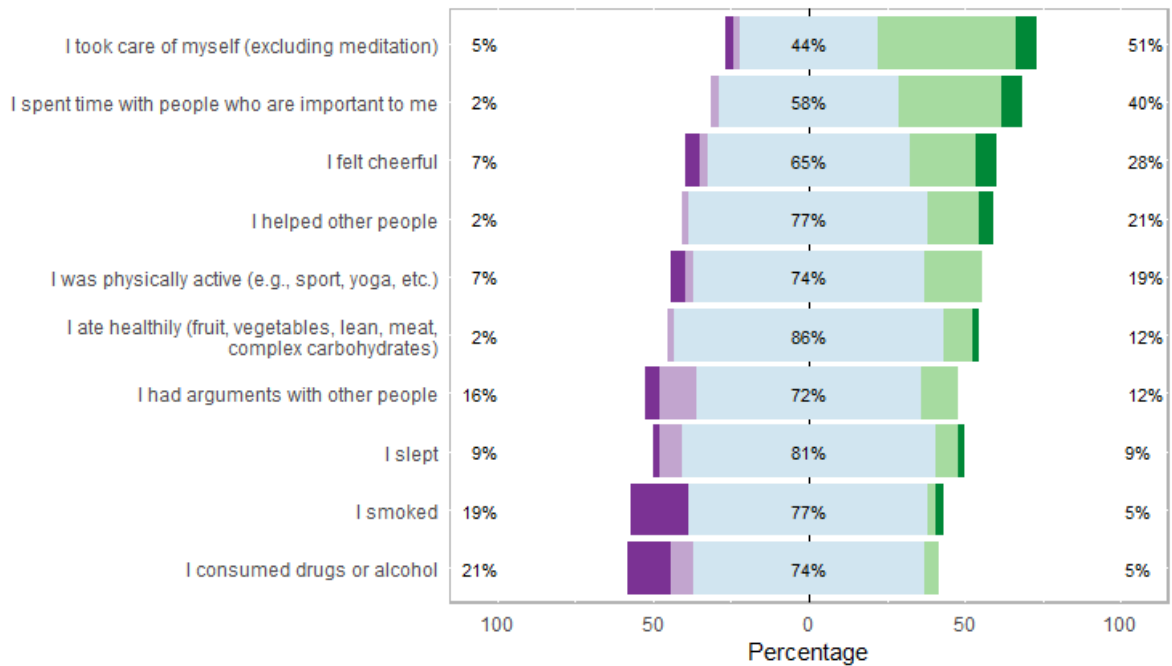
Sweden (N=52)



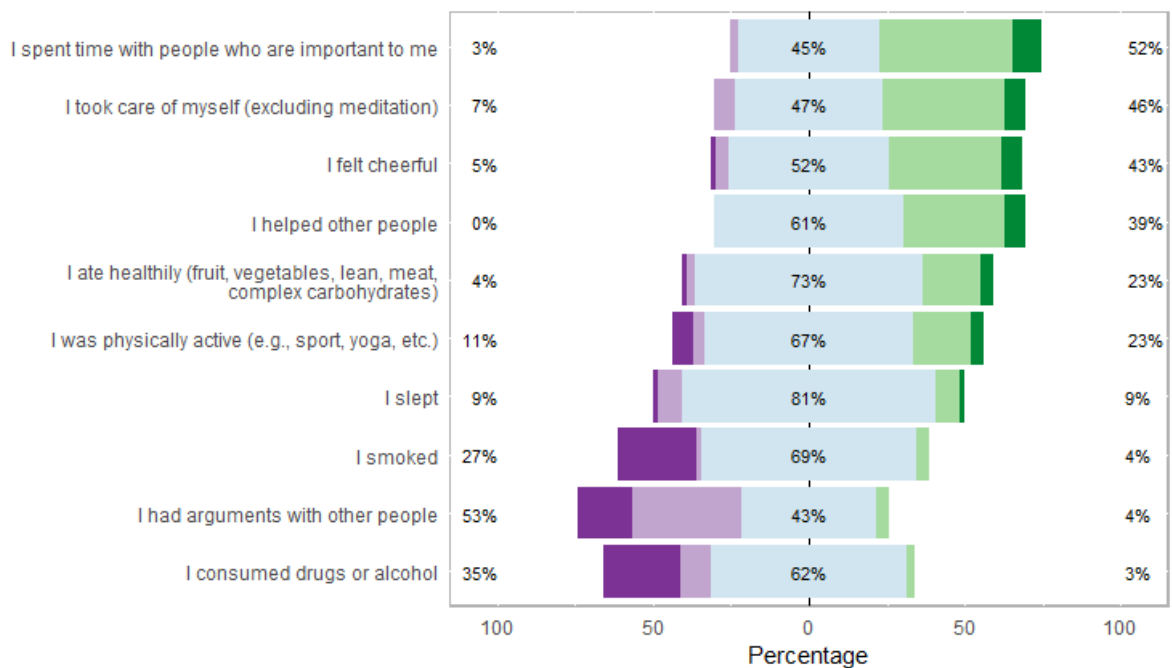
Appendix 6B. Percentage of responses about possible changes in the participants' way of life during the HAND:ET system compared to before by country

Response ■ much less ■ somewhat less ■ same ■ somewhat more ■ much more

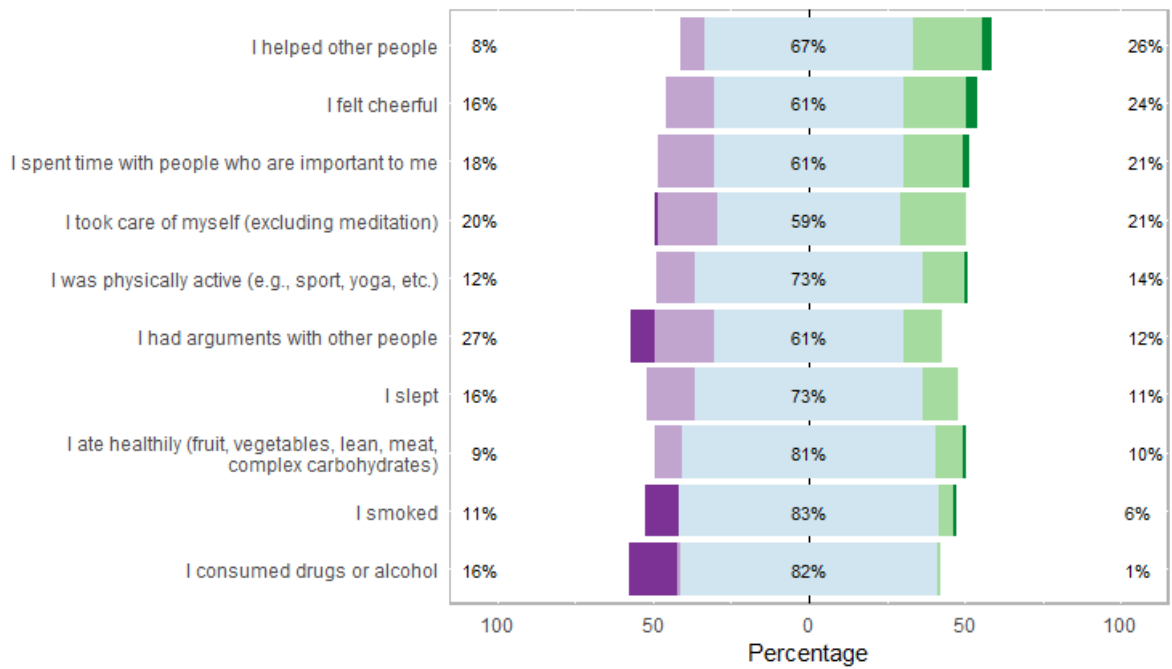
Austria (N=43)



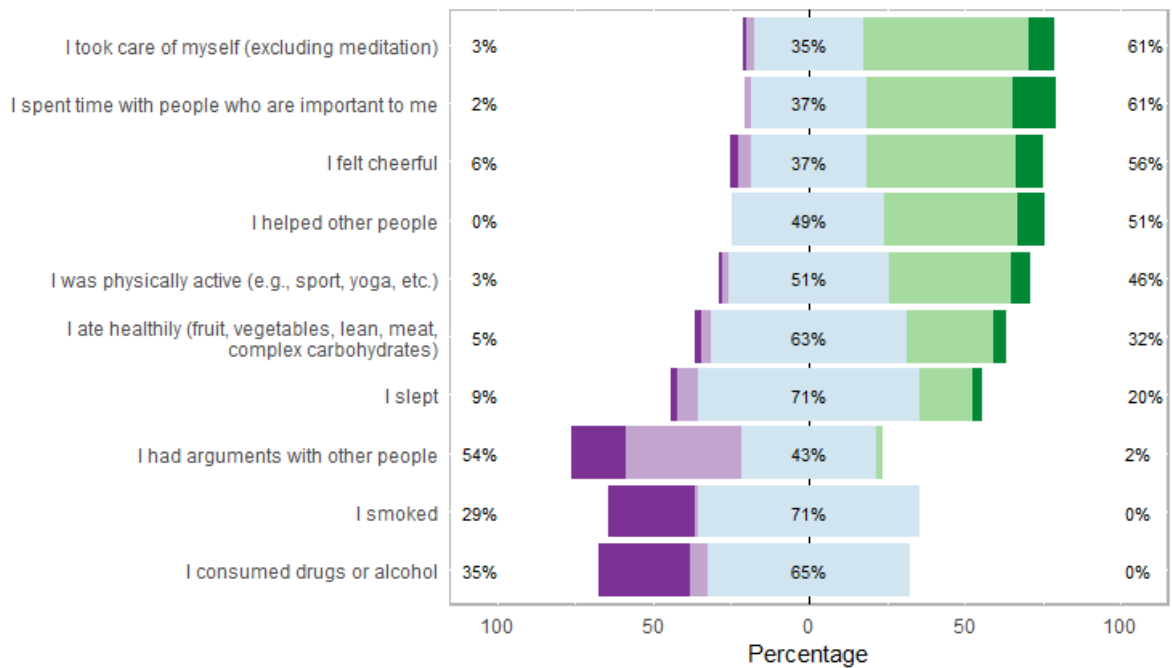
Croatia (N=75)



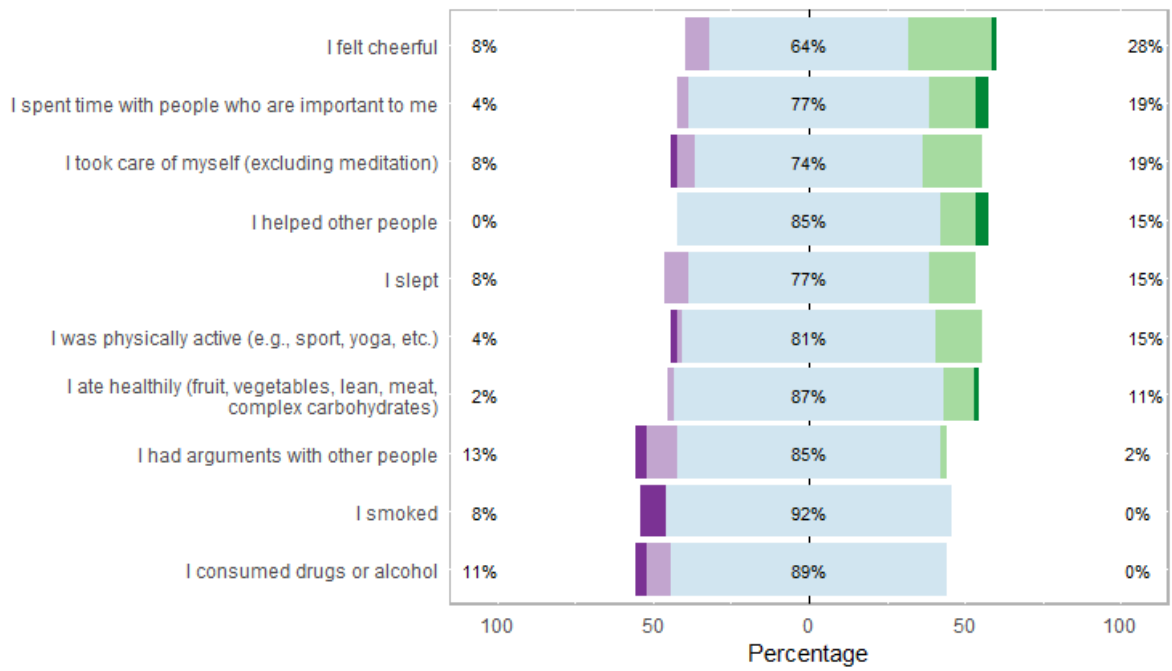
Portugal (N=90)



Slovenia (N=94)



Sweden (N=53)



Appendix 7A. Number of mentions for each code and subcodes from participants' responses regarding positive aspects of the HAND:ET programme

Code	Subcodes	Overall	AUT	HRV	PRT	SVN	SWE	Example
general appraisal of the HAND:ET system	appraisal of the programme in general	28	1	4	8	9	6	"Everything is right" (SVN)
	learning/practising something (general)	13	0	4	3	4	2	"I learned new things" (CRO)
	mixture of theory and exercises	8	0	1	1	4	2	"Good mix with theory and exercises" (SWE)
	relevance of the content	8	0	1	6	0	1	"relevance of the topic" (PRT)
	exercises in general	20	0	2	3	8	7	"Good and fun exercises" (SWE)
	theory/knowledge	24	3	4	8	6	3	"theoretical content" (AUT)
	exercises and techniques in general	24	3	0	6	12	3	"we can practise with family, friends, personally and professionally" (PRT)
HAND:ET exercises	dialogue exercises and communication exercises	4	0	0	0	1	3	
	empathic/active listening exercises	67	10	19	0	15	23	
	physical/movement exercises	11	4	1	0	5	1	
	inner exercises/body scan exercise	63	7	17	9	9	21	
trainers		27	5	9	4	7	2	"great trainers" (CRO)
atmosphere	training atmosphere in general	36	2	9	0	18	7	"a very pleasant atmosphere" (AUT)
	creation of a safe space	16	3	1	2	4	6	"Being allowed to say your opinion and being allowed to be who you really are" (AUT)
organisation		34	1	2	5	9	17	"provision of documents/books with ideas for practice" (PRT); "[b]eautiful choice of location and the good food" (SVN)
mindfulness	(incl. awareness, withholding judgement, acceptance, openness, focus on the present)	97	6	33	11	42	5	"openness towards all aspects of life and work"; "raised awareness about the importance of not judging" (CRO)
focus on self-care, wellbeing & empowerment	general appreciation of this focus	16	1	8	4	2	1	"empowering" (CRO)
	focus on the self	76	7	12	13	34	10	"personal growth" (SVN); "taking time for yourself" (AUT)
self-awareness*	focus on the teacher/school	29	1	4	7	11	6	"caring about feelings and problems of teachers" (CRO)
	(self-awareness & reflection including listening to oneself)	97	13	23	14	35	12	"attention to changes in the body" (SVN); "listening to myself" (CRO)
self-management*	self-management in general	30	3	12	5	9	1	"emotional control" (CRO)
	techniques for relaxation and calmness	65	5	7	6	35	12	"Ability to relax at work and in private life (relaxation techniques)" (SVN)
social-awareness*	empathy (without empathic listening)	26	3	7	6	10	0	"Developing empathy towards students/putting themselves in their shoes, finding the reasons for their actions" (SVN)
	communicative skills in general	13	2	2	0	6	3	"better communication" (SVN)
relationship skills*	communicative skills - listening	23	2	5	1	10	5	"listening to others, waiting in and letting them finish talking" (SWE)
	general applicability of the exercises/learned content	25	3	12	1	6	3	"understanding diversity" (CRO)
diversity awareness* practical applicability	general applicability of the exercises/learned content	34	2	5	10	11	6	"We can practise with family, friends, personally and professionally" (PRT)
	applicability in the school context	34	0	6	13	5	10	"I learned about different activities that I can use with students in the classroom" (SVN)
community & relationships	sharing experiences and exchange	52	7	12	7	20	6	"exchange among each other" (AUT)
	getting to know people, socializing, meeting other schools	36	2	8	1	17	8	"Getting to know new people" (CRO)
* SEDA competences	community and connectedness in the training group	27	4	3	1	11	8	"Lots of team and partner exercises - great community and very relaxed atmosphere" (AUT)
	connectedness and cooperation with colleagues from the own school	62	7	14	2	9	30	"Relationships with colleagues were intensified" (AUT); "increased/deepened fellowship with my colleagues" (SWE); "better cooperation" (SVN)
	improved relationships in general	10	0	1	3	4	2	"it contributes to improving interpersonal, intergroup and other relationships" (PRT)

* SEDA competences

Appendix 8.2A. Number of mentions and groups for each code and subcodes from participants' responses regarding perceived learning outcomes

Code	Subcode	No. mentions					No. groups					Example		
		Overall	AUT	CRO	PRT	SVN	SWE	Overall	AUT	CRO	PRT		SVN	SWE
self-awareness*	general enhanced awareness	15	0	8	5	2	0	6	0	1	4	1	0	"looking inside ourselves and reaching the importance of stopping and focusing on ourselves" (PRT)
	awareness of emotions	5	0	3	0	2	0	3	0	1	0	2	0	"I learned to ask myself how I feel, how certain things are affecting me" (SVN)
	awareness of body	4	0	2	0	0	2	2	0	0	0	0	2	"I have used body scanning more than I have in the past because I can feel that I need to stop for a while and feel how my body really feels. I've tried to get better at that" (SWE)
	awareness of the need for breaks	6	2	3	0	0	1	3	2	0	0	0	1	"I have become a bit more aware of when, when I started trying less out" (AUT)
	feeling emotions or stress in the body	6	1	3	0	1	1	3	1	0	0	1	1	"OK, alright. I feel that now. That the stress, yes, that I feel it inside. Oh, either. I don't know. I'm getting red in the face, or, I start to, I don't know, short or something" (AUT)
self-management*	awareness of the need for mindfulness	2	0	1	0	0	1	1	0	0	0	0	1	"Being meditative and relaxing with breaks and recovery and getting time for recovery. We see that as stress important now. Together we have become more aware of it" (SWE)
	confidence/being empowered	9	0	6	1	2	0	5	0	2	2	1	0	"I actually feel stronger in certain situations, when I encounter some new situations or problems, I feel as if I can face them more calmly" (CRO)
	self-management in general	40	2	21	3	10	4	32	1	2	3	4	2	"It helped me personally to have strategies for my wellbeing that I have been practicing" (PRT)
	getting energy/replenishing/becoming more awake	4	0	2	0	0	2	1	0	0	0	0	1	"something when you are tired and a little exhausted, it can feel like you need new energy from something else. Then maybe yoga and body scanning can be that energy instead of sugar" (SWE)
	calming down/relax	71	3	37	5	6	20	68	1	2	5	3	5	"In these moments when I need it, I can quickly use techniques to ease the situation, not requiring three days to relax, but rather using techniques that I have learned to help me in that moment" (SVN)
social awareness*	mindfulness	66	6	41	0	16	3	11	2	3	0	4	2	"and now, you just breathe for example, and I just breathe and nothing else" (AUT); "not to judge immediately. Not even myself, because I can be very critical of myself as well" (SVN)
	empathy (without empathic listening, see below)	10	0	5	3	2	0	5	0	0	3	2	0	"I have become more alert to situations within the classroom, observing my students and trying to understand the motive of some behaviours and go beyond academic teaching" (PRT)
	communication in general	6	2	3	0	1	0	2	1	0	0	1	0	"I notice when communication works well and I also notice when communication doesn't work well. And then I know relatively quickly why it doesn't work well now" (AUT)
	(empathic) listening	100	9	56	0	11	28	14	3	2	0	4	0	"to simply listen and not make any comments" (AUT); "to listen, pay attention, truly hear" (SVN)
	conflict management	9	0	0	0	4	5	7	0	2	0	3	2	"I actually experience such situations sometimes when it gets very heated and then I have started by first taking it easy and listening to what the person says before I act" (SWE)
diversity awareness*	teacher exchange and connectedness	14	0	7	0	0	2	4	2	0	0	0	2	"I think that we as a group have bonded together, yeah. I mean, our team was always good, yes. But it has taken on a completely different quality now" (AUT)
	applicability with colleagues	11	0	8	1	1	1	6	0	2	2	1	1	"So we read more and more different people from different cultures, from different professions, with different attitudes and opinions. We also know all that, of course, but this allowed us to look at it differently, somehow deeper" (CRO)
	applicability with students	6	0	3	2	0	1	3	0	0	2	0	1	"We also worked with the rest of the teachers and other staff, we created a space to do meditation once a week in the school and I noticed a difference in people's attitude in terms of being calmer and more patient. It was a fantastic experience" (PRT)
	applicability with parents	56	1	28	16	3	6	30	1	0	5	2	2	"I have learnt that even with children with special educational needs it is also possible to work and slowly reach them" (PRT)
	applicability with parents	8	0	4	1	0	3	2	0	0	1	0	1	"I have a father who I get so stressed by. Now I try to think about listening to him and taking it easy before answering" (SWE)

* NIDA competence

Appendix 8.3A. Number of mentions for each code and subcodes from participants' responses regarding positive aspects of the HAND:ET programme

Code	Subcode	No. mentions					No. groups					Example	
		Overall	AUT	CRD	PRT	SILV	SNE	Overall	AUT	CRD	PRT		SILV
general appraisal of the HAND:ET system	trainers	34	6	17	0	11	0	4	3	0	4	0	"And as far as the trainers are concerned, I found that very cool. So, they were always very well prepared, both in the practical exercises and in the theoretical abstracts, that was what I liked" (AUS)
	focus on individual / teachers	0	1	5	0	3	0	1	3	0	0	2	"But it's been good. An advantage and that it has been fun with a project where the focus is on the teachers' development." (SME)
	mix of theory and exercises	5	2	0	0	2	1	4	2	0	0	1	"Yes, the good thing was that it was both practical exercises combined with theory and I thought that was a good combination" (SWE)
	mix of online and onsite sessions	2	1	0	0	1	0	2	1	0	0	1	"[...] The in-person meetings were great, and the intermittent remote meetings served as a constant reminder that we were still together, connected" (SILV)
	active listening exercises	1	1	0	0	0	0	1	1	0	0	0	"So, now, the active listening and such, that was actually always exciting and you could get something out of it. That was in our group, was also interesting in the online sessions" (AUS)
	general appraisal of online sessions	6	1	1	0	3	1	6	1	1	0	3	"Overall, it was positive" (SILV)
	more convenient	28	10	2	10	3	3	12	2	2	5	1	"Yes, for me, of course, online is always more practical, because I have such long journeys. Because it's quite a long way." (AUS), "the online sessions made the management easier" (PRT)
	good reminder / keeping in touch	20	2	0	0	14	4	8	2	0	0	4	"Otherwise, as we discussed at the last meeting, these online trainings were fine, at least to maintain some continuity and not lose touch. Some connection is still preserved, and you build some bonds, making you feel more familiar within the group. To some extent, it's better than nothing" (SILV)
	good for meditation / relaxing exercises	9	0	2	0	3	4	6	0	1	0	2	"I thought it was very relaxing, as well as to be able to sit in a body scan or to do body exercises like that when you have finished working. It's been around three o'clock when students have just been dropped off. Then there is always the aspect of doing it digitally and physically. But no, I thought it was nice to calm and lend a bit later that after a day at work" (SWE)
	break-out rooms with colleagues	3	0	1	0	2	0	3	0	1	0	2	"[...] break-out rooms were great for me, the best part was talking to my colleagues" (CRD)
online sessions	music during sessions	2	0	0	0	2	0	1	0	0	0	1	"And I really enjoyed the music at the end. I always looked forward to it" (SILV)
	general appraisal of onsite sessions	38	5	9	1	20	3	12	3	2	1	4	"I mean, everything was just as it should be, and honestly, I can't think of anything that needs improvement, it was truly outstanding" (SILV)
	community & relationships	73	15	9	10	23	16	20	4	2	5	4	"The sessions went very well and allowed me to get to know my colleagues better" (PRT)
	exercises and techniques	51	2	21	1	13	14	14	2	3	1	4	"There seem benefits in every way related to both breathing exercises and physical activities and authentic listening and clearly that we experienced and observed through different exercises." (CRD)
	learning / practicing something	17	0	4	2	5	6	0	0	2	2	3	"I liked this new information, new research, new knowledge that we didn't have the chance to hear anywhere because even though we are teachers we don't really read, maybe I don't participate in some discussions and the trainers presented a lot of new findings that were discovered in the world and science of pedagogy." (CRD)
	atmosphere	12	3	4	0	5	0	6	2	2	0	2	"That was one thing, and it was always such a positive atmosphere. Was very, very pleasant, very quiet" (AUS)
	dynamic and practical	14	0	0	13	0	1	5	0	0	4	0	"The face-to-face sessions went very well, they were more dynamic and more practical." (PRT)
	safe space	12	0	2	3	3	3	6	0	2	0	4	"Yes, sometimes you feel uncomfortable, but that discomfort quickly transformed into relaxation and a sense of trust within the group, which allowed us to share certain things about ourselves that we wouldn't usually discuss to strangers." (SILV)
	good for disconnection / better focus	13	0	2	3	3	5	9	0	1	1	2	"In face-to-face meetings, we are focused only on the session." (PRT), "Then it was better with the physical meetings, as we got like the whole day, it's better to stay focused than too." (SME)
	organisation / well-prepared	8	3	0	0	4	1	5	2	0	0	2	"I enjoyed the fact that it was very well-structured and well-guided." (SILV)
good location (in nature/outside school)	5	0	0	0	5	0	3	0	0	0	3	"Yes, the location does its bit too, the locations were really well chosen, in nature. You drove there, it was something, you already felt the "wow" and the relaxation, and the fresh air, and that also adds to it." (SILV)	
focus on self-care, well-being & empowerment	3	0	3	0	0	0	3	0	3	0	0	"[...] Hand:ET was organized in such a way that it actually mattered to someone what you had to eat. Such care, which I experienced as well-being and the desire to make the participants really feel good, was truly prescribable to me. Very valuable." (CRD)	

Appendix 8.4A. Number of mentions for each code and subcodes from participants' suggestions for improvement of the HAND:ET programme

Code	Subcodes	No. mentions												
		Overall	AUS	CHD	PRT	SLV	SWE	Overall	AUS	CHD	PRT	SLV	SWE	
general suggestions of the HAND:ET system	preference for online, rather than offline	03	4	7	20	5	14	18	2	3	5	3	5	Example: "I would prefer more in-person sessions rather than online via Zoom." (SLV)
	theory online, convenient access	13	4	9	8	3	8	8	2	11	3	1	0	"Online sessions are more for the more theoretical part, I agree with my colleagues. When we have practical activities, we prefer face-to-face sessions" (PRT)
	flexibility in the actual content	02	3	3	1	0	5	7	2	1	1	0	3	"I wish there were more exercises that we could come up with so that they would apply to us in our work in subject teaching or classroom teaching" (CHD)
	more exchange / discussions	8	4	4	0	0	8	5	3	2	0	0	0	"That might mean, for me personally, when I think, I that I would have maybe sometimes tried to exchange ideas with others" (AUS)
	less sessions	4	1	2	0	0	1	4	1	2	0	0	1	"I think there were more exercises that we could come up with so that they would apply to us in our work in subject teaching or classroom teaching" (CHD)
	asynchronous material	1	0	1	0	0	1	1	0	1	0	0	0	"In my opinion, there should be greater concentration and a slightly longer change of content, which means fewer meetings" (CHD)
	group dynamics	8	7	2	0	0	0	4	3	1	0	0	0	"The way we work together is that we are more active when we are more active, so having more local venues could be more convenient" (SLV)
	long continuing	11	7	0	0	4	8	6	3	0	0	3	0	"That I think, just the problem with my group was, that there were no live" (AUS)
	better job (face-to-face sessions)	8	1	8	1	0	0	4	1	2	1	0	0	"I think, just the problem with my group was, that there were no live" (AUS)
	average day / whole-day	5	0	3	0	2	0	3	0	1	0	2	0	"I think, just the problem with my group was, that there were no live" (AUS)
	more sessions	6	0	2	0	4	0	4	0	2	0	2	0	"I think, just the problem with my group was, that there were no live" (AUS)
more sessions	4	0	0	0	2	2	3	0	0	0	1	2	"The only thing I would change is to add more, but I don't know if they will over."	
more sessions and lectures	4	0	3	0	0	1	2	0	1	0	0	1	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	
not appropriate jobs	2	2	0	0	0	0	1	1	0	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	
exercise allocation through the day	4	0	4	0	0	0	1	0	1	0	0	0	"I also seems to me that that part of the program is quite active, we work a little, exercises and tasks and also with exercises and listen to the teacher" (CHD)	
less body work	3	3	0	0	0	0	1	1	0	0	0	0	"So, for me, personally, less bodywork" (AUS)	
exercises too long	2	2	0	0	0	0	1	1	0	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	
more adaptation to the content	2	0	2	0	0	0	1	0	1	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	
online sessions	difficult to engage/concentrate/less easy attention	03	16	9	0	10	8	26	4	3	8	4	4	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	not adequate for asynchronous	23	7	1	6	8	5	12	3	1	3	2	3	"Since we work a lot with emotional learning and feelings, body language is an important part and eye contact and things like that, you do not get the same feeling for it digitally, but if you really want to get into understanding the teaching part, you need to sit in the same room as the teacher" (CHD)
	depends on appropriate conditions	21	1	4	0	11	6	11	1	2	0	4	4	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	less communication / interaction	24	3	5	14	1	5	12	2	1	5	1	3	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	inconvenient schedule	22	1	6	0	7	8	11	1	3	0	3	4	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	technical / repetitive	10	1	0	0	5	4	0	1	0	0	3	4	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	more theory, less practice	7	4	0	3	0	0	5	2	0	3	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	shorter exercises	2	2	0	0	0	0	1	1	0	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	longer sessions	3	0	0	2	0	1	3	0	0	2	0	1	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	small group	2	2	0	0	0	0	1	1	0	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
	less practice sessions	2	0	1	0	0	1	2	0	1	0	0	1	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)
less group work, more on self	1	0	0	0	0	1	1	0	0	0	0	1	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	
not enough time to discuss in the breakout rooms	1	0	1	0	0	0	1	0	1	0	0	0	"I think that the sessions should be included a little more, the materials, precisely because of the duration, so that it brings us back to the topic" (CHD)	

Appendix 8.5A. Number of mentions for each code and subcodes from participants' responses regarding challenges faces during the HAND:ET programme

Code	Subcodes	No. of mentions										Example		
		Overall	AUS	HRV	PRT	SLV	SWE	Overall	AUS	HRV	PRT		SLV	SWE
exercises	mindfulness/body scans	6	3	1	0	2	0	4	2	1	0	1	0	"I also found the mindfulness exercises and the body scan challenging. I found it very difficult at the beginning to focus, to calm down. However, when I managed to do it, I was really proud of myself, although it took time" (SLV)
	empathetic listening	5	0	0	0	3	2	2	0	0	0	1	1	"personally, I realized, as did many in the group, that it was difficult to listen to others. We jump into the conversation, etc. Some things you definitely become aware of again" (SLV)
	staring	2	0	0	0	2	0	1	0	0	0	1	0	"For me, it was that exercise, as I mentioned last time, when we were walking around the room, and you had to keep your gaze on someone long enough for them not to look away. I think it was a 60-90 exercise if I'm not mistaken, and that one was a bit uncomfortable because you start thinking to yourself, "Gee, have I looked long enough now? Am I staring yet? Should I move on?" That exercise was the only one that was a bit less pleasant for me, but it went through. That's maybe the one difficult task I remembered." (SLV)
	trigger uncomfortable feelings	1	0	0	0	1	0	1	0	0	0	1	0	"I will that some unfamiliar exercises, especially in the beginning, could trigger certain feelings that you may have forgotten or that were uncomfortable, but through that, you grow and get to know yourself better." (SLV)
personal	incompatibility with own beliefs	1	0	0	0	0	1	1	0	0	0	0	1	"For me, it was really hard in the beginning. I was struggling with myself. When I participate, I participate 100%, but in this case, when it was yoga and body scanning, for example, it went against my religion and my beliefs. I was in doubt whether I would participate or not" (SWE)
	prejudices	1	0	0	0	1	0	1	0	0	0	1	0	"For me, the most challenging game was during one of the live sessions, where we had three images or written sentences, and it was about prejudices, and moving steps forward [...] (SLV)
	difficult to open to strangers	6	0	0	0	4	2	5	0	0	0	3	2	"Talking for 2 minutes in hard registers, but taking 2 minutes with someone you don't know very well is really hard" (SWE)
	concentration	2	0	0	0	2	0	1	0	0	0	1	0	"[...] As I mentioned before, the level of concentration depended on the worries in my mind. The more worries I had, the harder it was to concentrate" (SLV)
	time investment vs. benefits	1	0	0	0	0	1	1	0	0	0	0	1	"It costs in scheduling before, for example, in a lot of time and commitment just to get in place. Facing and so the motivation is important, that you feel the motivation to invest the time. This is an arrangement where you might discover the profit after a few times. I understand that it can be a bit slow in the beginning and that after a while you understand the benefits. I think I have heard from several colleagues that they have seen the benefits now at the end of the project." (SWE)
	time restrictions for talking	1	0	0	0	1	0	1	0	0	0	1	0	"For me, it was difficult to talk for a specific amount of time. Sometimes there was silence and other times, we had so much to say that we ran out of time for the conversation" (SLV)
organisation	find replacement for teachers	3	0	0	0	3	0	2	0	0	0	2	0	"In our case, there was always a sense of panic when there were so many substitutions. It happened throughout the week, sometimes even more, and I think that was the maximum the school leadership allowed" (SLV)
	feasibility of regular attendance	1	0	0	0	1	0	1	0	0	0	1	0	"[...] But attending in person every month or spending a whole day away, I don't think it would be feasible for us" (SLV)