Participatory Validation of School-based Resilience Intervention in the UPRIGHT Project: Relevance and feasibility

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Abstract

The aim of the European UPRIGHT intervention project is to increase well-being and resilience for adolescents and prevent mental disorders such as anxiety and depression. International research point to the need to consider differences in context and culture in implementation of universal interventions in schools and points to a need of reducing the gap between research and practice. One of the milestones in the UPRIGHT endeavor was to use a participatory approach to meet the needs and demands of stakeholders (students, teachers, and families). This article focuses on how a participatory validation process might support the relevance and feasibility for participants of a resilience and well-being program. The findings were used to optimize the intervention in the pilot countries to guaranty a high level of commitment from participants in the execution of the program and the implementation in schools. Researchers and stakeholders involved in the UPRIGHT project initially conclude that the UPRIGHT program seems both feasible and relevant.

Keywords: Well-being, resilience, school-interventions, participatory validation, relevance, feasibility.

Introduction

How do we make interventions in schools work? How do we consider the relevance of interventions for students? Moreover, for teachers? These might be questions an educational researcher would ask him or herself before starting a research project. The theoretical or empirical foundation of a project based on sound research does not necessarily create resonance with involved participants and there is a need to consider possible solutions for closing the gap between research and relevance for practice. Hart & Heaver (2013, p. 48) argues; "there is a huge gap between what research often reports, and what people want to know and learn about when working in the messy, complexity of situated practice".

Research in well-being and resilience indicates successful outcome, when interventions are implemented in daily practice in class and in the overall school culture (Goldberg et al., 2018). As a result, a whole school approach is likely to create positive outcome due to a focus on multiple factors; student, parents, teachers as well as the school culture and community (Goldberg et al., 2018; Adi et al. 2007a, b; Wells et al. 2003).

A universal whole school approach for improving well-being and resilience interventions does not only target students at risk in order to avoid development of mental health issues or disorders, but aims at promoting mental health, well-being and resilience in *all* students (Weisz, Sandler, Durlak, & Anton, 2005).

There is a huge variation of research methodologies involved in the research of universal schoolbased interventions, which makes it difficult to produce a general overview of what works for whom, in which context or circumstances, how and even more so how to widen their impact (White, 2016; Chodkiewicz & Boyle, 2017). Furthermore, Chodkiewicz and Boyle (2017) elaborates on the gap between the theoretical approach of researchers and the actual educational settings stating that this is due to a mismatch between planned research and the real world of participants, and it is causing a possible disruption in the implementation of interventions in schools. A solid research design and evidence-informed interventions do not secure a successful implementation in schools, (Durlak & DuPre, 2008) but considerations of possible barriers (Mohammadi et al., 2010) and strategies to overcome them might add important value. According to Chodkiewicz & Boyle "Barriers hindering the seamless implementation of interventions in schools are numerous and varied across most settings" (2017, p. 76). Moreover, they argue to leave behind a one-size fits all model and create programs incorporating variation of methods and diversity among students (2017). In line with these arguments, White adds: "Each of these groups has values, ways of behaving, and accepted norms. Too many well-being programs are imposed without the care taken to consider existing values within communities before they are integrated" (White, 2016, P. 4). In their review of resilience interventions in schools Ungar, Russell and Connelly (2013) conclude that the least successful resilience programs are those that do not consider differences in school culture and contextual variations among students. Laying out the groundwork for a positive outcome for individual students and a successful implementation of changes in school culture, are important elements to consider. A universal whole school approach has demonstrated potential (Goldberg et al., 2018; Adi et al. 2007a, b; Wells et al. 2003), but to obtain a beneficial outcome, the approach needs to be grounded in existing values, context and culture (Chodkiewicz & Boyle, 2017; White, 2016; Ungar, Russell & Connelly, 2013). A possible strategy to avoid barriers and obstacles and reduce the gap between researchers and participants is to involve the stakeholders. There are numerous ways of involving stakeholders in research interventions, co-creation processes and participatory validation being among them. A co-creation process is a way of involving stakeholders by a joint effort of designing interventions according to culturally relevant aspects and needs detected. AAdditionally, participatory validation of programs and processes is a way of enhancing rigor in qualitative research (Lincoln & Guba, 1985) and to validate, verify, or assess the trustworthiness of qualitative results (Doyle, 2007). Furthermore, the participatory validation is ensuring relevance and feasibility within different school context and cultures. Involving stakeholders in a participatory process might be a way of reducing the gap between research and practice and be a potential benefit for process, outcome, and implementation by

taking into considerations school context and culture, as well as aiming to meet the needs and demands from the stakeholders. This article will focus on the process of using participatory validation of the UPRIGHT program to strengthen relevance and feasibility of the project.

The UPRIGHT Project

The acronym UPRIGHT stands for Universal Preventive Resilience Interventions Globally implemented in schools to improve and promote mental Health for Teenagers. UPRIGHT is a four-year (2018-2021) research project funded by the European Union's Horizon 2020 Research and Innovation programme under grant agreement No. 754919. The overall aim of the project is to increase well-being and resilience for adolescents and to promote mental well-being cultures in schools tested in five European countries; Spain, Italy, Poland, Iceland, and Denmark, through a co-created and participatory validated school-based intervention program (Las Hayas et al., 2019) with partners from these countries and Norway.

The UPRIGHT program is based on a theoretical framework developed by experts in the UPRIGHT consortium (Las Hayas et al., 2019). It is a whole school approach including a participatory process involving co-creation thoroughly described in the article "Co-creation and regional adaptation of a resilience-based universal whole-school program in five European regions" (Morote et al., 2020) and a participatory validation process, which is the focus of this article. Four core components: Coping, efficacy, social and emotional learning, and mindfulness form the basis of the program and each component has different skills associated – 18 skills in total. The program is conducted twice in two waves in the intervention schools; the first wave consists of interventions in class followed by activities to embed the learned knowledge and skills in the school culture. In the second wave this process is replicated with a new cohort of students ensuring participation of all students aged 12-14 years old.

Figure 1: The UPRIGHT programs theoretical framework



The universal program starts with an intensive training of UPRIGHT resilience-based skills (Figure 1) for all teacher involved in the project as well as for families volunteering. The training consists of face-to-face meetings and a supporting online platform (www.uprightprogram.eu). Then interventions with students in class are carried out by the teachers and further involves follow up activities to embed changes in the school culture. The program aims to be universal; the co-creation and participatory validation processes support the applicability not only in the five pilot countries, but also in other EU countries and beyond (Figure 2). At the same time, the program seeks to consider different contextual and cultural particularities (Las Hayas et al., 2019). This is ensured on two levels; the first level refers to a co-creation process in all countries as well as a designated chapter in the program manual describing the results obtained for the regional needs (Morote et al., 2020). The second level refers to the intervention program, which offers a great variety of materials and exercises enabling the teachers to consider local cultural and contextual matters.

Designing the UPRIGHT program

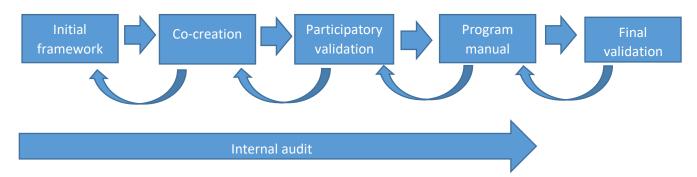
The UPRIGHT study design is a randomized control trial and involves mixed methods. In all 7380 adolescents participate in the study. 3850 students from 20 schools in total will receive the intervention and 3530 students from 18 schools in total will not receive the intervention, as they are control schools. In addition, 60 teachers participate in the study as well as 1200 families have been invited to participate in the study. All participants in the study have signed a consent sheet.

In the phase of designing the program, considerations were made on how to obtain a positive outcome in the short term of a research project and at the same time in a long-term perspective creating lasting well-being and resilience skills in individual students as well as implementing well-being and resilience in the entire school culture. In the effort to reach this goal, the intervention design included:

- A co-creation phase involving stakeholders; students, parents, teachers, and school-staff in the initial phase of designing the program (Morote et al., 2020)
- A participatory validation of the program and processes to ensure relevance and feasibility for stakeholders. Relevance in relation to importance or significance for stakeholders and feasibility in relation to being capable, suitable, and appropriate in schools.
- An internal audit for participatory products and processes.
- An inclusion of the design of a strategy of regional adaptation according to cultural differences and regional needs in the final program-manual (Morote et al., 2020.

Including a co-creation process and a participatory validation process in the project made room for an iterative process. Researchers created the initial framework; a co-creation process contributed valuable input from stakeholders. The input was then verified through a participatory validation followed by an incorporation of stakeholder feedback in the final program manual, and finally the manual was fed back to a sample of stakeholders to comment, to refine and to consider the results in a final validation. Furthermore, the participatory products and processes were audited by internal audit.

Figure 2. Steps of the participatory process to create a validated school program.



The initial framework for UPRIGHT was created by researcher within the UPRIGHT consortium based on review of existing literature. The UPRIGHT framework was presented in co-creation working group session involving groups of students, teachers and families selected by the participating intervention schools (Morote et al., 2020) ending the session by a member-checking validation. The input from the sessions was used in creating the program manual and volunteer validators from the working group session finally validated it. During the participatory process UPRIGHT researchers performed internal audit of products and processes.

Las Hayas et al. (2019) have described the initial framework for the UPRIGHT project in the article: "UPRIGHT, a resilience-based intervention to promote mental well-being in schools: study rationale and methodology for a European randomized controlled trial". Additionally, Morote et al. (2020) have described the co-creation phase and its procedures and results in the article: "Co-creation and regional adaptation of a resilience-based universal whole-school program in five European regions". This article will focus on the participatory validation process by using member checking method and the internal audit of products and processes aiming to ensure relevance and feasibility of the UPRIGHT program for the participants.

Participatory validation of the UPRIGHT program

The participatory validation process includes stakeholders' perspectives to ensure relevance, feasibility, and a high level of commitment in executing and implementing the UPRIGHT program. Furthermore, it creates methodological rigor. To obtain a successful outcome, as measured by improved well-being and resilience and a prevention of mental illness, researchers and stakeholders have validated the UPRIGHT program.

The validation phase consisted of three parts:

- 1) An initial validation of the UPRIGHT framework performed by students, teachers and families using priority boards and member-checking method concerning:
 - Contextual factors: The needs and demands of students, teachers and families in relation to the UPRIGHT components and skills
 - Cultural factors: comprehensibility of language and concepts used.

- 2) An internal audit of products and processes relating to the participatory validation and the co-creation phase conducted by an appointed researcher from each of the participating pilot countries.
- 3) A final program-manual participatory validation performed by a sample of students, teachers and families using member-checking method concerning:
 - Contextual factors: The needs and demands of students, teachers and families in relation to the UPRIGHT components and skills
 - Cultural factors; language, concepts and differences in teaching style and methods.

Member checking method is a technique for exploring the credibility of results (Birt et al., 2016) and it is used to clarify participants responses, ensure trustworthiness and to validate and verify qualitative research results (Doyle, 2007). The researcher hands back interviews or interpretation of received input and request the participants to review their input, and offers them a possibility to elaborate, to delete or to clarify on his or her position concerning the materials and the conclusions to confirm authentic representation. Member checking is "ensuring that the participants' own meanings and perspectives are represented and not curtailed by the researchers' own agenda and knowledge" (Tong et al., 2007, p. 356).

1) Initial validation: Priority Boards and member checking

The first participatory validation took place during working group sessions in the spring of 2018. Each pilot country had been equipped with a protocol on how to conduct participatory validation using member checking method to expand participants' voices. From each pilot country, the participating intervention-schools invited 10 stakeholders from each of the three groups 1) students, 2) families, 3) teachers and school- staff, and the UPRIGHT moderator held three working group sessions one for each of the groups of stakeholders. The participating students were 12-14 years old, the families in relation to the participating student, and the teachers and school-staff teaching 12-14 year old students. Each of the five pilot countries held at least three working group sessions involving at least 30 stakeholders. In total at least 150 stakeholders.

The initial validation consisted of two parts:

- a) A Priority Board with all 18 UPRIGHT components and skills
- b) A comment sheet for the UPRIGHT moderator to make a summary of the session and read aloud for the participants.

An UPRIGHT moderator presented the UPRIGHT project and the framework for the program including the four core components and their attached skills. The predesigned priority boards showing all components and skills were then explained to participants, and each participant was handed six post-it notes with instruction to place three green post-it notes at the most relevant or needed skills and furthermore to place three red post-it notes at the least relevant or needed skills. The participants shared their thoughts and ideas, discussed the relevance, and needs of the components and skills. The UPRIGHT moderator made a summary of the debate and the prioritized skills in the comment sheet, and the participants had an opportunity to elaborate, to delete or to clarify their priorities and perspectives. When all comments were noted, the moderator presented the conclusion, and the participants agreed and thereby validating the

outcome. By the end of the sessions, the UPRIGHT moderators asked for volunteer validators for the final UPRIGHT program manual.

2) Subsequent validation: Internal audit

The internal audit is an extra measure of quality control, where an appointed researcher from each pilot country have been performing audit trails of documents to validate research methods as well as the participatory process, to provide transparency by account of all research decisions and activities throughout the study. This method allows for rigor in research procedures in supporting the participatory approach.

The audit trail was established to secure a systematic procedure through which all documentation provided was studied carefully, including notes, journaling, research logs of all activities and recording the data collection chronologically (Creswell & Miller, 2000). The audit trail was performed using templates with a qualitative methodology to analyse the materials concerning respondent validity, content validity, transparency, representability, and plausibility in relation to products and processes in the co-creation process and the initial validation. The audit trail consisted of the following document: Timeline research activities, informed consent forms, templates for data collection, protocols for working group sessions, protocols for validation, checklists, field notes and memos, priority boards, common sheets and local reports. The internal audit makes it possible to do a thorough analysis focusing on strengths and weaknesses of the methods used and contributes to the quality of the results.

3) Final validation: Validation of the UPRIGHT program-manual

Based on the theoretical framework of UPRIGHT, reviews focusing on interventions with adolescents and the co-creation and participatory validation process, the UPRIGHT consortium agreed upon the structure of the UPRIGHT program and started creating the manual. The Icelandic partner created the core component - Mindfulness, whereas the Danish partner produced the other three components Coping, Efficacy and Social Emotional Learning. The responsibility of developing the associated skills was shared among different partners:

- Poland: Conflict Resolution
- Spain: Mental Health Literacy and Responsible Decision Making
- Norway: Social Resilience and Leadership
- Denmark: Cognitive Behavior Modification, Assertiveness and Communication Strategies, Self-efficacy, Growth Mindset, Emotional Resilience, Self-awareness, Self-management, Social Awareness and Relationship Skills.

In selecting relevant exercises for each skill in the program, some considerations were made:

- 1) To base the program on evidence-based exercises that had already demonstrated their effectiveness either as stand-alone interventions or as part of an effective program.
- 2) To apply exercises from established researchers and educators within the field.
- 3) To construct exercises for the UPRIGHT program from researchers and educators within the teams.

Creating an effective program, it might be tempting to use exercises that have already demonstrated a good outcome, have been published, and are used in schools today. Curriculum being taught in schools today, may not address the challenges that the students will face in the future (Fadel, Bialik & Trilling, 2017; Fullan & Scott, 2014, OECD, 2018). Therefore, merely relying on already evidence-based programs and exercises may produce the risk of being outdated and not being innovative enough. The choice for the UPRIGHT program has thus been to base the intervention program on a mix of evidence-based exercises, exercises from established professionals within the field and self-produced exercises from UPRIGHT researchers and educators. An important issue has therefore been to include a wide variety of methods from more traditional school assignments to exercises that require the use of technology, collaboration, creativity, and innovation.

Included in the UPRIGHT program manual is the use of rubrics, which is a model based on the SOLO-taxonomy (Biggs & Tang, 2011), visually displaying the learning outcome for the component and the skills. Rubrics include different learning levels (Gibson, 2017; Hook & Mills, 2011; Goodrich, 1996):

- Surface learning, i.e., the student will be able to use the new knowledge and new experiences in the same kind of situations; and
- Deep learning, i.e., the student will be able to use the new knowledge and new experiences in new situations.

The rubric allows students to choose the level of learning outcome corresponding to his or her ambitions and abilities and it engages and motivates them by increasing their autonomy.

Mindfulness is an element incorporated in each lesson throughout the program. This approach allows to learn and to apply different mindfulness practices in the school for the benefit of a focused attention and awareness but also to enhance learning of all the UPRIGHT skills. Furthermore the remaining components coping, efficacy and social emotional learning are described in the manual including their associated skills. The final section of the manual summarizes the findings of the regional adaptation for each of the participating countries, describing prioritized skills and highlighting the preferred areas of concern and methods to be considered during the lessons in each country (Morote et al., 2020).

The UPRIGHT program has been structured in 18 mandatory lessons and 6 voluntary lessons, approximately a lesson a week executed in 6 months from January to June, corresponding to 45-60 minutes per week and implemented in schools of the five pilot countries similarly.

All components and associated skills were edited by the Danish research-team to align all chapters concerning the theoretical part and the exercises related to it. The content edition consisted of a review of the structure, making the format uniform e.g., the length of each chapter and edition of the exercises for appropriateness for students aged 12-14 years.

After editing the manual, Poland, Iceland, Norway and Spain performed a quality check of the theoretical content concerning length of section, scientifically correctness, appropriateness for teachers and students, information gaps, perspective and synchronizing phrases. They also performed a quality check of all exercises concerning; quality of the exercises, age appropriateness, and variation of methods and if the exercises were evidence-based, researcher-based or made by UPRIGHT researchers or educators.

The manual for the UPRIGHT program consists of an introduction to each of the 4 components and of 14 chapters – a chapter for each of the skills. To validate the manual, each participating country was responsible for validating 2-3 chapters.

The final participatory validation of the UPRIGHT program manual was performed in early fall 2018, where representatives of students, families and teachers from Spain, Italy, Iceland, Poland and Denmark validated the content of the UPRIGHT program-manual - in relation to:

- a) The feasibility of the intervention program in class/school.
- b) The relevance of the theoretical content and the accompanying exercises.

Two students, two parents, two teachers from each of the pilot countries participated in the final validation. Each of these participants had volunteered to validate the program manual in the previous working group sessions. One or two chapters of the program manual were sent to each of them with a template for all components and skills assigned with columns for relevance and feasibility (Table 5). The participants were informed to read the chapter and consider the theoretical content and the accompanying practical exercises. They then marked their considerations in the template in relation to a green smiley for very applicable (possible to do) and very relevant (meaningful), a yellow smiley for applicable/relevant and a red smiley for not applicable/not relevant. The specific smiley (red, yellow, or green) represented to which extent it was considered applicable and relevant. Comments concerning the chapter were eventually added to the template.

Results of the participatory validation process

The results of the UPRIGHT validation process consist of, results from the initial validation of the UPRIGHT framework, results from the internal validation and finally the validation of the UPRIGHT program manual. The results from the initial validation and the final validation involves students, teachers, and parents, whereas the internal audit is made by researchers within the UPRIGHT consortium to ensure uniformity in the participatory process among the different pilot-sites.

1a) Initial validation: Priority Boards

At least a group of 10 participants from each stakeholder: students, teachers and families from each pilot-site took part in a working group session for the initial validation of the UPRIGHT framework and the analysis is based on at least 150 voices of stakeholders.

The results of a thematic comparison analysis of the skills with the highest priority among all countries and all participating stakeholders showed that the skills with the highest priority among all countries were problem resolution, self-efficacy, emotional resilience, and self-management. Mental health literacy and three skills of the Mindfulness disciplines (observation, description and acting consciously) were the skills least prioritized.

The analysis of the top three priorities of skills for the different countries is presented below:

Table 1. The ranking of top priorities among participating countries.

Ranking	Denmark	Italy	Spain	Poland	Iceland
1	Emotional Resilience	Self-Efficacy	Problem Resolution	Emotional Resilience	Self-Efficacy
2	Social Resilience	Emotional Resilience	Self-Efficacy	Problem Resolution	Self- Management
3	Cognitive Behavioral, Modification & Problem Resolution	Relationship Skills	Self- Management	Self- Awareness & Self- Management	Problem Resolution

Some of the skills were prioritized for several countries:

- Emotional resilience was among the top 3 priorities for Denmark, Italy, and Poland.
- Problem resolution was among the top priorities for Denmark, Spain, Poland, and Iceland.
- Self-efficacy appeared among the top priorities in Italy, Spain, and Iceland.
- Self-Management was among the top priorities for Spain, Poland, and Iceland.

Other skills were selected as priority only by one pilot site such as cognitive behavioral modification and social resilience in Denmark, relationship skills in Italy and self-awareness only in Poland.

The global analysis showed a very consistent prioritizing among the different countries. However, there were some opposite preferences. For example, social resilience was a skill, which was highly prioritized only among the Danish participants while it was one of the least prioritized skills for Italy and Spain.

To illuminate if the differences in the priorities among countries were less significant than differences between groups - students, families and teachers - the top priorities by stakeholder and by pilot countries were analyzed.

Table 2. The ranking of top priorities among stakeholders.

STUDENTS	FAMILIES	TEACHERS
DENMARK	DENMARK	DENMARK
1. Problem Resolution	1. Emotional Resilience	1. Cognitive Behavioral
2. Social Resilience	2. Accepting without	Modification
3. Emotional Resilience,	Judging	2. Growth Mindset
Leadership, Self-	3. Social Resilience,	3. Emotional resilience
Management	Social Awareness,	
	Relationship Skills,	
	Acting Consciously	

1TALY 1. Emotional Resilience 2. Mental Health Literacy 3. Self-Efficacy	ITALY 1. Relationships Skills	 Self-Efficacy Growth Mindset Social Awareness
SPAIN 1. Problem Resolution 2. Self-Efficacy 3. Self-Management Accepting without Judging (Mindfulness)	SPAIN 1. Self-Efficacy 2. Emotional Resilience 3. Problem Resolution	 SPAIN Cognitive Behavioral Modification Growth Mindset Emotional Resilience
POLAND 1. Emotional resilience 2. Leadership 3. Problem resolution, Self-Awareness, Self-Management	POLAND 1. Emotional Resilience 2. Responsible Decision Making	POLAND 1. Emotional Resilience 2. Growth Mindset 3. Self-Management
 ICELAND Problem Resolution Self-Efficacy Self-Awareness, Self-Management 	ICELAND 1. Self-Efficacy 2. Emotional Resilience 3. Problem Resolution, Self-Awareness, Self-Management	ICELAND 1. Self-Management 2. Self-Efficacy 3. Growth Mindset, Social Awareness

The students' results showed discrepancies; not all five pilot countries agreed upon prioritizing the skills. However, problem resolution and self-management were categorized as top priorities in four countries: Denmark, Spain, Poland, and Iceland. For the skills emotional resilience and self-efficacy; three countries agreed upon and considered these skills as top priorities. Denmark, Italy, and Poland coincided and ranked emotional resilience as very relevant while Italy, Spain and Iceland agreed on self-efficacy. Leadership was among the top priorities for Denmark and Poland, and self-awareness was among the top priorities for Poland and Iceland. Some skills were prioritized only by one country: social resilience by Denmark, mental health literacy by Italy, and accepting without judging by Spain.

The families' results demonstrated that not all five pilot countries prioritized the skills similarly. Among the families, there were a much greater diversity among the top priorities. Emotional resilience was highlighted as top priority by four countries: Denmark, Spain, Poland, and Iceland. Only another three skills were chosen as highly relevant by two countries: Relationships skills for Denmark and Italy, self-efficacy for Spain and Iceland and problem resolution: Spain and Iceland. The rest of the top priorities were assigned to only one country.

The teachers' and school-staff's results pointed out that all five countries agreed upon prioritizing the skill growth mindset as a top priority. Emotional resilience was among the top priorities for three countries: Denmark, Spain, and Poland. For the rest of the top priorities only two countries agreed

upon prioritizing the skill: Cognitive behavioral modification for Denmark and Spain, self-efficacy and social awareness for Italy and Iceland and self-management for Poland and Iceland.

The overall analysis showed that the skills; problem resolution, self-efficacy, emotional resilience, and self-management were among the skills with the highest priorities among all countries. Mental health literacy and three of the mindfulness disciplines (observation, description and acting consciously) were among the skills least prioritized. Students in the five countries did not agree upon prioritizing the same skills. Problem resolution and self-management were ranked as top priorities in four countries, while emotional resilience and self-efficacy were selected by three countries. Families in the five countries showed even bigger diversity among the top priorities in skills, yet emotional resilience appeared to be of high relevance in four countries. Teachers and school-staff agreed that growth mindset was a top priority for the students. Additionally, emotional resilience was ranked as very relevant in three countries. For the rest of the top priorities, only two countries agreed upon these preferences.

The analysis of the priorities among countries as well as the different groups of stakeholders shows both similarities and differences in needs and preferences, which highlights the need to consider school culture and context.

1b) Initial validation: Member checking

After finalizing of priority boards in the working group session, the researcher in each pilot country did a review of the session and of the conclusion made by the groups of participating students, teachers, and families. This process allowed participants a possibility to determine the accuracy of the review, to delete or to elaborate statements. If the participants affirmed that, the review reflected their views, feelings and experiences accurately and completely, the validation was credible.

For most of the participants in the working group session, it was hard to prioritize among the skills and to interpret each skill separately from one another, understanding possible overlaps and connections between them and as a result; they found all of them relevant and important.

The students were pleased to have the possibility to express their opinion and to be taken into consideration. They found all skills relevant and important. The students generally asked to be accepted, empowered and to have their perspective valued. They suggested the UPRIGHT program to have a great variety of methods and exercises e.g., teamwork, games, exercises including physical exercises, indoor/outside activities, and computer-based activities; videos, play and problem-solving. According to the students, learning needed to be joyful and fun. The students finally validated the session's main findings and conclusions.

The families found all skills very important, and the prioritizing was difficult. In one pilot country, the families commented on how to define resilience and to agree upon it. In addition, to consider that the students might not all be at the same level of resilience, and the families asked for an individual focus as well as a collective focus in the UPRIGHT program. In another pilot country, the families suggested that the UPRIGHT platform for families should be online, dynamic, visual, easy, engaging and providing feedback. They also found face-to-face meetings important. Finally, in a third pilot country, the families expressed concern about the overlap between main themes and

suggesting that the project should not be too complicated or academic. They hoped that the project would be successful, but they had some doubts as well. They stated the importance, that all families and their children realized how they could benefit from UPRIGHT to see the relevance.

The teachers found all skills highly relevant and had also difficulties in prioritizing among them. They recommended the UPRIGHT program to involve families, to be an innovative and creative program, and support collaborations with key opinion leaders (KOL) and school psychologists. The teachers had a positive mindset towards UPRIGHT and were keen to participate. The teachers finally validated the session's main findings and conclusions.

The initial validation of the UPRIGHT framework concluded that all components and skills were considered relevant for all stakeholders. Especially the students expressed gratitude for having their opinion considered.

2) Internal Audit Trail

An appointed researcher from each of the participating countries performed an internal audit trail based on documents of products and processes from the working group session and initial validation and documents from the participatory validation process to find strengths and weaknesses to consider in creation of the intervention program.

In the following, the results of the audit trails are summarized.

Table 3. Initial validation by member checking

General comments	Strengths	Weaknesses
	 Participants had 	 Limited time for
	the opportunity to	member checking:
	verify that the	Some countries did
	research team was	not perform the
	accurately	member checking
	collecting their	activity because of
	information. This	lack of time. Others
	reduced bias in the	had to do the
	collection of	activity very
	information.	quickly.
	 The program was 	
	very relevant to all	
	stakeholders.	
	 The working 	
	groups with the	
	three stakeholders	
	in five different	
	countries provided	
	excellent input	
	from stakeholders	
	to design the	
	content and the	
	implementation of	

	the UPRIGHT program. • Face to face meetings were an excellent methodological approach that helped the UPRIGHT research team to foresee whether the UPRIGHT program would be accepted by future users (students, teachers and families).	
Respondent validity in working groups session • Are the local reports in alignment with the materials from working group sessions?	 Yes, all countries used the local reports in alignment with the materials. Responses from the participants were comprehensive; there were variety in respondents and responses. The templates from each participating workgroup were very complete and the amount of information gathered was rich and coherent. This ensured the respondent validity. 	 Time was scarce for letting teachers, students and families talk and tell about their own life and worries (their own voice). Time for open discussions might have given rise to topics not covered by UPRIGHT. The group sessions lasted 2 hours and there was not anymore time available. We (UPRIGHT consortium) did not perform any previous and internal check to test whether all moderators of the working groups had the same understanding of the skills. This may

		have affected the process of the working groups and the reporting of the local reports. • Adapting the definitions of UPRIGHT constructs and attributes to simple language to be understood by lay audience might have modified the original meaning of the concept.
Transparency in local reports • Are the argumentations and comments clearly stated and easy to follow?	 Yes, reports were written in a clear way. Reports were long and detailed. Reports had literal quotations reflecting the idea to convey. 	None found
Representability in local reporting • Do the local reports represent all stakeholders in UPRIGHT? (students, families, teachers, schoolmanagers)	 Yes, all pilot countries carried out working groups with students, families, teachers and school-staff. The number of participants per stakeholder was representative for a qualitative methodology. Before implementation of the working groups, a selection of eligibility criteria was set, so only representative participants were 	 Gender representativeness: In families and among teachers and school- staff more women than men were participating in working groups. Other gender identities were not explored. Diversity in family types (monoparental, same sex couples etc.) was not explored. Participants did not report specific disabilities.

	invited to take part. During working groups suggestions were made for UPRIGHT to be an inclusive programme (embracing diversity).	
Plausibility ■ Is the argumentation in	 Yes, the argumentations in the analyses and 	None found.
the local reporting plausible?	conclusion of the reports were plausible since	
	they were similar to what the participants reported in the working groups.	

Table 4. Subsequent validation: Document analysis for audit

	Strengths	Weaknesses
 Informed consent General comments Are the informed consents representing all intervention-schools? All participants? 	 Ethical norms were followed to protect the confidentiality of the identity and opinions of participants. It was confirmed that all participants from all sites attended voluntarily to the sessions. In case that audio recording was needed, signed informed consent forms were collected from the three groups. 	Due to language barriers, it was not possible to test whether consent forms for all stakeholders/participants were signed in all countries. However, all ethical measures were taken to comply with any relevant data protection norms.

	All groups reported to have used consent forms.	
Adaptation and validation protocol and report	 The priority board had a very attractive layout, and participants found it very easy to understand. Content-validity between aim of protocol and report was very high. The information collected in the working groups was used for the elaboration of the report. The protocol and report were highly transparent. The methods used were well described and easy to follow. The reporting represents all stakeholders. The argumentations in analyses and conclusions were highly plausible. 	Participants, in general, had difficulty picking only three skills as priority since they considered all of them important.

The internal auditors conclude that the products and processes of the co-creation phase as well as the initial validation of the UPRIGHT framework has been performed with a high quality in transparency, plausibility, and validity. Concerning representability; five pilot countries from

different parts of Europe are represented from various demographic and socio-economic areas. The school sizes vary as well as the schools' locations in cities, small towns, and more rural areas. Concerning gender representativeness: In families and among teachers and school-staff more women than men were participating in working groups. Diversity in family types (mono-parental, same sex couples etc.) was not explored. Participants did not report specific disabilities.

When determining validity in qualitative inquiry, the primary lens has been the one of the participants in the UPRIGHT project. This approach has come to live through a series of validity procedures (Creswell & Miller, 2000). The internal auditors conclude that the overall aim of the UPRIGHT project, to create a program of validity by means of participatory validation has been successful. The information gathered in the different workshops was obtained under consistent conditions ensuring reliability. The data-collection was acquired simultaneously and contained a high degree of representability contributing to possible generalizability of results.

3) The final program-manual validation

In the introduction, the UPRIGHT framework was presented consisting of four core components: Mindfulness, coping, efficacy and social emotional learning. Mindfulness is embedded in the entire program, and therefore it is only presented in a component introduction and not presented in a specific skill chapter.

Appointed reviewers – validation volunteers - from each group of stakeholders; students, teachers and families in each pilot-country validated the program manual in relation to feasibility and relevance. The validation-volunteers consisted of 6 students within the targeting age-group of UPRIGHT, 9 teachers and 5 parents. Each participant rated the feasibility and relevance of each designated chapter with a green smiley for very feasible/very relevant, a yellow smiley for feasible/relevant, a red smiley for not feasible/not relevant.

The results from the analysis of participatory validation made by 20 representative stakeholders is show in the table 5 below.

Table 5. Joint display of the data from the final validation of the program.

SKILLS	STUDENTS		TEACHERS		FAMILIES	
	Feasibility	Relevance	Feasibility	Relevance	Feasibility	Relevance
Cognitive Behavioral Modification	©	©		© ©	\odot	
Conflict Resolution	<u>=</u>	-			O	<u>·</u>
Assertive Communication	\odot	\odot	\odot	© ©	<u>=</u>	<u>=</u>
Mental Health Literacy	O	\odot	\odot	\odot	O	O

Self-Efficacy	\odot	\odot	\odot	\odot	\odot	\odot
Growth Mindset			\odot	\odot	\odot	\odot
Emotional Resilience	<u>:</u>					
Social Resilience	\odot	\odot	\odot	\odot	\odot	\odot
Leadership	\odot	\odot	<u>:</u>	\odot	\odot	\odot
Self-awareness	<u>:</u>	\odot	\odot	\odot	<u>:</u>	\odot
Self-management		\odot	\odot	\odot	\odot	\odot
Social Awareness	\odot	\odot		$\odot \odot \odot$	\odot	\odot
Relationship Skills	$\odot \odot$	$\odot \odot$			\odot	\odot
Responsible Decision Making	\odot					

The display shows that the group of students rated the UPRIGHT program with 30 green smileys, 3 yellow smileys and 1 red smiley. The teachers rated the UPRIGHT program with 47 green smileys, 5 yellow smileys and 0 red smileys. Finally, the parents rated the UPRIGHT program with 13 green smileys, 1 yellow smiley and 0 red smileys. In summary 90 green smileys, 9 yellow smileys and 1 red smiley were obtained during the final program-manual validation. Thus, it is convincingly concluded that the UPRIGHT program and its manual is considered very feasible and very relevant for all stakeholders.

From Italy, the validation-volunteers commented that some exercises were difficult to understand and remarked not to make UPRIGHT exercises or assignments part of homework. The student-volunteer doubted that everyone would talk about his or her feelings or opinions freely. They also suggested how to apply the skills and exercises directly in different subjects. Last, but not least, participants pointed out the importance of the teachers learning the program to be role models and teach it effectively.

From Spain, the validation-volunteers commented that a classroom with students is not a protected environment, and that students can be vulnerable. It is important to be careful when asking them to express something aloud. In terms of language use in program, participants expressed the relevance of the program.

From Denmark, the validation-volunteers considered that, in general, exercises were considered very good and added some suggestions to improve or extend some of them. They noted that all stakeholders understand the importance and necessity of the program. Participants emphasized that it is good to be active and try the exercises out for themselves, doing exercises once a day rather than just once a week, with regular repetitions to remind them. A few exercises were considered too difficult for some students, but most exercises are feasible and easy to understand. Participants commented that it is not possible to do all exercises corresponding to a skill in a session of 45 min.

From Iceland, the validation-volunteers were concerned that some peers may feel vulnerable towards expressing their own feelings and experiences, so they may have an option of using examples. Some of the materials appeared to be a bit too complex and it was suggested to lighten the heavy theory. The content was considered interesting, relevant, and important but in need of simplification. Participants appreciated the idea of including families in the teenager's projects and opening discussion between families and teens was seen as a huge opportunity.

From Poland, the validation-volunteers commented that, in some exercises, students might have difficulties speaking in plenum without preparation. A good solution would be to let them prepare their sentences first on a piece of paper.

The aim of the three phases of validation; initial validation in working group sessions, internal audit securing participatory validation and final validation of the UPRIGHT program manual is to involve stakeholders in the co-creation and co-design of the program.

Based on the feedback received in the participatory validation process, and in to close the gap between research and practice making a project feasible and relevant for stakeholders the UPRIGHT program needs to consider:

The necessity of making all stakeholders involved in the project understand the relevance and importance of the UPRIGHT program is crucial. A simplification of theoretical explanations in content and in some of the exercises might be needed for teenagers to fully understand the concepts and skills. Furthermore, it is important that the teacher is a role model for UPRIGHT engaged in the delivery of well-being and resilience knowledge and skills. The teachers also need to consider a prudent approach when asking students to express personal feelings and thoughts aloud in class.

Discussion

How do we make interventions in schools work? How do we consider the relevance of interventions for students? Moreover, for teachers? These questions were introduced at the beginning of this article as they might be questions an educational researcher would ask him or herself before starting a research project in schools. As stated in the introduction, research points to the need of closing the gap between research and practice. Previous research suggests that a whole school approach taking local culture and context into account might be a possible answer (Goldberg et al., 2018; Adi et al. 2007a, b; Wells et al. 2003). By including a participatory validation process in the UPRIGHT program design, we found that it was possible to comply with the aim to build a bridge between the UPRIGHT theoretical framework and the UPRIGHT program implemented with feasibility and relevance in schools.

The UPRIGHT project had an agenda of co-creating a well-being and resilience program for teenagers – as a whole school approach - that is highly relevant, useful, and meaningful not only to the teenagers themselves but also for their teachers and parents. This led the UPRIGHT research-team on a quest for a participatory approach to co-create and implement a program in accordance with the participants and stakeholders. The first part of this quest was a co-creation process involving stakeholders; students, parents, teachers, and school-staff (Morote et al., 2020). The second part of this quest was to use a participatory validation process to secure feasibility and

relevance of the UPRIGHT program, and to use an internal audit of research procedures in support of the participatory approach.

Firstly, the co-creation methodology was an excellent source of information to design the UPRIGHT program. Important cultural differences as well as differences in opinions, adolescents' psychosocial concerns, and methodologies for the implementation of the UPRIGHT program among pilot site were considered to design UPRIGHT's regional adaptation strategy and the methodology proposed for teachers' implementation of the program (the program manual). The co-creation process formed the base for an adaptation of the core resilience program into a feasible and relevant program for all stakeholders by considering similarities and differences in regional and cultural needs for - and among stakeholders (Morote et al., 2020)

Subsequently, the UPRIGHT core resilience program was an excellent foundation for a participatory validation process with stakeholders. The initial validation using priority boards and comment sheets gave important information about importance and relevance of components and skills. The highest priority among all countries were problem resolution, self-efficacy, emotional resilience, and self-management, but the analysis of the priorities among countries as well as the different groups of stakeholders shows both similarities and differences in needs and preferences of skills, as well as preferences in teaching methodology.

This highlights the need to consider school culture and context. Furthermore, it underpins the argument that there is not a one size fits all model for a school intervention aimed at promoting mental wellbeing and prevent mental disorders by enhancing resilience capacities in youths, through a holistic approach addressing early adolescents, families, and education professionals, creating a mental wellbeing culture in schools.

A key consideration is that many of the participants in the working group session found it difficult to prioritize among the skills and to interpret each skill separately from one another, and to understand possible overlaps and connections between them. The UPRIGHT moderators in the working group sessions had not formerly discussed if they themselves had the same definition and understanding of the skills. This may have affected the process of the working groups and the participants' ability to prioritize among the UPRIGHT skills. A possible explanation could also be that all UPRIGHT skills are equally important and relevant.

The initial participatory validation process formed the adaptation of the core resilience framework into a feasible and relevant intervention for all stakeholders. Consequently, by considering the detected similarities and differences in regional and cultural needs for - and among stakeholders (Morote et al., 2020). In the final participatory validation, volunteer-validators from each country and from each group of stakeholders validated the manual for the UPRIGHT intervention program. 90 green smileys for very feasible and very relevant, 9 yellow smileys for feasible and relevant and only 1 red smiley for not feasible and not relevant were obtained during the final program-manual validation. This led to a conclusion that the UPRIGHT program and its manual is considered very feasible and very relevant for all stakeholders.

The UPRIGHT project intended to make a well-being and resilience program for teenagers work well with a positive outcome and a firm implementation in school culture by using a whole school approach, using a co-creation process to design the intervention program and to use a participatory

co-creation and validation processes to secure feasibility and relevance for stakeholders. The aim was to create a universal program for all students and at the same time taking context and cultural aspects into account. Comparing the aim and intentions of UPRIGHT with the results from the participatory validation led to a series of questions.

The first question that arose from the process addressed the differences in agreement or disagreement of the *importance of doing school-based interventions on well-being and resilience with teenagers* across different countries in Europe. The five countries participating include Iceland distancing itself geographically from the European continent in the Atlantic Ocean far north; it also includes Denmark and Poland in the northern part of the European continent as well as Spain and Italy in the southern part of the European continent. Besides the geographically wide-spread area, the pilot schools also include areas from cities to urban or rural areas. Despite, these geographic as well as socio-economic differences, all participants and stakeholders agreed upon the relevance and the need of a well-being and resilience-program for teenagers in schools. They also agreed upon the relevance of the different UPRIGHT components and skills. The disagreements were found in the priority of the skills, even though these are not caused by geographic and socioeconomic differences but seem to be caused by the individual participants or the group of participants in each site (see Table 6).

The next question that arose from the process addressed the differences between the three groups of participants and stakeholders: students, teachers and families. Are these differences caused by differences among these groups? Once again, there does not seem to be alignment among students across Europe, nor among teachers or families. The differences seem to be caused by individual participants' or the group of participants in each site.

For both questions, it is necessary to consider possible different knowledge and understandings of the skills among the participants, but the analysis does not reveal consistency in lack of knowledge or lack of understanding based on country or based on group of stakeholders.

The final question that arose from the process addressed the feasibility and the relevance of the UPRIGHT program among participants and stakeholders. The large number of green smileys for relevance and feasibility of the program clearly demonstrates that despite the differences in prioritizing among the different components and skills of the UPRIGHT program, all participants and stakeholders agree upon the relevance and feasibility.

In regard to previous research of positive outcome of school based intervention, using a whole school approach (Goldberg et al., 2018; Adi et al. 2007a, b; Wells et al. 2003), and the necessity of considering local context and culture (White, 2016; Chodkiewicz & Boyle, 2017), the UPRIGHT project seems to be on the right track of creating sustainable positive outcome in relation to well-being and resilience for individual student and the school community.

Ongoing evaluation of the UPRIGHT research project on the effectiveness of the intervention will reveal whether initial attempt to engage, empower and create ownership for participants by involving them directly in the initial research process will lead to a positive intervention process, a positive outcome, and a positive change of culture.

Conclusions

The participatory approach of co-creation and validation used in the initial research process of the UPRIGHT project has clearly demonstrated that stakeholders consider the UPRIGHT program as a highly relevant and feasible well-being and resilience program for teenagers. The aim to be a universal program has been achieved even considering cultural context and needs.

In summary 90 green smileys (very feasible/very relevant), 9 yellow smileys (feasible/relevant) and 1 red smiley (not feasible/not relevant) were obtained during the final validation of the UPRIGHT program convincingly evaluating the program relevant and feasible for stakeholders.

The overall conclusion from the participatory validation process is that the three groups of stakeholders – students, teachers, and families - in all the five countries bid a warm welcome to the UPRIGHT program. All stakeholders recognised the necessity of improving resilience skills and mental well-being knowledge as a valuable asset for their lives. Yet, it is important that participants have a clear understanding of the aims and scope of the project to feel confident in providing reliable information. Mental health is still considered a rather personal matter in many cultures, and while the sources hereof are in many ways social, personal data remains personal, with all the requirements for protection hereof. Furthermore, the UPRIGHT project demonstrates high quality research. The voices of the stakeholders have been taken into account while creating the program and stakeholders confirm the accuracy, the credibility and the validity of the program according to regional and cultural needs and the needs of the different groups of stakeholders, students, teachers and families.

The participatory validation of the UPRIGHT program has been ambitiously ensuring the participants' and stakeholders' opportunity to affect the program assuring commitment and ownership of the project. The UPRIGHT program is thus a universal program adaptable to the needs of different stakeholders in different countries

Furthermore, the participatory validation process of the UPRIGHT program was started with the work conducted in 2018. Since then, it has been continued during interventions in schools by means of surveys for teachers by the end of the teacher-training course, implementation monitoring templates and user validation of activities on the UPRIGHT platform. All of it making it possible to further adapt and refine the program from the first wave to the second wave of interventions in schools with the needs of the stakeholders.

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Ethical statement

The project was approved by the institutional review boards of the countries. UPRIGHT researchers, in collaboration with schools' professionals, obtained signed informed consent forms from all participants, including teachers, families (legal tutors also signed consent forms for adolescents' participation), and adolescents (12–14 years of age signed assent forms) before the study data was collated. The instruments used (surveys and participatory sessions) have procedures for verification of participants' consent (described in methods section). List of ethics committees (additional information):

- Spain: Research Ethics Committee for Medicines in Euskadi (Basque Country), Spain. Resolution No. PI2018089.
- Italy: APSS (Azienda Provinciale per i Servizi Sanitari) Ethics Committee in Trento, Italy. Resolution No. 5/2018.
- Poland: Bioethical Commission at the Lower Silesian Medical Chamber: Resolution No. 3 / BNB0 / 2018.
- Denmark: According to the National Ethics Committee, the project is not required to be notified. The Ministry of Higher Education and Science has published a Danish Code of Conduct for

Research Integrity which contains some ethical principles and guidelines. At Aarhus University we adhere to this framework, amongst others.

• Iceland: The National Bioethics Committe. Resolution No. VSN-18-122.