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OVERVIEW OF THE PROGRAM

Colors of Kindness is a social emotional learning (SEL) program created by Amal Alliance, designed specifically for emergency and humanitarian settings. Colors of Kindness focuses on six areas of SEL: self-awareness, self-management, creativity, social awareness, relationship building, and responsible decision making. The goal of the program is to improve student SEL skills as a pathway to promote learning and wellbeing outcomes for students facing extreme adversity.

Colors of Kindness has a unique model designed to be low-cost and scalable even in hard-to-reach contexts: SEL content is delivered through a series of weekly podcasts and a digital workbook. These materials are accessible to teachers through an open-source app and learning management system called Kolibri, developed by Learning Equality, which works offline on low-cost devices and provides real-time data that tracks teachers' use of each module.

WHY SEL?

Children's social, emotional, and behavioral skills are linked to a wide range of outcomes – including academic achievement, mental health, and lifelong well-being [1]. Research indicates that classrooms function better and students learn more when children have the skills to express and manage emotions, focus attention, persist in the face of difficulty, and build relationships and resolve conflicts with peers and adults [2].

SEL is especially relevant for low-income children, children who enter school with academic or behavioral problems, or who face toxic stress and/or trauma [3]. High-quality SEL programming has been shown to improve outcomes for all students, with the largest gains among students who face the highest number of risks [4].



STUDY DETAILS

In Spring 2022, Amal Alliance and researchers at the Harvard EASEL Lab designed a quasi-experimental study to explore implementation and impacts of the Colors of Kindness program in Greece. Approximately 400 students participated in the study. Students were from 26 classrooms (taught by 23 teachers; some teachers taught multiple classrooms) across nine different sites. Three sites were schools that are part of the formal education system run by the Greek Ministry of Education. Six sites were run by NGOs and include refugee camps, shelters, and community centers that primarily serve refugee children. NGOs that participated in the study were ARSIS, Danish Refugee Council, Dråpen i Havet, Ladies Union of Drama, Lifting Hands International, and Second Tree. Learning Equality served as the Education Technology Partner, by making the digital workbooks available on Kolibri, supporting data collection for M&E, and training teachers on the learning platform.

Teachers participated in a 2-day training at the start of February, led by the Colors of Kindness team. The training introduced teachers to SEL and wellbeing, reviewed specific content across each of the six skill areas, and demonstrated how to use Kolibri to track progress over time. The study took place over 16 weeks, from February through June 2022.

On average, in our sample:

- Each classroom had 15 students;
- 10 students per classroom don't speak Greek as the primary language at home;
- 8 students per classroom were identified by teachers as displaced or homeless; and
- 6 students per classroom were performing below grade level at baseline.

WHAT DATA DID WE COLLECT?

Throughout the study, we collected data on program implementation and student attendance. Specifically, we documented the number of weeks that students participated in the program, how many Colors of Kindness lessons were completed by teachers/classrooms, and the number of students absent in each class. This allowed us to determine overall exposure to the program (i.e., the "real" dosage that students received): the average number of lessons students in each classroom were exposed to, based on number of lessons completed by teachers and student absenteeism rates.

Teachers also completed an assessment of student SEL skills at the beginning and end of the study (e.g., baseline and endline). The assessment is a 19-item survey developed by Amal Alliance and EASEL Lab and is closely aligned to skills taught in the program. Teachers completed this survey for each student, using a 5-point scale to indicate how strongly they agree or disagree with each statement (e.g., this child usually knows how they are feeling and why). Students in the NGO classrooms also completed a self-report version of this assessment at the beginning and end of the program.

In addition, teachers participated in focus groups at the end of the study. Teachers were invited to discuss their experiences with the program, give feedback to program developers (via open-ended questions as well as a survey on tablet/Kolibri use), and describe any changes they observed in their own teaching and wellbeing and in students' SEL skills and wellbeing. In some cases, school principals and families/caregivers also joined the focus group sessions.

Finally, we documented salient events – such as decisions made by NGOs and the Greek Ministry of Education and field updates from program staff – in order to provide details about the conditions "on the ground" and how they affect the study and implementation of the program. Thus, we complemented a traditional pre/post study design with a case study method, enabling our team to explore real-world conditions that may be present in other education and refugee contexts and therefore important to consider in future efforts.





First, we learned that absenteeism and mobility are major challenges for refugee education in this context. A significant number of students left (or entered) the program/school settings over the 16-week study period. Specifically, 399 students participated at baseline, and only 303 students participated at endline; of the 303 at endline, only 274 have matching data (i.e., were present at both baseline and endline). In addition, two teachers left their teaching positions during the study period, and therefore didn't complete the Colors of Kindness program or the endline student assessments. The implication for students is they have less opportunity to learn and build skills, because they have limited and/or interrupted exposure to the Colors of Kindness program. The implication for the study is a smaller sample to compare beginning and end of program SEL scores, making it difficult to measure the full effects of the program as it was intended to be used (16 lessons).

Second, we learned that data collection is a significant challenge for this context. The research team originally proposed a triangulated approach to assessment: a teacher survey, a parent survey, and a student survey of SEL skills, in order to account for potential reporter bias. In conversations with the Greek Ministry of Education, Amal Alliance learned that a parent survey was considered an insurmountable burden because parents are difficult to reach in this context; as a result, we narrowed our assessment plan to teacher and student surveys, both of which could be completed inperson during school hours using the Kolibri app. Ultimately, the Ministry of Education decided not to participate in the student survey and one of the NGOs did not administer the student survey; as a result, only a subset of the participating schools (5 out of 9 schools) administered the student survey. The implication for the study is a smaller set of assessments from which to draw conclusions about student SEL skills and identify potential changes over the study period.

These challenges are common in refugee, humanitarian, and crisis-affected contexts. While they pose threats to the ability to design a robust evaluation and accurately measure program effects, some clear findings emerged from the study.

SPRING 2022 MAIN FINDINGS

IMPLEMENTATION OF COLORS OF KINDNESS IN GREECE

- The majority of teachers in this study completed most or all of the lessons
 - 50% of the classrooms completed all 16 lessons
 - 75% of the classrooms completed 15 lessons
 - o The lowest number of lessons completed was 9
- Teachers in NGOs tended to complete more lessons than teachers in formal schools; the average completion rate in NGOs was ~1 lesson more (15.8) than in formal schools (14.4)



STUDENT EXPOSURE TO THE PROGRAM

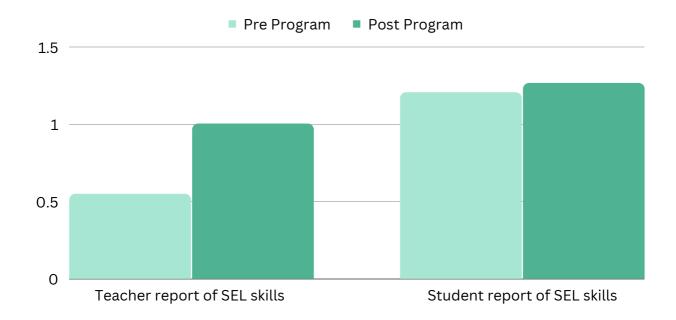
- 81% of students completed the program (out of 303 students at endline, 81% of these participated in at least 13 of 16 weeks of implementation)
- 15% of students participated in half or less of the program. This illustrates how much absenteeism and mobility is in the sample. These students were part of the study in February, but they were absent frequently or they moved or left classrooms/schools for various reasons, resulting in 8 weeks or less of program exposure.
- On average, across all 23 classrooms, students were exposed to ~11 lessons

STUDENT ABSENTEEISM

- Across all 16 weeks, on average, 25% of the students were absent from their classes when the program was delivered:
 - In 50% of the classrooms, absenteeism rates were at least 23.4%
 - 75% of the classrooms had up to 33% of students absent during program implementation
- There was a large range of absenteeism among classrooms: lowest at 2.4%, highest at 65.9%
- NGOs had significantly higher rates of absenteeism compared to formal schools; average rates of absenteeism in NGO classrooms were 33.5%, compared to 16.7% in formal schools.

STUDENT SEL SKILLS

- Teachers reported a substantial increase in student SEL skills from baseline to endline. On average, student scores on the SEL assessment increased from 0.55 to 1.004. These changes are positive and statistically significant. The effect size is very large = 0.80 (n=256).
 - Regression models indicate that program completion is associated with higher teacher-reported SEL scores at endline, controlling for baseline scores.
- Students reported a small increase in their own SEL skills from baseline to endline. On average, student scores on the self-report increased from 1.207 to 1.267. These changes are not statistically significant. The effect size is small = 0.16 (n=82).
 - At baseline, students tended to rate themselves high on the self-report, so there wasn't much room for growth/improvement between baseline and endline (e.g., possible ceiling effect).
- Lesson exposure (i.e., the number of lessons completed, weighted by student absenteeism) is also associated with slightly higher SEL scores at endline, controlling for baseline scores.
 - These findings are important, because they indicate that more exposure to the Colors of Kindness program is associated with greater gains in SEL skills; suggesting that the gains observed from baseline to endline are not simply due to typical development and may be driven, at least in part, by the Colors of Kindness program



FEEDBACK ON KOLIBRI AND THE FORMAT OF MATERIALS

Teachers had mixed responses to a survey about the use of Kolibri in their classrooms.

- With respect to tablet use:
 - 8 teachers responded "very helpful"
 - 11 teachers responded "somewhat helpful"
 - o 2 teachers responded "not at all helpful"
- With respect to the Kolibri learning management system:
 - 10 teachers responded "very helpful"
 - 10 teachers responded "somewhat helpful"
 - 1 teacher responded "not at all helpful"

In focus groups, teachers described mixed experiences with the materials.

- Some teachers appreciated the pre-recorded podcasts, which reduced the burden they usually face in creating their own content. Other teachers found the podcast limiting and wanted more flexibility to reflect their own teaching style.
- Some teachers said it was helpful to bring another voice into the classroom to help engage students. Other teachers said it was hard for students to listen carefully and stay focused on the recording. Many educators said the podcast recordings were especially challenging for children from refugee backgrounds, as the recording was only available in Greek, which many of them do not speak.
- Some teachers said the Kolibri platform and user-interface was easy to use. Others said it was difficult to navigate the app and find what they needed.
- Many teachers faced challenges with the quality/volume of the audio. As a result, students had difficulty hearing the recording. Since tablets could not connect to projectors, teachers were also unable to present the visuals as they wanted.
- Teachers offered suggestions to improve the experience with Kolibri:
 - Add a timestamp, so teachers can track their use of different features
 - Eliminate folders, to reduce the navigation required
 - Number the weekly sessions, to help teachers know what lesson is next
 - Create a dedicated folder for student surveys, to make them easier to find

FEEDBACK ON TEACHER TRAINING AND IMPLEMENTATION

The majority of teachers reported that the Colors of Kindness training was very helpful. Teachers indicated that more extensive training is needed, and more support throughout the implementation of the program, particularly in the following areas:

- Supporting stress management for children
- Responding to children's emotional reactions and behavior
- o Building relationships across language divide
- o Cultural mediation
- Exchanging ideas about implementation of the activities
- How to choose alternatives, be creative, and adjust teaching style and content to the needs of students

Teachers in the formal/public schools identified two major challenges for implementation:

- Time: lack of time to implement all the activities
 was mentioned most frequently. Teachers said that
 45 minutes is not sufficient time to allow all
 students to participate in a meaningful way.
 Translating between students who speak different
 languages, and technical challenges associated
 with the tablets, exacerbated this problem.
- Mixed-age groups/difficulty level of activities: some teachers with mixed-age classrooms (7-12 years old) indicated that activities and concepts were too complicated for the younger children, and that differentiation (adjusted materials for different ages) would make it more accessible. Other teachers said the mixed-age classroom helped to facilitate the lessons; older children could translate for younger children, and were able to bring examples from their everyday lives to help explain for younger children.



PARTICIPANT PERSPECTIVES ON THE PROGRAM

In focus groups, teachers and principals emphasized that activities about friendship and conflict resolution were instrumental to students' social development. Teachers mentioned that students were more open to learning about others they have not connected with before, and to creating new friendships that seemed unlikely at the beginning of the program. Teachers said these changes in social dynamics contributed to a more inclusive environment where students felt safe to open up and express themselves emotionally. Teachers said this was particularly helpful for students from refugee backgrounds. As one teacher described:



"My classroom is a special classroom because as I said before, 10 out of 15 of my pupils are refugees. So many times in my classroom, we have fights and get conflicts between the students. And I think that [the program] did help both me and the students to help solve these types of problems."

Across all of the focus group sessions, participants described the benefits of the breathing and stretching activities, which are core to the Colors of Kindness program. Teachers said they used the breathing activities both inside and outside of the classroom, including with other students who were not participating in the study. Teachers also described hearing from families that students were teaching the breathing exercises at home, to manage conflict with siblings and with parents. One teacher suggested that perhaps the breathing activities were so powerful because they transcend language barriers, and could be understood by everyone in the classroom, including children from refugee backgrounds who often did not speak Greek (the language of instruction). Some teachers talked about how breathing activities helped students develop self-regulation:

"Both me and the children have used and still using the breathing strategies because they help have them concentrate, and stay calm when they're more stressed and angry. Think before they say something out loud, to help them concentrate more. And I will use this part again definitely."





Participants said the program enhanced their children's ability to express emotions, and provided teachers with the tools to support their students emotionally in ways they could not do before. Some parents said the program helped their children talk about their feelings, and also become better listeners and more respectful at home. The program's activities helped teachers find new ways to connect with their students, and better understand them. For example, one teacher said:

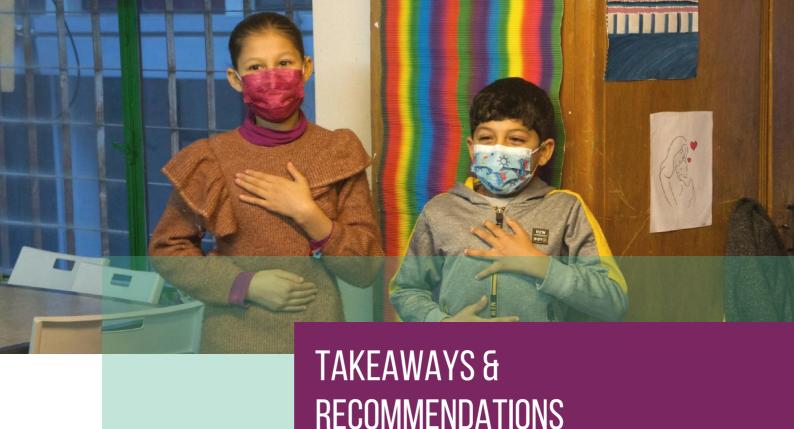


"I have taken some parts from this program for example the circle, and every Tuesday and Thursday we do this circle we sit on the circle and discuss about something negative or positive that has happened to us during the week, so it has brought all of us closer one to another."

Principals detailed why the program was helpful, compared to other SEL interventions. The program's structure and content provided teachers with the guidance they needed to implement it, whereas other programs lacked that level of concrete details. For example:

"Colors of kindness was an alternative, was a gift from God, as somebody said it yesterday because it was something structured, well organized, it gave them guidance, they knew what they should do every week, they could see the results of measurable results, which is not something that happens all the time."





Overall, the results of this study indicate the following:

- The Colors of Kindness program was feasible for teachers to implement in Greece, in both NGO and formal school settings that serve a high number of refugee and displaced students. 75% of teachers were able to implement either 15 or 16 (of 16 total) lessons.
- The Colors of Kindness app, podcasts, and digital workbook were accessible to use.
 Teachers generally found the materials helpful, though some technical and logistical challenges were identified and can be explored and improved in future efforts.
- Across all students average SEL scores, as reported by teachers, increased a substantial amount (by ~½ point on a 5-point scale) from the beginning to the end of the study. In addition, exposure to Colors of Kindness lessons was associated with growth in SEL skills, suggesting that use of Colors of Kindness may be associated with the observed SEL gains.

Limitations with study design (i.e., lack of a control group) means that we cannot say for certain whether the growth in student SEL skills was caused by the Colors of Kindness program. Other factors that were not measured or identified by researchers and educators in this study could be contributing to student growth. However, our findings from this study provide promising evidence that Colors of Kindness is an effective way to promote SEL skills of children.

Future research should build on this study, by using more rigorous evaluation designs (e.g., experimental design, randomized control trial) to determine the extent to which Colors of Kindness is responsible for gains in student SEL skills and teacher wellbeing. Future studies should use multiple reporters (e.g., parents, teachers) to reduce potential bias, and use multiple forms of measurement (e.g., survey, observation, direct assessment task) to generate more robust evidence of change/growth in SEL skills. Future studies may also explore broader outcomes that have been tied to high-quality SEL programs, such as reduced behavior problems, improved school liking, improved mental health, and improved academic performance. Studies across larger samples with different background characteristics (e.g., gender, income, language, refugee/displacement status, prior experience with SEL, academic skills) will help to clarify the students and teachers who benefit most from the program.

Finally, program developers can use findings from this study to refine teacher training and implementation support, and explore tweaks to the content and format of materials. Rich qualitative feedback – detailed in the full technical report – provides nuance about what did and didn't work for teachers, where teachers need additional support, and how students responded to specific activities and lessons in the Colors of Kindness curriculum.



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ACKNOWLEDGEMENTS

Amal Alliance and EASEL Lab would like to thank the Ministry of Education and Religious of Affairs of Greece, the Institute for Educational Policy (IEP) of Greece, Learning Equality, and our NGO partners ARSIS, Danish Refugee Council, Dråpen i Havet, Ladies Union of Drama, Lifting Hands International, and Second Tree for participating and collaborating with us on this pilot program. We would also like to thank the 20th Primary School of Egaleo, 2nd Primary School of Perama, and the 87th Primary School of Athens and the many teachers and students who participated in the Colors of Kindness program, as well as the school leaders. Special thanks to Learning Equality's and implementation teams, NGO staff and coordinators, YourTranslator for covering all our translation needs, Interpretit for simultaneous interpretation, Eversheds & Sutherlands Associates for providing pro bono legal support, and the Ministry of Education and IEP officials who helped make this study possible. We are especially grateful for the time and effort of educators, principals, and parents who participated in focus groups and/or surveys to share their candid perspectives with our research team.

We are especially grateful to Porticus, who funded this study through a grant provided to Amal Alliance. The EASEL Lab provided technical assistance on the study design, evaluation plan, analysis of data, and interpretation of findings. This brief summarizes results from a study of the Colors of Kindness program in Greece, and was written by members of the EASEL Lab at Harvard University. Suggested citation:

Rebecca Bailey, Sonya Temko, Tom Nachtigal, and Stephanie M. Jones (2022). "Colors of Kindness, Spring 2022: Results from a pilot study with refugee and host students in NGOs and formal schools in Greece." Executive Summary. Cambridge, MA: Harvard Graduate School of Education.

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SPECIAL THANKS TO ALL PARTNERS

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