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Global Evaluation of the Special Olympics Unified Champions School Program in Six Countries

Final Report

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Executive Summary

The Special Olympics Unified Champion Schools® (UCS) program is a comprehensive initiative designed to break down barriers and promote a culture of inclusion by integrating three key components: Unified Sports, Inclusive Youth Leadership, and Whole School Engagement. Through these elements, the UCS program aims to dismantle social barriers, improve student relationships, and foster school environments where inclusivity, respect, and understanding are embedded in daily interactions.

In 2019, the UCS program underwent a significant global expansion, made possible by a US$25 million donation from His Highness Sheikh Mohamed bin Zayed Al Nahyan. This expansion extended the program to six diverse countries—Argentina, Egypt, India, Pakistan, Romania, and Rwanda—with the goal of promoting inclusion and creating positive school climates worldwide.

The Research and Innovation for Social Equity and Inclusion (RISEI) Lab at Northwestern University, in partnership with Special Olympics International (SOI) and local stakeholders, conducted a comprehensive evaluation of the UCS program to assess its implementation, student participation, and the broader impact on school and community environments in these six countries. This evaluation provides critical insights into how effectively the UCS model fosters inclusivity and its adaptability across different cultural and educational contexts.

A. Evaluation Goals and Methods

This mixed-methods research study was conducted to evaluate the relationship between the UCS model and student and school-level outcomes. The evaluation aimed to address the following key questions:

- **Participation**: What were the levels of participation in UCS activities across the six countries?
- **Experiences and Barriers**: What experiences did participants have, and what barriers did they face in engaging with UCS activities?
- **School Climate and Social-Emotional Learning (SEL)**: How did UCS activities influence school climate and the development of students' social-emotional learning?
- **Student Engagement**: How did UCS participation affect student engagement and interactions both within schools and in their broader communities?
- **Experiences of Students with Intellectual Disabilities (ID):** How did participation in UCS affect experiences of students with ID in their schools and communities?

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- **Attitudes Toward Students with ID**: How did participation in UCS activities affect attitudes toward students with ID, as reported by their peers and school staff?

By answering these questions, the evaluation sought to provide a comprehensive understanding of how the UCS model supports inclusive education across diverse cultural contexts.

B. Key findings

The evaluation revealed high levels of participation in Unified Sports, with strong engagement from both students and teachers across all six countries. However, participation in Inclusive Youth Leadership and Whole School Engagement was less consistent and varied between countries. Most students faced few barriers to participation, although challenges like time constraints, transportation, and a lack of information were reported in some cases. For parents and caregivers, lack of time was the most common obstacle.

Students with ID generally had positive experiences in the UCS program, reporting feelings of inclusion and respect. Over 70% of students without ID noted improved interactions with peers with ID after participating in UCS activities, highlighting the program's success in fostering inclusivity.

The evaluation, using factor analysis and regression models, demonstrated that UCS activities were positively correlated with key outcomes such as school climate, SEL, and student engagement. The most significant positive associations were observed among students with ID in

Summary of Key Findings:

- **High Participation in Unified Sports**:
  - Strong engagement from both students and teachers in all countries.
  - Lower and more varied participation in Inclusive Youth Leadership and Whole School Engagement**.**
- **Barriers to Participation**:
  - Most students faced minimal barriers, though some cited a lack of time, transportation challenges, and a lack of information on how to sign up.
  - Parents and caregivers most frequently reported time constraints as a barrier.
- **Positive Experiences for Students with ID**:
  - Students with ID felt included, respected, and eager to continue participating.
  - Over 70% of students without ID reported more positive interactions with their peers with ID after UCS activities.
- **Improvements in School Climate and SEL**:
  - UCS activities were positively associated with improvements in school climate and SEL.
  - Significant improvements observed among students with ID in Rwanda, Egypt, and Romania.
  - Gains in school climate and SEL were also observed for students without ID in Egypt and Rwanda.
- **Improved Attitudes Toward Students with ID**:
  - Students without ID in several countries showed greater understanding and acceptance of their peers with ID after participating in UCS activities.
- **Teacher and Administrator Insights**:
  - Positive changes in school climate and SEL noted, especially in special schools in Rwanda and Egypt.

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Rwanda, Egypt, and Romania. Teachers and administrators in special schools, especially in Rwanda and Egypt, noted positive correlations of UCS with school climate and SEL.

While the program showed strong potential, the evaluation's impact was limited by small sample sizes and pandemic-related disruptions. These disruptions reduced face-to-face interactions and added technological challenges, which hindered full participation and data collection in some regions.

C. Conclusions, Lessons Learned, and Recommendations

The evaluation of the UCS program expansion into the six countries demonstrated its potential to foster inclusivity and engagement, particularly for students with ID. Positive impacts were observed in school climate, SEL, and attitudes toward students with ID. However, the outcomes varied across the six participating countries, emphasizing the need for localized adaptations to ensure that the program fits the specific cultural and educational contexts of each region.

Lessons Learned for Program Implementation

The UCS program's expansion highlighted several challenges that must be addressed to improve its effectiveness in diverse regions. The following key lessons are based on the findings from the evaluation:

Localized Adaptations: The program's success relies heavily on its ability to adapt to the unique cultural, logistical, and educational contexts of each country. Tailoring the core components—Unified Sports, Inclusive Youth Leadership, and Whole School Engagement—to fit local needs is critical for creating meaningful and lasting change.

Flexible Program Design: Flexibility in program implementation is crucial, especially in response to unforeseen challenges like the COVID-19 pandemic. Schools need the ability to adjust UCS activities to accommodate disruptions such as school closures and limited in-person interactions, ensuring that engagement can continue even during crises.

Strengthening Local Partnerships: The importance of robust local partnerships cannot be overstated. Effective collaboration with local schools, governments, and community organizations is key to addressing barriers such as lack of resources, transportation, or infrastructure. Local partners play a vital role in tailoring the program to specific contexts and ensuring long-term sustainability.

Addressing Inclusivity Challenges: The evaluation revealed barriers such as lack of time, transportation, and awareness of how to participate in UCS activities. Addressing these challenges through improved communication and outreach strategies is essential for ensuring broader and more equitable participation.

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Expanding Partnerships and Funding: To sustain and scale the UCS program, building diverse funding streams and expanding partnerships with local and international organizations is necessary. These partnerships will provide resources to support ongoing program adaptations and ensure its reach across more schools and regions.

Lessons Learned for Conducting Evaluations

The evaluation itself also yielded valuable insights into how future assessments of the UCS program can be improved, particularly in cross-cultural and international contexts:

Simplifying Evaluation Tools: Simplifying and localizing evaluation tools will increase the likelihood of obtaining accurate and complete data across countries. Tailoring surveys and data collection methods to the local context will make them more accessible and relevant for participants, improving the overall quality of the evaluation.

Evaluation Flexibility: Future evaluations must be adaptable to regional differences and potential disruptions, such as those posed by the pandemic. Hybrid or remote data collection methods should be considered to mitigate challenges related to limited access to technology or in-person participation.

Ensuring Data Completeness: Varying levels of data completeness across countries posed challenges to a consistent analysis. Future evaluations should provide support for standardized data collection practices while accounting for regional variations in infrastructure and capacity. This will help ensure more reliable and comprehensive data.

Overcoming Technological Barriers: In regions where technological infrastructure is limited, evaluations need to incorporate low-tech or alternative methods of data collection. Providing additional support for digital literacy or using non-digital means where appropriate can help ensure broader participation and more accurate data.

Building Stronger Local Evaluation Capacity: Collaborating with local evaluators who have a deep understanding of the cultural and educational landscape is crucial for conducting effective and contextually relevant assessments. Strengthening the capacity of local evaluation teams will enhance the quality and relevance of future studies.

Recommendations for Future Program Success

Adaptability: Continuously refine the UCS model to ensure it is adaptable to local needs and global challenges, ensuring both the program and its evaluation processes can withstand future disruptions.

Sustaining Inclusivity: Prioritize communication and outreach to address participation barriers and ensure that the program fosters a truly inclusive environment for students with and without intellectual disabilities.

Leveraging Partnerships: Expand and deepen partnerships with local stakeholders to ensure the sustainability of UCS activities and the accuracy and relevance of its evaluations.

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Investing in Evaluation: Invest in creating evaluation frameworks that are flexible, accessible, and tailored to the diverse contexts in which UCS operates.

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I. Introduction

Inclusive education is a core principle that seeks to ensure all children have access to quality education, regardless of factors such as gender, ability, ethnicity, language, religion, nationality, social background, or economic status (United Nations Educational, Scientific and Cultural Organization, 2012). Achieving this goal requires coordinated efforts from governments, organizations, and communities to identify and remove the barriers that limit access to education, thereby addressing the underlying causes of exclusion.

In 2019, His Highness Sheikh Mohammed bin Zayed Al Nahyan, now President of the UAE, Ruler of Abu Dhabi, and Supreme Commander of the UAE Armed Forces, donated US$25 million to Special Olympics to establish the Special Olympics Global Center for Inclusion in Education and to further the global expansion of Unified Champion Schools® (UCS). This donation enabled the UCS program to further expand internationally, including Argentina, Egypt, India, Pakistan, Romania, and Rwanda. Northwestern University, in collaboration with Special Olympics International (SOI) and local stakeholders, conducted a comprehensive evaluation to assess the implementation and if and how the model may benefit its participants across these nations.

The UCS program stands out for its unique approach to promoting inclusion by operating across various ecological levels and engaging multiple stakeholders—including students, teachers, and administrators—in a variety of school settings such as classrooms, cafeterias, clubs, and sports. Based on a whole-school model, UCS is anchored in three core components: Unified Sports, Inclusive Youth Leadership, and Whole School Engagement. These components work synergistically to build an inclusive school climate that welcomes all students.

Unified Sports brings together students with and without ID as teammates, fostering mutual respect and understanding through shared sports training and competition. Inclusive Youth Leadership offers leadership opportunities to all students, empowering them to lead initiatives that promote social inclusion. Whole School Engagement aims to establish inclusion as a fundamental value school-wide, through various awareness and education activities.

Despite the existence of various interventions aimed at improving social inclusion for young people with ID, such initiatives often fall short of making significant, lasting impacts. The UCS program, however, seeks to overcome these limitations by encouraging sustained, meaningful change that makes schools more welcoming for all students. Previous evaluations of the UCS program focused primarily on its implementation within the United States, revealing positive outcomes such as enhanced school climates and smoother transitions for students with ID (Yin et al., 2022). The current international evaluation led by Northwestern University aims to extend this understanding to a global context.

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This multi-country evaluation involves a collaborative effort among partners in six countries, each tasked with assessing the implementation of the UCS model as well as its correlation with various student and school outcomes within their local contexts. The evaluation team has navigated challenges, including those posed by the COVID-19 pandemic, to collect individual level data from students, teachers, and in some countries parents. Northwestern, SOI, and country partners fostered a shared learning environment through conducting regular Community of Practice (CoP) meetings, in which participants collaborated to exchange knowledge, provide feedback, and improve skills. This collaboration ensured high-fidelity implementation of the evaluation despite the obstacles encountered. This international evaluation represents a critical step in understanding the broader implications of the UCS model for fostering inclusive education worldwide.

II. Background

A. SOI, Northwestern University, and Country Evaluator Partnership Framework

SOI previously collaborated with a team led by Dr. Michelle Yin, funded by a grant from the Stavros Niarchos Foundation (SNF), to evaluate the UCS strategies. This preliminary study aimed to understand the adaptability of the UCS model across different cultural landscapes and its potential for global success. Under this initiative, the evaluation team developed a global evaluation framework to document the adaptation of the UCS strategy to local contexts, conducting both implementation and correlation assessments, and synthesizing a comparative evaluation report that summarizes findings from all participating countries. SOI's headquarters played an important role in liaising with Special Olympics regional and country offices, ensuring a coordinated flow of evaluation processes. Concurrently, country evaluation partners collaborated closely with regional and SOI headquarter teams, ensuring the effective execution of the local data collection and other evaluation activities.

Building on the methodologies and partnership structures established through the SNF-funded project, the current study extended the collaborative efforts between SOI and Northwestern University to a broader spectrum, incorporating evaluations in six countries worldwide. This expanded initiative mirrored the previous model, with the Northwestern-SOI collaboration spearheading the management and coordination of local evaluations. The Northwestern team took the lead in providing essential evaluation expertise and training, assisting each country partner in refining their evaluation plans, facilitating CoP gatherings, and supervising the early stages of formative evaluation and data collection efforts. Meanwhile, SOI's headquarters continued to work in tandem with Special Olympics regional and national evaluation partners, ensuring that the evaluations are effectively implemented at the local level.

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B. Background of and Existing Evidence in Six Countries

Research conducted within the United States has highlighted the positive impacts of the UCS model on fostering inclusive school environments. Siperstein et al. (2017) observed notable engagement among students in high schools that have adopted the UCS program for three or more years. In these schools, participants reported increased visibility and social interactions with students with ID, ranging from simple greetings to shared meals. Furthermore, comparative studies by Siperstein et al. (2019) revealed that involvement in the UCS program significantly enhanced students' attitudes towards their peers with ID, bolstered perceptions of school inclusivity, and encouraged social interactions with peers with ID.

The Special Olympics UCS 2022-2023 Reach Report highlighted the program's impact, with 9,440 schools participating in UCS and generating 16 million inclusive experiences for students. Other studies have corroborated these findings, pointing out the UCS program's effectiveness in improving students' feelings of connectedness to their school, their active participation in school activities, and the quality of peer interactions (Jacobs et al., 2018; Siperstein et al., 2017). Notably, schools implementing the UCS program have seen an increase in the visibility and social integration of students with ID, fostering a more inclusive atmosphere (Siperstein et al., 2017). Moreover, participation in the UCS program has been linked to improved high school graduation rates (Yin et al., 2022).

Despite the ample evidence of the UCS model's success within the United States, there exists a significant gap in the literature regarding its implementation and impact in international contexts. This study seeks to address this void by investigating how the model is implemented in diverse cultural settings and its association with student outcomes in six countries. This research aims to expand the understanding of the global applicability and potential benefits of the UCS model.

Argentina

Argentina's education system, governed by National Education Law No. 26206, mandates compulsory education from age five through secondary school. Article 42 of the 2006 National Education Act emphasizes the state's responsibility to ensure free and equitable education, particularly for marginalized groups. This legal framework supports special education, ensuring the right to inclusive education for individuals with disabilities. CFE Resolution No. 311/2016 further strengthens the inclusion of students with disabilities in mainstream schools, with the Ministry of Education overseeing their integration using approaches tailored to individual needs.

In 2017, approximately 120,000 students were enrolled in special education schools in Argentina, demonstrating ongoing efforts to improve educational inclusion (Taverna et al., 2019). Legislative advancements such as Act No. 27306, passed in 2016, introduced a more comprehensive approach to supporting students with disabilities, by focusing on

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early detection, curriculum adjustments, and teacher training. The National Disability Plan (2017–2022) reinforced these efforts, promoting the inclusion of people with disabilities in mainstream education. Special Olympics Argentina, a key contributor to these goals, has fostered inclusive education through its UCS project, which brings together students with and without intellectual disabilities to participate in sports and leadership activities, reaching over 162 schools from 2020 to 2023.

As of May 2024, Special Olympics Argentina has facilitated UCS activities in 219 schools, partnering with universities, higher education institutions, and municipal government agencies to expand its reach. These partnerships provide professional training for athletes, increase disability awareness for future educators, and support inclusive activities in local schools. Based on internal reporting by Special Olympics, UCS in Argentina has engaged over 10,000 Unified Partners (without disabilities) and 9,000 Unified Athletes (with disabilities), trained 691 coaches, 1,751 teachers, and 36,770 youth leaders. Special Olympics Argentina has also developed guides for schools and families and partnered with media outlets to raise awareness about UCS initiatives, furthering its mission of inclusion.

Egypt

Egypt's education system starts with two years of kindergarten at age four, followed by six years of primary education and three years of preparatory school, aligning with the International Standard Classification of Education (ISCED) Level Two. Families choose between state-run, religious, or private schools. In 2014, Egypt's constitution committed to integrating individuals with disabilities into society through principles of equality. This commitment was reinforced by the 2018 Law on the Rights of Persons with Disabilities, which mandates equal opportunities for students with disabilities in education. The Ministry of Education ensures that support services are provided to promote inclusion within mainstream schools, though special schools are available for students with severe challenges.

Special Olympics Egypt, part of the broader Special Olympics Middle East/North Africa region, has played a key role in promoting inclusion. Egypt hosted its first Special Olympics regional games in 1999. Since 2000, the number of athletes in the region has grown from 20,433 to nearly 150,000. Special Olympics Egypt has partnered with private firms, cultural centers, sports organizations, and national ministries to support UCS events, aiming to expand inclusion through sports and leadership opportunities for all students.

As of May 2024, Special Olympics Egypt has implemented UCS in 154 schools, engaging 1,778 Unified Partners (without ID) and 1,407 Unified Athletes (with ID). They have trained 242 coaches, 273 teachers, and 219 youth leaders, with 55,484 youth indirectly engaged through school-wide awareness events. Special Olympics Egypt has also developed educational resources for UCS, supported by a national youth leadership council and a committee of educators focused on implementing Unified Sports days and

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volunteer initiatives. These efforts aim to promote inclusion and foster leadership skills among students across Egypt's governorates.

India

India's education system has traditionally been segmented into four levels: lower primary (ages six to 10), upper primary (ages 11 to 12), high school (ages 13 to 15), and higher secondary (ages 17 to 18). In 2020, the National Education Policy (NEP) introduced a new "5 + 3 + 3 + 4" structure, reflecting the developmental stages of children. This policy includes early childhood education for children ages three to five, marking a significant shift towards emphasizing early learning.

India has also made important strides in inclusive education through key legislation such as the Persons with Disability Act of 1995, the National Trust Act of 1999, and the 86th Constitutional Amendment of 2002. These laws have advanced the rights of children with disabilities, mandating free and compulsory education for all children up to the age of 14. Both integrated and segregated educational models are used in India's system, with integrated schools educating students with and without intellectual disabilities together, while segregated schools cater specifically to students with special needs.

Special Olympics Bharat, founded in 1987, plays a crucial role in promoting inclusivity for individuals with ID through sports and education programs. As of March 2024, Special Olympics Bharat has facilitated Unified Champion Schools in 191 institutions, engaging 4,794 Unified Partners (without ID) and 6,521 Unified Athletes (with ID). They have trained over 1,000 coaches and 800 teachers, reaching more than 16,000 youth through school-wide awareness events. Special Olympics Bharat has also developed materials to support educators and youth leaders and convenes national committees to share best practices and engage government leaders in promoting inclusion through education and sports.

Pakistan

Inclusive education in Pakistan began in 1972 with a focus on training special educators and providing vocational education for students with disabilities (Hammad & Singal, 2015). Since then, the country has established approximately 700 special education institutions, split between public and private sectors. However, these institutions face numerous challenges, such as limited resources, inadequate infrastructure, and a lack of specialized training for teachers. These hurdles, along with societal biases, continue to impede the quality of education for children with disabilities, highlighting the need for more systemic support and accountability in educational practices.

Despite these barriers, Special Olympics Pakistan has been a vital force in promoting inclusivity since its establishment in 1989. It began with 75 athletes at its first National Games in 1991 and has grown substantially, now supporting over 31,000 special athletes and nearly 12,000 young athletes. SOP's UCS program stands out as a key initiative,

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collaborating with mainstream, inclusive, and special needs schools to foster a sense of belonging and participation for individuals with ID. The program's reach has expanded across communities, not only through sports but also by instilling a culture of inclusivity within educational institutions.

As of March 2024, Special Olympics Pakistan has facilitated UCS in 79 schools, engaging over 2,000 Unified Athletes and Partners and training 226 coaches and 103 teachers. SOP's innovative activities, such as Unified Camps, Marathons, and Hikes, are often youth-led, showcasing the power of young leadership in promoting inclusion. With the support of a national youth leadership committee and an Educator Advisory Committee, SOP regularly convenes youth leadership summits and awareness campaigns, working closely with educators and government agencies to expand its impact. This collective effort highlights the growing movement toward a more inclusive society in Pakistan, driven by education, opportunity, and community support.

Romania

In Romania, the right to education for all, including individuals with disabilities and special educational needs, is a fundamental principle within the education system. Romania has adopted a dual approach in its Pre-University Education system, offering both separate and integrated special education tracks. However, significant gaps remain in providing consistent resources for students with special educational needs, as highlighted by a World Bank analysis for the Romanian National Authority for the Rights of Persons with Disabilities (Stănculescu et al., 2017). These gaps are worsened by a lack of trained educators, with 68% of secondary schools lacking staff trained in inclusive education or special pedagogies.

The challenges are compounded by financial constraints within Romania's education system, with much of the budget allocated to staff salaries, leaving limited funds for additional resources. Overcrowded classrooms and overloaded teacher schedules make it difficult to provide individualized support for students with ID in mainstream settings. Furthermore, societal attitudes, including discrimination from non-disabled students' parents who fear that the presence of students with disabilities will negatively impact academic performance, create additional barriers to inclusive education.

Special Olympics Romania addresses these challenges through its UCS program, focusing on Youth Leadership, Unified Sports, and collaboration between School Inspectorates, NGOs, and both mainstream and special schools. Based on internal reporting, Special Olympics Romania has facilitated UCS in 256 schools, engaging over 6,800 athletes and partners and training 1,246 teachers as of May 2024. The program aims to foster a culture of inclusion through joint participation from students with and without ID, while partnerships with media influencers and national government agencies help promote awareness. Regular meetings of national youth and educator advisory committees further enhance the program's impact by sharing best practices and strategies for inclusive education.

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Rwanda

Rwanda has made significant progress toward inclusive education, focusing on integrating students with ID into mainstream educational settings, in line with the country's "education for all" policy (Flora, 2015). The policy on special needs education emphasizes creating environments that accommodate all children, regardless of ability. This move toward inclusivity began in the early 2000s, reflecting trends seen in other nations. However, despite policy advancements, mainstream schools often remain inaccessible to children with disabilities due to insufficient accommodations, resources, and societal misconceptions, limiting the success of inclusive education.

While Rwanda boasts a high net enrollment rate in primary schools at over 95% (Bots, 2015), the enrollment and retention rates for children with disabilities tell a different story. UNICEF (2019) reports that only 70% of children with disabilities are enrolled in primary education, and many leave school early due to unaddressed needs. Nearly 85% of children with mild ID drop out before obtaining a primary school certificate. These challenges highlight the gap between Rwanda's policy ambitions and the practical realities on the ground, pointing to the need for better resources, improved physical access, and a shift in societal attitudes toward individuals with disabilities.

Special Olympics Rwanda plays a crucial role in promoting inclusion through its UCS program. As of May 2024, UCS activities have been implemented in 110 schools, engaging 4,895 Unified Partners and 763 Unified Athletes. The program has trained 420 coaches and teachers and engaged over 355,000 youths indirectly through school-wide events. Unified Sports competitions, including bocce and football, have been central to these efforts, and Special Olympics Rwanda has been instrumental in fielding the first Unified Sports team in the East African Secondary Schools Sport Association Games. Through its youth leadership and education advisory committees, the program continues to drive inclusive education initiatives, focusing on bullying prevention, gender equity, and curriculum modifications to support children with disabilities.

III. Research Design

In this multiyear evaluation project, the study team's focus in Phase 1 had been on identifying local partners, providing capacity-building training for country evaluation partners, and designing evaluation and data collection plans. In Phase 2 of the project, the study team continued to provide technical assistance and training on data collection methods; performed quality assurance reviews of local partners' products (evaluation plans, protocols, monthly report, and CoP meeting slides); reviewed round one pre-intervention datasets; conducted preliminary analysis; and monitored evaluation and data collection progress.

The global pandemic significantly impacted the UCS implementation in Phase 2. In response to this event, the Northwestern evaluation team worked closely with SOI and local evaluation partners to adapt their timelines and data collection strategies to ensure

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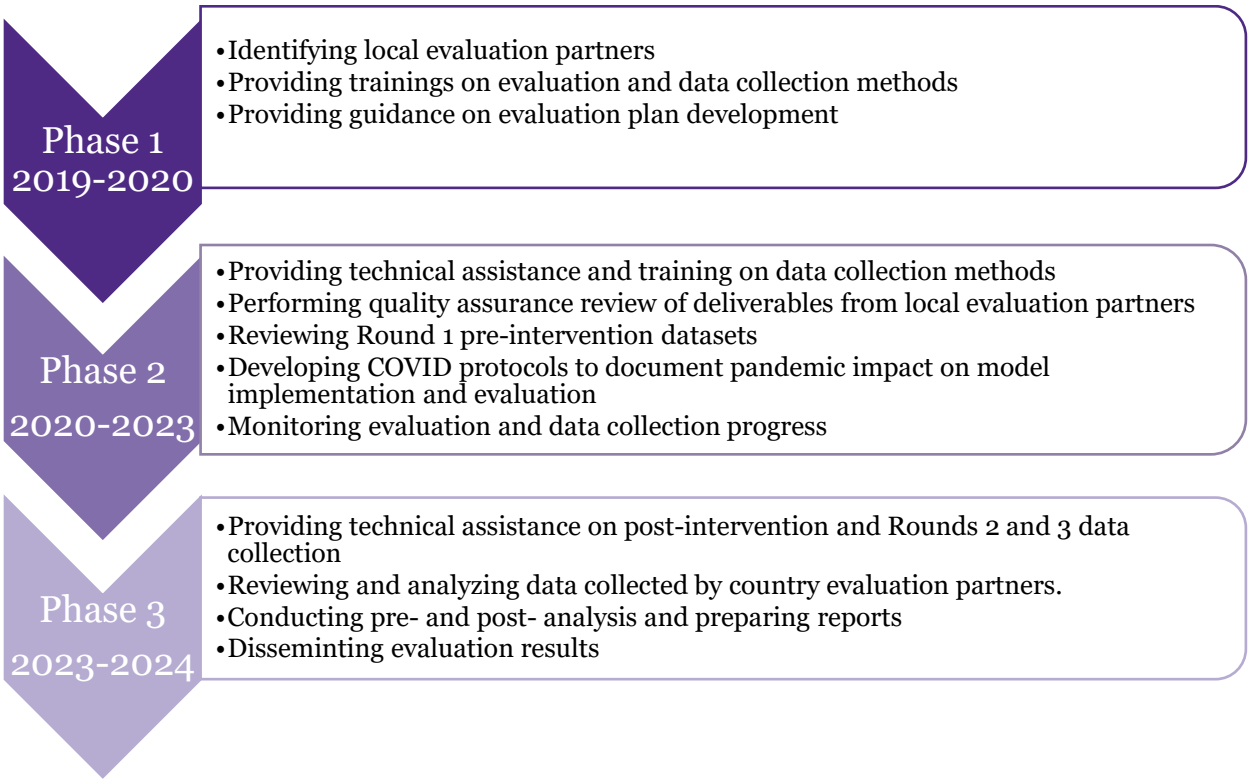
pre-intervention data and post-intervention data were collected consistently across countries.

In Phase 3 of the project, the evaluation team continued to support survey and interview data collection for all rounds, cleaned and analyzed survey and interview data, and prepared this final report. Exhibit 1 summarizes the evaluation activities by project year.

Exhibit 1. Activities of the MBZ Evaluation, by Project Phase



A. Impact of COVID-19 on Implementation and Evaluation

The COVID-19 pandemic had a profound impact on both the implementation and evaluation of the UCS program across the six countries involved. School closures, restrictions on gatherings, and the need for social distancing forced many UCS activities to either be canceled or adapted to virtual and hybrid models. These changes posed significant challenges to the program's core objectives of fostering social inclusion and improving school climate, as well as to the process of collecting comprehensive and reliable evaluation data. Below, the effects on implementation and evaluation are discussed separately.

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Impact on Implementation

The pandemic caused widespread disruptions to the on-the-ground delivery of UCS activities, which rely heavily on in-person engagement. In many cases, schools were forced to suspend UCS activities altogether, while others shifted to hybrid or virtual formats to maintain some level of continuity. Each country adapted to these challenges differently:

Argentina: Faced delays in starting UCS activities due to school closures but was able to expand from six to 23 provinces by adopting a hybrid model. Virtual tools helped sustain participation, although challenges in reaching a representative sample and engaging students with ID persisted.

Egypt: Delays were caused by school closures and the timing of Ramadan. To adapt, the country involved parent volunteers and resumed activities once in-person schooling recommenced. However, reduced group interaction in hybrid settings limited the social aspects of UCS that are key to its inclusivity goals.

India: The pandemic delayed program rollouts, but hybrid models allowed activities to continue across states. Virtual meetings helped maintain engagement, though the team acknowledged that in-person interactions were more effective in promoting inclusivity and participation.

Pakistan: School closures and pandemic-related restrictions delayed both activities and data collection. Nevertheless, the program expanded from nine to 75 schools by using digital tools. However, the benefits of in-person interaction, particularly for students with ID, could not be fully replicated in a virtual format.

Romania: Teachers reported significant challenges due to school closures and technological barriers, especially in rural areas. Virtual events replaced in-person activities, but unequal access to technology limited participation, particularly among low-income students.

Rwanda: UCS activities were halted temporarily due to school and sports closures, but the program adapted by maintaining visibility through media and resuming once schools reopened. Virtual adaptations helped sustain some engagement, but the limitations of these formats were evident.

Across all countries, while hybrid models allowed the program to continue, they could not fully replicate the in-person social interaction that is central to UCS's goals of fostering inclusivity and peer engagement. The adaptations were necessary but limited the program's full potential during this period.

Impact on Evaluation

The pandemic also had a significant impact on the evaluation of the UCS program, complicating data collection efforts. The challenges included delays in obtaining ethical

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approvals, limited access to participants, and the need for alternative data collection methods. The reliance on virtual or hybrid activities also affected the types of data that could be collected, as in-person observations and interactions—a key component of evaluating social inclusion—were severely restricted.

Argentina: Ethical approval and data collection were delayed, and the shift to a hybrid model created challenges in reaching a representative sample, especially for students with ID. Virtual data collection tools were essential, but limitations persisted in capturing the full impact of the program.

Egypt: The pandemic delayed data collection, particularly during Ramadan. Parent volunteers played a key role in gathering data during hybrid activities, but the reduced in-person engagement raised concerns about the evaluation's ability to fully assess group dynamics and social inclusion.

India: The shift to virtual data collection was crucial in preventing further delays, but the lack of face-to-face interactions limited the depth of insights that could be gathered on student engagement and social-emotional learning outcomes.

Pakistan: Data privacy and record management challenges in special schools further complicated evaluation efforts. While digital tools like Qualtrics helped manage surveys, virtual engagement limited assessing the more nuanced aspects of UCS's impact, particularly for students requiring direct support.

Romania: Teachers reported that 44% of planned UCS activities had to be canceled, while 41% shifted to virtual formats, making it difficult to track consistent participation. Technological barriers in low-income and rural areas further hindered data collection, leading to gaps in the evaluation data.

Rwanda: Like other countries, evaluation efforts were disrupted by school closures and the transition to virtual engagement. The limited ability to conduct in-person observations made it difficult to assess the program's impact on school climate and student relationships in depth.

The COVID-19 pandemic presented significant challenges to both the implementation and evaluation of the UCS program, necessitating adaptations that, while essential, limited the program's ability to fully achieve its goals. Hybrid and virtual models allowed activities to continue and maintained a level of engagement, but they could not replace the in-person interactions that are central to fostering social inclusion and peer relationships. The evaluation process was similarly affected, with delays, reduced access to participants, and limited opportunities for in-person observations, complicating efforts to fully assess the program's impact. These disruptions highlight the importance of flexibility in both program delivery and evaluation, and the need for future planning to better address similar challenges. In the following sections, we will discuss the specific impacts of COVID-19 on the results of this evaluation.

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B. Evaluation Objectives

The objective of this mixed-methods research study is to document the implementation of the UCS model in six countries and examine how the UCS model correlates with both student and school-level outcomes. Specifically, we address the following research questions:

- **RQ1:** What was the level of participation and involvement in each UCS program component, as reported by students, teachers/administrators, and parents/caregivers?
- **RQ2:** What were the experiences of students, teachers/administrators, and parents/caregivers with the UCS program, and what barriers to participation did they encounter?
- **RQ3:** How have perceptions of school climate changed for students with and without ID after participating in UCS activities, as rated by students and teachers/administrators?
- **RQ4:** How have social-emotional learning skills for students with and without ID evolved, as rated by students, teachers/administrators, and parents/caregivers?
- **RQ5:** How has student engagement for students with and without ID changed after participating in UCS activities?
- **RQ6:** How have school and community experiences changed for students with ID after participating in UCS activities?
- **RQ7:** How have attitudes toward students with ID changed for students without ID and for teachers/administrators?

C. Technical Assistance

Community of Practice (CoP)

From July 2021 to July 2023, eight CoP meetings were held to facilitate collaboration between country evaluation partners and SOI staff. These meetings served as an essential platform for sharing experiences, lessons learned, and solutions to common challenges across diverse contexts. Exhibit 2 provides a summary of the key focuses and themes from each meeting.

The CoP meetings were particularly valuable during Phase 2, where three sessions were dedicated to finalizing evaluation plans, securing ethical approvals, reviewing protocols, pilot testing tools, and addressing data collection issues. These meetings were instrumental in helping partners navigate the complexities of the evaluation process and ensuring that each country's evaluation approach remained aligned with the broader goals of the UCS program.

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Beyond immediate problem-solving, the CoP meetings fostered the development of a learning community among country partners. This collaborative environment encouraged the exchange of findings and reflections on both successes and challenges in real-time. Regular meetings allowed participants to address shared data collection challenges—such as issues with internet access and language barriers—while also brainstorming effective strategies for increasing parental engagement, a critical element for the program's success.

The CoPs also highlighted the importance of effective communication and coordination for successful collaboration and data collection. Discussions highlighted the ongoing impact of COVID-19 on the evaluation process, prompting the development of innovative solutions such as hybrid data collection models and the use of digital tools to overcome these challenges. Crucially, the collaborative atmosphere nurtured by the CoPs enabled country partners to refine their strategies, develop context-specific solutions, and collectively adapt to the complexities introduced by the pandemic.

Exhibit 2. Community of Practice Meetings Timeline, Focus, and Key Theme

Trainings

Northwestern University played a critical role in preparing local evaluation teams for the UCS program by providing comprehensive pretraining and live training sessions.

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These training initiatives were designed to build the capacity of country evaluation teams, equipping them with the knowledge, skills, and tools necessary to conduct rigorous evaluations. The impact of these trainings extended beyond the technical aspects of data collection, fostering long-term benefits for local evaluation partners.

Pretraining Preparation

The pretraining phase laid the foundation for the evaluation process. Northwestern developed a structured series of prerecorded videos, guides, and tools, which were distributed to country evaluation teams a week before their live training. The pretraining materials included:

- Three 30-minute videos covering key topics such as partnership structure, evaluation frameworks, evaluability assessments, and data collection methods for both implementation and impact evaluations.
- Multilingual evaluation guides and tools, including survey and interview templates, which were customized to meet the local needs of each country.
- A final video that provided detailed instructions on building a high-quality database, preparing reports, and outlining project timelines and deliverables.

By introducing these materials before the live training, Northwestern ensured that evaluation teams were well-prepared and familiar with the foundational concepts of the evaluation process. This step helped streamline the live training sessions, allowing for more in-depth discussions and practical application of the tools provided.

Live Training Sessions

Following the pretraining, Northwestern conducted two virtual training sessions for each country, each lasting two days and two hours per day. These sessions were led by Dr. Michelle Yin, who guided the local evaluation teams through the various stages of the evaluation process.

- Day 1 focused on reviewing the pretraining videos and homework, with Dr. Yin providing additional tips and clarifications. Research questions, survey protocols, and interview procedures were discussed in detail, with the option to adapt these protocols to local languages, ensuring that the tools were culturally relevant and accessible.
- Day 2 delved into data collection methods, sampling strategies, data quality assurance, and data analysis. Practical examples from the SNF evaluation helped clarify expectations and standards for data collection. The session also addressed project timelines, deliverables, and the ethics approval process, ensuring a comprehensive evaluation plan for the multiyear UCS project.

The training for local evaluation partners provided immediate benefits for the UCS evaluation and built long-term capacity. Teams gained practical experience with evaluation frameworks, data collection methods, and analysis techniques, which can be

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adapted for future projects. Multilingual guides and flexible survey templates helped tailor evaluations to local contexts, improving data accuracy and relevance. The training also emphasized data quality, sampling strategies, and database management, enhancing the reliability of the evaluations.

In addition to technical skills, the training fostered local ownership of the evaluation process and prepared teams to navigate ethics approvals in line with international standards. Stronger partnerships between Northwestern and local teams, along with clear project timelines, allowed local partners to take a more active role in managing evaluations. Adaptations to local languages and cultures further improved participant engagement and evaluation quality.

Monthly Check-Ins

To track the progress of each country's evaluation efforts, Northwestern implemented regular monthly check-ins through detailed reports from the local evaluation partners. These reports outlined the activities completed, next steps, and key topics such as adapting survey and interview protocols, obtaining ethical approval, and developing evaluation plans. Each partner also identified any challenges they faced and the specific support they required. Northwestern used these reports to tailor technical assistance to each country's needs, ensuring timely and focused support to help overcome obstacles and advance the evaluation process.

D. Data Collection Method

In October 2020, SOI distributed a request for proposal (RFP) to six countries. The RFP provided an overview of the study, outlined the criteria for selecting evaluation partners, detailed the responsibilities of the selected organizations, and included other project specifics. As a result, Special Olympics regional offices identified professional organizations and universities in each country.

Northwestern and SOI held initial meetings with regional staff and local organizations to assess their capacity to conduct the evaluation. Together with Special Olympics staff, Northwestern reviewed proposals from these local organizations, providing multiple rounds of feedback. The feedback focused on clarifying details such as the local education system, sampling frame and selection methods, training for enumerators, timelines for data collection, and staff expertise on proposed analyses.

After revisions, the organizations submitted their final proposals to SOI, leading to the establishment of official contracts with four evaluation partners in Year 1 (Argentina, Romania, India, and Pakistan) and additional partners in Year 2 (Rwanda and Egypt). These partners used surveys and interviews to collect data for the project. The following sections outline the design of data collection methods, sampling methods, and administration details.

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Surveys

To design the survey protocols, the Northwestern team created a survey bank tailored for different educational settings: segregated special schools, segregated general schools, and combined schools. Surveys were developed for four key respondent groups: students with ID (athletes), students without ID (partners), teachers and administrators, and parents or caregivers. Most survey items were drawn from existing, validated Special Olympics protocols used in UCS evaluations in the United States, ensuring alignment with the project's research questions.

Country evaluation partners then adapted the surveys to fit their local contexts. This process included translating the survey items into local languages or dialects and ensuring cultural relevance in both the survey scales and items. The adapted surveys were pilot-tested to ensure reliability and validity within each country.

Table 1 outlines the data collection periods across the six countries, while the Data Construction Appendix (Appendix A) details the survey data collection process and sampling methodology. Table 2 presents the sample sizes of the final analytical samples by country and survey type, ensuring consistency and data quality across datasets.

Table 1. Data Collection Rounds

Country	Round	Survey Type	Data Collection Period
Argentina	Round 1	Pre-intervention	June – July 2021
		Post-intervention	November 2021
	Round 2	Pre-intervention	August – September 2022
		Post-intervention	N/A
	Round 3	Pre-intervention	August – September 2022
		Post-intervention	October – November 2023
Egypt	Round 1	Pre-intervention	September – December 2022
		Post-intervention	December 2022 – February 2023
India	Round 1	Pre-intervention	July – October 2021
		Post-intervention	December 2021 – February 2022
	Round 2	Pre-intervention	February – October 2022
		Post-intervention	February – May 2023
	Round 3	Pre-intervention	February – June 2023
		Post-intervention	September 2023 – February 2024
Pakistan	Round 1	Pre-intervention	October – December 2021
		Post-intervention	March – April 2022
	Round 2	Pre-intervention	October – December 2022
		Post-intervention	March – July 2023
Romania	Round 1	Pre-intervention	September – November 2021
		Post-intervention	March – May 2022
	Round 2	Pre-intervention	February – March 2022
		Post-intervention	June 2022
	Round 3	Pre-intervention	September 2022 – February 2023

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		Post-intervention	April – June 2023
Rwanda	Round 1	Pre-intervention	October – December 2022
		Post-intervention	March – May 2023

Analytical Sample Construction

To ensure the accuracy and reliability of the evaluation findings, a systematic approach was taken to construct the analytical samples from the raw data. The following steps outline the process and provide justifications for each action, ensuring the final datasets were robust and suitable for analysis:

- **Remove Duplicates:** Duplicate observations, whether due to data entry errors or repeated survey submissions, were identified and removed. This step was crucial to avoid skewing results, as duplicates could artificially inflate the sample size or over-represent certain responses, leading to biased conclusions about the program's impact.

- **Drop Observations with Missing Key Variables:** Observations missing essential outcome variables, such as measures of social inclusion, school climate, or student engagement, were excluded from the analysis. Retaining incomplete data could compromise the integrity of the results, as missing values reduce the power of the analysis and could lead to misleading interpretations. Ensuring that only observations with complete data were included allowed for more reliable and consistent comparisons across the study sample.

- **Exclude Non-Compliers:** Participants who either engaged in UCS activities prior to the intervention or failed to participate post-intervention were removed from the sample. Non-compliance could distort the analysis by introducing confounding factors—such as prior exposure to UCS—that are unrelated to the specific intervention being evaluated. By excluding these individuals, the analysis could more accurately assess the impact of the UCS program on participants who followed the intended intervention timeline.

- **Match Pre- and Post-Intervention Data (for Egypt, India, Pakistan, and Romania):** For these four countries, only individuals with both pre- and post-intervention data were retained in the sample. This matching process was essential for evaluating changes in key outcomes over time, such as shifts in social-emotional learning, attitudes toward inclusion, or school climate. Without matched data, it would be impossible to assess the direct impact of the UCS intervention on individuals. However, due to logistical and data collection challenges, pre- and post-matching was not feasible for Argentina and Rwanda, so these countries were analyzed without this step. Although this limited the depth of analysis for these two countries, their data still provided valuable insights into the program's overall impact.

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Table 2. Analytical Sample Sizes

		Students		Admin/Teachers		Parents/Caregivers	
		Has ID	No ID	Special	General	Has ID	No ID
Argentina	Pre	56	157	16	82	10	65
	Post	64	132	18	9	20	11
Egypt	Pre	161	58	3	16	88	39
	Post	161	58	3	16	88	39
India	Pre	37	31	19	11	8	3
	Post	37	31	19	11	8	3
Pakistan	Pre	76	97	4	2	1	1
	Post	76	97	4	2	1	1
Romania	Pre	78	94	16	11	0	0
	Post	78	94	16	11	0	0
Rwanda	Pre	155	188	122	73	640	799
	Post	567	717	107	59	659	802

Table 3 presents descriptive statistics for the analytical sample pooled across countries. Country-specific statistics are available in the Data Construction Appendix (Appendix A). Overall, the gender ratio is largely balanced among students without ID, though students with ID tend to be slightly more male, particularly in the post-intervention surveys. Most of the students fall within the 12-18 age range. Among administrators and teachers, the pre-intervention surveys reflect a balanced gender ratio in both general and special schools, while the post-intervention surveys show a slight male skew. The majority of administrators and teachers are between 31 and 50 years old. Between 38% and 48% of the sample consists of general education teachers, while special education teachers make up 4% to 11%. Physical education teachers account for 14% to 22% of the sample, while less than 10% are headmasters/principals, counselors, or special education assistants. There is also a good gender balance among parents and caregivers in the sample.

Table 3. Descriptive Statistics of Pooled Analytical Sample

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	48%	48%	46%	40%
11 or younger	17%	21%	17%	9%
12-18 years old	70%	57%	53%	56%
19-25 years old	13%	22%	30%	35%
N	625	1129	563	983
Admin/Teacher Survey				

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	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	51%	40%	51%	40%
20 or younger	3%	4%	3%	4%
21-30 years old	15%	17%	15%	17%
31-40 years old	34%	28%	34%	28%
41-50 years old	36%	30%	36%	30%
51-60 years old	12%	21%	12%	21%
61 or above	0%	0%	0%	0%
General education teacher	38%	48%	38%	48%
Special education teacher	11%	4%	11%	4%
Headmaster/principal	9%	9%	9%	9%
Physical education teacher	14%	22%	14%	22%
Counselor	6%	5%	6%	5%
Special education assistant	8%	10%	8%	10%
Other	14%	4%	14%	4%
N	253	166	197	174

Parent/Caregiver Survey	Without ID		With ID	
	Pre	Post	Pre	Post
Female	50%	45%	49%	51%
N	907	856	747	776

Interviews and Focus Groups

In **Argentina**, 11 semi-structured interviews were conducted between June 1st and 15th, 2023, during Round 3 of data collection. These included five principals and five teachers from 10 schools, with four being Comprehensive Training Centers or Special Education Schools and six being Secondary Schools. Three interviews were held in person and eight virtually (via Zoom or Meet), with all participants providing verbal consent for recording. Interviewees were selected based on their engagement during the survey process. The interviews focused on three key areas: a) perceptions of inclusion within their institutions, b) expectations of the UCS program, and c) the implementation process.

In **India**, qualitative data collection began in 2021 with a virtual focus group in October during the first round of data collection. Participants included five teachers/administrators of students with ID, one teacher/administrator of students without ID, one parent of a student with ID, one student with ID, and two students without ID from multiple states. Due to COVID-19 restrictions, the focus group was conducted online. Despite initial connectivity challenges, the group had a productive discussion about their experiences with the UCS program. No qualitative interviews were conducted during Round 3.

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In **Pakistan**, qualitative data collection began between May and June 2022, involving three students with ID, three students without ID, one teacher/administrator of a student without ID, three parents of students with ID, and three parents of students without ID. The evaluation partner faced challenges with the implementation model, as it relied on relationships between general schools and Special Olympics Pakistan rather than direct links with PCH Global. Additional interviews were conducted in April 2023 for Round 2.

Romania collected qualitative data in Round 2 (June-July 2022), including three interviews with students, three with teachers, and a focus group with 13 teachers. In Round 3 (May-June 2023), Romania conducted five student interviews, seven teacher interviews, and a focus group with 12 students.

In **Rwanda**, 195 teachers and coaches were interviewed, including 8 from segregated schools, 116 from unified schools, and 71 from special schools.

IV. Implementation Findings

This section provides a descriptive analysis of the implementation of the UCS model, focusing on participation in its core components, student and school involvement, and the challenges faced by participants. The findings are based on survey data collected from students, administrators, teachers, and parents/caregivers.

The data show high levels of participation in Unified Sports across all countries, as reported by both students and staff. However, participation in Inclusive Youth Leadership and Whole School Engagement was lower and more varied. While most students reported no barriers to UCS participation, some noted challenges such as lack of time, transportation issues, or insufficient information on how to join. For parents and caregivers, lack of time was the most commonly cited barrier. Post-intervention surveys indicated that students with ID had generally positive experiences, feeling included, respected, and eager to continue. Additionally, more than 70% of students without ID reported more positive interactions with their peers with ID after participating in UCS activities.

This section is organized into subsections covering student participation in each UCS component (Unified Sports, Inclusive Youth Leadership, and Whole School Engagement), the experiences of students with ID, and the perceived effects of the program as reported by students without ID, administrators, and caregivers. It also discusses barriers to participation and acknowledges limitations, such as small sample sizes for parent/caregiver data in countries like India and Pakistan.

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A. Participation in UCS

Student Participation

Most students reported high levels of in-person participation in Unified Sports, as shown in Figure 1. In Argentina, Pakistan, and Rwanda, the majority of both students with and without ID participated in-person. In Egypt, there was a clear split, with 100% of students with ID participating in-person, while 100% of students without ID participated virtually. India and Romania had more varied participation, with students with and without ID engaging in a mix of in-person and virtual activities. Non-participation rates were notably higher in Argentina and Romania. Additionally, non-participation was observed among students without ID in India and students with ID in Rwanda.

There was significant variation in student participation in Inclusive Youth Leadership across the six countries, as reported in Figure 2. Egypt had the highest in-person participation, with 94% of students with ID and 97% without ID, while Argentina also showed strong participation for students with ID (67%). India, Romania, and Rwanda had higher levels of participation in virtual and hybrid (both in-person and virtual) modes of Inclusive Youth Leadership activities. Non-participation was notably high in Argentina (30% for students with ID, 66% for students without ID), Pakistan (43% for students with ID, 24% for students without ID), and Rwanda (30% for students with ID). Overall, students in Egypt and India exhibited the highest engagement in Inclusive Youth Leadership activities, particularly in in-person and mixed formats.

Students reported higher participation in Whole School Engagement activities in general, as reported in Figure 3. In-person participation was highest in Egypt and Pakistan, where over 95% of students with ID and around 88% or more of students without ID engaged. Argentina also saw strong in-person participation for students with ID (84%), though only 46% of students without ID participated. India had the lowest in-person engagement, especially for students with ID (31%) and without ID (41%). Virtual and hybrid participation were notable in India and Rwanda, with 51% of students with ID in India and 37% in Rwanda participating in both in-person and virtual formats. Non-participation was highest in Argentina (42% for students without ID) and Romania (26% for students without ID). Overall, Egypt and Pakistan had the highest levels of in-person participation, while India and Rwanda showed more involvement in mixed formats.

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Figure 1. Participation in Unified Sports as Reported by Students

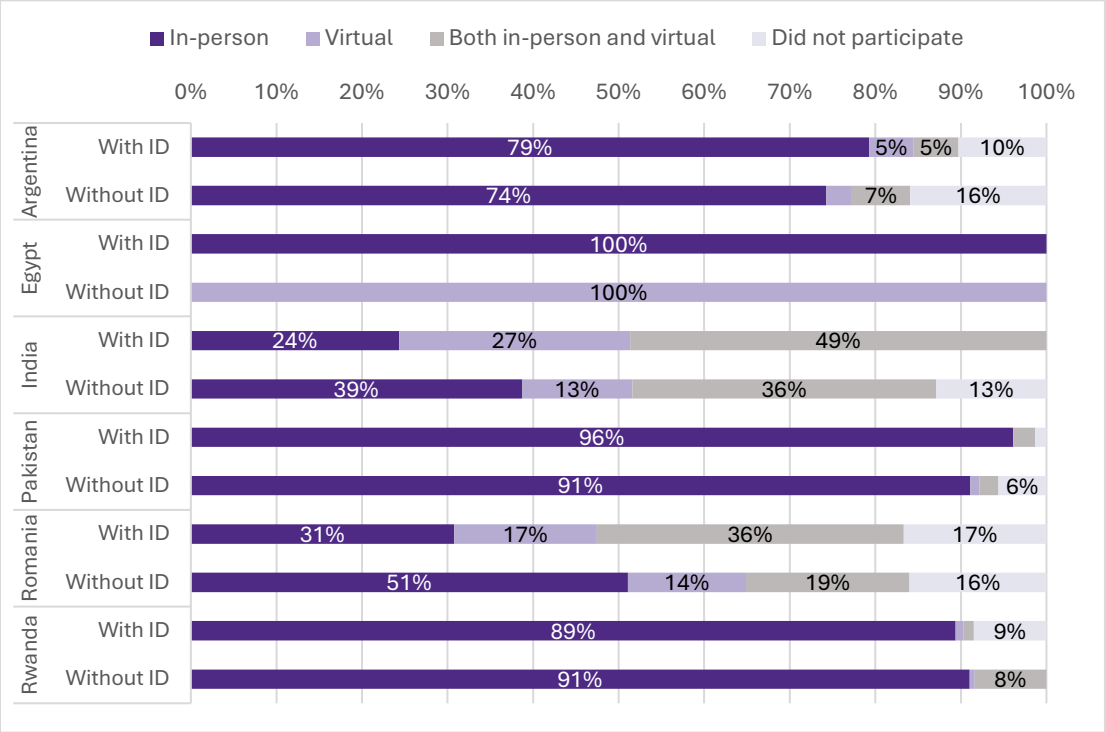

Figure 2. Participation in Inclusive Youth Leadership as Reported by Students

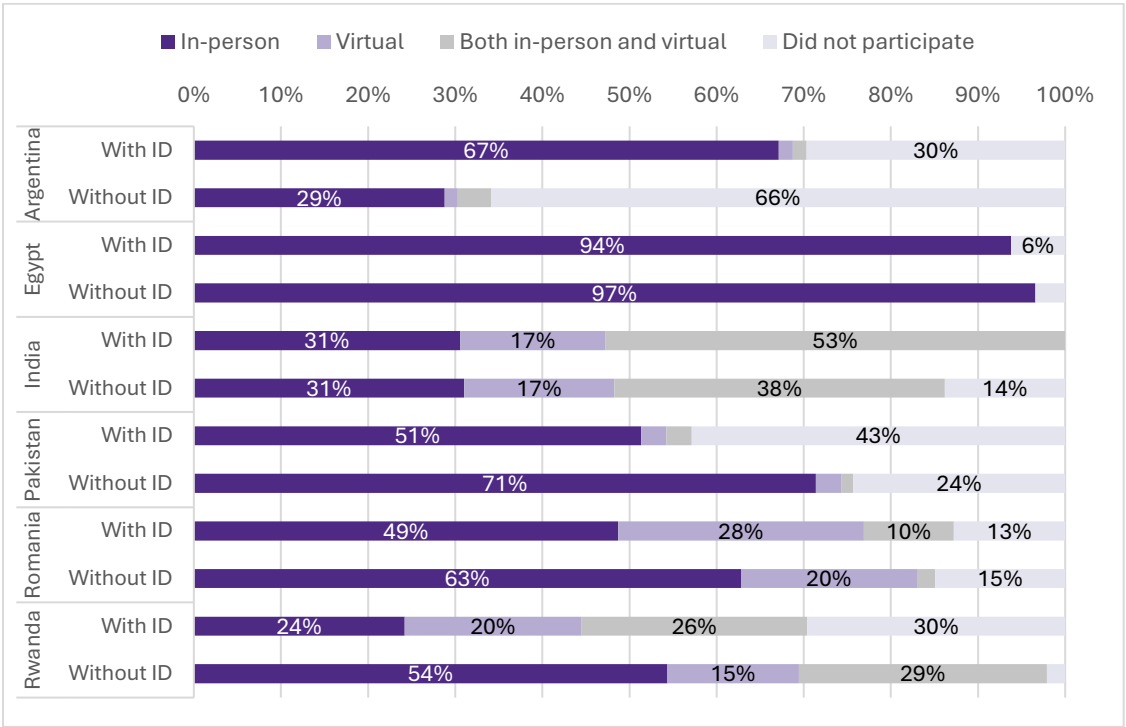

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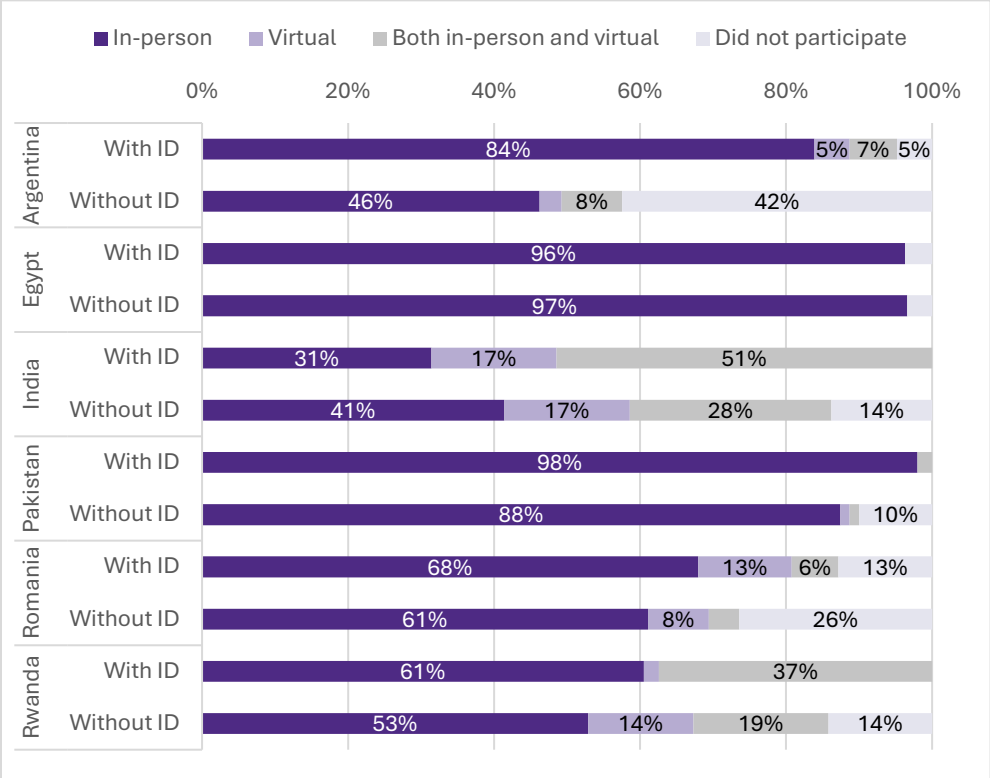
Figure 3. Participation in Whole School Engagement as Reported by Students



School Participation

Figure 4 illustrates the reported implementation of UCS components among special and general education schools as reported by administrators/teachers. Unified Sports had the highest overall implementation rates, with nearly universal participation from both special and general schools in Argentina and Rwanda. In contrast, Romania showed a significant gap between special schools (94%) and general schools (45%). Egypt and India also had high levels of Unified Sports implementation, though general schools in India were less involved than special schools (73% vs. 95%).

Implementation of Inclusive Youth Leadership was reported at much lower rates across all countries, with no participation in Argentina and very low rates in Rwanda. However, India and Romania stood out with higher levels of involvement, particularly in general schools (64% in India and 73% in Romania).

Whole School Engagement had varied implementation. Romania showed strong implementation in special schools (81%) but lower levels in general schools (36%). Other countries, such as Argentina, reported minimal Whole School Engagement implementation for both special and general schools.

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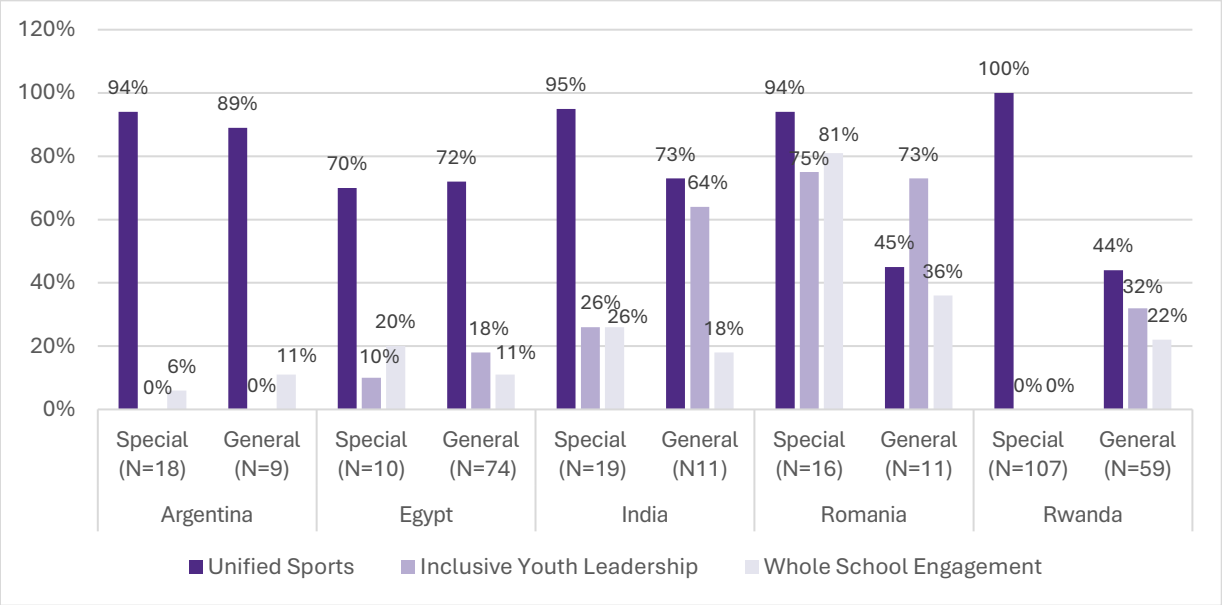
Figure 4. Implementation of UCS Components as Reported by Admin/Teachers



Note: Pakistan was removed due to small sample sizes.

Parent/Caregiver Awareness

Figure 5 reports parents' and caregivers' awareness of the UCS components in their children's schools. Unified Sports is again the most recognized component, but awareness is lower compared to what was reported by administrators. In Argentina, parents of students with ID reported 65% awareness, and for students without ID, only 55% of parents reported awareness. Similarly, in Rwanda, parents reported much lower awareness of Unified Sports (48% for students with ID, 42% for students without ID) compared to the 100% implementation rates reported by administrators.

Inclusive Youth Leadership showed significant discrepancies between administrator reports and parental awareness. For instance, in Rwanda, 32% of parents of students with ID reported awareness of the component, compared to no reported implementation by administrators. Whole School Engagement followed a similar pattern, with reported awareness by parents being generally lower than reported implementation by administrators. Argentina and Rwanda showed relatively high awareness among parents for both students with and without ID.

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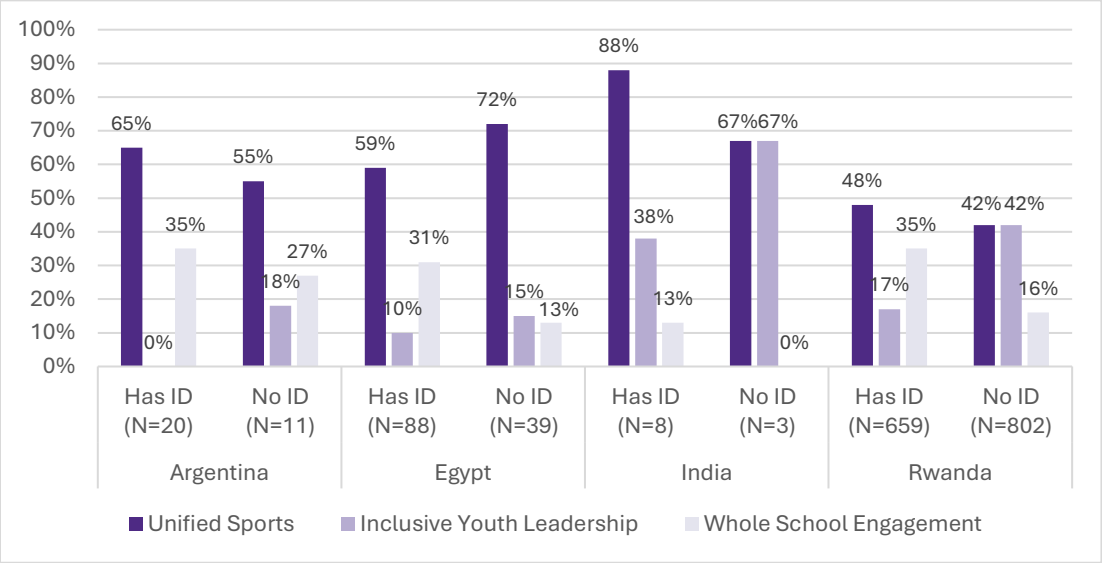
Figure 5. Awareness of UCS Components as Reported by Parents/Caregivers



Note: Pakistan was removed due to small sample sizes.

The data from administrators, caregivers, and parents should be interpreted with caution due to small sample sizes in some countries, particularly in India and Pakistan, where fewer administrators and parents took surveys. These smaller sample sizes may result in skewed findings that do not fully represent the broader population. In the following subsections, we focus on participation in each UCS component as reported directly by the students.

B. Student Experiences of UCS Activities

In the post-intervention surveys, students with ID were asked to rate from 1 (never) to 5 (all the time) on four statements regarding their experiences during the UCS activities:

1. I was included in UCS activities (such as sports, clubs, assemblies, and rallies).
2. I was treated equally and respectfully during UCS activities.
3. I was accepted by other students who took part in UCS activities.
4. I want to be a part of UCS activities in the future.

Figure 6 illustrates the percentage of students with ID who responded "4" (often) or "5" (all the time) to the statements regarding their experiences in UCS activities, broken down by country. Overall, students with ID reported high levels of positive experiences. Egypt, Rwanda, Romania, and Argentina showed consistently high positive responses across all four categories: feeling included in UCS activities, being treated equally, feeling accepted, and aspiring for future participation.

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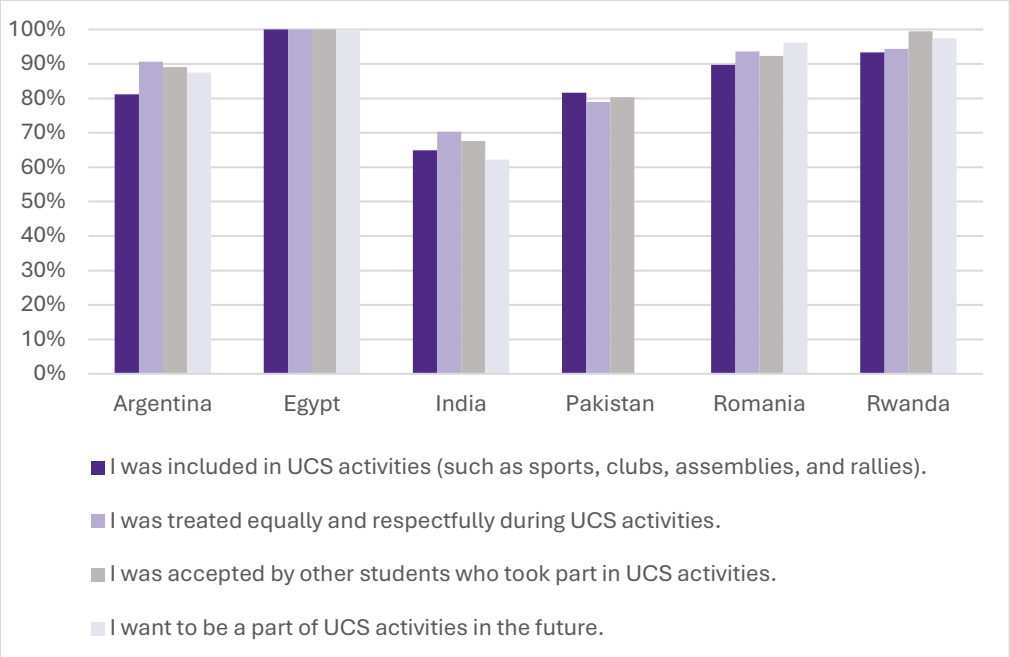
While India and Pakistan reported slightly lower rates of positive experiences compared to the other countries, the majority of students with ID still indicated positive experiences, with at least 60% reporting favorable outcomes across all categories. These results highlight the overall success of UCS in promoting inclusion and positive experiences for students with ID.

Figure 6. Proportion of Students with ID who Responded 4 (Often) or 5 (All the time)



Note: Pakistan has missing data for the last question.

C. Perceived Effects of UCS

Students with and without ID were asked to share their perceptions of how the UCS program affected interactions among students. Specifically, students with ID were asked whether their peers without ID treated them differently after participating in UCS activities, as reflected in post-intervention surveys. Figure 7 illustrates their responses by country.

The majority of students with ID in India (76%), Rwanda (74%), and Argentina (55%) felt they were treated more positively after participating in UCS. In Egypt (86%), Romania (47%), and Pakistan (38%), a significant portion of students reported no change in treatment, suggesting that pre-existing relationships may have been generally positive. Encouragingly, very few students across all countries reported feeling treated more negatively, with Pakistan (11%) being the highest but still representing a small minority.

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Similarly, students without ID were asked how UCS activities impacted their interactions with students with ID. Figure 8 presents their responses by country. In all countries, more than 70% of students without ID reported that their interactions with students with ID had improved, either stating "Yes, they've been more positive" or "Yes, they've changed a little."

Figure 7. Responses of Students with ID to Perceived Effects of UCS

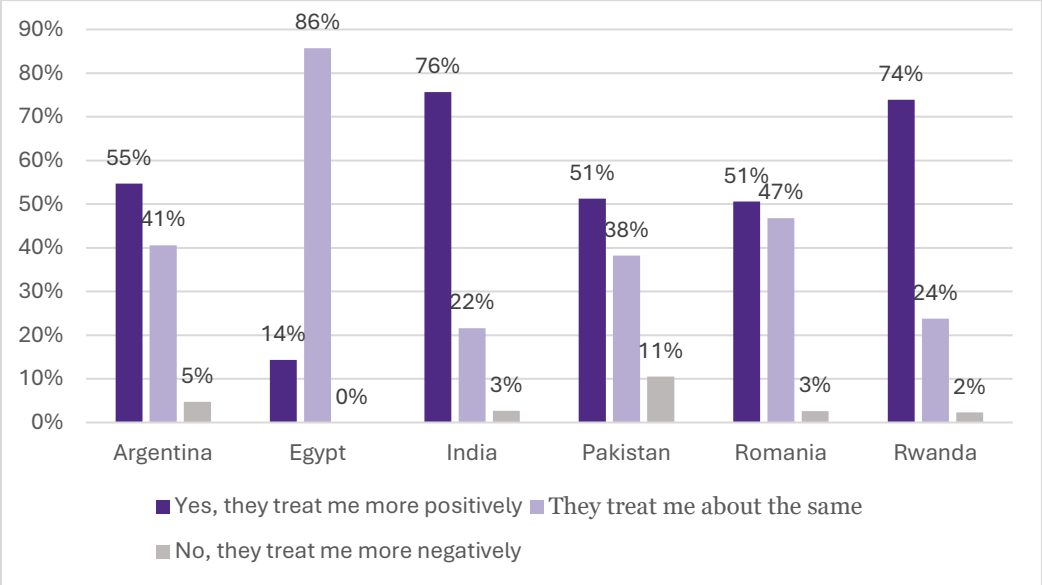
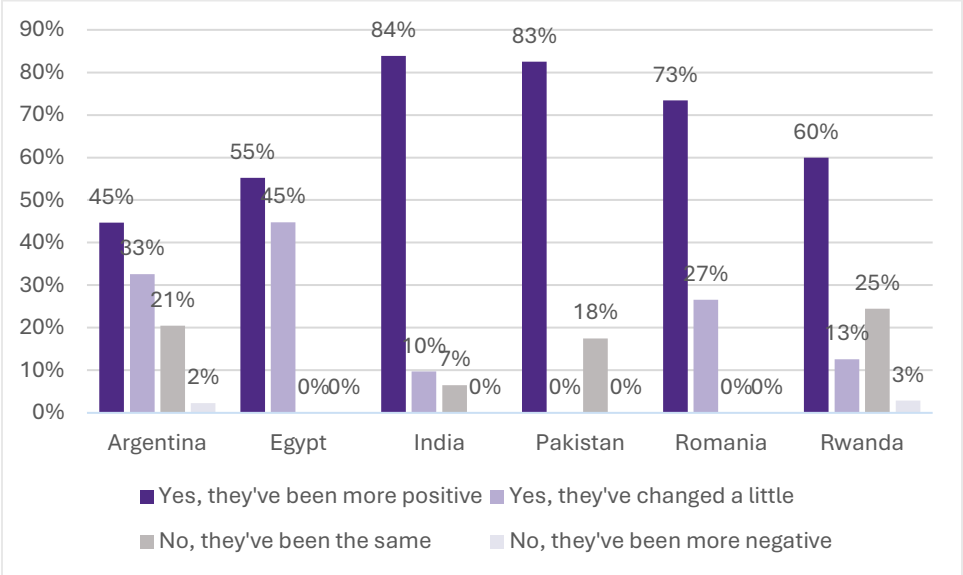


Figure 8. Perceived effects of UCS on interactions with students with ID



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D. Barriers to Participation in UCS Activities

Students with and without ID were asked about any barriers preventing them from participating in UCS activities in Figures 9 and 10. Many students reported no barriers to participation. In Egypt, for instance, 100% of students with and without ID indicated they had no difficulties participating in UCS activities. However, in other countries, students faced specific challenges.

In Argentina, 38% of students with ID reported that activities were too far away, while 27% said they didn't know how to sign up. Among students without ID, the main barriers were lack of knowledge about how to sign up (33%) and lack of time (31%). In India, both students with and without ID commonly cited lack of time (24% for students with ID, 23% for students without ID), lack of transportation (22% and 16%), and the distant location of activities (16% and 13%) as barriers to participation.

In Pakistan, students with ID reported few barriers, while 51% of students without ID cited lack of time as a major obstacle. In Rwanda, the only reported barrier was lack of transportation, affecting seven percent of students with ID and 11% of students without ID.

Parents and caregivers of students, both with and without ID, were asked about their involvement in UCS activities and any barriers to participation, as shown in Figures 11 and 12. A common barrier for both groups was lack of time. In India, 25% of parents and caregivers of students with ID cited lack of interest as a barrier, although this finding should be interpreted with caution due to the small sample size of only eight respondents. In Rwanda, the primary barriers reported by parents and caregivers of both students with and without ID were lack of interest and lack of transportation.

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Figure 9. Barriers to Participation in UCS Activities as Reported by Students with ID

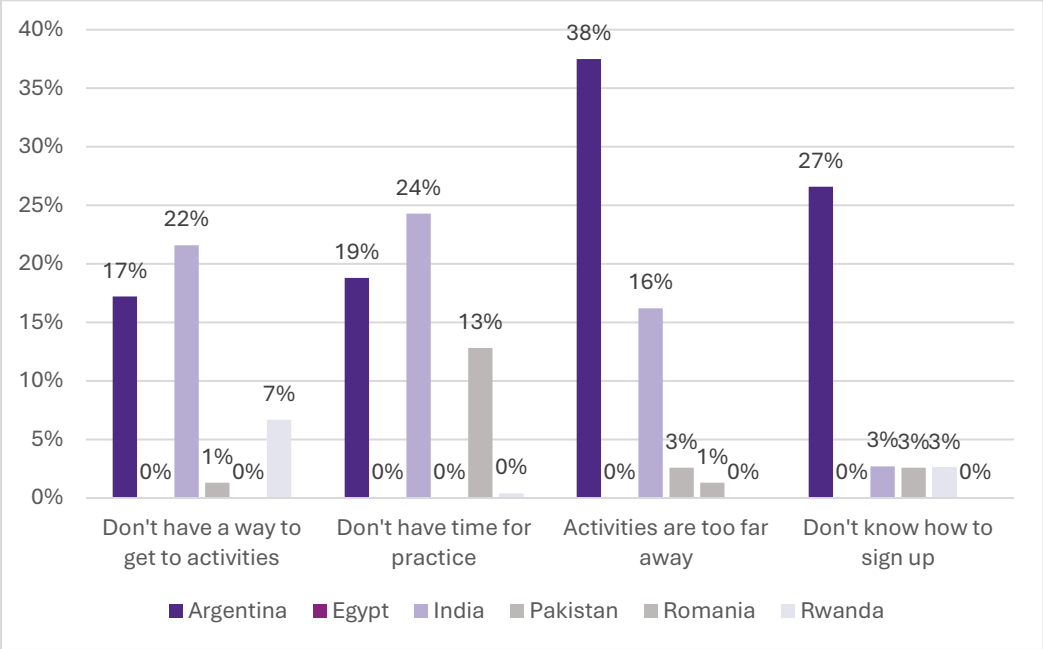

Figure 10. Barriers to Participation in UCS Activities as Reported by Students without ID

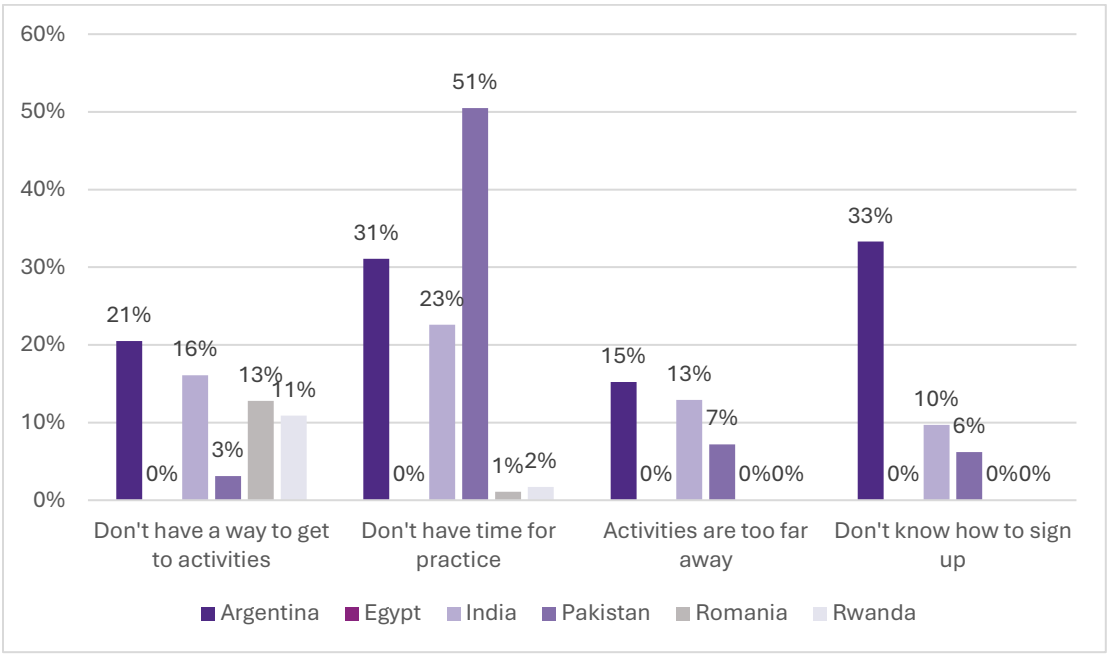

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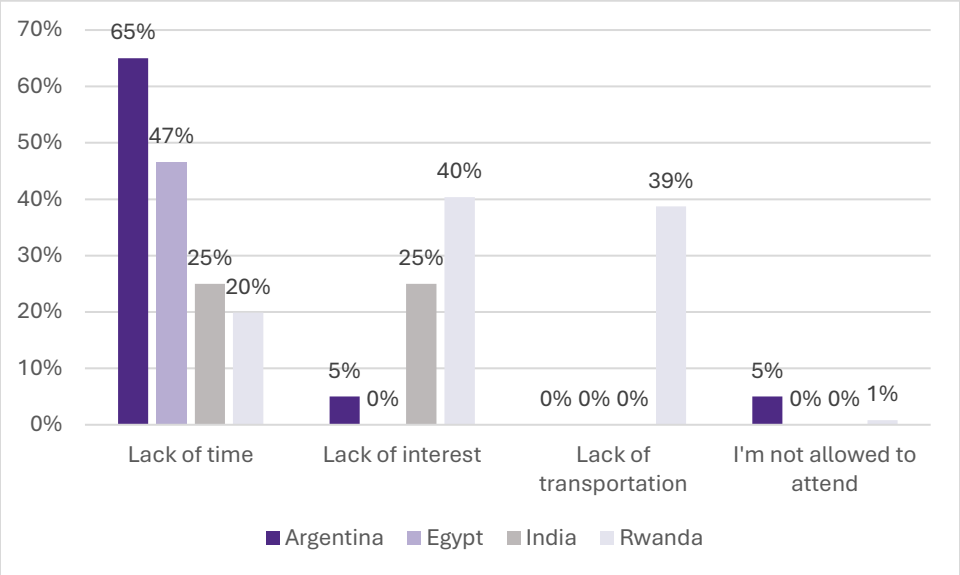
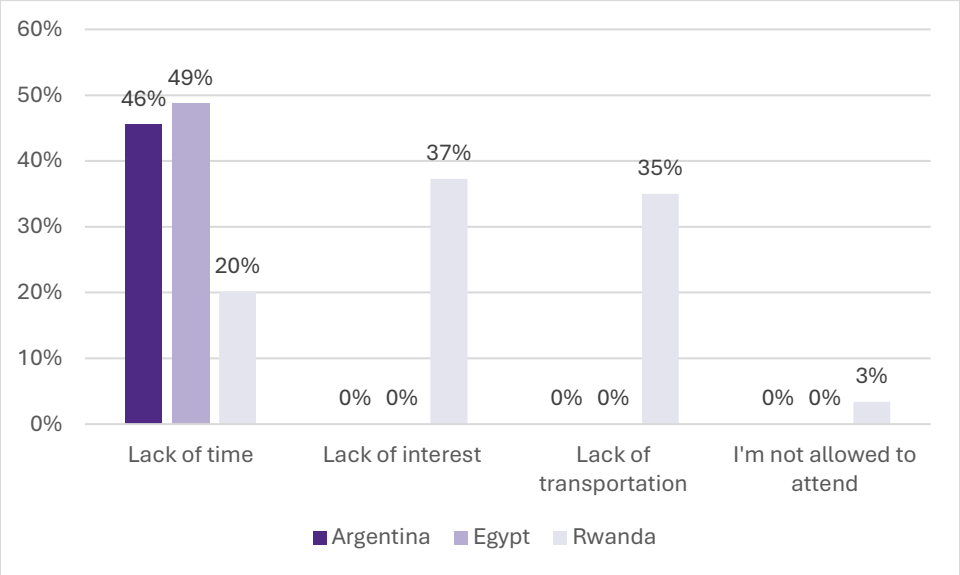
Figure 11. Barriers to Participation in UCS Activities as Reported by Parents/Caregivers of Students with ID



Note: Pakistan is dropped due to low sample size (N=1). Romania did not collect parent/caregiver data.

Figure 12. Barriers to Participation in UCS Activities as Reported by Parents/Caregivers of Students without ID



Note: India (N=3) and Pakistan (N=1) are dropped due to low sample sizes. Romania did not collect parent/caregiver data.

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V. Evaluation Findings

This section presents findings on the relationship between UCS participation and various outcomes as reported by students, administrators/teachers, and parents/caregivers. Although rigorous methods were applied, the results should be interpreted as statistical associations, not causal effects, due to data limitations and small sample sizes. The primary data source for this evaluation is survey analysis, supplemented by insights from focus groups and interviews where relevant.

A. Methods

To evaluate the relationship between the UCS program and key outcomes, we employed several methodologies, adapting them to the specific data and circumstances of each country. Here's a detailed breakdown of our approach:

Pooled Estimates

First, we used factor analysis to combine survey responses into composite scores for important domains, such as school climate or social-emotional skills. This method simplifies qualitative survey data into measurable and stable variables, which we then used as the primary outcomes for the analysis.

Next, we estimated the relationship between these outcome scores and UCS program participation using regression models. We conducted two pooled analyses to assess the overall impact of the program across multiple countries:

1. First pooled estimate (All Countries): We pooled data from all six countries and included fixed effects for both country and survey round. This approach controls for country-specific factors and changes over time, helping to isolate the overall association between the UCS program and key outcomes. However, this method does not fully account for potential biases from unmeasured individual factors.

2. Second pooled estimate (Pre-Post Individual-Level Tracking for Four Countries): To address these potential biases, we conducted a second analysis that included countries where individuals could be tracked across pre- and post-surveys, including Egypt, India, Pakistan, and Romania. We used individual-level fixed effects, which control for time-invariant individual characteristics (such as personal traits). While this reduced bias, it also limited the sample size, as countries like Argentina and Rwanda, where individuals couldn't be tracked over time, were excluded.

Country-Specific Estimates

In addition to these pooled analyses, we conducted country-specific evaluations based on the data available in each context:

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- For Argentina, only school-level data was available, so we applied a school-level fixed effects model to compare schools over time (School-Level Fixed Effects).
- In Egypt, India, Pakistan, and Romania, we used individual-level fixed effects models by linking survey responses through names or school information to track individuals across pre- and post-surveys (Individual-Level Fixed Effects).
- In Rwanda, where individual identifiers were unavailable, we used a simpler ordinary least squares (OLS Regression) regression model to assess the relationship between program participation and outcomes.

Comparing Pooled vs. Country-Specific Estimates

Pooled Estimates provide a broad overview of the correlations between UCS program and various outcomes across multiple countries, offering generalized insights but potentially missing individual or country-specific nuances. Country-Specific Estimates offer more insights into how the program performed in different contexts. These analyses are valuable for understanding local drivers of success or challenges but are less generalizable across regions. In sum, the first pooled estimate gives us a high-level understanding of all participating countries, the second pooled estimate adds more precision by controlling for individual traits, and the country-specific models dive into localized outcomes, providing more context-specific findings. It's important to interpret these results with caution, especially when making cross-country comparisons. The varying quality and structure of the data across countries required different estimation techniques, which can affect the comparability of results.

For more detailed information about the methodologies used, please refer to the Technical Appendix (Appendix B).

B. Key Findings

School Climate

We evaluated the relationship between the UCS program and students' perceptions of school climate by surveying them on three key areas: reducing bullying, increasing feelings of belonging, and helping different groups of students get along. Students rated these areas on a scale from 1 (no difference) to 5 (big difference). Before UCS started, students rated the impact of existing school activities, and after UCS was implemented, they rated the influence of UCS activities. We created school climate scores both before and after UCS to measure the change over time.

Figure 13 shows the estimated relationship between UCS and changes in school climate for students with and without ID. The results are presented in three ways:

1. Combined estimates across all six countries (labeled "All")
2. Estimates for the four countries where we could track individual students before and after UCS (labeled "Linked")

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3. Estimates for each country separately.

Detailed estimates are available in Tables B.1 and B.2 in the Technical Appendix.

Overall, students with ID reported a stronger positive link between UCS activities and school climate, particularly in Rwanda, Egypt, and Romania. In the combined estimate across all countries, there was a 1.2-point increase in school climate scores, starting from a baseline of -0.7. This means that the score more than doubled, and this increase was statistically significant at the 5% level. In simple terms, this suggests that there's less than a 5% chance that the observed improvement in school climate was due to random chance, meaning the UCS program likely contributed to this improvement.

In the four countries where students were tracked before and after UCS implementation, there was an observed increase in school climate scores; however, this result was not statistically significant. This means we cannot confidently attribute the improvement to the UCS program. The lack of statistical significance could be due to the smaller sample size in this analysis, or it may indicate that the relationship between UCS and school climate is weaker in this group.

For students without ID, we found positive correlations in Egypt and Rwanda. Interviews conducted in Egypt supported these findings, with one student with ID noting that UCS activities "promote inclusion, anti-bullying, and acceptance of others." In Rwanda, students attributed a significant decline in bullying to UCS initiatives, with one student reporting that encouraging peers to speak up led to a reduction in bullying by more than 70%, underscoring the lasting benefits of UCS on the broader school environment. However, no statistically significant correlation of UCS with school climate was observed for students with ID in Argentina and Pakistan, or for students without ID in Argentina, India, Pakistan, and Romania.

Teachers and administrators were asked to evaluate the perceived effects of school activities before UCS (pre-intervention) and after UCS activities (post-intervention) on school climate, specifically focusing on two areas: increasing the sense of community and helping different student groups get along. They rated these effects on a scale from 1 (no difference) to 5 (big difference). We then used a statistical method (factor analysis) to combine these ratings into overall school climate scores for each country and across all countries.

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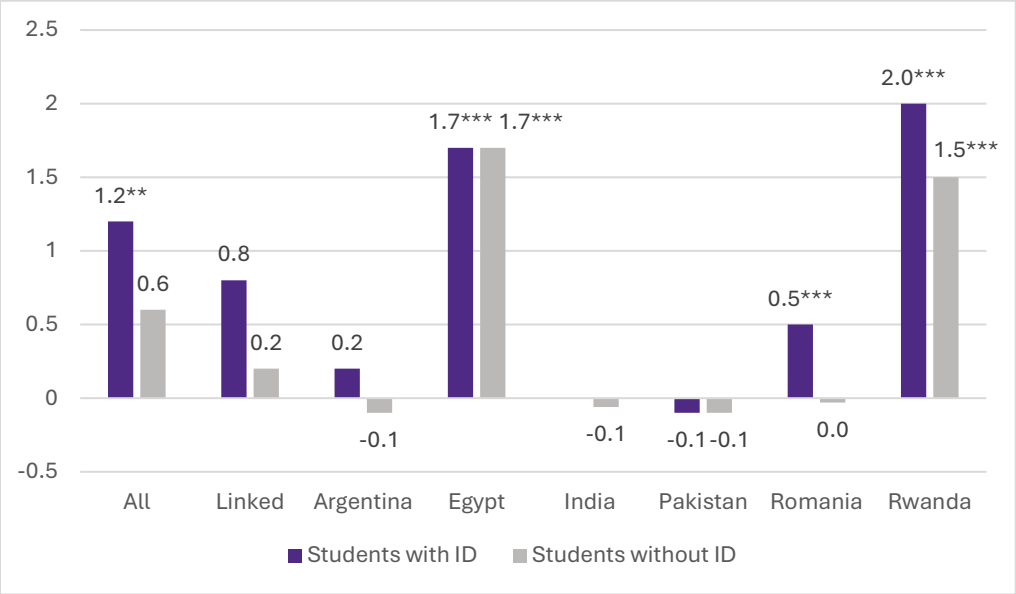
Figure 13: Estimated Correlation of UCS Program and School Climate as Reported by Students



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Students with ID in India are omitted due to a negative R-squared, indicating poor model fit.

Figure 14 shows the estimated correlation of UCS and school climate, with separate results for special schools and general schools.

- In special schools, there were positive correlations with UCS and school climate reported by administrators and teachers, especially in Rwanda and Egypt. Across all countries, UCS was associated with a 1.0-point increase in the school climate score, from a pre-UCS score of -0.5. This means UCS was associated with a school climate score that more than doubled, representing an increase of over 200%.

- In general schools, there were no significant associations of UCS and school climate reported by administrators and teachers, except for a positive association in Egypt and a negative association in Argentina. However, the results from Argentina should be viewed with caution because the number of administrators and teachers surveyed after UCS was small.

Detailed estimates are available in Tables B.10 and B.11 in the Technical Appendix.

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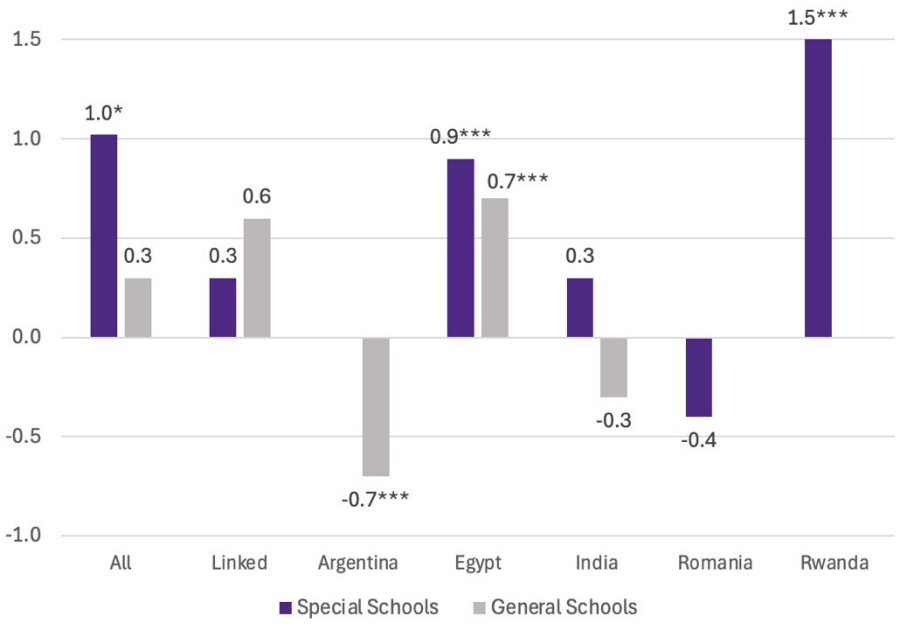
Figure 14: Estimated Correlation of UCS Program and School Climate as Reported by Administrators/Teachers



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Admin/teachers from special schools in Argentina and from general schools in Romania and Rwanda are omitted due to negative R-squared, indicating poor model fit.

Social-Emotional Learning Skills

Students, parents/caregivers, and teachers/administrators were asked to rate students' SEL skills before and after UCS activities. They used a scale from 1 (No, not true) to 5 (Yes, really true) to assess eight specific skills, including:

- Reflecting on personal strengths
- Recognizing strengths in others
- Learning from people who are different
- Identifying when someone needs help
- Practicing patience with others
- Contributing to improving the school environment
- Being patient
- Understanding how emotions and actions affect others
- Believing they can improve their school
- Setting personal goals

We used factor analysis to combine these responses into overall SEL scores for all countries and for each country individually.

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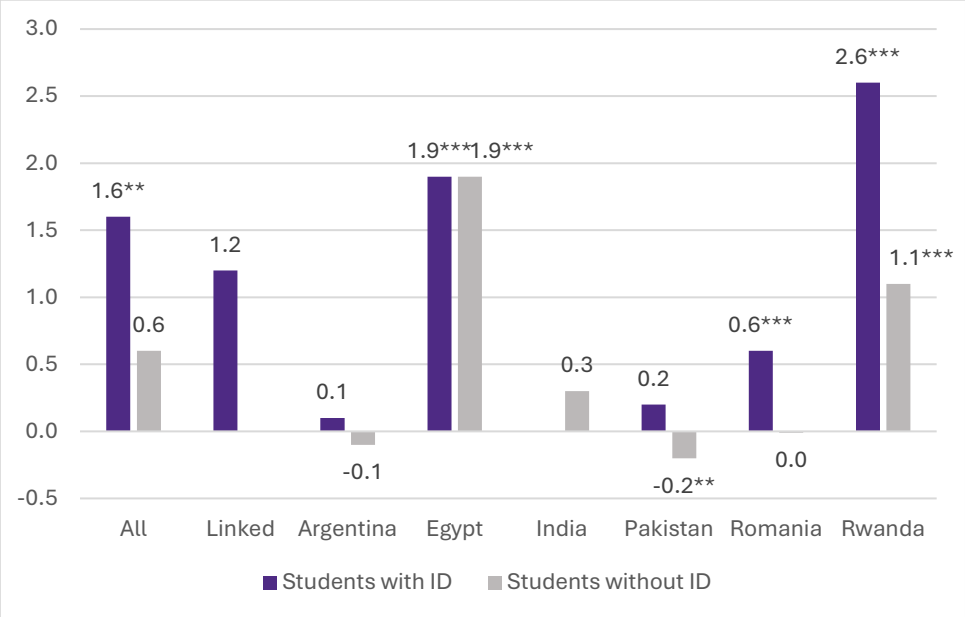
Figure 15 shows the relationship between UCS participation and SEL scores for students.

- For students with ID, UCS was positively associated with SEL across countries, especially in Rwanda, Egypt, and Romania. The first pooled estimate shows that UCS correlated with a 1.6 point increase in SEL scores, from a pre-UCS score of -1.1, which represents about a 145% increase.
- For students without ID, UCS was positively associated with SEL scores only in Egypt and Rwanda. In Argentina and Pakistan, no significant correlations were found for students with or without ID. Additionally, there was a slight negative correlation of UCS with SEL scores for students without ID in Pakistan.

These results were echoed in interviews with students in Egypt, where one student without ID shared, "I learned patience in achieving victory and goals," and another said that helping others during activities was a rewarding experience.

More detailed estimates are available in Tables B.3 and B.4 in the Technical Appendix.

Figure 15: Estimated Correlation of UCS Program and Social Emotional Skills as Reported by Students



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Students with ID in India and students without ID in the pre-post linked sample are omitted due to negative R-squared values, indicating poor model fit.

In addition to asking students to rate their own SEL skills, parents and caregivers were also asked to evaluate their children's skills on the same eight areas using a scale from 1

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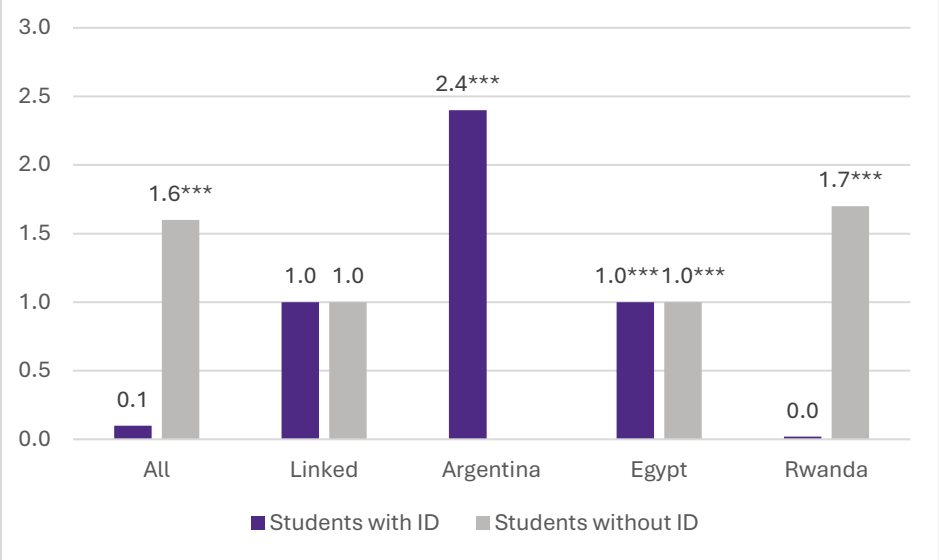
to 5, both before and after the UCS program. Figure 16 shows the estimated impact of UCS on SEL scores as reported by parents and caregivers for children with and without ID.

- For students with ID, UCS was positively associated with SEL skills reported by parents and caregivers in Argentina and Egypt.
- For students without ID, UCS was positively correlated with SEL skills reported by parents and caregivers, with the most significant correlations in Egypt and Rwanda. According to the first pooled estimate, UCS was associated with a 1.6 point increase in SEL scores reported by parents and caregivers, a 432% increase from a pre-UCS score of -0.37.

For more detailed estimates, refer to Tables B.16 and B.17 in the Technical Appendix.

Figure 16: Estimated Correlation of UCS Program and Social-Emotional Learning Skills as Reported by Parents/Caregivers



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Parents of students without ID in Argentina are omitted due to a negative R-squared, indicating poor model fit.

Administrators and teachers were also asked to evaluate students' SEL skills. Figure 17 presents the results.

- In special schools, UCS was positively correlated with SEL skills reported by administrators and teachers, with the largest positive associations in Rwanda, Egypt, and India. UCS was associated to a 1.4 point increase in SEL score, more than tripling the baseline score of -0.63.

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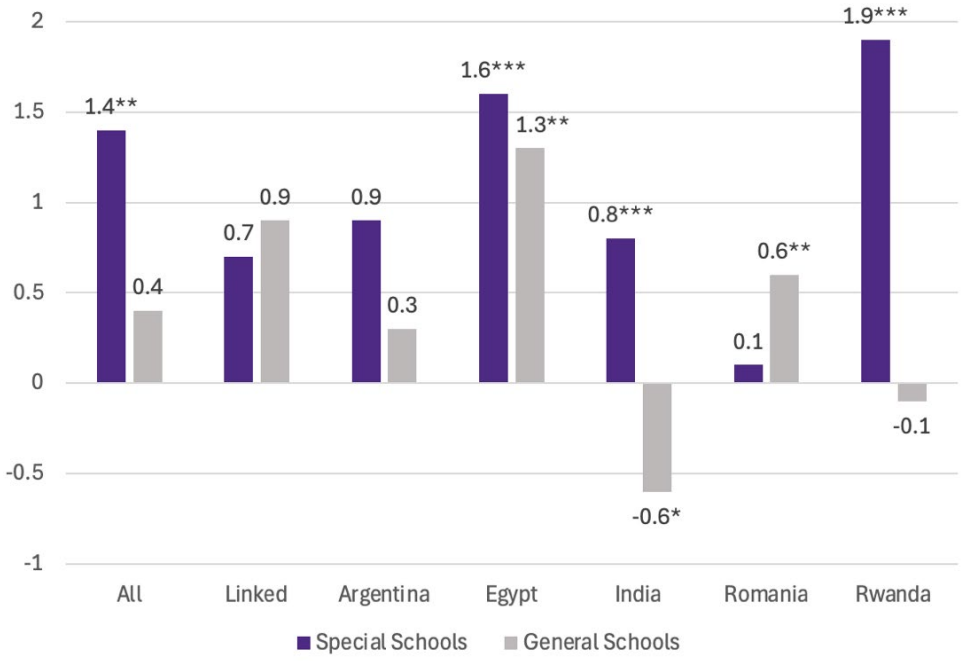
- In general schools, UCS was positively correlated with SEL skills reported by administrators and teachers in Egypt and Romania, but there were some negative correlations in India. However, the small sample size in India might have affected these findings, making the results less reliable.

More detailed estimates can be found in Tables B.12 and B.13 in the Technical Appendix.

Figure 17: Estimated Correlation of UCS Program and Social-Emotional Learning Skills as Reported by Administrators/Teachers



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$).

Student Engagement

Students, both with and without ID, were surveyed about their interest and participation in activities with friends. Students with ID were asked about activities they shared with their closest friend, who might also participate in the same UCS activities. Students without ID were asked about their interactions with peers with ID, focusing on shared school or UCS activities. They rated how often they engaged in 12 different activities, using a scale from 1 (never) to 5 (all the time). These activities included things like hanging out outside of school, borrowing items, sharing secrets, standing up for friends, eating meals together, texting, and attending events like sports games or movies. We used a factor analysis to create an overall score based on these ratings.

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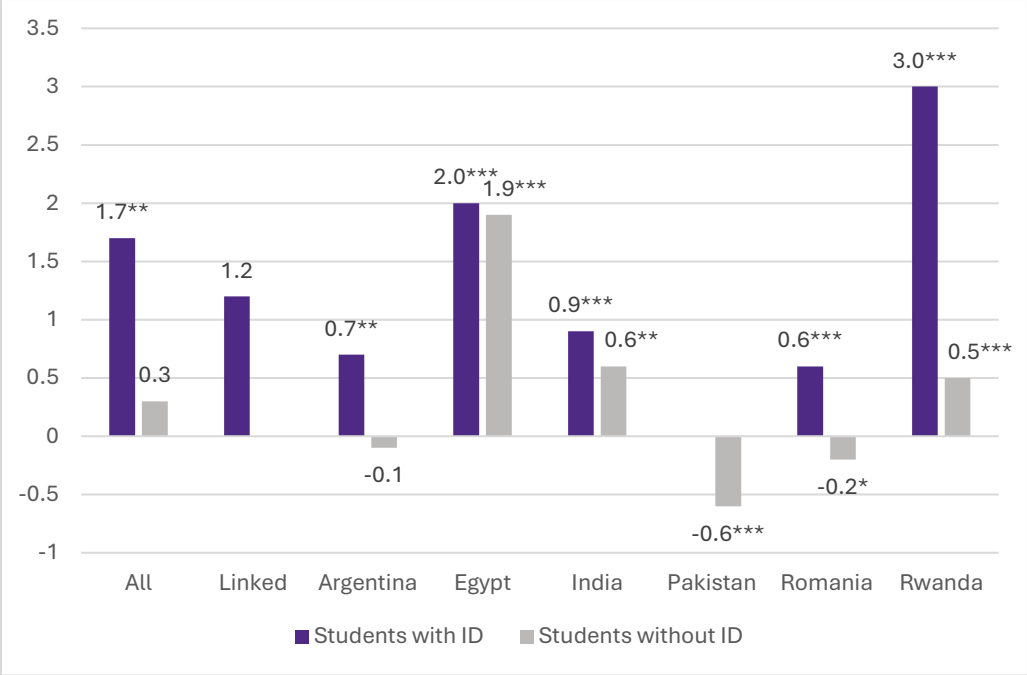
Figure 18 shows the relationship between UCS and student engagement for both groups of students.

- For students with ID, UCS was positively correlated with student engagement in all countries except in Pakistan. According to the first pooled estimate, UCS was associated with a 1.7-point increase in the student engagement score, more than doubling the baseline score of -1.3.
- For students without ID, UCS was positively associated with student engagement in Egypt, India, and Rwanda, but not in other countries. There were small negative relationships of UCS with engagement in Pakistan and Romania, possibly due to the impact of COVID-19 on students' ability to interact.

More detailed information can be found in Tables B.5 and B.6 in the Technical Appendix.

Figure 18: Estimated Correlation of UCS Program and Student Engagement as Reported by Students



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Students with ID in Pakistan and students without ID from the pre-post linked sample are omitted due to negative R-squared values, indicating poor model fit

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Experiences of Students with ID

Students with ID were surveyed to evaluate their experiences at school and in the community, using a rating system from 1 (never) to 5 (all the time). At school, they were asked about things like how much they enjoy school, feel included, communicate with peers, take part in activities, feel supported by other students, experience equal treatment, and their social interactions outside of school. In their community, they reflected on social inclusion, interactions with neighbors, invitations to events, and feeling like they belong and are valued.

We created overall scores for students' school and community experiences using factor analysis based on their responses. Figure 19 shows the relationship between the UCS program and students' experiences at school and in their communities. Positive associations were seen in most countries. Across all countries, the school experience score more than doubled, increasing by 1.5 points, from -0.9 to 0.6, while the community experience score went up by 1.35 points, from -0.9 to 0.4. These positive relationships were mainly driven by results from Egypt, Rwanda, India, and Romania. Detailed estimates can be found in Tables B.7 and B.8 in the Technical Appendix.

Interviews from Rwanda and Egypt backed up these findings. In Rwanda, teachers and parents noticed that students with ID were treated more positively after the UCS program, which reduced isolation and improved social inclusion. One parent shared that school counseling helped her accept and support her child's involvement in the community. In Egypt, pre- and post-program interviews revealed that the program helped families overcome barriers to integrating children with ID. Before the program, students often felt isolated, but after participating, parents reported that their children were more confident and socially engaged. One student said that participating in unified sports gave them a sense of belonging. Teachers also observed that the program created a supportive environment, which helped ease parents' worries about their children’s community integration.

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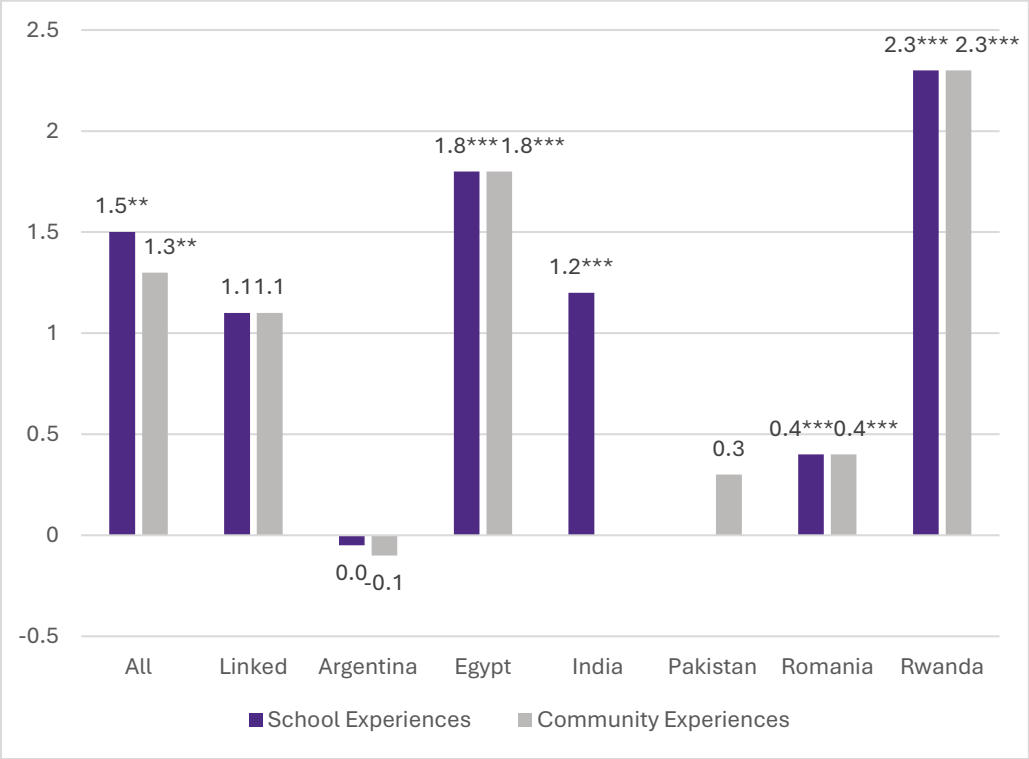
Figure 19: Estimated Correlation of UCS Program and School and Community Experiences as Reported by Students with ID



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). School experiences in Pakistan and community experiences in India are omitted due to negative R-squared values, indicating poor model fit.

Attitudes and Knowledge Towards Students with ID

Students without ID were asked to rate six statements about their perceptions of students with ID, using a scale from 1 (no, not true) to 5 (yes, really true). These statements covered things like: feeling comfortable talking with students with ID, knowing how to act around them, sharing contact information, responding to conversations, introducing them to friends, and spending time one-on-one. After adjusting the ratings so that higher values reflected more positive attitudes, we combined the responses into an overall attitudes score using factor analysis.

Figure 20 shows the positive correlation of the UCS program and the attitudes and understanding of students without ID, with the biggest improvements seen in Rwanda, Egypt, India, and Romania. Detailed estimates are reported in Table B.9 in the Technical Appendix.

These results are supported by interviews from Egypt, where one student without ID shared, "I enjoy the positive interaction with athletes with intellectual disabilities and

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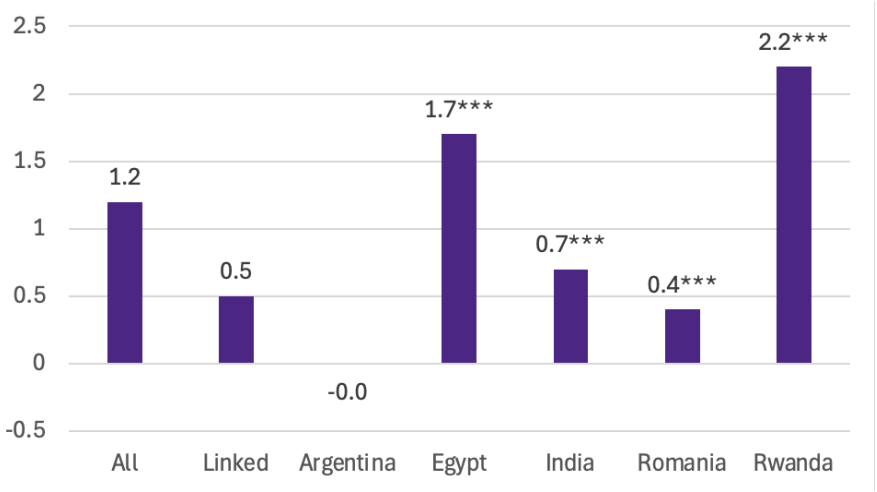
other students at school." Another student mentioned, "I've made many athlete friends with intellectual disabilities and stay in regular contact with them." In Egypt, UCS events seemed to help foster positive attitudinal shifts among students without ID.

Figure 20: Estimated Correlation of UCS Program and Attitudes Towards Students with ID as Reported by Students without ID



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Pakistan is omitted due to a negative R-squared, indicating poor model fit.

Teachers and administrators were surveyed about their attitudes toward students with ID before and after UCS activities were introduced. They rated whether students with ID, both in general school activities (before UCS) and in UCS activities (after UCS), were capable of six different tasks, using a scale from 1 (definitely not) to 5 (definitely yes). These tasks included learning academic subjects alongside other students, making new friends, participating in physical activities, playing on a sports team (with and without other students with ID), and understanding the rules of competitive sports.

We combined these responses into an attitude score for teachers and administrators using factor analysis. Figure 21 shows that there is a positive correlation between UCS program and attitude scores, especially in special schools in Rwanda and Egypt, where scores increased by 1.4 points, from a baseline of -0.63 to 0.74. In general schools, positive associations of UCS with attitudes were observed among administrators and teachers in Egypt, but no significant relationships were noted in other countries. Detailed estimates are available in Tables B.14 and B.15 in the Technical Appendix.

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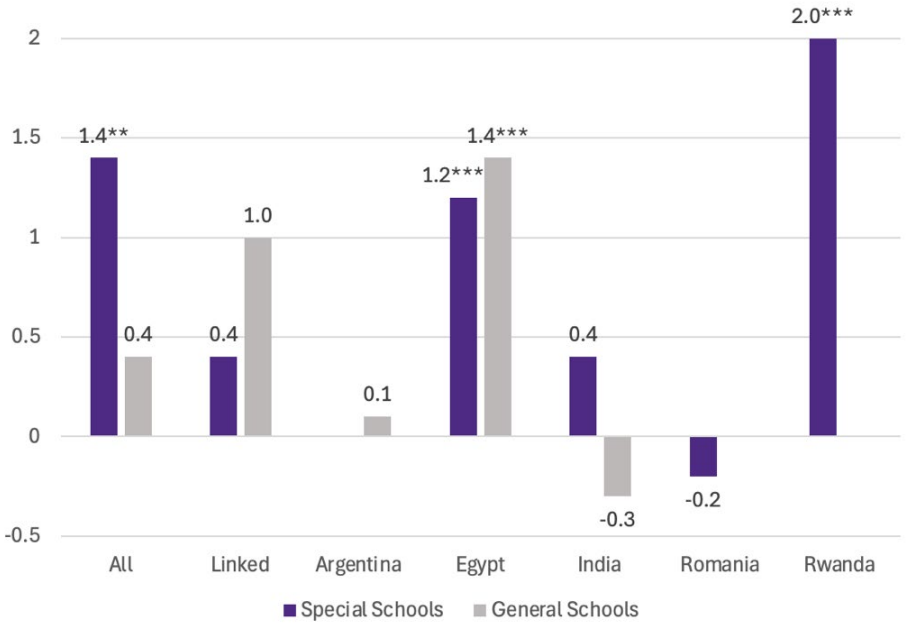
Figure 21: Estimated Correlation of UCS Program and Attitudes Towards Students with ID as Reported by Administrators/Teachers



Note: Stars indicate statistical significance (* $p<0.10$, ** $p<0.05$, *** $p<0.01$). Admin/teachers from special schools in Argentina and from general schools in Romania and Rwanda are omitted due to negative R-squared values, indicating poor model fit.

VI. Lessons Learned and Recommendations

The evaluation of the UCS program across six countries demonstrated its potential to promote inclusivity and engagement, particularly for students with intellectual disabilities (ID). Positive impacts were seen in school climate, social-emotional learning (SEL), and attitudes toward students with ID. However, results varied between countries, highlighting the need for localized adaptations to fit the specific cultural and educational contexts of each region.

A. Lessons Learned for Program Implementation

The UCS program's expansion revealed several challenges that must be addressed to improve its effectiveness across diverse regions. The following key lessons are based on the evaluation:

Localized Adaptations

The success of UCS heavily depends on its ability to adapt to the unique cultural, logistical, and educational environments in each country. Tailoring core components—such as Unified Sports, Inclusive Youth Leadership, and Whole School Engagement—to

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fit local needs is essential for creating meaningful, lasting change. For example, some countries faced challenges with the age gap between students with and without ID, affecting peer interactions, as seen in Argentina. In other countries like Romania, strong local partnerships with PE teachers helped tailor the program to local needs. Without these adaptations, UCS activities may fail to resonate with the participants or align with the existing school and community structures.

Flexible Program Design

Flexibility in program implementation is crucial, particularly in response to unforeseen challenges like the COVID-19 pandemic. During the pandemic, schools needed the ability to adjust UCS activities to accommodate disruptions like school closures and limited in-person interactions. For instance, Romania successfully transformed Unified Sports into a Virtual Fitness Championship to maintain engagement, but virtual participation proved less impactful than in-person activities. The pandemic also highlighted the value of in-person interaction, as many students, teachers, and administrators reported that virtual events did not foster the same level of social inclusion or engagement. Going forward, ensuring that the program remains flexible in the face of such disruptions is vital for its continuity.

Strengthening Local Partnerships

Strong local partnerships are critical for overcoming barriers such as lack of resources, transportation, or infrastructure. In regions like Rwanda, thorough planning and collaboration between local schools, governments, and Special Olympics (SO) implementers were key to successfully running events and sustaining engagement. In contrast, countries like Argentina faced coordination challenges, particularly with logistical issues, underscoring the need for better collaboration with local partners. These partnerships are essential for implementing the program. They also ensure its long-term sustainability by tailoring the program to the local context and fostering community buy-in.

Addressing Inclusivity Challenges

The evaluation revealed persistent challenges to inclusivity, such as time constraints, limited transportation, and a lack of awareness on how to participate in UCS activities. These barriers disproportionately affected students from more vulnerable socioeconomic backgrounds, particularly in rural and low-income areas. For example, in Rwanda and Romania, many students lacked access to essential technology during the shift to virtual activities, further exacerbating existing inequalities. Addressing these issues through improved communication and outreach strategies, as well as providing necessary resources, is essential for ensuring that all students can participate in and benefit from UCS programming.

Expanding Partnerships and Funding

To sustain and scale the UCS program, it is essential to build diverse funding streams and expand partnerships with local and international organizations. Securing support

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from local, EU, and US sources is necessary to provide resources that will support ongoing program adaptations and ensure its reach across more schools and regions. In countries like Pakistan, participants suggested expanding UCS to include life skills training and work opportunities, requiring additional funding and partnerships. Countries like Romania also emphasized the importance of national coordination and partnerships to increase the program's scope and effectiveness.

B. Lessons Learned for Conducting Evaluations

The evaluation itself also yielded valuable insights into how future assessments of the UCS program can be improved, particularly in cross-cultural and international contexts:

Simplifying Evaluation Tools

Simplifying and localizing evaluation tools will increase the likelihood of obtaining accurate and complete data across countries. Complex surveys, as seen in Argentina and Romania, led to lower response rates and challenges with data accuracy, particularly for younger participants and those with ID. By tailoring surveys and data collection methods to the local context and the abilities of participants, the quality of the evaluation can be significantly improved. Countries recommended more user-friendly, streamlined instruments that better capture the program's impact without. overwhelming participants.

Evaluation Flexibility

Future evaluations must be adaptable to regional differences and potential disruptions, such as those posed by the pandemic. Hybrid or remote data collection methods should be considered to mitigate challenges related to limited access to technology or in-person participation. The shift to virtual evaluations during COVID-19 posed challenges in areas with limited digital infrastructure, such as Rwanda and Pakistan. Adapting to these constraints by offering both digital and non-digital options can help ensure data is collected in a reliable and accessible way.

Ensuring Data Completeness

Varying levels of data completeness across countries posed challenges to a consistent analysis. Logistical issues, like teacher strikes in Argentina and connectivity problems in other regions, affected the ability to collect full datasets. Providing more support for standardized data collection practices, while accounting for regional variations in infrastructure and capacity, will help ensure more reliable and comprehensive data in future evaluations. Addressing sample attrition and ensuring timely submissions from country partners are also key to maintaining data integrity.

Overcoming Technological Barriers

In regions where technological infrastructure is limited, evaluations need to incorporate low-tech or alternative methods of data collection. Providing additional support for digital literacy or using non-digital means, such as paper surveys or phone interviews, where appropriate, can help ensure broader participation and more accurate data

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collection. The pandemic exposed significant technological inequities, particularly in countries like Rwanda and Romania, where access to devices and internet connectivity was limited. Supporting these regions with alternative methods will help overcome such barriers in future evaluations.

Building Stronger Local Evaluation Capacity

Collaborating with local evaluators who have a deep understanding of the cultural and educational landscape is crucial for conducting effective and contextually relevant assessments. Strengthening the capacity of local evaluation teams will enhance the quality and relevance of future studies. In countries like Rwanda, successful coordination with local evaluators and schools was key to obtaining accurate and timely data. Investing in building this local capacity will ensure future evaluations are better aligned with local realities and more reflective of the program's true impact.

C. Recommendations for Future Program Success

Adaptability

Continuously refine the UCS model to ensure it is adaptable to local needs and global challenges, such as those posed by COVID-19. Ensuring that both the program and its evaluation processes are flexible enough to withstand future disruptions will help maintain program continuity and impact. Countries like Romania demonstrated the need for adaptive solutions, such as virtual events, to maintain engagement during difficult times. However, ensuring the program can smoothly transition between in-person and virtual formats will be key to its resilience.

Sustaining Inclusivity

Prioritize communication and outreach to address participation barriers and ensure that the program fosters a truly inclusive environment for students with and without ID. Ensuring that all students, regardless of socioeconomic status or location, can engage with the UCS program is critical. Providing resources to overcome technological, logistical, and financial barriers will help expand access to the program, particularly in regions where these barriers are most pronounced.

Leveraging Partnerships

Expand and deepen partnerships with local stakeholders to ensure the sustainability of UCS activities and the accuracy and relevance of its evaluations. Strong coordination between local schools, SO implementers, governments, and community organizations is crucial for scaling the program and tailoring it to local needs. In Argentina and Rwanda, effective partnerships led to smoother implementation and higher engagement, whereas in countries with weaker collaboration, logistical issues hindered participation.

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Investing in Evaluation

Invest in creating evaluation frameworks that are flexible, accessible, and tailored to the diverse contexts in which UCS operates. Simplifying data collection tools and training local evaluators will help improve data quality and relevance. Expanding the evaluation capacity in countries with limited resources will allow for more comprehensive and accurate assessments, ensuring that the true impact of UCS is captured across different regions and contexts.

VII. Conclusion

The UCS program has demonstrated strong potential for fostering inclusivity and student engagement, particularly among students with ID. These findings suggest the program's capacity to promote a positive school climate and enhance SEL for students with ID. However, variations in outcomes across different countries highlight the importance of adapting the program to fit local cultural and educational contexts.

While the program showed a stronger positive association with outcomes for students with ID, further efforts are needed to extend its benefits to all students. This includes addressing specific barriers to participation, such as time constraints, transportation issues, and limited awareness of the program. Additionally, improving outreach to families and schools and tailoring interventions to meet the unique needs of each region will be essential for the UCS program’s continued growth and success.

By focusing on these areas, the UCS program can continue to enhance its positive impact on promoting inclusion and engagement across diverse settings, ensuring that all students—regardless of ability—have access to the benefits of inclusive education.

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References

Bots, E. (2015). *The Right to Education: Challenges and Perspectives on Inclusive Primary Education for Children with Disabilities in Rwanda*. [European Master's Degree in Human Rights and Democratisation]. University of Vienna.

Flora, M. (2015). *Implementation of Strategies for Reducing Dropout Rates of Learners with Mild Intellectual Disabilities in Inclusive Primary Schools in Bugesera District, Rwanda* [Masters of Education]. Kenyatta University.

Hammad, T., & Singal, N. (2015). Education of women with disabilities in Pakistan: Enhanced agency, unfulfilled aspirations. *International Journal of Inclusive Education*, *19*(12), 1244–1264. https://doi.org/10.1080/13603116.2015.1043962

Jacobs, S., Martín-López, B., Barton, D. N., Dunford, R., Harrison, P. A., Kelemen, E., Saarikoski, H., Termansen, M., García-Llorente, M., Gómez-Baggethun, E., Kopperoinen, L., Luque, S., Palomo, I., Priess, J. A., Rusch, G. M., Tenerelli, P., Turkelboom, F., Demeyer, R., Hauck, J., … Smith, R. (2018). The means determine the end – Pursuing integrated valuation in practice. *Ecosystem Services*, *29*, 515–528. https://doi.org/10.1016/j.ecoser.2017.07.011

Simplican, S. C., Leader, G., Kosciulek, J., & Leahy, M. (2015). Defining social inclusion of people with intellectual and developmental disabilities: An ecological model of social networks and community participation. *Research in Developmental Disabilities*, *38*, 18–29. https://doi.org/10.1016/j.ridd.2014.10.008

Siperstein, G. N., McDowell, E. D., Jacobs, H. E., Stokes, J. E., & Cahn, A. L. (2019). Unified Extracurricular Activities as a Pathway to Social Inclusion in High Schools. *American Journal on Intellectual and Developmental Disabilities*, *124*(6), 568–582. https://doi.org/10.1352/1944-7558-124.6.568

Siperstein, G. N., Summerill, L. A., Jacobs, H. E., & Stokes, J. E. (2017). Promoting Social Inclusion in High Schools Using a Schoolwide Approach. *Inclusion*, *5*(3), 173–188. https://doi.org/10.1352/2326-6988-5.3.173

Stănculescu, M. S., Grigoraș, V., Marin, M., Iamandi-Cioinaru, C., Teşliuc, E., Blaj, G., Corad, B., Pop, V., & Trocea, A. (2017). *Romania: Children in Public Care 2014.pdf*. World Bank, National Authority for the Protection of Children's Rights and Adoption (ANPDCA), UNICEF.

Taverna, M. E., Polo, M. L., Zocola, M. E., & Bertero, M. P. (2019). Inclusion of Children and Adolescents with Mild Disabilities in the Scientific Area through a Novel Workshop as a Didactic Strategy. *International Journal of Special Education*, *33*(4), 925–937.

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United Nations Educational, Scientific and Cultural Organization. (2012). *Addressing Exclusion in Education: A Guide to Assessing Education Systems Towards More Inclusive and Just Societies*. https://unesdoc.unesco.org/ark:/48223/pf0000217073

Yin, M., Siwach, G., & Belyakova, Y. (2022). The Special Olympics Unified Champion Schools Program and High School Completion. *American Educational Research Journal*, *59*(2), 315–344. https://doi.org/10.3102/00028312211032744

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Appendix

A. Data Construction Appendix

This appendix provides an overview of the survey data collection process by country, detailing the impact of COVID-19 on data collection. It also explains the construction of the final analytical samples for student, administrator/teacher, and parent/caregiver data in each country.

Argentina

In 2021, Special Olympics International (SOI) partnered with Fundación para la Promoción y Desarrollo de la Persona con Discapacidad (Fupaeh) and Pontificia Universidad Católica Argentina to initiate the UCS program evaluation in Argentina. The team developed evaluation plans and adapted protocols to the local context. However, the COVID-19 pandemic delayed the process, as the ethics committee paused reviews of new protocols. To address this, the team considered engaging a private ethics committee.

Despite these setbacks, by the second year, the team implemented a hybrid data collection approach, combining in-person and online methods based on regional conditions. Urban schools followed stricter in-person guidelines compared to rural ones. By May 2022, as schools returned to in-person activities, the second round of pre-intervention data collection was completed. However, Fupaeh faced challenges in securing a representative student sample, leading to the termination of their contract.

In 2023, Somos Red was contracted to conduct the third round of UCS evaluations. They utilized digital tools through the Somos Red ITA platform, along with paper surveys where schools faced connectivity challenges. With regular weekly communication, the evaluation team successfully achieved the targeted sample size, covering six provinces in the pre-implementation phase and expanding to 23 provinces post-implementation.

To select the analytical sample, the Northwestern team excluded data from Rounds one and two due to quality issues in the post-surveys, focusing solely on Round three. From the 338 pre-intervention and 272 post-intervention student responses, the sample was narrowed to 213 pre- and 196 post-intervention observations, including only compliant respondents who completed all key outcome measures. For the administrator/teacher surveys, 138 pre- and 80 post-intervention responses were collected, with duplicates and incomplete data removed, resulting in 108 valid responses. For the parent/caregiver data, 172 responses were collected, and after excluding 63 non-compliant observations, a final sample of 75 pre- and 30 post-intervention responses was selected.

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Table A.1. Descriptive Statistics: Argentina

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.49	0.48	0.21	0.34
11 or younger	0.09	0.12	0.07	0.14
12-18YO	0.89	0.86	0.45	0.28
19-25YO	0.02	0.02	0.48	0.58
N	157	132	56	64

Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.73	0.56	0.73	0.56
20 or younger	0.00	0.00	0.00	0.00
21-30YO	0.26	0.33	0.26	0.33
31-40YO	0.40	0.33	0.40	0.33
41-50YO	0.26	0.22	0.26	0.22
51-60YO	0.09	0.11	0.09	0.11
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.17	0.11	0.17	0.11
Special education teacher	0.15	0.00	0.15	0.00
Headmaster/principal	0.10	0.00	0.10	0.00
Physical education teacher	0.10	0.22	0.10	0.22
Counselor	0.05	0.11	0.05	0.11
Special education assistant	0.01	0.00	0.01	0.00
Other	0.43	0.56	0.43	0.56
N	82	9	26	18

Parent/Caregiver Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.85	0.64	0.90	0.89
N	65	11	10	20

Egypt

In May 2022, SOI signed a contract with Helwan University as the local partner for the UCS program evaluation in Egypt. Due to earlier school closures, the team conducted training sessions in April 2022 and planned two rounds of data collection for 2022-2023, though only Round 1 data was successfully collected. Ethical approval was obtained for five of the eight governorates. Surveys were administered during in-person schooling and interscholastic games. Despite scheduling challenges around Ramadan, the team sampled parents through Egypt's existing volunteer programs, improving response rates with adjustments such as breaks and extra time during surveys.

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The first round of data collection yielded 450 unique student observations. The sample was then restricted by dropping 26% non-compliant observations (those with UCS participation before the intervention but not after), removing duplicates, and excluding cases with missing key outcomes. This resulted in a final analytical sample of 219 unique students, with one-quarter not having ID. For administrator/teacher data, the analytical sample included 74 administrators/teachers from general schools and 10 from special schools, with 382 unmatched observations excluded. Full compliance was assumed due to the lack of UCS participation data. For parent/caregiver data, the analytical sample consisted of 39 observations without ID and 88 with ID, drawn from a total of 320 Round 1 observations. All were successfully matched between pre- and post- surveys, though 33 non-compliant individuals were dropped.

Table A.2. Descriptive Statistics: Egypt

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.40	0.40	0.60	0.60
11 or younger	0.24	0.24	0.27	0.27
12-18YO	0.40	0.40	0.51	0.51
19-25YO	0.36	0.36	0.22	0.22
N	58	58	161	161
Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.27	0.27	0.27	0.27
20 or younger	0.00	0.00	0.00	0.00
21-30YO	0.15	0.27	0.15	0.27
31-40YO	0.32	0.27	0.32	0.27
41-50YO	0.35	0.16	0.35	0.16
51-60YO	0.18	0.30	0.18	0.30
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.08	0.12	0.08	0.12
Special education teacher	0.11	0.08	0.11	0.08
Headmaster/principal	0.05	0.09	0.05	0.09
Physical education teacher	0.34	0.39	0.34	0.39
Counselor	0.15	0.09	0.15	0.09
Special education assistant	0.27	0.22	0.27	0.22
Other	0.00	0.00	0.00	0.00
N	74	74	10	10
Parent/Caregiver Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.69	0.69	0.72	0.72
N	39	39	88	88

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India

Amity University was selected as the local partner to lead the UCS program evaluation in India. In the first year, the team adapted the evaluation framework to the local context and finalized protocols. However, due to COVID-19, implementation and data collection were delayed. By February 2022, as schools reopened in a hybrid format, Round 1 pre-intervention data was collected virtually, allowing SOI India to expand the sample for Round 2 UCS activities through hybrid learning across states.

In the second year, post-intervention data collection continued using the hybrid model, with initial success contacting students with ID in person. However, challenges arose due to COVID-19 disruptions, student relocations, and accessibility issues. The hybrid model proved beneficial in reaching remote areas, coordinating activities across states, preventing delays, and reducing travel needs. By the third year, as in-person activities resumed, the team continued using the hybrid approach, improving follow-ups and collaborating with SO Bharat to refine data collection methods. The hybrid model allowed flexibility, while face-to-face interactions supported program sustainability.

Over three rounds, the team collected data from 578 unique students. The analytical sample was refined by first dropping noncompliers (those who participated in UCS before or did not report participation after) and removing duplicates, reducing the sample by half. To retain more data, 37 missing values on student engagement were imputed with the country's sample mean, resulting in a final analytical sample of 68 students, 54% of whom have ID. For administrators/teachers, the sample included 11 from general schools and 19 from special schools, with 140 observations lost due to unmatched pre- and post-surveys. The parent/caregiver sample, initially 224 observations, was reduced to 11 unique observations after dropping noncompliers, duplicates, and those with incomplete responses.

Table A.3. Descriptive Statistics: India

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.39	0.39	0.32	0.46
11 or younger	0.55	0.00	0.32	0.08
12-18YO	0.39	0.55	0.35	0.54
19-25YO	0.06	0.45	0.32	0.38
N	31	31	37	37
Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.55	0.55	0.55	0.55
20 or younger	0.00	0.00	0.00	0.00
21-30YO	0.27	0.36	0.27	0.36
31-40YO	0.45	0.36	0.45	0.36

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41-50YO	0.18	0.18	0.18	0.18
51-60YO	0.09	0.09	0.09	0.09
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.55	0.55	0.55	0.55
Special education teacher	0.27	0.09	0.27	0.09
Headmaster/principal	0.09	0.09	0.09	0.09
Physical education teacher	0.18	0.18	0.18	0.18
Counselor	0.00	0.00	0.00	0.00
Special education assistant	0.00	0.00	0.00	0.00
Other	0.00	0.09	0.00	0.09
N	11	11	19	19
Parent/Caregiver Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	1.00	1.00	0.38	0.50
N	3	3	8	8

Pakistan

In 2021, Special Olympics International (SOI) contracted Prevision Health Consultants (PHC) Global to conduct a local evaluation in Pakistan for the UCS program. However, the implementation and data collection were delayed due to Covid-19 lockdowns. After restrictions eased in September 2021, most UCS activities resumed in-person. Ethical oversight for the project was managed by Pakistan's National Bioethics Committee, and in February 2022, PHC obtained approval for a Covid-19 survey protocol as an addendum to the main study. Despite logistical challenges such as rescheduling due to exams and summer breaks, as well as data privacy issues in special schools, the program expanded to include 30 schools by the end of year two. Data collection was conducted using Qualtrics, though difficulties remained in coordinating interscholastic events and maintaining record-keeping standards.

By year three, the program grew to 75 schools across nine cities, focusing on program sustainability and integrating Youth Leadership programs in mainstream schools. Data collection involved extensive training for volunteers, especially for interacting with students with ID. Despite early challenges in contacting schools, PHC's team adapted by coordinating closely with regional partners. The final analytical sample for student data consisted of 173 unique students, 43% of whom had ID, but strict criteria led to the exclusion of several observations, including non-compliers and duplicates. Administrator and teacher data were ultimately dropped from the final analysis due to a small sample size, as was parent/caregiver data, which yielded only two pre-post matches, making it insufficient for further analysis.

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Table A.4. Descriptive Statistics: Pakistan

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.48	0.48	0.38	0.38
11 or younger	0.02	0.02	0.04	0.04
12-18YO	0.90	0.90	0.55	0.55
19-25YO	0.08	0.08	0.41	0.41
N	97	97	76	76
Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.00	0.50	0.00	0.50
20 or younger	0.00	0.00	0.00	0.00
21-30YO	0.00	0.00	0.00	0.00
31-40YO	0.50	0.50	0.50	0.50
41-50YO	0.50	0.50	0.50	0.50
51-60YO	0.00	0.00	0.00	0.00
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.00	0.00	0.00	0.00
Special education teacher	0.00	0.00	0.00	0.00
Headmaster/principal	0.50	0.50	0.50	0.50
Physical education teacher	0.00	0.50	0.00	0.50
Counselor	0.00	0.00	0.00	0.00
Special education assistant	0.00	0.00	0.00	0.00
Other	0.50	0.00	0.50	0.00
N	2	2	4	4
Parent/Caregiver Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	1.00	1.00	0.00	0.00
N	1	1	1	1

Romania

The Motivational Romania Foundation was chosen to lead the evaluation activities for the UCS program in Romania. In the first year, the team focused on developing evaluation plans and protocols, with ethical documentation prepared to ensure compliance with the General Data Protection Regulation. Due to Covid-19 disruptions, much of the data collection and school activities were conducted online, with survey implementors trained on the UCS model, data collection methods, and participant

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profiles. During this period, virtual and in-person interscholastic events were organized to connect students with and without disabilities, such as Disability International Day and the #BeSocksy Campaign for Down Syndrome awareness.

In the second year, UCS activities and data collection were carried out using a hybrid model, adapting the framework to local contexts by involving various stakeholders, including the Ministry of Education, local NGOs, and the press. By the third year, in-person survey collection resumed, resulting in greater awareness of the UCS model. However, the team faced challenges with scheduling and cost-effective travel, while concerns over the long-term financial sustainability of the program were raised.

The analytical sample for Romania's student data includes 172 unique individuals, 45% of whom have intellectual disabilities. After applying criteria to remove noncompliers, duplicates, and those without key outcome data, the final sample was restricted to students who could be linked between pre- and post-surveys. For administrative and teacher data, the sample was similarly refined, leaving 11 observations from general schools and 16 from special schools. However, 90 observations could not be linked across pre- and post-surveys and were dropped from the analysis. No parent or caregiver data was collected in Romania.

Table A.5. Descriptive Statistics: Romania

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.66	0.67	0.33	0.33
11 or younger	0.17	0.06	0.23	0.19
12-18YO	0.83	0.93	0.73	0.74
19-25YO	0.00	0.01	0.04	0.06
N	94	64	78	78
Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.82	0.73	0.82	0.73
20 or younger	0.00	0.00	0.00	0.00
21-30YO	0.09	0.09	0.09	0.09
31-40YO	0.18	0.18	0.18	0.18
41-50YO	0.64	0.64	0.64	0.64
51-60YO	0.09	0.09	0.09	0.09
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.55	0.91	0.55	0.91
Special education teacher	0.45	0.00	0.45	0.00
Headmaster/principal	0.00	0.09	0.00	0.09
Physical education teacher	0.09	0.18	0.09	0.18
Counselor	0.00	0.00	0.00	0.00
Special education assistant	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
N	11	11	16	16

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Rwanda

In June 2022, SOI engaged a new local evaluation partner in Rwanda after facing administrative challenges with the initial partner. The Rwanda team received training from Northwestern University in July and completed their evaluation plans and data collection protocols by August. Ethical approval was obtained from the Rwanda National Ethics Committee in October 2022. The team conducted pre-intervention data collection in the fall of 2022 and participated in one round of data collection in year three of the UCS project.

For student data, the final analytical sample includes 343 pre-intervention and 1,284 post-intervention observations from Round 1, with 44% of the participants having intellectual disabilities. Since the data lacked individually identifiable information, respondents could not be linked between pre- and post-surveys. The sample was restricted to those who complied with the study and responded to all key outcome variables, such as engagement, school climate, and social-emotional outcomes.

The admin/teacher data consists of 132 observations from general schools and 229 from special schools in both pre- and post-intervention surveys, though these observations also could not be matched across surveys. Similarly, for parent/caregiver data, there were no unique identifiers to link pre- and post-surveys. After excluding non-compliers and incomplete responses, the final analytical sample included 1,439 pre-intervention and 1,461 post-intervention respondents, with around 44-45% having intellectual disabilities.

Table A.6. Descriptive Statistics: Rwanda

Student Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.41	0.46	0.54	0.36
11 or younger	0.24	0.28	0.10	0.03
12-18YO	0.52	0.44	0.52	0.59
19-25YO	0.24	0.28	0.38	0.38
N	188	717	155	567
Admin/Teacher Survey				
	General Schools		Special Schools	
	Pre	Post	Pre	Post
Female	0.48	0.44	0.48	0.44
20 or younger	0.10	0.10	0.10	0.10
21-30YO	0.03	0.02	0.03	0.02
31-40YO	0.29	0.29	0.29	0.29
41-50YO	0.47	0.42	0.47	0.42
51-60YO	0.12	0.17	0.12	0.17
61YO+	0.00	0.00	0.00	0.00
General education teacher	0.88	0.92	0.88	0.92
Special education teacher	0.00	0.00	0.00	0.00
Headmaster/principal	0.12	0.08	0.12	0.08
Physical education teacher	0.00	0.00	0.00	0.00

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Counselor	0.00	0.00	0.00	0.00
Special education assistant	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
N	73	59	122	107
Parent/Caregiver Survey				
	Without ID		With ID	
	Pre	Post	Pre	Post
Female	0.46	0.44	0.46	0.47
N	799	802	640	659

B. Technical Appendix

Analytical Method

To evaluate the impact of the UCS program, we utilized several methodologies tailored to the availability of data and specific circumstances of each country. First, outcomes are transformed into a composite score using factor analysis, overcoming the challenges of categorial questions used in the surveys. For each primary outcome of interest (e.g., school engagement, social emotional skills), the surveys ask a series of relevant questions, capturing various dimensions of each outcome. To consolidate these multiple indicators into a single, coherent measure, we conducted a factor analysis. Factor analysis reduces the dimensionality of the data by identifying underlying relationships between the survey questions. The factor analysis produces predicted scores for each individual or school, which serve as the primary outcome variables for the evaluation. This approach allows us to simplify the complex data and create a reliable and interpretable outcome measure for each key domain of interest.

The next step in the analysis is the estimation of the relationship between the outcomes score and participation in the UCS program. We provide two different approaches, pooling responses from countries. First, we use a linear regression estimator pooling data across all six countries, including fixed effects at both the country and survey round levels to control for unobserved heterogeneity across countries and survey rounds. The regression estimates the overall statistical relationship between UCS program and the outcome of interest, as represented in Equation (1):

$$y_{icr} = \beta_1 post_{icr} + X'_{icr}\gamma + \theta_c + \delta_r + \epsilon_{icr} \quad (1)$$

y_{icr} refers to an outcome score derived from a factor analysis for individual i in country c in survey round r. $post_{icr}$ is an indicator variable equal to one if the individual was surveyed in the post-survey. X is a vector of individual characteristics such as sex and age group. θ_c and δ_r refer to country-level and survey-round level fixed effects, respectively, while ϵ_{icr} is an idiosyncratic shock. The coefficient of interest is β_1, which measures the average difference between outcomes before and after participation in UCS, controlling for individual characteristics and other fixed effects. The standard errors are clustered at the country level.

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The second approach relies on a linear regression with pooled estimate restricted to countries where data availability permits linking individuals between the pre- and post-surveys. This method compares the individuals' outcomes before and after participating in the UCS program, controlling for all time-invariant characteristics of individuals by including individual fixed effects. This pre-post analysis mitigates biases in the estimate of the program's impact on individuals, as it eliminates confounding factors related to individual differences that may affect the results. This is represented in Equation (2), where the coefficient of interest is β_2. The components are similar to Equation (1), except for an addition of an individual-level fixed effect, α_i, and an exclusion of individual characteristics that are taken care of by individual-level fixed effects. We cluster the standard errors at the individual level.

$$y_{icr} = \alpha_i + \beta_2 post_{icr} + \theta_c + \delta_r + \epsilon_{icr} \quad (2)$$

A third step in the analysis performs linear regression in each individual country to account for idiosyncrasies and data limitations. The country-specific estimates use the most appropriate estimation method based on the available data.

In Argentina, the estimator exploits a school-level fixed effects (FE) model. The approach overcomes data limitations, as no personally identifiable information was collected in the surveys, except for school information. Standard errors were clustered at the school level, and we control for gender and age group to account for demographic variations. This is represented in Equation (3), with the coefficient of interest being β_3. The equation now includes a fixed effect at the school level, ρ_s, instead of fixed effects at the country or survey round levels, given we estimate this for Round 3 data of Argentina only.

$$y_{is} = \beta_3 post_{is} + X'_{is}\gamma + \rho_s + \epsilon_{is} \quad (3)$$

In Egypt, India, Pakistan, and Romania, the data allowed linkages between individuals using names and, when necessary, school names to connect pre- and post-survey responses. For these countries, we used individual-level fixed effects models to estimate the within-individual changes due to program participation. We also included survey round fixed effects and clustered standard errors at the individual level. However, the process of linking pre- and post-data often reduced the sample size in some countries, and in a few cases, specific countries were dropped from certain analyses due to insufficient data. This is represented in Equation (4), where the coefficient of interest is β_4.

$$y_{ir} = \alpha_i + \beta_4 post_{ir} + X'_{ir}\gamma + \delta_r + \epsilon_{ir} \quad (4)$$

In Rwanda, no personally identifiable information or school-level information was available, making it impossible to track individuals across survey rounds. For this reason, we applied a simpler ordinary least squares (OLS) model to compare the pre- and post-outcomes on average. Like in Argentina, we controlled for gender and age

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group in the analysis to account for differences in the sample composition over time. The estimating equation is shown in Equation (5), where the coefficient of interest is β_5.

$$y = \beta_5 post + X'\gamma + \epsilon \quad (5)$$

The different estimation methods used across countries make cross-country comparisons challenging. The choice of methodology was driven by the nature and quality of the available data in each country, and thus, the results should be interpreted carefully, keeping these methodological differences in mind. On the one hand, the pooled estimates provide an overall picture of the program's statistical association with the key outcomes of interest. On the other hand, the country-specific analyses offer tailored insights into how the program performed in different contexts.

Results

The following sections report the main estimated coefficients of interest by key outcome and survey source. Column (1) reports estimated effects from Equation (1) and Column (2) reports the estimated effects from Equation (2). Columns (3) to (8) report country-specific regression results, as shown in Equations (3) to (5). The row "Post-intervention" reports the estimated coefficients on post-intervention and standard errors in parentheses, and the row "Baseline" refers to the pre-intervention means of the key outcome variable to provide context to the magnitude of the correlation. All models include survey-round level fixed effects.

Analysis Tables - Student Data

Table B.1: Estimated Coefficients of Post-Intervention on School Climate Reported by Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.172**	0.757	0.219	1.706***	0.205	-0.060	0.478***	2.037***
	(0.411)	(0.438)	(0.309)	(0.030)	(0.215)	(0.132)	(0.109)	(0.034)
Baseline	-0.74	-0.42	-0.04	-0.85	-0.22	-0.09	-0.05	-1.51
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.48	0.24	0.11	0.91	-0.10	0.06	0.34	0.85
N	1546	704	120	322	74	152	156	722
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

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Table B.2: Estimated Coefficients of Post-Intervention on School Climate Reported by Students without ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	0.633	0.240	-0.093	1.696***	-0.052	-0.093	-0.028	1.464***
	(0.450)	(0.330)	(0.092)	(0.058)	(0.172)	(0.071)	(0.109)	(0.038)
Baseline	-0.45	-0.06	0.08	-0.86	0.16	0.14	-0.15	-1.26
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.18	0.15	0.19	0.89	0.29	0.35	0.17	0.62
N	1754	560	287	116	62	194	188	905
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

Table B.3: Estimated Coefficients of Post-Intervention on Social-Emotional Learning Skills Reported by Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.586**	1.204	0.087	1.893***	0.038	0.178	0.597***	2.562***
	(0.463)	(0.708)	(0.202)	(0.024)	(0.171)	(0.135)	(0.133)	(0.038)
Baseline	-1.10	-0.77	-0.03	-0.95	-0.22	-0.56	-0.48	-2.09
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.55	0.19	0.32	0.95	-0.18	0.21	0.36	0.87
N	1546	704	120	322	74	152	156	722
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

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Table B.4: Estimated Coefficients of Post-Intervention on Social-Emotional Learning Skills Reported by Students without ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	0.576	0.458	-0.074	1.872***	0.301	-0.191**	-0.002	1.148***
	(0.338)	(0.541)	(0.123)	(0.038)	(0.264)	(0.087)	(0.091)	(0.039)
Baseline	-0.29	-0.02	-0.03	-0.92	0.09	0.47	0.15	-0.85
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.22	-0.01	0.20	0.96	0.16	0.18	0.33	0.49
N	1754	560	287	116	62	194	188	905
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

Table B.5: Estimated Coefficients of Post-Intervention on Student Engagement Reported by Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.662**	1.218	0.677***	1.968***	0.900***	-0.283***	0.638***	3.043***
	(0.495)	(0.756)	(0.091)	(0.017)	(0.125)	(0.090)	(0.147)	(0.038)
Baseline	-1.28	-0.81	-0.38	-0.99	-0.70	-0.51	-0.60	-2.58
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.61	0.20	0.21	0.98	0.58	-0.08	0.30	0.90
N	1546	704	120	322	74	152	156	722
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

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Table B.6: Estimated Coefficients of Post-Intervention on Student Engagement Reported by Students without ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	0.266	0.340	-0.088	1.898***	0.615**	-0.564***	-0.157*	0.459***
	(0.256)	(0.598)	(0.211)	(0.026)	(0.226)	(0.129)	(0.083)	(0.035)
Baseline	-0.13	0.08	0.01	-0.92	-0.01	0.79	0.32	-0.19
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.25	-0.22	0.11	0.98	0.26	0.06	0.38	0.16
N	1754	560	287	116	62	194	188	905
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

Table B.7: Estimated Coefficients of Post-Intervention on School Experiences Reported by Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.519**	1.122	-0.035	1.759***	1.171***	0.100	0.372***	2.345***
	(0.513)	(0.600)	(0.233)	(0.039)	(0.157)	(0.142)	(0.116)	(0.021)
Baseline	-0.93	-0.56	-0.20	-0.88	-0.59	-0.05	-0.19	-1.84
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.55	0.28	0.22	0.88	0.51	-0.11	0.38	0.95
N	1546	704	120	322	74	152	156	722
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

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Table B.8: Estimated Coefficients of Post-Intervention on Community Experiences Reported by Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.345**	1.108	-0.053	1.808***	0.611***	0.314***	0.429***	2.292***
	(0.389)	(0.550)	(0.261)	(0.028)	(0.220)	(0.105)	(0.122)	(0.029)
Baseline	-0.92	-0.55	-0.14	-0.90	-0.31	-0.16	-0.21	-1.75
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.61	0.33	0.13	0.93	-0.01	0.47	0.26	0.89
N	1546	704	120	322	74	152	156	722
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

Table B.9: Estimated Coefficients of Post-Intervention on Attitudes and Knowledge Reported by Students without ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Pakistan	(7) Romania	(8) Rwanda
Post-intervention	1.151	0.522	-0.009	1.743***	0.712***	0.186	0.414***	2.231***
	(0.698)	(0.228)	(0.147)	(0.062)	(0.178)	(0.116)	(0.122)	(0.024)
Baseline	-0.63	-0.26	0.10	-0.87	-0.36	-0.09	-0.21	-1.77
Country FE	Yes	Yes	No	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	Yes	No
R-squared	0.35	0.15	0.13	0.87	0.37	-0.03	0.12	0.91
N	1754	560	287	116	62	194	188	905
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means.

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Analysis Tables – Administrator/Teacher Data

Table B.10: Estimated Coefficients of Post-Intervention on School Climate Reported by Special School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	1.040*	0.288	-0.121	0.912***	0.258	-0.358	1.548***
	(0.440)	(0.325)	(0.141)	(0.196)	(0.181)	(0.275)	(0.064)
Baseline	-0.51	-0.22	-0.14	-0.49	-0.19	0.10	-0.51
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.48	0.37	-0.14	0.46	0.68	0.18	0.73
N	363	90	44	20	38	32	229
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

Table B.11: Estimated Coefficients of Post-Intervention on School Climate Reported by General School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	0.278	0.634	-0.701**	0.675***	-0.282	-0.050	-0.049
	(0.297)	(0.269)	(0.274)	(0.060)	(0.270)	(0.407)	(0.081)
Baseline	-0.09	-0.28	0.15	-0.33	0.24	0.14	-0.35
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.48	0.22	0.16	0.49	0.28	-0.16	-0.03
N	415	192	88	148	22	22	132
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

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Table B.12: Estimated Coefficients of Post-Intervention on Social Emotional Skills Reported by Special School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	1.444**	0.727	0.907	1.613***	0.776***	0.080	1.891***
	(0.399)	(0.376)	(0.676)	(0.168)	(0.234)	(0.290)	(0.050)
Baseline	-0.60	-0.43	-0.34	-0.83	-0.34	-0.23	-0.54
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.64	0.36	0.05	0.85	0.49	0.38	0.87
N	363	90	44	20	38	32	229
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

Table B.13: Estimated Coefficients of Post-Intervention on Social Emotional Skills Reported by General School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	0.360	0.936	0.344	1.268***	-0.639*	0.583**	-0.058
	(0.328)	(0.380)	(0.477)	(0.071)	(0.339)	(0.240)	(0.048)
Baseline	-0.13	-0.44	-0.04	-0.63	0.23	-0.02	-0.60
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.67	0.27	0.18	0.70	0.18	0.58	-0.00
N	415	192	88	148	22	22	132
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

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Table B.14: Estimated Coefficients of Post-Intervention on Attitudes and Knowledge Reported by Special School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	1.365**	0.420	0.636	1.209***	0.418	-0.167	2.025***
	(0.479)	(0.346)	(0.773)	(0.220)	(0.274)	(0.262)	(0.041)
Baseline	-0.63	-0.19	-0.18	-0.43	-0.13	0.05	-0.65
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.65	0.23	-0.07	0.66	0.26	0.41	0.92
N	363	90	44	20	38	32	229
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

Table B.15: Estimated Coefficients of Post-Intervention on Attitudes and Knowledge Reported by General School Administrators/Teachers

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) India	(6) Romania	(7) Rwanda
Post-intervention	0.374	1.047	0.140	1.391***	-0.301	0.007	-0.047
	(0.345)	(0.424)	(0.368)	(0.075)	(0.309)	(0.390)	(0.051)
Baseline	-0.09	-0.53	-0.00	-0.72	0.01	0.05	-0.52
Country FE	Yes	Yes	No	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	Yes	No
R-squared	0.72	0.31	0.07	0.71	0.36	-0.06	-0.01
N	415	192	88	148	22	22	132
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. Pakistan is dropped due to small sample size (N<5).

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Analysis Tables – Parent/Caregiver Data

Table B.16: Estimated Coefficients of Post-Intervention on Social Emotional Skills Reported by Parents/Caregivers of Students with ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) Romania	(6) Rwanda
Post-intervention	0.137	0.982	2.376***	0.982***	0.026	0.137
	(0.157)	(.)	(0.000)	(0.094)	(0.027)	(0.157)
Baseline	-0.50	-0.46	-0.34	-0.46	-0.56	-0.50
Country FE	Yes	Yes	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	No
R-squared	0.55	0.52	0.37	0.53	0.02	0.55
N	1504	176	27	176	1299	1504
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. India and Pakistan are dropped due to small sample sizes (N<10).

Table B.17: Estimated Coefficients of Post-Intervention on Social Emotional Skills Reported by Parents/Caregivers of Students without ID

	(1) All countries	(2) Linked sample	(3) Argentina	(4) Egypt	(5) Romania	(6) Rwanda
Post-intervention	1.566***	1.023	-0.286	1.023***	1.713***	1.566***
	(0.103)	(.)	(0.660)	(0.188)	(0.020)	(0.103)
Baseline	-0.37	-0.58	-0.09	-0.58	-0.42	-0.37
Country FE	Yes	Yes	No	No	No	No
Person FE	No	Yes	No	Yes	Yes	No
R-squared	0.74	0.39	-0.01	0.42	0.82	0.74
N	1755	78	73	78	1601	1755
Estimator	Country FE	Pre-Post	School FE	Pre-Post	Pre-Post	OLS

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors reported in parentheses. All models include fixed effects for survey rounds. The row "Baseline" reports pre-intervention means. India and Pakistan are dropped due to small sample sizes (N<10).