Rural Areas After-School Program (R.A.A.P)

ABSTRACT

Contemporary research has backed up the advantages of school-based mental health care. One in five young people enrolled in schools today suffers from diagnosable mental health conditions. However, statistics show that up to 35% of those young people in rural Botswana do not get the resources they require. The numerous ways that circumstances outside of the classroom affect a child's educational performance have come to the attention of policymakers in the past few years. The "poverty" achievement gap, or the disparity in academic success between poor and non-poor children, has risen, according to a new study. The serious traumas that children might experience or witness, such as homelessness, spousal abuse, parental drug usage, neglect, and physical or sexual abuse, are less widely acknowledged. This care gap significantly impacts the intellectual, social, and emotional well-being of young people and early childhood mental health neglect has lasting effects that affect not just the individuals but also their families, schools, and communities. There is therefore a clear need to ensure that young children's mental health is prioritized so that poor mental health does not hamper their learning ability which would jeopardize the economic development of the country. The program examines and develops an after-school program for children aged 6 to 12 in rural villages, that provides a special and priceless chance to fill in the gaps from the school day and advance their development. The after-school program places a strong emphasis on social-emotional and behavioural development, with routines and activities created particularly to foster pro-social behaviour and healthy peer interactions.

About The Team

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BEng Mechanical and Energy Engineering from Botswana International University of Science and Technology (BIUST). Matthias Motsomi is currently pursuing a master of engineering in Mechanical and Energy Engineering at BIUST. His research and interest are in electro-mobility and green energy technology. His current research is on the conversion of an internal combustion engine vehicle into an electric vehicle. Matthias is from Botswana.

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I. INTRODUCTION

Both the Botswana Vision 2016 and the 2030 Agenda for Sustainable Development highlight the intrinsic, mutually reinforcing the relevance of addressing poverty reduction, access to education, and mental health services (Babatunde et al. 2021). Both treat it as one of the major issues of our time. One of the six major axes of Vision 2016 and National Development Plan 10, which were created to enhance the expansion and diversification of Botswana's economy, is education (Pansiri 2017). More than 9% of the nation's GNP is spent on public education, which is a significant amount. 90% of children in the country are enrolled in primary schools, and this number has increased over the past five years (Molosiwa and Boikhutso 2016).

In addition, numerous reforms have been implemented since 1966 to generate graduates who are endowed with labor market skills and prepared for self-employment or jobs (Mokibelo and Pansiri 2021). Every financial year, significant investments are made in the education sub-sector to accomplish this goal, yet the public continues to criticize the quality of education based on the calibre of secondary school graduates generated. Despite improvements in enrolment, worldwide benchmarking shows that Botswana's student learning outcomes trail those of other nations with comparable incomes. Furthermore, Botswana has a 45.54% youth unemployment rate as of December 2020. The local industry contends that graduates lack the necessary skills to satisfy the existing labor demand due to the poor quality and relevance of education and training they receive, resulting in a skilled labor shortage.

To quantify the problem official records were used as data sources, and they were analysed qualitatively to find gaps and other causes of poor educational outcomes, especially between the rural and urban areas' primary education results (Vulpen et al. 2018). The results showed a lack of coordination between previous and present policies, a lack of financial and human resources to put policies into practice, and ineffective evaluation and assessment procedures that do not sufficiently influence follow-up changes (Biakolo 2007).

Research shows that one in seven children have mental health challenges and one tenth qualify for a psych evaluation (Jo¨rns-Presentati 2021). Furthermore, the budget for education is mostly concentrated on postsecondary education and less on early childhood and basic school.

Moreover, important data collected shows data:

- 13% of Botswana's population is below the age of five.

- Only 43% of children between the ages of 4-5 participate in early learning initiatives.

- After four to five years of primary education, almost one-third of children still lack the foundational abilities for literacy.

- Children who take the primary school examination fail in about one-third of cases.

- A little more than two thirds of children who take the Junior Certificate exams fail them as shown in Fig. 1.

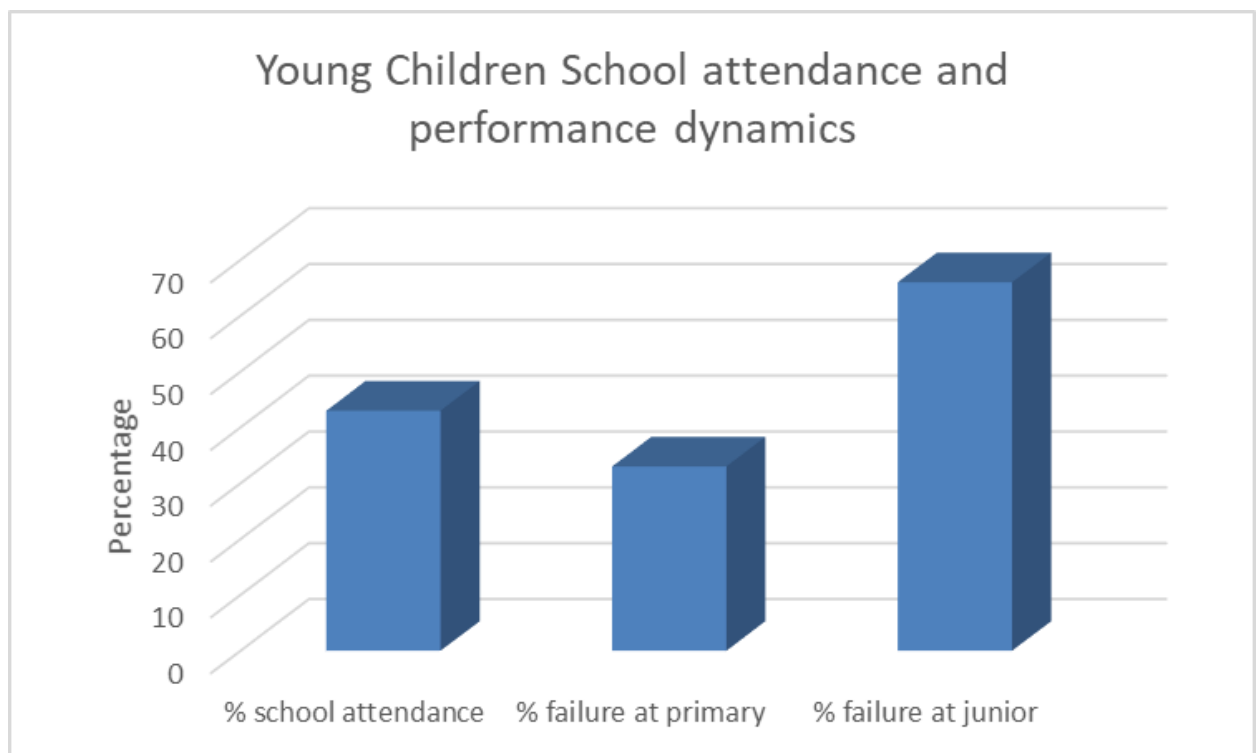- Ten to twelve percent of children who should be in school are not.

Figure 1: Young children school attendance vs academic performance

Our project seeks to provide a comprehensive response to the declining performance epidemic for students in primary school, while simultaneously tackling the problem of lack of access to mental health services and developmental support in rural areas by developing an after-school program.

After-school programs offer a chance to lessen these risk factors and promote equally healthy development for both boys and girls during middle childhood. This project's aim is to develop after-school programs for children aged 6 to 12 that have beneficial social-emotional, behavioural, and physical health outcomes.

Studies and analyses on after-school programs that show excellent social-emotional, behavioural, and physical health outcomes frequently claim that these programs are specially positioned to encourage better development throughout primary school-going children and include support for these claims. We review and integrate the assertions made and information provided in each area as background information.

II. PROBLEM

The world views education as a tool through which poverty could be eradicated across all continents. Botswana is one of the few developing countries in Africa that prides itself in providing free education for all its citizens. However, in many developing countries the education gap seems to be growing within schools in urban, rural, and remote areas. Mental health education is one of the few subjects that are often neglected locally (Brooks et. al 2021). Moreover, children in rural settlements do not have the same access to social services as those residing in urban settlements, the gap has only grown bigger since the Covid 19 pandemic. This is a result of sporting and club activities being suspended. The sad part is that the very children who grow up in rural areas are the ones greatly affected by unemployment, lack of exposure leads to them not knowing that there is a wide spectrum of careers they could choose from, some end up being school dropouts from a very young age (Mokibelo 2014). The dire situation tends to exacerbate the levels of violent crime, as well as suicides (Litner 2020).

The following subsections explain further on issues of mental health problems affecting the education and unemployment problems in Botswana followed by a description of challenges faced by children in rural settlements.

● Education and Employment in Botswana

Education has always been recognised as the means to achieve change, create new ideas, initiate new practices, and move towards increasing prosperity (Sebidie 2022). Thus, in many developing countries, tertiary education is increasingly important in facilitating a move into employment as part of an effort to increase prosperity. In Botswana, recent evidence suggests that graduates from the country's tertiary institutions find it difficult to penetrate the labour market as shown

in Fig. 2. Youth unemployment, especially graduate unemployment, has become a national concern in Botswana. It is normal for young graduates to expect to have a thriving career, yet, when these expectations are not met, unemployed graduates may face challenges in adapting to their situation.
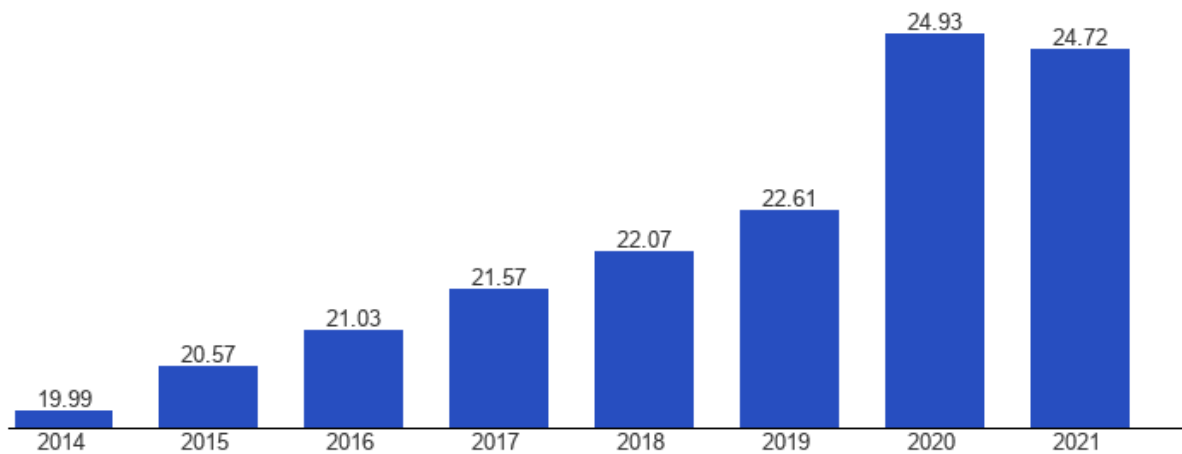

Figure 2: Percentages on unemployed graduates over the past years

The male suicide rate is four times higher than females in Botswana. The country has one of the highest suicide rates in the Southern African Development Community (SADC) region according to World Population Review. With a suicide mortality rate of 16.1 per 100, 000 population, Botswana comes in third in the region. Lesotho tops the region with total suicide rate of 72.4, while South Africa comes in second with total suicide rate of 23.5. Whilst research shows that women are more likely to be diagnosed with depression and to attempt suicide in most countries around the world, the male suicide rate is still several times higher than female in Botswana. The World Population Review states that the male suicide rate in Botswana is 26.3 while the female rate is 6.4. This could be the pressures of society because at a certain age male are expected to start a family and in order to marry in Botswana one should have a job thus frustrations of not being able get a job being one of the contributing factors to suicide.

Botswana is relatively secure, with modest crime levels by regional standards. However, incidences of crime have increased and are more prevalent in urban areas, such as Gaborone (the capital) or Francistown. Petty street crime and crimes of opportunity, primarily theft of money and personal property such as in non-violent house invasions, are the most reported crimes, however incidents of armed robberies and other violent attacks have increased. There is an

increasing risk of rhino poaching. Women, children, and the rural poor are vulnerable to trafficking.

- Challenges for rural children and Education

Research findings have shown that good quality early childhood care and education (ECCE) programmes provide a wide range of benefits for children, families, and communities. For instance, they facilitate children's social, emotional, nutritional, and health development (United Nations Educational Scientific and Cultural Organisation – UNESCO, 2007).

UNESCO (2015) indicated that ECCE services in Botswana are still largely concentrated in urban areas and accessible to children from affluent families, invariably isolating the poor in the rural areas.

Children in remote areas of Botswana have limited or no access to ECCE programs due to the general geographic, socio-economic, and cultural conditions of these areas. Rural areas continue to be affected by a high incidence of poverty as most economic activities and government spending is in urban areas. Development programs in rural areas tend to be major budget targets during periods of economic downturns. Hence access to ECCE is still far below the Education for All (EFA) targets as indicated below (UNESCO, 2015).

Another challenge is that some populations in the country are not officially recognized as Remote Area Dwellers (RAD). RAD refers to people or communities which are not recognised as villages as they fall outside the scope and coverage of social service provision (Ministry of Foreign Affairs and International Cooperation, n.d.). They are characterised by a lack of economic well-being and as being poverty stricken with little or no access to educational resources. Due to the remoteness of these areas, they miss out on Non-Governmental Organisation (NGO) initiatives to set up ECCE centres.

- School Going Children's Experiences and Perceptions

Botswana's education is based on the teacher-centred approach, this has remained the primary method starting from primary level to tertiary, which is a system that employs very little to no practical work being done by the students. The teacher is said to be the bearer of the knowledge while the students remain the recipients. The examination-oriented curriculum further maintains the status quo by leading teachers to teach to the test. This method of teaching has been proven to discourage critical, analytical and hands-on

experience; thus, continuing the culture of memorising amongst the students for regurgitation during the examinations. The study reviewed the reasons for continuous poor performance in schools despite the efforts made through educational policies that provided innovations to improve learning and teaching in schools. The performance of students in schools in Botswana has plummeted year after year despite the various innovations introduced in new educational policies(Molejane et.al 2019).

- Access to Mental Health Services and Support

Botswana is a country with a population of approximately 2.3 million people that has a geographical size approximately the size of France. The country's health system prioritises widespread community clinic outreach, reaching many rural communities, and a central Ministry of Health and Wellness that provides guidelines and policies for the nation's health. Like many other Low and Middle-Income Countries (LMIC), Botswana has a severely limited mental health professional infrastructure (World Health Organisation, 2011). There is one 300-beds paediatric psychiatric hospital 80 km away from the capital city of Gaborone. The republic has only 17.7 mental health practitioners per 100 000. There are mental health nurses (4.05 mental health nurses) and community health workers available, but few professional psychologists (about 1.52 per 100,000 people) (World Health Organisation, 2011) and psychiatrists (about 0.29 per 100,000 people). Social workers are more numerous (217 per 100,000), but have different levels of comfort in providing therapy, especially to youth (Jongman, 2020) (World Health Organisation, 2011). The youth bear the brunt of the nation's mental healthcare professional shortage since available professionals often lack the training needed to work with youth effectively. Furthermore, Botswana society also has cultural norms that include communication nuances that make talk therapy between generations difficult.

- Mentorship and Inequality: Rural and Urban Areas

Mentorship is one of the key programs that contribute to a child's development, socially and academically (Mukeredzi 2017). It is without doubt that the gap between rural and urban schools is undeniable. In rural schools a speaker is normally invited once during the term in effort to impact awareness and motivate the students as shown in the figure below. Which is not effective at all because in a setting shown in the figure 30% of the students are probably paying attention, in that 10% are clueless to what is being discussed. In Fig. 3 the top image shows a mentor attending to a few groups of students, which is a more effective method where students are able

to engage with the mentor and as well making it easier for the mentor to monitor the progress of each student.

Figure 3: The image shows mentorship in Maruapula, a Private school in an Urban Area, and the bottom image shows the mentorship in Chobe senior high school, a public school in a village

III. METHODOLOGY

Unemployment Survey for graduates

We conducted a mental health survey among graduates who are unemployed, amongst the respondents 42% were females and 58% were males between the ages of 18 and 35. We gathered the following data

Table 1: Summary of the unemployed graduate state of mental health questionnaire

Questions	Responses					
	Factor 1 %	Factor 2 %	Factor 3 %	Factor 4 %	Factor 5 %	Factor 6 %
What is the highest level of education you've completed?	50	33	8	0	8	
How long have you been unemployed?	8	8	17	33	25	8
How often do you feel good about yourself?	17	25	17	33	8	0
Do you have any social support?	8	75	17			
If yes, how is the level of social support?	8	25	8	0	17	0
How confident do you feel about yourself?	17	33	42	0	8	
Do you smoke?	25	58	17	0		
If yes, how often do you smoke?	8	8	0	8	0	42
How often do you drink alcohol?	0	25	17	17	8	33
Do you take any other drugs?	0	92	8			
Would you say your drug and alcohol intake are to compensate for the stress inflicted by being unemployed?	25	42	8	8		
How often do you feel stressed by the unemployment situation?	92	0	8	0	0	0

Depression is one of the most common mental health problems experienced by men and women between the ages of 18 and 35. Some of the common cues of depression are low self-esteem, and emotional sadness. It is medically well known that severe stress, like a divorce or a huge financial change, is a major stressor, and it sends the psyche sort of out of equilibrium. If you keep raising levels of stress, something's going to happen, and often it is depression. Many graduates with little or no financial support, social pressures are also stressors as they are unemployed. Men are known to overcompensate by abusing drugs and alcohol and our questionnaire confirms that.

Student Mental Health Signs Survey for Educators

Table 2: Summary of the questionnaire responded to by teachers.

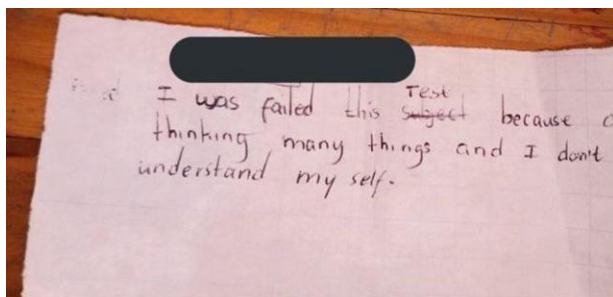| Question	Response
How many years have you been in this trade/field?	100% - Less than 5 years
How many years have you been with your current institution?	100% - Less than 5 years
How many years have you been teaching your current class?	100% - 3 to 5 years
Has your current school changed its method of teaching?	100% - No
Is there an increase or decrease in the pass rate of your current students?	50% - Increase 50% - Decrease
Have you noticed any students' change of behaviour since the Covid - 19 pandemic struck?	50% - Yes 50% - No
Has the number of top performers in class increased, decreased, or stayed the same?	100% - Stayed the same
Has an investigation into the cause of performance decline been made?	100% - No
Of the students whose performance has declined, how many cite mental health issues owing to Covid-19 and its impacts as a cause?	50% - Yes 50% - No

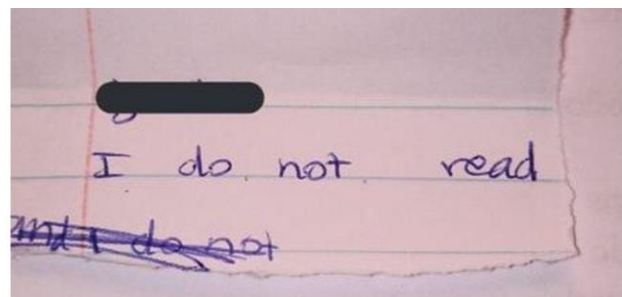| Do you have students that have repeated tantrums or those that consistently behave in a defiant or aggressive manner?	100% - Yes

IV.   CHALLENGES THAT AFFECT EDUCATION IN RURAL VILLAGES IN BOTSWANA
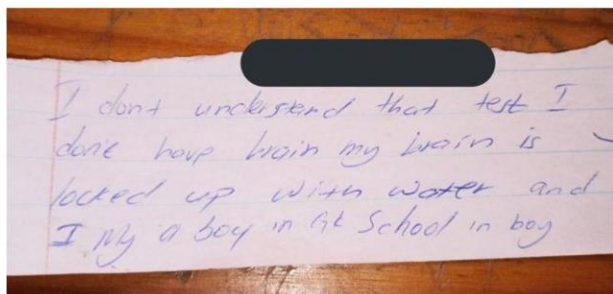
Social determinants

1. **Income:** Botswana is a country that still maintains a chieftaincy or customary law system, whereby the Chief is the head of the Kgotla (ward) in every settlement there is a kgotla. There is what is called the House of Dikgosi, which is a group of Chiefs from different villages that advise the parliament when passing laws. Now Chiefs who are part of the House of Dikgosi are mostly the ones from major towns and cities. There is an income and living gap between these chiefs and the ones in rural villages, this is a typical example of the income situation in rural areas.

2. **Language:** Subjects in Botswana schools are taught in English except for Setswana. But all over the country, there are different languages, which are not related to either English or Setswana therefore communication barriers between students and teachers are rather common. This affects the rate of learning and the ability of students to express
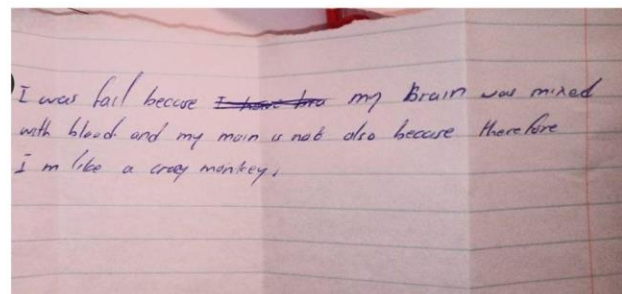
themselves as shown in the picture below where **15-year-old** students were asked why they think they perform poorly on a test.

Figure 4: Responses from form 2 students in a rural junior high school when quizzed about the reasons for their poor performance after a test

3. **Culture:** The culture views people with mental problems as "crazy or mad" . People are encouraged to bottle their problems and carry on, in Setswana, there is a saying that, "Monna nku o lelela teng" meaning that men are not supposed to cry out in the open rather bottle the hurt as they are perceived to be much stronger than women and children. Which is true physically but on an emotional level we are all at par as human beings. Some of these misconceptions have led suicide among the male species to be quite common as they do not seek help well in time.

4. **Electricity and Internet access:**

Figure 5:A picture taken in Majwanaadipitse village where BIUST students in collaboration with USF students were conducting research on how to generate electricity with fire.

Majwanaadipitse is a typical example of the common rural villages around the village where there is no electricity, although Botswana is a country with most clear skies all year round many of the villagers cannot afford those even the village chief. We found two solar panels in the village, one in the village kgotla and the other by the general dealer shop. So, in a village like those computers cannot be installed therefore children have no access to the internet.

Health care system challenges

1. Health care facilities: Botswana has one psychiatric hospital and 28 general and primary hospitals which offer free treatment, all these facilities are in major villages, towns, and cities. Rural villages normally have small health posts with one nurse or two nurse(s) assigned to each health post. This leads to people with mental health problems not having the suitable care that should be offered as mental cues are not easy to identify unless one gets regular check-ups.

2. Health care workers: As previously mentioned there are not enough practitioners in the psychiatric field in Botswana. Rural areas are definitely at the short end of the stick.

V. SOLUTION: RURAL AREAS AFTER-SCHOOL PROGRAM (R.A.AP)

Early childhood development increased primary education quality, and access to quality education are the solutions we are proposing.

One of the leading causes of children not meeting projected curriculum objectives in primary school is that many eligible children in neglected and underprivileged communities lack access to high-quality early childhood education. Children in families from disadvantaged families in rural areas, such as financial hardship, lack of access to resources, or instability in their food or housing, could have limited opportunities for compassionate friendships, and fewer opportunities to take part in initiatives that foster resilience or reduce risk from hardships. Even though afterschool programs offer a special chance to encourage healthy development, many children who might benefit the most from participation don't have access to high-quality programs in their neighbourhoods.

Rural Area After-School Program (R.A.A.P) is a program with a budgeted action plan and a culture that promotes access to high-quality early childhood development. We selected a pilot primary school in a remote village, to collaborate with the ministries of health and education as well as social workers to design, develop, and implement a community-based early childhood development model. The concept uses already-existing community structures including the school principals, teachers, social workers, and community volunteers to link service delivery and message.

The solution was inspired by the challenge of technology reaching rural areas in Botswana since the vast majority of teachers and homes lacked computers and internet connections. But the majority of villages have primary schools, and out-of-school youths could be used as volunteers to facilitate the program and earn an income as well as job experience. This "low-tech" strategy, which makes use of basic feature phones, at least one laptop/computer, models, and printed educational charts for students is workable, scalable, and capable of helping those who need it most. This method contrasts with "high-tech" methods that rely on computers or the internet and virtual programs which are frequently more costly and more difficult to obtain in rural areas.

Goals

The main objectives of R.A.A.P is to

(1) create an after-school setting that is safe and encouraging and

(2) to advance the students' social and academic skills as well as foster their intellectual abilities.

The specific objectives include assisting children in gaining social and emotional competency, self-worth, positive relationships, and prosocial skills. Additionally, improving behavioural health is a specific objective, which includes lowering problem behaviours, limiting risky behaviour, and/or preventing depressive symptoms. A specific goal of R.A.A.P is to also improve physical health, which includes boosting physical activity, enhancing knowledge about health and wellbeing, and promoting healthy eating habits. R.A.AP aims to also identify children whose backgrounds may need expert intervention such as social workers.

Program Location

According to the research, students residing in a rural and remote village with high poverty rates were thought to be most at risk for academic failure, hazardous behaviour, and gang recruitment. As a result, the R.A.A.P pilot will be held in Majwanaadipitse tribal village shown in Fig. 6. Majwanaadipitse is found in Botswana's Central District, 70 kilometres north of Palapye.

Figure 6: The image on the left is a homestead in the village of Majwanaadipitse, while the image on the left is that of a primary school teacher showing his students how to navigate a windows PC.

There is a primary school in the village. 455 people were counted in the population in 2022. The majority of the tribal settlements in Botswana are found in remote locations without access to water, medical services, or power. Additionally, because of no infrastructure, the villages do not have a clinic or health centre and have to travel to the nearest major village or town, leading to a health crisis in these areas. The selection of Majwanaadipitse Primary will aid in our understanding of how the solution will be implemented in locations with a high concentration of children from poor families.

Participants

R.A.A.P targets children aged 6-12 or grade level, standard one to six. A majority of the participants are low-income pupils at an estimated percentage of 74 percent. R.A.A.P aims to involve an equal number of boys and girls, regardless of sex or race/ethnicity.

Program Curriculum

R.A.A.P uses a model or curriculum created especially for teaching or practising social-emotional skills.

In line with the signs of mental health issues in children, R.A.A.P helps to address the issues in the manner shown in the table below.

Table 3: Tabulation of the mental health signs that are addressed by the activities of R.A.A.P.

Program Action	Sign being alleviated
Student participation in team activities	The problem of fitting in and getting along with other students, avoiding social situations
Games that include "spaghetti bridge" and other board games	Trouble focusing and decline in performance at school
Physical activities including hop-scotch and others	Trouble sleeping (since an active lifestyle helps to improve sleeping for young children)
Social issue resolution, mood control and good communication	Repeated tantrums and aggressive behaviour, worries a lot, feeling of sadness and unhappiness

The content and activities vary greatly depending on the objectives of the day and the age range of the participants. In summary, R.A.A.P starts with a welcome/introductory period and a snack

followed by homework and/or tutoring, and a wide choice of enrichment activities (e.g., Legos, Arduino, art games and activities, board games, guest speakers). Leadership and other frequent pursuits including community service, community clean up and volunteer activities are also practised. Problem-solving, emotion control, and effective communication are all covered in social-emotional health programs, but how they are presented varied depending on the participants' ages.

Figure 7: An emotions chart

For instance, for the lower standard children (age 6-8) R.A.A.P recommends direct instruction, puppet shows, and storytelling to teach the students cognitive and behavioural techniques for problem-solving, relaxing, and naming emotions as demonstrated in Fig. 7. On the other hand, it's encouraged that middle school students be exposed to didactic instruction, exploration of skills, role-playing, athletics, and recreational activities to encourage social problem-solving, emotion control, and effective communication.

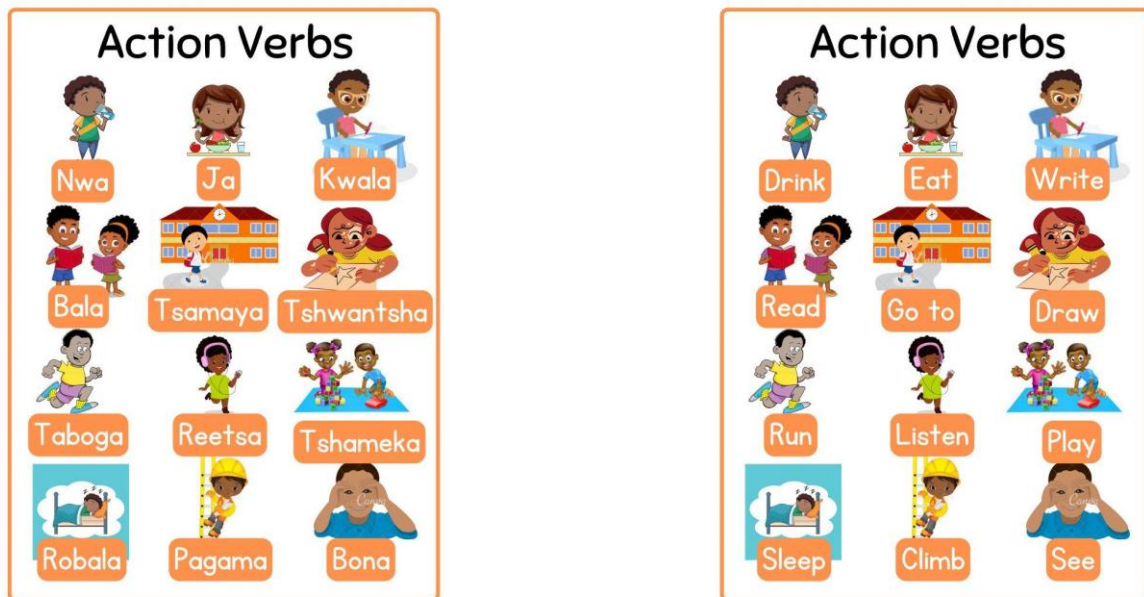*Figure 8: Activities to engage students ranging from*

Figure 9:

Tasks in the curriculum, like activities and games like "Run run, Statue/Stop", "Hopscotch" and "spaghetti bridge" shown in Fig. 8 and 9 are incorporated to help participants improve their fundamental movement skills, sustained attention, cognitive function, and emotion regulation.

The curriculum also includes physical exercises that are both aerobically taxing and offer chances to improve motor skills to focus on executive control in 8 to 9-year-olds. Regular exercise via team sports or activities, as well as age-appropriate diet and wellness education, promote inner rivalry based on establishing and monitoring individual long-term objectives, such as "increase my fitness to improve at football."

R.A.A.P also includes social-emotional learning modules that cover topics like teamwork, friendship, and dispute resolution.

R.A.A.P is designed for the entire school year for 3 to 5 days per week, with sessions lasting between 1.5 and 3 hours. Students are expected to participate in R.A.A.P on average 3–4 days a week which is summarised in table 4.

Table 4:

Category	Goal	Activities	Length and Frequency of Activities
Social-Emotional Health	Utilising cognitive control, emotional processing, and interpersonal abilities, encouraging ethical behaviour, sensible decision, and meaningful relationships. Minimise emotional suffering by receiving instruction, and dialogue in order to stop the onset of behavioural, social, or emotional issues.	Exercises that foster a sense of community include volunteer work, Role-playing, didactic training, skill demonstration, conversation, sports, and leisure activities are many ways to practice with feedback. Social issue resolution, mood control, and good communication	4 days per week 60 minutes
Mental Health	Self-control and temperament management, focus, language, and problem-solving.	Engage youngsters in moderate-intensity physical activity, develop their motor skills, increase their confidence in their ability to make good food decisions, and monitor their own physical activity levels.	2 days per week 60 minutes

	time for academic support, and fun games that combine electives of interest with lessons concerning social/psychological goals.	Activities such as coding for kids, Legos, assembling Arduino, languages, improve language learning games, concept mapping	3 days per week 60 minutes
Intellectual Wellness			

Table 5: Proposed Supplemental Stem Mentorship/ Career Day Activities

Activities	Stakeholders	Comments
Presentations/ Talks	student, Teachers, youth volunteer, and Rep from STEM Institution.	students experience and aspirations Teachers' efforts
Exhibition	students' projects, STEM institutions projects and courses/ services, Maths and Science clubs, STEM Industry rep	Showcase students' projects, STEM institutions projects
STEM Demos	Tertiary students, teachers, institution	Showcase STEM concepts through demonstrations
Competitions	student, Teachers, youth volunteer	Host competitions on STEM knowledge and skills, hence involving all students
Quizzes	student, Teachers, youth volunteer	Conduct on STEM knowledge and skills, hence involving all students to interest them into STEM concepts on daily use perspective

Awards or Prize Giving	student, Teachers, youth volunteer	Award the best students projects to motivate more students and students to be interested in STEM and join STEM clubs
Poster Presentations	student, Teachers, youth volunteer, STEM Industry and Institution reps	Teach the student project presentation and flow and sharing it to the public
Field trips	student, Teachers, youth volunteer, STEM Industry and Institution reps	Expose students to the application and use of STEM in the industries and daily activities. This will encourage them to have problem solving perspective and pursue

As a result of poor performance of students in Mathematics and Sciences, R.A.A.P also proposes a STEM career day shown in Table 5 that may be held every term/semester to expose the students to careers in science and as well as to make the sciences fun.

Sample Lesson Plan (one week)

R.A.A.P After School Program

School Name: _____   Week: _____1_____

Monday	Tuesday	Wednesday	Thursday	Friday
Academic Exercise	Academic Exercise	Academic Exercise	Academic Exercise	Academic Exercise
Conclusion:	Conclusion:	Conclusion:	Conclusion:	Conclusion:
Social-Emotional Exercise	Social-Emotional Exercise	Social-Emotional Exercise	Social-Emotional Exercise	Social-Emotional Exercise

Conclusion:	Conclusion:	Conclusion:	Conclusion:	Conclusion:
Active Games & Physical Exercise	Active Games & Physical Exercise	Active Games & Physical Exercise	Active Games & Physical Exercise	Active Games & Physical Exercise
Conclusion:	Conclusion:	Conclusion:	Conclusion:	Conclusion:

Additional-Notes:

_____
_____
_____

Instructor's Name: _____

Instructor Signature: _____

Date: _____

VI. STAKEHOLDER INVOLVEMENT

While R.A.A.P's main stakeholder, being the student found in primary schools in rural areas, the initiative requires cooperation between numerous partners and stakeholders as illustrated below. Stakeholders are divided into government stakeholders, as shown in shaded circles, and non-government stakeholders, as shown in circles with an outline in Fig. 10.
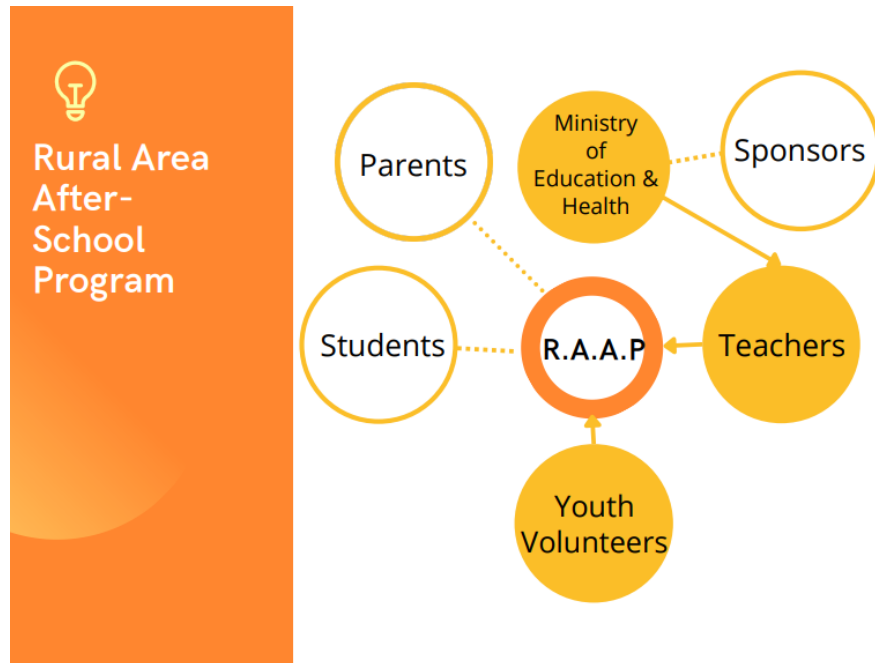

Figure 10: Illustration of stakeholder involvement in R.A.A.P.

With R.A.A.P being hosted in primary schools, a lead teacher with a teaching degree oversees events with aid from other teachers, and youth volunteers (unemployed, out-of-school youth, or school dropouts) from the villages. R.A.A.P engages psychologists and/or social workers (included under the "Ministries of Education and Health" stakeholder in the above image) to provide and oversee the mental health curriculum since it aims to improve social-emotional results.

R.A.A.P teachers and youth volunteers are required to participate in a two-day training seminar before the social-emotional learning program is implemented in their primary schools. In addition, an experienced coordinator provides weekly counsel to instructors throughout the academic year. This consultation includes continuous sessions as required and four annual direct observations of the host primary schools.

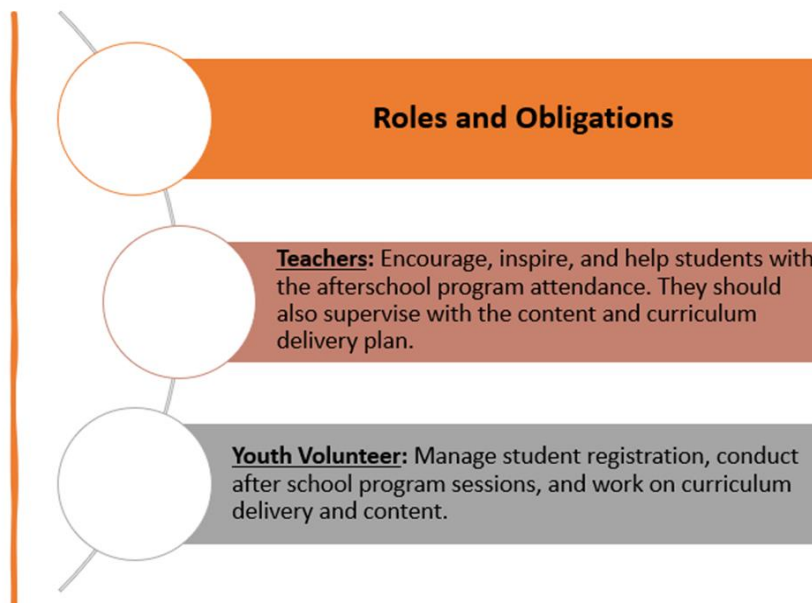# VII. PROCESS FLOW FOR R.A.A.P FOR ONE SAMPLE PRIMARY SCHOOL

Identification of Primary School with disadvantaged students

- R.A.A.P conducts site visiting sessions to a school of interest for talks with the school Principal and teachers to identify the need for an after-school program.
- R.A.A.P conducts a selection of students in need who will participate in R.A.A.P.
- Permission is obtained from the student guardians to participate in R.A.A.P.

Team Identification

- R.A.A.P conducts team selection at the primary school geographical location consisting of R.A.A.P Coordinator (Lead Teacher), two teachers, a Social Worker, and Youth Volunteers.
- The youth volunteers will be appointed by making a call for unemployed youths in the geographical location to apply.
- Due Diligence is made when selecting youth volunteers as R.A.A.P is a sensitive cause.

Figure 11: R.A.A.P Stakeholder roles.

Roles and Obligations

Teachers: Encourage, inspire, and help students with the afterschool program attendance. They should also supervise with the content and curriculum delivery plan.

Youth Volunteer: Manage student registration, conduct after school program sessions, and work on curriculum delivery and content.

Team Training and Capacity Building

- R.A.A.P training offers the creation of an "ideas pool" for curriculum development for teachers, social workers, and youth volunteers.
- Along with exchanging various concepts and advice on how to conduct the afterschool program in a classroom setting, teachers will discuss their experiences in teaching students in remote areas with challenges such as mentally neglected children, language barriers, shortage of resources, etc.
- Education and mental health are interrelated; therefore, it is necessary to give social and emotional learning more priority because there is a limited institutional structure for it in schooling. The stakeholders are encouraged to share knowledge and brainstorm strategies for coping going forward.
- The training and capacity building serves the purpose of ensuring standardised curriculum delivery.
- The training also motivates and appreciates teachers, social workers, youth volunteers, and parents—across areas and encourages networking and long-term cooperation between all the stakeholders.

Registration of Students on the After School Program

- Selected students are registered on the afterschool program by R.A.AP, where personal information, academic, and health records that will be kept confidential are provided.
- R.A.AP uploads the information on the cloud, to be shared with healthcare workers or teachers upon evaluation.
- The village social worker is consulted to provide information on the children's backgrounds, and advice on how to deal with students with underlying mental health issues caused either by social, family, or learning disabilities.
- Registration of the students is a delicate process conducted by the volunteers with the social worker and at least one teacher present where a one-on-one session is conducted with the students thereby helping the students understand the objectives and significance of the program along the process of registration.
- The one-on-one sessions help to determine which students extra care or have underlying conditions that may affect their learning and participation process.

R.A.A.P Weekly Sessions Begin

- The youth volunteers with the supervision of the teachers and social workers begin the after-school program following the curriculum designed.

- Each lesson plan/ curriculum is designed based on the specific school and specific needs of the students while following the guidelines and regulations.
- The volunteers are availed of resources such as a working computer, learning material, props, and infographics to use when interacting with the students.
- The volunteers are required to fill out information for each session in the "Weekly Visits" area in order to record the student, attendance, and activities done on that day as well as note the progress of the students.
- The supervising teacher will check the report and sign before uploading and saving the data.

Overview of Program Status by Program Coordinator and Social Worker

- The next activity for R.A.A.P Coordinator and social workers is to review and acknowledge the data of each enrolled student, learning progress, and weekly visits data (if available) in weekly reports.
- The social worker is required to hold counselling periodically with the individual students, or group counselling to record the mental and behavioural progress of the students as well as a wellness check.

Proactive Care for High-Risk Cases

- Based on the progress reports, if there is a detection of the high-risk cases i.e., students needing referral to a medical officer or detection of a social or mental health issue that needs an expert, the following actions are triggered for R.A.A.P coordinator, social workers, and the youth volunteer in charge to coordinate among themselves to identify the referral facilities if the High-Risk cases are present.
- R.A.A.P coordinator would provide the youth volunteers with instructions to observe and report high-risk cases and note the data during weekly visits.
- The team will continue to examine the weekly information gathered for the high-risk instances and analyse whether the students are still at high risk or whether they are receiving the assistance they need outside R.A.A.P.

VIII. R.A.A.P PROJECT TIMELINE

The launch of the R.A.A.P after-school program will take place in three phases outlined below:

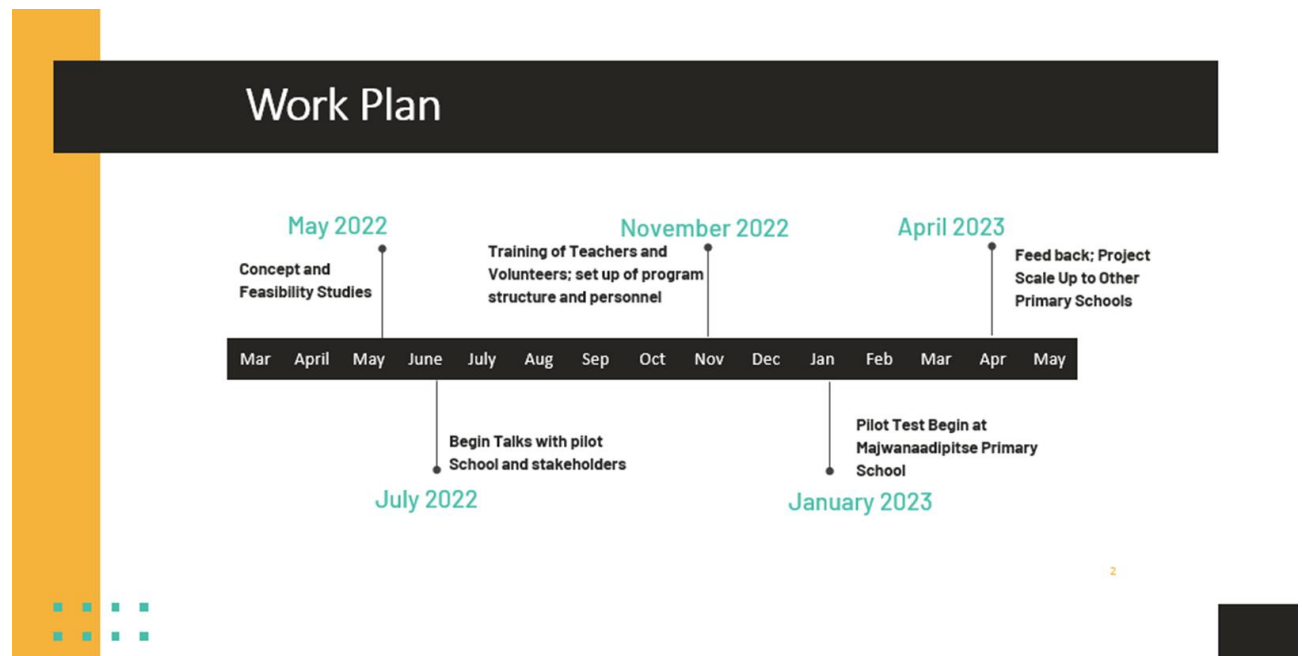Fig. 12 displays the comprehensive project Timeline.

Work Plan

May 2022
Concept and
Feasibility Studies

November 2022
Training of Teachers and
Volunteers; set up of program
structure and personnel

April 2023
Feed back; Project
Scale Up to Other
Primary Schools

| Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |

Begin Talks with pilot
School and stakeholders

July 2022

Pilot Test Begin at
Majwanaadipitse Primary
School

January 2023

Figure 12: Work plan for the roll-out of the R.A.A.P program.

(a) The concept and feasibility studies phase, which lasts for the first eight months, will create the framework for an expedited scale-up with the creation of partnerships and effective program design as its two primary objectives. The group will first hold focus groups with representative samples of the Majwanaadipitse Primary School (students and teachers) as well as the representatives of the ministries of health and education in Botswana. The focus group will improve R.A.A.P's suitability for the intended audience.

(b) Pilot Phase: The rest of R.A.A.P's initial year will be devoted to the pilot stage. During this period, volunteer and school matching and training will take up, as well as talks with the ministry of education and health. Gaining insight into schools' penetration strategies, particularly word-of-mouth, and public awareness is the main focus in these select few primary schools in rural Botswana. Improvements will be made to R.A.A.P execution and provision of services strategies

during these four months of the pilot phase. The second effort to get private companies to sponsor R.A.A.P will be the bridge between the trial and scale-up.

(c) The second year of R.A.A.P is devoted to the two phases of district-wide scale up to other primary schools in rural Botswana, with the aim to at least launch in one village per district. Once the pilot phase's feedback from all the stakeholders, especially the students and parents are taken into account, the scale-up phase will apply newly discovered knowledge to implement a sustainable program for the ongoing program in other villages on the service delivery labor demand side.

IX. RISK ASSESSMENT AND MITIGATION

Risk	Mitigation
Stakeholders Cooperation and Involvement The initiative requires that both the ministry of health and education and teaching professionals be aware of R.A.A.P for it to be a success. Therefore, there is a necessity for everyone to coordinate.	The team will speak with the various stakeholders to learn how they perceive the mental health issue in students. Each viewpoint will be considered, and it will be discussed how R.A.A.P will assist in tackling mental health challenges by emphasising each one in the decentralised system of education provision services in rural areas.
Remote Rural Areas The project locations are hosted in primary schools in rural villages in various districts, whereas the R.A.A.P is based in Palapye. As a result, it can be difficult to communicate with stakeholders on time.	Throughout project execution, the team intends to travel to the primary schools on at least two occasions. To make sure the project is a success, the team will use e-resources and supplement meetings where possible and make use of local contacts.
Project Funding	The project's overall cost is relatively low because it does not require a significant

Prior to being financially self-sustaining, R.A.A.P needs funding to buy resources needed for the operation of the sessions such as computers and learning materials for students as well as for operating costs and up-front costs.	investment in machinery or physical infrastructure. The project team will broaden its funding plan and present the initiative to a range of prospective sponsors, including student contests, laptop providers, governmental organisations, and foundations with a focus on mental health and primary school education.

X. CONCLUSION

There is evidence that Schools in remote villages experience ingrained inequality, that the official systems do not meet their unique requirements, and that the reality on the ground differs significantly from what is portrayed. The goal of R.A.A.P is to develop after-school programs that have the potential to improve the physical, behavioural, and social-emotional well-being of poor children aged 6 to 12. Our program strategically utilises typical after-school interactions and activities as well as development, curriculum, and treatments created to have positive effects on crucial developmental areas. The circumstances and resources needed to execute project delivery on a larger scale will be identified by feedback from the pilot, which will examine more in-depth descriptions of how R.A.A.P should be executed for it to be successful.

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