Re Tsoga (we rise up) Community Workshops: Supporting the brain development of children in Limpopo crèches through empowering early educators and fostering community dialogue.

**Country of project implementation:** South Africa  
**Sponsoring College Designated:** Yale University  
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**Serve and Return: a vital tool in the fight against brain-damaging toxic stress**

Thousands of children in Limpopo are being prevented from reaching their full potential by the long-term neurological and physical damage of toxic stress. This crisis is not only a tragedy, but also dangerously undermines South Africa’s peaceful future. Right now, as our economy teeters on the brink and levels of unemployment and civil unrest soar, it is more essential than ever that South Africa’s children are given the best start in life. A child’s first few years are both the most opportune and the most vulnerable for their future trajectory. During this sensitive period, a continually activated stress response due to ongoing, severe environmental pressures causes changes in brain architecture and other organ functioning which greatly increase the chance of cognitive impairment and disease. The more of this ‘toxic’ stress a child experiences, the greater the likelihood of severe and long-lasting later health problems including depression, heart disease and diabetes. Children experiencing this stress do more poorly on cognitive tests, score lower on working memory tasks and flexible thinking tests, demonstrate poorer executive function skills and are more likely to drop out of school or become incarcerated later in life. Limpopo province currently has the highest school drop-out rate in South Africa, limiting these children’s employability and putting them at even higher risk of turning to crime or violent protest in desperation.

‘Serve and Return’, a method of caregiver-child interaction studied by the Harvard Center for the Developing Child, has been shown to be highly effective in reducing toxic stress levels in children and preventing its damaging long-term consequences. ‘Serve and return’ is based off an analogy with tennis – the baby ‘serves’ the ball and the caregiver ‘returns’ it. Babies ‘serve’ through gesturing, babbling or crying, reaching out into their environment for connection and positive reinforcement. When adults respond appropriately and ‘return’ by sharing attention with their baby, speaking or affirming, neural connections essential for executive skills, communication and social skills are strengthened. Conversely, when adults do not respond, or when responses are inappropriate or unreliable, brain development may be disrupted, causing long-term mental, physical, and emotional health impairments. Research suggests that teaching caregivers serve and return techniques is highly effective in reducing the toxic stress response in children by providing a ‘buffer’, either ‘blocking’ the physiological effects of the stress response or helping restore it to baseline quickly and allowing healthy brain development.

**The urgent need for ‘Serve and Return’ training in the Modimolle Municipality:**

In my home community in Northern Limpopo, domestic violence, widespread poverty, the trauma of the coronavirus and post-covid intensified economic pressures have combined to place an enormous burden of stress on young children during these critical sensitive years. Early Childhood Educators, who have received little training or support and are seen as low-status workers in their communities, bear the brunt of these challenges as they struggle to care for children who bring the trauma of their home experiences to their ‘crèches’, or early education centers.

In the Modimolle municipality, where I grew up and where my family still live, children now face a triple-crisis of exposure to violence, poverty and the loss of loved ones during the pandemic. 7 out of every 10 people in our region are unemployed, contributing to a poverty rate of almost 80%. Domestic violence and violence against children are also at crisis levels, thousands living in homes where gender-based violence regularly occurs. Children are not only often victims of such violence, but also witnesses to violence occurring in their communities, internalising these experiences and leading to soaring levels of toxic stress.

During the pandemic, thousands of children witnessed the loss of their loved ones in over-crowded hospitals and our largely tourism-based economy was put under even greater strain. These layers of trauma face educators each day in their villages as they care for children who have lived through two years of intense pressure. Those under the age of 4, when critical and irreversible brain changes are occurring, are most at risk of serious cognitive damage from this toxic stress.

**The project goals:**

This project will have 3 main goals:
1) **Providing educators with information and training to address toxic stress in the children they serve**

Despite commonly observing symptoms of toxic stress in the students they care for, many educators have received little or no training on how to tackle this issue. In January 2023, we held a ‘pilot’ conference for 70 educators in the Modimolle Municipality at which we discussed the effects of toxic stress and its causes as well as other key issues related to early childhood development. After the conference, which was far better attended than expected due to a hunger for information to address the key issues observed, we handed out feedback forms to investigate the key concerns of teachers. Many were eager for further training, saying that the information received in the workshop had given them insights. One educator wrote: ‘please come again for 3 or 4 days. Please do more workshops in our area so we can learn more’. Of the educators who attended, 70% specifically suggested that more training workshops should be held as soon as possible.

Through this project, we hope to hold 2 full-day training events, one in the town of Vaalwater and another in the town of Modimolle, both central areas with a meeting facility we can use. The first half of the day will be dedicated to detecting signs of toxic stress and addressing its causes. The second half of the day will focus on ‘Serve and Return’ training. The workshop will aim to provide as much room for discussion as possible, with a focus on educators sharing their own experience and methods as well as brainstorming new strategies.

2) **Providing opportunities for early childhood educators to be sources of knowledge on early childhood education in their communities and fostering sustainable dialogue between parents and educators around key issues such as toxic stress and early childhood care**

3) **Raising parent awareness of toxic stress and the crucial role of ‘Serve and Return’**

While early childhood educator training is essential, it alone is insufficient to combat the full extent of the crisis. Parent training, participation in continued dialogue, and trust in trained community early childhood educators as sources of information is critical for the project to be sustainable in the long-term. During the feedback section of the conference held in January, 80% of educators stated the ‘biggest issue [they] saw in crèches in our area preventing positive change’ was a lack of parent buy-in. In our area, the early childhood years are not seen as very important, little is understood about how the brain develops and how it can be impacted by the environment. Early childhood education professionals are very poorly paid and seen as low-status workers in the community. Many teachers struggle to get parents to engage or attend parent-teacher meetings. Parents are often dissuaded from attending these meetings by ‘simple’ barriers such as rural transport costs and a lack of incentive.

In the second project phase, parents will be invited to a morning ‘tea’ event, for which transportation costs are covered, where educators from the community who have gone through the training workshop will share information they found most important. In creating a platform for educators to speak as community leaders, they will not only be empowered and encouraged, but will be given a chance to connect with the parents of children they teach and foster a long-term relationship and dialogue. After both conference days, I will continue communication with educators to record the impact and shortcomings of the model as well as suggestions for follow-up ‘refresher’ meetings.

**Partners on this project:**

In this project, as in the previous workshop held in January, we will be working in partnership the Department of Education and with the Modimolle Municipality Mayor’s Office. The Department of Education liaisons for the Vaalwater district and Modimolle area will be community coordinators, providing feedback from educators and guidance as to the most effective ways to transfer knowledge sustainably and create lasting impact. These two coordinators have worked as early childhood educators here for the past 14 and 10 years respectively. Through a series of meetings over the past two months, heads of crèches from the Modimolle municipality have provided essential wisdom on how this project could have the most sustainable impact, suggesting the element of educator sharing as well as the provision of tea and transport for the parent meetings to remove barriers to parent attendance. We will also be coordinating with the Department of Social Development to inform educators of the latest avenues for reporting child abuse and detecting it. At the previous conference in Modimolle, two social workers and Department Representatives agreed to be guest speakers, one at each event.

The participation of Afrika Tikkun, a non-profit focused on ‘cradle to career’ child development, has been a key resource in the planning of this project and the past January event. Their syllabus, the ‘Bambanani Early Childhood Education Syllabus’ will serve as a key training resource and guide
during the workshops on how to practically address toxic stress and identify markers of toxic stress causes such as abuse. Afrika Tikkun has conducted broad field research in the area already to record current levels of teacher training and the most essential problems to be addressed. Much of the information for the workshops has been developed using research from the Harvard Center for the Developing Child, yet it will be filtered through the wisdom and cultural understanding of a core group of education professionals who I have worked with over the past five years.

**Project Logistics:**
I will arrive in South Africa in early July and will meet with education leaders and members of the Department of Education over the first three weeks to coordinate the best days for the training events and discuss the outline of the workshop syllabus. I will also meet with the two representatives from the Department of Social Development to go over the resources they would like to contribute and how to support them as event speakers.

After the teacher training events in Vaalwater and Modimolle, at the Boereseal venue and Oliver Tambo Memorial Hall venue respectively, we will meet with educators and community leaders to discuss who would like to share key information at the morning parent meetings. Over the next week or so, we will then work with each educator on the area they will be sharing on. Funding for renting the ORT hall venue has been secured through community fundraising.

I will then meet again with crèche teachers to establish the locations for bus pickup for parents and the best days for the parent conferences (most likely on a weekend). Educators will send the word out to the parents of the children they care for and through local community channels. Each educator will be the ‘point-person’ for the parents of their students. After the parent meetings, I will conduct electronic follow-ups with the educators who participated to record suggestions for the future.

**My background in this area:**
Growing up 30 minutes outside of Vaalwater, I was unusual and privileged to receive a high-quality early education and be protected from many of the damaging effects of poverty. Just 500 meters from the house I grew up in, most of my peers were denied that chance. Some of the educators who I will be working with on this project taught me as a child, and I was able to benefit from their many years of experience in designing the workshop material. Frustrated with the educational inequalities I observed around me, I took a crèche teacher training certified course myself at age 16 and then started a Saturday school to help children in the community catch up key building blocks that they had missed in earlier education. After graduating high school in 2018, I studied to receive formal English Second Language Teaching and Young Learners Teaching certificates through The Language House in Prague. I then moved to Cambodia to work as an English Teacher and Project coordinator for the non-profit Daughters Of Cambodia which works with women who have gone through the trauma of sex trafficking. In 2020 I began work for the Waterberg Trust, an aid distribution organisation providing funding for community projects in the Waterberg, before going to Yale University to study Cognitive Development and the Environment of Development.

**Long-term impact:**
The goal of this project is not only to increase crèche teacher and parent awareness of how to combat brain-damaging toxic stress, but also to help open a long-term dialogue between parents and educators to support child development in our region for years to come. Only through parent-teacher collaboration and sharing of crucial knowledge can children be supported in reaching their full potential and build a better future for South Africa.