

Youth First Kenya: Evaluation of an Evidence-based Resilience Programme on Psychosocial Wellbeing and Education in Kajiado and Tharaka Nithi

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Sub-theme: Innovative Disruption. **Type of Data:** Primary. **Methodology:** Mixed methods pre-/post-test trial (uncontrolled). **Key words:** Resilience, Psychosocial Wellbeing, Pupils

Background

Globally, education researchers, policymakers, and practitioners are increasingly recognizing the need for an integrative approach to pupil learning. Rather than focussing solely on academic achievement, policies, programmes, and research have shifted to recognize the importance of building assets that foster mental and social wellbeing (MSWB) among pupils and teachers (e.g., Tawil, 2013; UNICEF, 2019; World Bank, 2006). Building such assets empowers youth to set and achieve goals and become healthy, contributing members of society (Gavin, Catalano, David-Ferdon, Gloppen, & Markham, 2010; Martin & Marsh, 2006; Payton et al., 2008; UNICEF, 2017). Programmes that improve these assets also improve teacher wellbeing and improve teacher engagement, in turn supporting pupil learning and school experiences (Orodho, Waweru, Ndichu, & Nthinguri, 2013).

Youth First (YF), a teacher-facilitated, resilience-based middle school curriculum, has been developed, implemented, and tested since 2009 in India, and adapted in 2017 as Youth First Kenya (YFK) for use in Kenya. Efficacy trials in India have shown that YF fosters pupil resilience, related MSWB outcomes, and physical health, helping pupils bounce back from challenges and thrive (DeMaria, Andrew, Leventhal, Eksambi, & Leventhal, 2016; Leventhal et al., 2015; Leventhal et al., 2016). YF is one of the first evidence-based MSWB programmes in any low or middle income country (LMIC). It has been conducted in India among 100,000+ marginalized adolescents (and is currently on track for universal institutionalisation among Bihar, India's 26,000 government middle schools and 2.6 million pupils) and piloted in Kenya in 33 schools among nearly 1,000 pupils.

YF's curriculum is designed to strengthen key areas such as self-concept, character strengths, emotional awareness and regulation, gender equality attitudes, communication, problem solving, and conflict resolution. YF includes all pupils in 8th grade at a given school, girls and boys, who participate in 23 weekly teacher-facilitated peer support sessions throughout the school year. Sessions are held in single-sex groups of 15 or fewer pupils each.

Resilience, or the ability to bounce back and thrive in the face of adversity, enables individuals to grow, learn, and improve their lives while confronting change, obstacles, and difficult circumstances. School-based resilience interventions are increasingly common in high-income countries (HICs), and evidence suggests that HIC resilience programme benefits may be reproduced in LMICs (Barry, Clarke, Jenkins, & Patel, 2013; Hart & Heaver, 2013; Jordans et al., 2010; Ungar, Russell, & Connelly, 2013).

Particularly in LMICs such as Kenya, poverty and gendered education/aspirations often lead to high drop-out rates, especially among girls, and other behaviours that limit future options. Integrating resilience training broadly for adolescents in government schools holds huge potential as a cost-effective approach to improve school performance, reduce drop-outs, and delay marriages. Yet most resilience research and programmes focus on HICs. YFK can thus fill a major gap in strengthening youth capacities to engage productively in schools and beyond via a preventive, promotive model.

This study represents the first evaluation of YFK, conducted during its first full implementation during the 2018 academic year, in 9 schools, among 242 pupils and 19 teachers in Tharaka Nithi and Kajiado counties. YFK has since expanded to an additional 25 schools in these counties.

Methods

A pre/post mixed-methods (quantitative/qualitative) study design was used to evaluate the effect of YFK on the wellbeing of pupils and teachers involved in the programme. We employed quantitative and qualitative methods to describe the effects on psychosocial wellbeing, health, and educational outcomes, on pupils and teachers, and to gain insight into key feasibility aspects of the project.

The main research questions that we sought to answer were:

1. How do psychosocial, health and educational outcomes of Class 7/8 pupils in YFK schools in Tharaka Nithi and Kajiado Counties change from pre- to post-test?
2. How feasible and acceptable is YFK?

The quantitative component included a questionnaire for pupils and one for teachers. Each questionnaire included questions related to socio-economics and demographics, age-appropriate validated psychosocial measures of wellbeing, such as the Connor-Davidson Resiliency Scale-10, mental health (Self-Reporting Questionnaire (SRQ-20) and KIDSCREEN Psychological Wellbeing) physical health, gender equality attitudes, pupil school engagement, and pupil-teacher relationships.

The qualitative component involved in-depth interviews with 8 teachers across the two counties. One teacher from each of 8 schools (4 per county) was selected and asked to participate. Interviews were carried out in July 2018, near the end of YFK. A semi-structured interview guide explored themes of teacher experience, perceptions of teacher training, and perceived impact on pupils and teachers.

Quantitative Results

The following summarizes the results of the quantitative component of the research.

Pupil Assessments

A total of 208 pupils across 9 schools in both counties completed baseline and endline surveys (242 total pupils participated in the intervention but not all were accessible at baseline and endline). In Tharaka Nithi, only Class 8 pupils participated. In Kajiado, Class 7 and 8 pupils were included in the intervention and the assessments given the small size of the Class 8 in the schools.

We measured change in key educational and psychosocial indicators. We found that measures in both categories improved from pre to post. Table 1, below, provides pre and post-test outcomes on each measure. We observed modest but statistically significant changes in pupil-teacher relationships. Scores for this measure increased by 4%. While other classroom-related measures exhibited changes (improvements in classroom cohesion and decreases in perceived exclusion/privilege) the change was not statistically significant which may be due to the small sample size. For youth MSWB, we found significant and sizeable improvements in all measured outcomes: Resilience (+21.4%, $p < 0.001$), self-efficacy (+7.9%, $p < 0.001$), social wellbeing (+9.9%, $p < 0.001$), and psychological wellbeing (+6.1%, $p < 0.01$).

Table 1: Pre- and Post-intervention measurements, Pupil assessments

	Baseline		Endline		% Change	p-value
	Mean	SD	Mean	SD		
Education Indicators						
Pupil Teacher Relationships	36.2	4.5	37.7	4.8	4.0%	***
Perceived Exclusion/Privilege	13.0	2.9	12.7	3.8	-2.6%	
Classroom Inventory						
Cohesion	9.2	4.0	9.6	3.9	4.6%	
Satisfaction	10.2	2.6	10.1	2.5	-1.2%	
Psychosocial Indicators						
CD-RISC Resilience	21.3	7.3	25.9	7.0	21.4%	***
General Self-efficacy	31.7	5.7	34.2	4.0	7.9%	***
Psychological Wellbeing	16.6	5.0	17.7	4.3	6.1%	**
Social Wellbeing	16.3	4.7	18.0	4.1	9.9%	***
Gender Indicators						
Gender Attitudes (Overall)	10.7	3.7	10.6	3.7	-1.4%	
Gender Attitudes (Roles)	4.2	1.9	4.1	2.0	-4.1%	
Gender Attitudes (Violence)	6.4	2.7	6.2	2.7	-3.1%	

Note: SD=standard deviation; *** $p < 0.001$; ** $p < 0.01$. P-values only indicated for measures with a statistically significant change at $p < 0.05$.

Measures of gender attitudes overall and attitudes about gender roles and gender-based violence did not improve pre to post. However, these changes were not statistically significant, and likely can be attributed to variations in measurement and the small sample size. We will continue to investigate pupil interpretations of these scales and the Likert response options. Regardless, we will continue to emphasize gender equality messages in the curriculum and aim to strengthen these messages.

Teacher Assessments

We carried out baseline and endline surveys with 17 of the 19 teachers who went through the CorStone training for Youth First and imparted the programme among their pupils.

While we have a small sample (17 teachers with assessments at baseline/endline across 9 schools), results were encouraging, shown in Table 2, below, pointing to improvements across a host of teaching quality and other indicators. (Given the small sample, we did not calculate statistical significance.)

Teachers decreased their use of punitive and aggressive approaches to classroom discipline, which declined by a sizeable amount, 22% and 15% respectively, while the use of recognition and rewards as discipline strategies increased by 3.4%. The number of teachers who felt they were very effective at helping a pupil with a problem increased by 20%. Teachers' work-related burnout decreased by 10%. Teacher wellbeing also improved, with increases in resilience (11%) and mental health (5%).

Table 2: Education and Psychosocial Outcomes, Teachers

	Baseline		Endline		Crude change	% Change
	Mean	SD	Mean	SD		
Education-related outcomes						
Classroom Discipline Scale						
Punishment subscale	12.6	3.5	9.9	4.85	-2.7	-21.5%
Recognition and Rewards	19.1	3.4	19.7	2.82	0.7	3.4%
Involvement in Decision-making	33.1	5.2	32.8	6.11	-0.3	-1.0%

Hinting	17.9	3.1	16.1	3.80	-1.8	-10.3%
Aggression	9.1	3.9	7.7	3.87	-1.3	-14.9%
Copenhagen Burnout Inventory - Work-related burnout scale	4.5	1.9	4.0	2.22	-0.5	-10.1%
Organizational Climate Index	23.2	2.5	23.2	2.25	0.0	0.1%
Psychosocial and Mental Health Outcomes						
CD-RISC Resilience	29.5	6.5	32.7	7.32	3.2	10.7%
Schwarzer's Teacher Self-Efficacy Scale	33.6	2.3	34.2	2.27	0.6	1.7%
Self-reported questionnaire (mental health)	17.1	1.8	17.9	2.15	0.8	4.6%

Qualitative Findings

Six main themes emerged from the data. A short summary of findings follows each theme, below.

1. Preparedness of the facilitators: Initial training and follow up trainings

Teachers overall felt that they were well prepared to facilitate the programme. The trainings that the teachers received gave them a good understanding of the YFK concepts and also the confidence to facilitate it in their respective schools. They felt that the training was difficult at first, but over time they came to fully grasp the concepts.

2. Reception by the pupils

The pupils received the YF programme very positively, even though some were uncertain at the beginning. They enjoyed it to such an extent that they were very disappointed that the programme came to an end. According to the facilitators, the level of pupils' engagement increased as the programme progressed. Some pupils were even sharing what they had learned with others in younger grades, as they felt it was important for everyone to learn.

3. Programme role in pupil and teacher lives

All participants appreciated YFK and reported that it had played a big role in their lives. According to the pupils, YFK helped them to shape their future. They reported that they felt proud that they got the opportunity to undertake the programme. Teachers also felt that the programme was of help to the pupils as well as to them as individuals. For instance, one teacher mentioned that the programme really cultivated leadership and another mentioned that the programme had helped in dealing with personal matters (such as anger).

4. Programme support

During initial training, refresher trainings, and session support from staff, teachers, pupils and heads of schools felt well-supported to run sessions. Facilitators said that they received all materials that they needed and that any time they needed help, they could call upon the YFK team. Some teachers did ask for more support in implementing the sessions over the course of the academic year in the future. One teacher highlighted that additional visits and phone calls would be welcome.

5. Facilitators' motivation

The love for helping children and preparing them for a brighter future emerged strongly as the main motivation for teachers to facilitate the YF programme. Seeing pupils succeed and experience change was also something that gave them the motivation to run the programme in their schools. Additionally, some felt that the personal benefits they were gaining as individuals motivated them. Others felt that programme content motivated them to facilitate the programme, as they believed that the concepts in YFK are important, though they are not subjects included in the Kenyan school curriculum.

6. Programme growth and expansion

Pupils were very positive about the YFK programme and all of them would like the programme to expand to more schools so that more can benefit. They also felt that the programme should be

expanded to high schools, in particular because expanding the programme to high schools would give a smooth transition for the YFK pupils even as they exit primary schools. Pupils also felt that the programme should be expanded within their schools to accommodate pupils in lower grades, especially those from class six and seven. Others suggested that the programme could even begin from class one, as they felt the subject matter was important to all.

Discussion

Results showed that pupils who participated in YFK improved from pre to post test on a host of psychosocial and educational indicators, including pupil-teacher relationships, resilience, self-efficacy, social wellbeing, and psychological wellbeing (all p 's < 0.01). Additionally, though pupils also improved in their classroom cohesion and perceived exclusion/privilege in their classrooms, these changes did not reach statistical significance. Teachers who participated in YFK as facilitators also improved from pre to post test on a host of indicators, including approaches to classroom discipline, effectiveness at helping pupils solve problems, work-related burnout, resilience, and mental health. Qualitative findings additionally showed that the programme was relevant to pupils' and teachers' lives, that it was enjoyable and generally felt to be beneficial, and that there was enough support and high-quality training for teachers to conduct the programme.

This study supports the feasibility, acceptability, and initial evidence of effects on psychosocial and educational indicators of one of Kenya's first resilience-based programmes for youth. Future studies should continue to investigate programme effects with larger samples and a control group.

Conclusion

This paper provides initial evidence of the effects of YFK, a resilience programme for adolescents, which is a type of programme that is new to Kenya. Resilience programmes for youth have great potential in Kenya, with its rapidly changing landscape of opportunities and challenges for youth, as these programmes help to build a next generation that is more able to take advantage of new opportunities that arise while becoming more flexible and able to grow and change in the face of new and continued challenges.

YFK not only represents one of Kenya's first evidence-based resilience programmes for youth, but it is also imminently scalable (it is based on a model that is currently under agreement to be institutionalised in Bihar, India's 26,000 middle schools). As such, it has potential to disrupt Kenya's education system by offering a scalable model to integrate into schools that can create more youth who know how to flourish as they grow, no matter what challenges come their way.

References

- Barry, M. M., Clarke, A. M., Jenkins, R., & Patel, V. (2013). A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. *BMC Public Health*, *13*, 835.
- DeMaria, L., Andrew, G., Leventhal, K. S., Eksambi, S., & Leventhal, S. (2016). "Now I Have the Courage"—Empowering Girls to Raise Their Voices and Advocate for Their Rights: Preliminary Qualitative Results from the Girls First Resilience Trial. Research Brief. Accessed July 2019. https://corstone.org/wp-content/uploads/2016/02/Now-I-Have-the-Courage_CorStone_Qualitative-Summary_11-Jan16.pdf
- Gavin, L. E., Catalano, R. F., David-Ferdon, C., Gloppen, K. M., & Markham, C. M. (2010). A Review of Positive Youth Development Programs That Promote Adolescent Sexual and Reproductive Health. *Journal of Adolescent Health*, *46*(3, Supplement), S75–S91. <https://doi.org/10.1016/j.jadohealth.2009.11.215>
- Hart, A., & Heaver, B. (2013). Evaluating resilience-based programs for schools using a systematic consultative review. *Journal of Child and Youth Development*, *1*(1), 27-53.
- Jordans, M. J. D., Komproe, I. H., Tol, W. A., Kohrt, B. A., Luitel, N. P., Macy, R. D., & de Jong, J. T. V. M. (2010). Evaluation of a classroom-based psychosocial intervention in conflict-affected Nepal: a cluster randomized controlled trial. *The Journal of Child Psychology and Psychiatry*, *51*(7), 818–826.

- Leventhal, K. S., DeMaria, L. M., Gillham, J. E., Andrew, G., Peabody, J., & Leventhal, S. (2016). A psychosocial resilience curriculum provides the “missing piece” to boost adolescent physical health: A randomized controlled trial of Girls First in India. *Social Science & Medicine*, 161, 37–46. <https://doi.org/10.1016/j.socscimed.2016.05.004>
- Leventhal, K. S., Gillham, J., DeMaria, L., Andrew, G., Peabody, J., & Leventhal, S. (2015). Building psychosocial assets and wellbeing among adolescent girls: A randomized controlled trial. *Journal of Adolescence*, 45, 284–295. <https://doi.org/10.1016/j.adolescence.2015.09.011>
- Orodho, J.A., Waweru, P.N., Ndichu, M., & Nthinguri, R. (2013). Basic education in Kenya: Focus on strategies applied to cope with school-based challenges inhibiting effective implementation of curriculum. *International Journal of Education and Research*, 1(11), 1–20.
- Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Pupils: Findings from Three Scientific Reviews. Technical Report*. Collaborative for Academic, Social, and Emotional Learning. Accessed July 2019. <https://files.eric.ed.gov/fulltext/ED505370.pdf>
- Tawil, S. (2013). *Education for ‘Global Citizenship’: A framework for discussion*. UNESCO Education Research and Foresight, Paris [ERF Working Papers Series, No. 7].
- Ungar, M., Russell, P., & Connelly, G. (2013). School-Based Interventions to Enhance the Resilience of Pupils. *Journal of Educational and Developmental Psychology*, 4(1), 66-83.
- UNICEF. (2017). *The State of the World’s Children 2017*. Accessed July 2019. https://www.unicef.org/publications/files/SOWC_2017_ENG_WEB.pdf
- UNICEF. (2019). *Global Annual Results Report 2018: Goal Area 2: Every Child Learns*. Accessed July 2019. https://www.unicef.org/sites/default/files/2019-06/Global_Annual_Results_Report_2018_Goal_Area_2.pdf
- World Bank (2006). *World Development Report 2007: Development and the Next Generation*. World Bank. Accessed July 2019. <https://openknowledge.worldbank.org/handle/10986/5989>