



## Original research

# Youth researchers academy: a report on an innovative research training programme for young people in Zimbabwe

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► Additional supplemental material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/bmjinnov-2021-000885>).

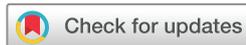
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Received 9 November 2021

Accepted 21 May 2022



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**To cite:** Tembo M, Mackworth-Young C, Kranzer K, *et al*. *BMJ Innov* Epub ahead of print: [please include Day Month Year]. doi:10.1136/bmjinnov-2021-000885

## ABSTRACT

**Introduction** Youth engagement has the potential to enhance the design, implementation and relevance of research. Without strategies to capacitate young people with research skills, youth engagement in research is often tokenistic and ineffective. In this paper, we detail the implementation and evaluation of an innovative research training programme for youth (aged 18–24 years) in Zimbabwe called the Youth Researchers Academy (YRA).

**Methods** Quantitative programme data and qualitative interviews and focus group discussions assessed acceptability of the YRA, youth researcher and mentor experiences, and impact of the YRA over time.

**Results** We received 60 applications in 2019 and 89 applications in 2021. Ongoing feedback led to changes in the second programme (including longer training and certification). Youth researcher experiences included being motivated by learning new skills and valuing the relationship with mentors and peer networks. Many described long-term impact, including facilitation of higher education, setting up of new businesses through the stipends received, and, for some, opportunities to work in research.

**Discussion** Overall, the programme was acceptable, facilitated meaningful youth-led research and trained a cohort of empowered youth researchers. Young people were eager to learn and capable of both learning and implementing critical research skills in a professional working environment. Implementation challenges included limited

## WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ Youth engagement is integral to developing, implementing, and evaluating sustainable and acceptable youth-focused interventions.
- ⇒ Effective youth engagement needs to involve an interactive capacity-building component that allows for young people to appropriately inform and participate in the relevant research work.

## WHAT THIS STUDY ADDS

- ⇒ Robust youth engagement requires that researchers and implementers make an intentional effort to dismantle power dynamics and give young people agency and support in their research work.
- ⇒ The Youth Researchers Academy highlights key youth engagement strategies in effective youth-focused research work that could be transferrable to interventions in other areas looking to address young people's needs and overall well-being.
- ⇒ Youth engagement activities should consider providing young people with tangible outcomes, such as remuneration for work done or certifications of trainings, that reinforce the importance of their work and time.

freedom in the co-design of research projects and the additional burden of work for YRA mentors.

**Conclusion** The YRA provides a template for other academics to support similar training to facilitate capacity building and meaningful youth engagement for research with and for youth.

**HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE AND/OR POLICY**

⇒ Embedding youth-led and youth-focused research in parent studies is possible; however, implementers must ensure that youth are adequately capacitated, remunerated and given agency.

**INTRODUCTION**

Youth engagement is widely recognised as essential for designing, developing and evaluating effective youth health interventions and policies, as well as in the implementation of interventions.<sup>1</sup> The recent drive for youth participation has led to increased numbers of youth engaging in research and decision-making.<sup>2,3</sup> When enacted in an inclusive and collaborative way, youth engagement can empower youth and improve the overall sustainability, effectiveness and acceptability of youth-focused interventions.<sup>4</sup>

Active youth engagement is impeded by the inequitable relationship between them and ‘adult’ (more powerful) stakeholders, alongside young people often not having the skill set to facilitate their participation in either research, policy or programming.<sup>1</sup> Shier’s ladder of participation discusses different levels of participation by children, which encompasses how youth engagement is often incorporated ((1) Manipulation; (2) decoration; and (3) tokenism) and how participation can be incorporated ((4) assigned but informed; (5) consulted and informed; (6) adult-initiated, shared decisions with children; (7) child-initiated and directed; (8) child-initiated, shared decisions with adults).<sup>5</sup> Globally, higher levels of participation are notably rare in health research.<sup>6,7</sup> To achieve this, investment into youth training and skills-building is critical.

While young people’s involvement, for example, as peer supporters within health programmes is increasing along with acknowledgement that this needs to be accompanied by training,<sup>8,9</sup> there is much less recognition of this need in research. This is a missed opportunity as involvement of youth in research can improve quality of and relevance of research as well as having directly empowering youth themselves and their communities.<sup>10</sup> However, there is a dearth of approaches for provision of age-appropriate and relevant training to equip young people with skills to contribute to research.<sup>11</sup>

We present the design, implementation and evaluation of an innovative and participatory approach to train youth as researchers in Zimbabwe, namely the Youth Researchers Academy (YRA). We explored the acceptability and impact of the programme through analyses of the experiences of the youth researchers, facilitators and mentors. The aim is to encourage and capacitate other academic researchers to develop and run similar programmes for young people through the provision of resources and lessons learnt. A short film

on the YRA is available (<https://www.chiedza.co.zw/youth-researchers-academy>).

**METHODS****Overview of the YRA**

The YRA is a 4-month research training programme for young people (aged 18–24 years old) developed in Zimbabwe, as a collaboration between the London School of Hygiene and Tropical Medicine, UK, and the Biomedical Research and Training Institute, Zimbabwe. Between 2019 and 2021, two YRA programmes were developed and delivered in Zimbabwe. The first occurred from May to August 2019 with 21 participants, and the second from May to August 2021 with 20 participants (table 1). The YRA aimed to train and equip youth with the necessary skills to design, conduct and report on the findings of youth and/or health focused research. The YRA consisted of a residential research skills training, followed by a 12-week remunerated period of designing and conducting a research project in groups of two to six over 12 weeks supported by experienced mentors. This was followed by a stakeholders’ dissemination meeting. A team of professionals including epidemiologists, health researchers, social scientists and public engagement specialists oversaw the design and development of the YRA promotional materials, recruitment and selection criteria, curriculum and dissemination plans.

**Recruitment and selection**

YRA promotional materials and applications were shared with non-governmental organisations and community-based organisations working with young people and across social media platforms, including Twitter, Facebook and Instagram. Applications were accepted through paper-based submission, email, WhatsApp or Google Forms (online supplemental appendix A).

Complete written applications were shortlisted by three reviewers. Shortlisted candidates were invited to attend an in-person interview and to take part in a group work exercise designed to identify individuals with critical-thinking skills, a willingness to learn, the ability to work in a team and a passion for research.

**Table 1** Age and sex of YRA 2019 (N=21) and YRA 2021 (N=20) participants

	YRA 2019 participants (N=21)	YRA 2021 participants (N=20)
	n (%)	n (%)
<b>Age (years)</b>		
Mean	21	20
<b>Sex</b>		
Female	12 (57.1)	8 (40.0)
Male	9 (42.9)	12 (60.0)

YRA, Youth Researchers Academy.

**Table 2** YRA 2019 and YRA 2021 research projects and participant roles

YRA 2019		
YRA research project titles	Type of study	YRA participant role
Menstrual Health Period Tracking Diary	Qualitative	Qualitative research codesign, data collection and analysis
The Feasibility and Acceptability of HIV Self-Testing (FAST) Mapping Study	Qualitative	Qualitative data collection and analysis
Socioeconomic Survey	Qualitative and quantitative	Qualitative and quantitative research codesign, data collection and analysis
CHIEDZA Mapping	Geo mapping	Data collection and analysis using GPS technology
Youth-friendly Scorecard	Qualitative	Qualitative research codesign, data collection and analysis
YRA 2021		
YRA research project titles	Type of study	YRA participant role
Community Youth Neighbourhood Walks (with CHIEDZA process evaluation)	Qualitative	Qualitative research codesign, data collection and analysis
STIs in CHIEDZA - A Partner Notification Study	Qualitative	Qualitative research codesign data collection and analysis
STIs in CHIEDZA - Acceptability of self-collected vaginal swabs	Qualitative and quantitative	Qualitative and quantitative research codesign, data collection and analysis
Typhoid in the time of COVID in Harare, Zimbabwe (TAZ) – A Social Science Study	Qualitative	Qualitative research codesign, data collection and analysis
VITamin D for AdoLescents with HIV to reduce musculoskeletal morbidity and Immunopathology (VITALITY) – Participant Experiences	Qualitative and quantitative	Qualitative and quantitative research codesign, data collection and analysis
Youth Researchers Academy Process Evaluation	Qualitative	Qualitative research codesign, data collection and analysis
CHIEDZA, Community based interventions to improve HIV outcomes in youth: a cluster randomised trial in Zimbabwe; STI, sexually transmitted infection; YRA, Youth Researchers Academy.		

### Residential skills training

Training provided interactive and engaging teachings on stages of the research process. We incorporated activities such as group work and games to promote practical learning rather than one-way communication via presentations or lectures. Training was facilitated by 8–10 multidisciplinary research professionals. All teaching was conducted in English. Programme facilitators created interactive lesson plans that were collated to build a training curriculum (online supplemental appendix B). Training was of 1 week in 2019 and 2 weeks in 2021.

### Research projects

After training, YRA participants codesigned and implemented mentored research projects. These were embedded within larger research studies and aimed to put into practice the learnings from the training. Mentors were selected from the training facilitators. All projects had a focus on youth and/or health (table 2).

Following this, participants underwent a 2-day presentation skills workshop after which findings were disseminated at a stakeholders' meeting attended by representatives from government ministries, UN agencies and academic and youth-focused organisations within Zimbabwe. In the second YRA, participants were also awarded certificates of completion.

### Patient and public involvement

No patients/public were involved in the research process, design of the study, the recruitment and conduct of the study, or the dissemination of study results.

### YRA evaluation

We conducted two focus group discussions (FGDs) and six in-depth interviews (IDIs) (table 3) with the past participants to explore programme acceptability and its impact (before, during and after YRA completion). This qualitative study was conducted from May to July 2021 by a YRA 2021 research team (DR, BM-D and DC) as one of the research projects, mentored by MT and CM-Y. As the interviews were carried out by YRA 2021 participants, we only interviewed YRA 2019 participants to ensure a degree of separation between researchers and participants. For the FGDs, we called all the YRA 2019 participants and interviewed those that were available at the time. For IDIs, we purposively sampled 2019 participants in university locally or abroad, working on other research programmes, or unable to participate in the FGDs. Youth researchers developed semistructured topic guides for IDIs and

**Table 3** Age and sex of participants in focus group discussions (FGDs) and in-depth interviews (IDIs)

	FGD 1	FGD 2	IDIs (face to face)	IDIs (via telephone)
<b>Age range (years)</b>	20–23	20–24	21–24	20–23
<b>Sex</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
Female	5 (55.6)	4 (57.1)	2 (50.0)	2 (100.0)
Male	4 (44.4)	3 (42.9)	2 (50.0)	0 (0.0)
Interviews were conducted 24 months after the first Youth Researchers Academy implemented in 2019.				

FGDs. IDIs were conducted face to face or by phone and all FGDs were conducted face to face, in either Shona or English (as preferred by the participants) and took 60–75 min. Written informed consent was obtained and pseudonyms were used to ensure confidentiality.

Additionally, MT attended, collected and reviewed meeting minutes of the YRA teaching faculty and mentor meetings to gain a deeper understanding of operational issues and the experiences of designing and implementing the programme and of mentoring the youth researchers over time.<sup>12</sup>

#### Data management and analysis

FGDs were audio recorded and detailed summaries of each FGD were written and checked against the audio recordings. FGD summaries were thematically coded, using three top-level deductive codes: acceptability, experiences and impact. Coded FGDs were used to summarise emerging findings and to highlight areas for further investigation in subsequent IDIs.

IDIs were audio recorded, transcribed verbatim and translated into English for thematic analysis.<sup>13</sup> Transcripts were read through for familiarisation and coded manually using the same top-level deductive codes as used for the FGDs: acceptability, experiences and impact. Coding was conducted by DR, BM-D and DC, mentored by MT and CM-Y.<sup>14</sup> Coded transcripts were discussed with and reviewed by MT and CM-Y and through discussion, additional themes and subthemes were generated.<sup>15</sup> During analytical discussions with the team, themes and subthemes were iteratively reviewed and refined to capture emerging new codes. Examples of subthemes included: socioeconomic motivators to apply and complete the YRA; and access to education and professional support over time.

## RESULTS

We received 60 applications in 2019 and 89 applications in 2021. The mean age of selected candidates was 20 years. We made a deliberate effort to have similar numbers of young men and women in both YRA cohorts. In 2019, all (n=21) selected participants completed the training and research work while in 2021, all (n=20) completed the training but 3 (15%) did not complete the research component (one left to pursue a university degree in another country and the other two had personal family issues).

### Assessment of the YRA

#### YRA acceptability

Overall, the participants interviewed ‘enjoyed’ the YRA and felt ‘proud’ to have been part of their respective YRA cohorts. Importantly, feedback from the first YRA led to real-time changes in the design and implementation of the second YRA. Youth researchers in the first cohort noted the lack of tangible outputs, such as ‘certificates of completion’ and YRA graduate databases

that would facilitate future employment, features that were added into the second programme. Additionally, following feedback that the research training period was too short, the YRA residential training was extended from 1 week in the first programme to 2 weeks in the second, enabling more time for active teaching and learning.

From YRA coordination meetings, teaching faculty and mentors also discussed having positive experiences planning and implementing the YRA. Mentors were pleasantly surprised by participants’ enthusiasm to learn and conduct research, and many noted observing notable improvements in the skills and professionalism over time.

In reflecting on aspects of the training and implementation that influenced acceptability among participants, mentors noted three key points. First, use of ‘research jargon’ and technical terms such as ‘cohort’ as opposed to ‘group of study participants’ confused participants. This was proactively addressed with replacement by simpler universally understood terms. Second, cognisant of intergenerational power dynamics, there was an intentional effort by teaching faculty and mentors to be relatable and approachable to participants: faculty stayed in the same residence as participants over the residential programme, ate meals with participants and joined in evening social activities. Additionally, teaching faculty and mentors provided opportunities for the participants to be heard and to exercise agency during the residential training, which to some degree countered traditional youth-adult power dynamics. For example, YRA research projects were cocreated between mentors and participants and the teaching curriculum included sessions in which the YRA participants led a ‘training of trainers’ session on a research-related topic of their choice. Thirdly, the use of icebreaker activities and practical exercises were important for training avoiding being a passive process and enabled trainers to check comprehension. Additionally, during the dissemination meeting, we highlighted how the research findings from the YRA changed practice in other studies.

#### YRA experiences

Participants were motivated to apply for and to remain engaged with the YRA by a desire to be ‘productive’, and to work with other young people. Participants were excited about being part of a research programme and most were eager to learn more about working in youth-focused research:

I like challenges and thought that doing the project with YRA was one and it helped [me] to be a better person doing something new (IDI, female, 22 years old).

I was interested in working with young people and finding how young people are coping up with life... (FGD, female, 21 years old).

Some participants ‘had nothing to do’ before the YRA, and were looking for a working and learning opportunity:

Some of us were just sitting at home. I like working with youth like myself so I thought I would apply... (FGD, male, 22 years old).

While a learning and working opportunity motivated them to apply, participants noted their engagement was sustained by the cultivation of supportive relationships with peers and mentors alongside the opportunity to earn a reliable source of income:

[YRA] was pretty great actually, I enjoyed the experience... I was blessed to work with a great team, they were wonderful people... I would not say there were any negative things. (IDI, female, 23 years old).

Mentors were always there for us, or in their absence they would assign someone to be assisting us (IDI, female, 20 years old).

It was like having a real job. It was nice going to work and being paid every month (FGD, female, 23 years old).

Work on research that had personal relevance improved engagement and the participatory nature of training was considered key for effective learning:

We had our training at Cresta Lodge and was a nice environment. It was fun, we had so many activities... You were not like you are in a lecture. We were learning like being given tasks to do and then presenting... (IDI, female, 22 years old).

However, some participants also noted that they struggled with the intensive training curriculum and sometimes felt intimidated by their mentors:

We needed more time with the training... (FGD, male, 23 years old).

Sometimes it was difficult to go to our mentor for assistance because she was too serious and we feared her... (IDI, female, 23 years old).

Other challenges included those faced on specific research projects, including technical challenges with electronic data collection, challenges approaching participants in communities linked to mistrust of research and fear for personal safety on projects on substance abuse.

Some of the YRA teaching faculty and mentors also found the work ‘challenging’ and an additional burden to their heavy work schedules. In response to this, some research groups had two mentors to share the duties of supporting the research work.

#### Long-term impact of the YRA

For most, the YRA had a positive and long-lasting impact on their lives. To date, four youth researchers from the first and nine researchers from the second YRA have since been fully employed as either youth mobilisers or research assistants in other research programmes. Almost all the participants acknowledged

that they learnt both life and research skills that have benefitted them as students and working youth in the short and long term:

I am now at university and I am still using the teamwork skills that I learnt from YRA (IDI, female, 21 years old).

I acquired skills which are needed in my line of work. For example, going to the field and knowing how to interact with different people with different personality and how to approach and even working in a team. I still have those skills... (IDI, female, 23 years old).

Other participants highlighted that getting paid for their participation in the YRA allowed them to start ‘small businesses’. For some, the YRA also resulted in travel and work opportunities affiliated with the YRA:

I had the opportunity to go to Uganda to share my experiences as a young researcher in the YRA. I had fun... It was great exposure... (IDI, female, 23 years old).

[The YRA] was amazing for me and it changed my life... I now work in research. The behaviour changes in me like the way I used to be, the way I used to handle myself... It all actually changed through YRA. (IDI, female 23 years old).

## DISCUSSION

The YRA programmes were well received by young people. Young people were eager to learn and capable of both learning and implementing critical research skills in a professional working environment. The YRA programmes also adds weight to how young people, when capacitated and given opportunity, can be key contributors to research implementation and knowledge creation.<sup>16 17</sup> Key elements that made the YRA successful included: (1) a teaching curriculum that incorporated interactive and practical teaching intermixed with fun and social activities, (2) remuneration for research done which added ‘value’ to the work, (3) implementation of changes to YRA activities based on youth researchers’ feedback, (4) mentorship and group work that allowed for practical and supported learning and research and (5) the cocreation of research projects. Our findings are similar to those identified by the evaluation of a multiyear community-based youth engagement project in Canada.<sup>18</sup> Importantly, the programme provided an opportunity for personal and professional growth, encouraged pursuit of further education and facilitated employment opportunities, highlighting the impact of such an approach.

While the overall feedback on the YRA was positive, there were some challenges, which are noted for learning for future programmes. Some mentors found that the work was an additional commitment and noted that working with young people with limited working experience required patience and flexibility. In future programming, mentors could be adequately

capacitated and prepared for their roles beforehand by receiving 'mentorship handbooks' that would outline roles, mentorship guidelines and time commitments. Both mentors and youth researchers also noted the training time was limited and future programmes would benefit from a longer training period.

Within the available literature, there are examples of research programmes that incorporate youth engagement.<sup>19 20</sup> However, very few programmes allow young people to lead in the design and implementation of the research work.<sup>21 22</sup> The YRA used participatory approaches that allowed for young people to exercise their agency, implement their learnings and design and conduct research that tangibly informed ongoing research work. Skills training and agency are critical if youth are to actively contribute to the generation of evidence and to the policy-making processes about issues relevant to them.<sup>4 10</sup> Programmes such as the YRA provide an opportunity to gain unique perspective into what matters to young people and into new and effective ways to investigate topics pertinent to young people's health and well-being.<sup>22 23</sup>

Our findings have fundamental implications for youth engagement in research. With an increased recognition that young people need to be at the centre of youth-focused research, the YRA demonstrates that when equipped with adequate training, information and support, youth are more than capable of meaningfully engaging in the design, implementation and dissemination of research.<sup>17</sup> Moreover, as evidenced by the reflections from the teaching faculty and mentors, engaging young people as equal partners on research projects allows for an information exchange that enriches youth-focused research and benefits both the youth and the research team.<sup>4 24</sup> Using the YRA as a reference, similar programmes could be implemented to support and capacitate young people to participate in other sectors such as social welfare or education.

We acknowledge limitations in the evaluation and implementation of the YRA. The evaluation was limited to the first YRA, and interviews were conducted 2 years after the first YRA, which may lead to recall bias. Desirability bias may have led to more positive responses, as the data collection was conducted within the YRA. However, youth researchers from the second cohort leading the data collection likely facilitated more open responses from the youth researcher participants from within the first cohort. In terms of implementation, while there was some freedom in designing the research work, participants could only work within existing research studies and within the purview of the relevant mentor(s). We also note that employment opportunities are extremely limited in the setting. That said, the YRA training and mentorship did equip young people with the knowledge and skills to conduct youth or health focused research in the YRA and in future work.

## CONCLUSION

In conclusion, the YRA capacitated young people, which is vital if they are to contribute to development of youth-focused research, interventions and policy. It also facilitated opportunities that are critical in resource-constrained settings where employment and further education opportunities are scarce. To be effective, such initiatives will need to be participatory, consider the capacity of participants and address the inherent intergenerational power dynamics.

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**Funding** The Youth Researcher Academy was supported by Hivos in 2019, and the Wellcome Trust in 2021 through a Research Enrichment Public Engagement Grant (206316/Z/17/A /A).

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**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Ethics approval** This study involves human participants and was approved by Medical Research Council of Zimbabwe (MRCZ/A/2387). The London School of Hygiene and Tropical Medicine ethics committee (16124/RR/11602), The Biomedical Research and Training Institute Institutional Review Board (AP/1492019). Participants gave informed consent to participate in the study before taking part.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** Data are available upon reasonable request. Data are available from the corresponding author on request.

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