

Executive Summary

Background: Since January 2022, Grassroot Soccer Zambia (GRS) has been implementing the IREX - USAID funded Youth Excel project, which aims to empower young people and youth led organizations to use implementation research to strengthen local, national and global development solutions. In view of this, GRS developed the MindSKILLZ Magazine, a comic, take-home resource that aims to fill a critical gap in mental health education and engage young people's families in positive mental health promotion. From March to October 2023, GRS implemented its phase 2 of the Youth Excel project by building on lessons learnt under phase 1.

Methods: GRS Zambia conducted a mixed-method evaluation to explore the feasibility of engaging teachers and facility caregivers as co-distributors of the magazine and the extent of the effectiveness of the magazine among adolescents and young people (AYP) as a tool for mental health promotion. A total of 231 AYP received pre-post tests, alongside twelve in-depth interviews. Key informed interviews were also conducted with four facility caregivers and six teachers. Lastly, six focus group discussions (FGDs) were conducted with adolescents and three FGDs with GRS Coaches.

Findings: Overall the evaluation findings showed that the magazine was effective in promoting mental wellbeing among AYP across all groups as 93% participants had improved mental health attitudes and 96% had improved mental health knowledge. Prior exposure to GRS SKILLZ health programmes was noted as having a positive impact on adolescents mental health knowledge and attitudes. Adolescents from the SKILLZ plus curriculum, which has mental health content, showed more positive results, including those reached using individual based distribution. In addition, engaging teachers and facility caregivers as co-distributors of the magazine, alongside GRS coaches where positive attribution was noted in the use of a complementary approach that built a strong support network for adolescents to acquire positive mental health knowledge and attitudes. Although limitations of the model were noted as a potential deterrent for future scalability of this model.

Recommendations: Based on the evaluation findings, there is need to integrate mental health information in existing GRS SKILLZ health curricula, strengthen home visits as entry points for magazine distribution, explore partnerships with other civil society organizations and government entities to scale up magazine distributing using co-facilitation and revise content and features of the magazine to make it more relatable across all AYP groups.

Background

In 2023, Grassroot Soccer Zambia (GRS) leveraged on its learnings from phase 1 of Youth Excel project, to continue integrating the MindSKILLZ Magazine as a supplementary tool for positive mental health promotion among adolescents and young people in Lusaka and Chipata districts of Zambia. In line with the new objectives of phase 2 of the Youth Excel project, GRS scaled the distribution of the MINDSKILLZ magazine to a new cohort of young people with an inclusion of adolescent girls and young women (AGYW) from fifteen schools in Chipata, a rural district in Eastern province. The AGYW included previous beneficiaries of SKILLZ Girl curriculum aged 15-24 years. The SKILLZ Girl curriculum, covers topics such as gender equality, Sexual Gender Based Violence, HIV, Sexual Reproductive Health and Rights, contraceptives and self-concept.

In the second phase, GRS continued to engage Youths living with HIV (YLHIV) in Lusaka, an urban district, to reinforce mental health concepts and promotional activities using the MINDSKILLZ magazine in twenty five health facilities. GRS also extended its magazine distribution to four health facilities in Sinda, Katete and Peteuke districts of Eastern province. Youths living with HIV were selected among previous beneficiaries that had undergone the SKILLZ plus curriculum for young people aged 10-24 years. The SKILLZ Plus curriculum focuses on building resilience around ART adherence, disclosure, positive living and managing stigma and discrimination based on its mental health concepts. In addition, GRS uniquely piloted the co-distribution model which entailed teachers and caregivers working alongside GRS near-peer coaches as distributors of the magazine to 2,452 adolescents and young people against an initial goal of 2,500: 951 of which were Youths living with HIV and 1, 501 adolescents and young women.

Engagement strategies used involved co-distribution of the magazine to adolescent girls and young women using group based sessions by 13 trained GRS coaches and 21 school teachers which was later accompanied by home visits by GRS coaches. The group based sessions were aimed at helping adolescents and young people navigate any literacy related challenges while interacting with the magazine. For YLHIV, co-facilitation by 17 facility caregivers and 22 GRS youth coaches enabled them to conduct home visits to adolescents and young people as a way of sustaining mental health conversations beyond the project life cycle. The co-facilitation was also marked with group based sessions and later followed by virtual home visits by coaches and caregivers.

Similarly, GRS also engaged teachers to pilot the magazine distribution to adolescents from schools that had not previously benefited from GRS SKILLZ Health programming. Within this model, teachers identified adolescent girls and young women that were earmarked for magazine distribution using school based platforms such as open day platforms and Parent Teachers Association meetings. As a result of this model, six school teachers distributed 382 MINDSKILLZ magazines to Non-SKILLZ adolescent girls and young women from five schools. Alongside these strategies, nine community dialogue meetings were held in partnership with health facility staff and teachers, which facilitated for 598 adult stakeholders to receive the MINDSKILLZ magazine. Prior to the roll out of the magazine, GRS coaches or youths were engaged to provide ongoing input in the revised MINDSKILLZ magazine using coach academy sessions. Additionally, GRS also held three trainings to support teachers, caregivers or health service providers and GRS coaches in their roles as facilitators of the MINDSKILLZ magazine.

In line with the learning goals of the second phase of the project, GRS Zambia conducted an evaluation to help respond to the two queries alluded below:

Learning goals

1. We need to know whether engaging teachers and facility caregivers as co-distributors of the magazine, alongside GRS coaches, will improve mental well-being of AYP so that we can adapt our delivery method to reach more youths.
2. We want to know how effective the magazine is as a tool for promoting mental wellbeing among adolescents so that we can integrate it in our SKILLZ Health programs (soccer-based and SRH focused activities) that target adolescents and young people.

Methodology

Study Design

The study was conducted using a mixed-method research design which enabled collecting, analyzing and mixing both quantitative and qualitative data. The mixed method design provided for a contextual understanding around the proposed learning goals by strengthening the triangulation of both quantitative and qualitative data.

Study setting

The study was conducted in two provinces of Zambia: Eastern, a predominantly rural province and Lusaka, an urban province. In Eastern province, three districts namely, Chipata, Sinda and Petauke and one district in Lusaka province were purposively engaged based on existence of GRS SKILLZ programming in the said districts. All the research activities relating to AGYW were conducted in Chipata district, while data collection with YLHIV was conducted in Sinda, Petauke and Lusaka districts. Eastern province is characterized by high prevalence of teenage pregnancies while Lusaka scores the highest prevalence of HIV, of which both factors largely contribute to mental health challenges among AYP in Zambia.

Target Population

Our target population comprised YLHIV are beneficiaries of the SKILLZ Plus curriculum, who were beneficiaries of an HIV intervention under GRS known as SKILLZ Plus. The SKILLZ Plus participants were aged between 10 to 24 years old and were from selected health facilities where GRS had distributed the MINDSKILLZ magazine. In addition, we collected data from AGYW who were both GRS SKILLZ Girl participants and non SKILLZ participants but had received the MINDSKILLZ. The adolescent girls, aged between 15 and 19 years old, were selected in both primary and secondary schools where GRS delivers the sex-specific intervention. All the participants who were engaged in the study had received the MindSKILLZ magazine and previously undergone SKILLZ activities in the last one year.

To respond to our second objective, we included Teachers, Caregivers and GRS Coaches in the study to better understand their experiences and opinions on co-distribution and facilitation of the magazine. While the Teachers and Caregivers belonged to the health facilities and schools where the adolescents were sampled from, the teachers comprised guidance teachers only as they were the focal point persons for GRS activities in the schools, while the caregivers included community health workers, nurses and adolescent health supporters.

Sampling Technique

Quantitative Data

Participants for the pre-post test were identified from a vetted list of participants who were to receive the magazine. Before distributing the magazine, a list of all former SKILLZ participants was provided by the programs team and vetted by IREX, of which, the list was exported into Excel sheet, which allowed for systematic random sampling. The adolescents, in each school or health facility, were first assigned a random number, shuffled and then assigned a mode based on the mean. Each school or health facility had a different total population hence the mean differed. After assigning a mode to each participant, adolescents were selected based on the preferred mode for each group.

Qualitative Data

Purposive sampling was used to sample the different participants that were included in the evaluation. This meant only including adolescents who had engaged with the magazine in order for them to be able to provide in-depth information on the topic at hand. Suffice to mention that some of the adolescents had been sampled on the initial list of adolescents who received the pre-post test. For the Teachers, Caregivers and Coaches, we purposely sampled those who had distributed the magazine to the adolescents through co-distribution or co-facilitation, this led to an inclusion of one caregiver from Katete district, which was not initially included in research activities..

Sample size

Quantitative Data

Out of the proposed 10% reach, 234 AYP received the pre-test, of which 231 AYP completed the post-test. The sample size was determined by 10% of the total number of participants who were yet to receive the magazine. With that said, 68 and 15 SKILLZ Plus participants in Lusaka and Eastern province respectively received both pre-post tests, while 30 non-SKILLZ Girl participants and 118 SKILLZ Girl participants received both pre-post tests. In total, 148 pre-post tests with SKILLZ and non-SKILLZ Girl participants and 83 pre-tests were delivered to SKILLZ plus participants across both sites. Unlike the pre-test, the post-test was conducted virtually for most SKILLZ Plus participants which resulted in not reaching 3 adolescents, 2 of the contact details were unreachable while 1 participant had gone to boarding school with no means of reaching them. In Lusaka, we did not meet the target of 80 adolescents due to the limited number of participants at one facility.

Qualitative Data

A total of 22 interviews were conducted with AYP (n=12), teachers (n=6) and caregivers (4) from all sites. We also conducted 6 focus group discussions with AYP, consisting of at least 10 in each group and 3 Coach focus group discussions consisting of at least 4-5 Coaches in each group. Table 1 provides a distribution of the data collection across the different sites.

Data Collection Method		Lusaka	Chipata	Sinda	Petauke	Katete	Total
Adolescent Interview	SKILLZ Girl		4				4
	SKILLZ Plus	2			2		4
	Non-SKILLZ		4				4
Adolescent FGD	SKILLZ Girl		2				2
	SKILLZ Plus	1		1			2
	Non-SKILLZ		2				2
Teacher Interview			6				6
Caregiver Interview		2		1		1	4
Coach FGD		1	2				3

With regards to the number of schools and health facilities involved, 5 out of the 11 schools had been selected based on those who did not receive the WorldCup Magazine. Other than that, the schools were selected to represent variety of geography, school population, and primary/secondary status. For the YLHIV, 2 out of 4 health facilities in Eastern, and 3/6 health facilities in Lusaka were engaged in the study. The health facilities were selected based on geography and the number of participants, which entailed selecting health facilities with a high number of participants.

Data collection

Quantitative Data

Quantitative data was collected from June to September 2023. AGYW in schools were brought together in each school and pre-test was delivered at once, each of the adolescents recorded their own responses while the Research Assistants (RAs) read out the questions. For YLHIV, the pre-test was delivered in homes of adolescents during distribution of Magazine. Most of the efforts to bring them together at the facility were unfruitful. Post-test were conducted after three home visits, for YLHIV, or group-based sessions for AGYW. However, at the time of post distribution, the implementation plan changed to allow for virtual visits, this ultimately led to virtual distribution of post-test, especially for YLHIV. Suffice to mention that some RAs exhausted their list of participants hence sampled their participants from other Coaches distributing from the same school or health facility.

Qualitative Data

We employed a near-peer-led data collection approach with emphasis on building capacities of young people to undertake research to change activities. Qualitative data was collected between August to September 2023. The data was collected using virtual and in-person interviews in English and Nyanja. The virtual interviews were as a result of some of the respondents, such as caregivers and participants, being placed in further districts as the case of YLHIV in Eastern province. To complement our findings, data from registers collected by Coaches through observation during magazine distribution, was collected and triangulated with the primary findings.

Quality Assurance

Upon developing the data collection tools, the tools ran through a series of reviews by the research and programs teams as well as the data collectors. Revisions were made at each point before finally being pre-tested among a group of adolescents. The pre-post tools were finally translated in local languages that suited both the language needs of adolescents in the two sites to avoid losing meaning of the questions, especially that the questions had to be translated into local languages, in the case of rural areas. Data was collected through trained RAs assistants, who have previously been engaged in data collection activities, we also ran debriefs with the data collectors to address any challenges. Finally, the pre-post data was reviewed by the MEL team before being approved.

Data Analysis

Quantitative data

The initial analysis was done through the salesforce database to establish the pre-post changes for each statement as well as overall pre-post change. Individual level data was exported to excel and cleaned for analysis. Pivot tables and cross tabulations in excel were used to establish frequencies and relationships between variables. Data was imported into Stata 14 for the McNemar's Test which is a test we used to determine if there is a statistically significant difference in proportions between pre and post paired data.

Qualitative data

We employed a thematic analysis approach to analyze the data that was presented. The interview recordings, as well as FGD recordings, were first transcribed, after which, a matrix framework was used to gather key notes from the transcripts while inserting key quotes. The notes were synthesized and placed under the main themes that were developed from the data collected.

Ethics considerations

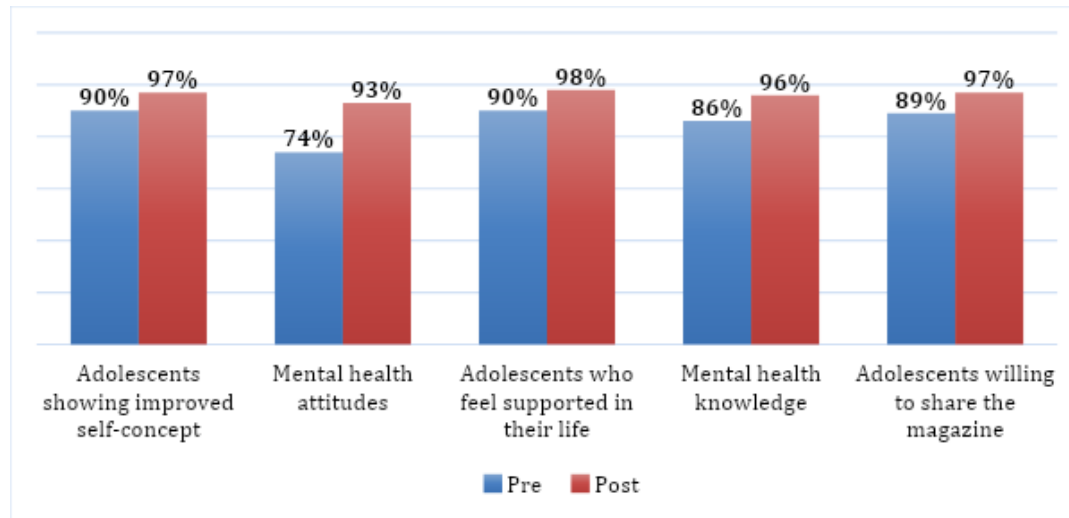
To ensure the data collection followed an ethically approved approach, all data collection tools were reviewed and approved by the IREX ethics committee. In addition to that, the research assistants conducted informed consent from all participants, including parents, before distributing the Pre-test and before conducting interviews with the study participants. The RAs also ensured that all names of participants were anonymised and the data was filed and secured in cabinets. Only adolescents who were vetted by IREX were included in the research study.

3. Results

3.1. Effectiveness of the magazine as a tool for promoting mental wellbeing among AYP

3.1.2. Mental Health Knowledge and attitudes

Figure 1: Pre-post performance by outcome



According to **Figure 1**, adolescents and young people that received the MINDSKILLZ magazine demonstrated improved mental health attitudes from a pre score of 74% before engagement with the magazine to a post score of 93% after engagement with the magazine. For Mental health knowledge an improvement was noted from a pre score of 86% to a post score of 96%. These findings also showed that adolescents and young people were willing to share the magazine and had improved self-concept as evidenced by a post score of 97% across both outcome areas.

Table 2: Pre-post performance by outcome mapped by pre-post items

Outcome/Statement	Pre	Post
Mental health attitudes	74%	93%
Seeking help for mental health challenges is a sign of weakness. 36; 42		
People who experience mental health problems are just mad. 44; 46		
Mental health knowledge	86%	96%
Seeking help for mental health challenges is a sign of weakness.		
People who experience mental health problems are just mad.		
Getting enough sleep is one of the best ways to strengthen your mental health.		
Every day, there is something to be grateful for and identifying those things can help you stay positive.		

Drinking too much alcohol can have serious negative effects for mental and physical health		
I know where to go for support services if I or someone I know abuses alcohol.		
Sadness and a loss of pleasure are common symptoms of depression.		
Society expects boys and girls to deal with their emotions differently.		
I know where to get support services for mental health related challenges.		
Self-control helps you make smart decisions when you are angry or upset.		
I know how to express my anger without being violent.		
A good friend allows you to hang out with your other friends		
In your view do you think MindSKILLZ magazine is a good tool to improve individual mental health?		
Adolescents feeling supported	90%	98%
There are people I trust with whom I can talk to about my mental health.		
Adolescents showing improved self concept	90%	97%
I can make my own decisions, no matter how much pressure I get from others.		
I know how to express my anger without being violent.		
I can reach my goals in life.		
Adolescents willing to share the magazine	89%	97%
I would be willing to share the magazine with my sibling (sister/brother).		
I would be willing to share the magazine with parents/guardians.		
I would be willing to share the magazine with my friends at school.		

Table 3: Pre/post analysis by different groups and geographical distribution

Category	Pre	Post
SKILLZ status		
Non-SKILLZ (n=30)	79%	88%
SKILLZ (n=201)	83%	92%
SKILLZ Curriculum		
SKILLZ Girl (n= 148)	86%	91%
SKILLZ Plus (n= 83)	76%	93%
Rural vs Urban sites		
Rural (n=163)	76%	93%
Urban (n= 68)	73%	94%
Group vs individual		
Group (n= 148)	86%	91%
Individual (n= 83)	76%	93%

Table 3, shows adolescents and young people who underwent SKILLZ interventions prior to magazine engagement had a slightly higher knowledge and attitudes around MH with a pre-score of 83% vs 79% for non SKILLZ participants. Post scores for adolescents who underwent SKILLZ interventions were at 92% versus non SKILLZ participants at 88%. The findings also showed little variations in MH knowledge and attitudes among urban and rural adolescents with pre scores of 76% and 73% respectively. Urban adolescents had post scores of 94% while rural adolescents had post scores of 93%. MH knowledge and attitudes among adolescents who received the magazine using group and individual based delivery slightly varied with 91% and 93% respectively.

Qualitative results showed that prior to receiving the magazine, participant knowledge around mental health was generally limited to misconceptions and myths in their communities, where the idea of ‘mental health’ was often associated with a person being mad or crazy. This was more frequently reported by adolescents in rural sites. However, adolescents in urban settings reported more previous knowledge on mental health, including some knowledge of depression, anxiety and stress. Other adolescents, especially non-SKILLZ participants, openly shared they knew nothing or little about mental health.

I only knew a little bit about mental health; I was told that people with mental health are crazy. I heard this in my community. [Non SKILLZ Participant, Chipata]

As for me what I knew about mental health was, it's when someone is stressed and it leads someone into killing themselves when they are facing anxiety and depression and it makes people start taking drugs because you start to think that's the only solution and it will make them feel cool which is not right. [SKILLZ Plus, Lusaka]

When asked where the AYP acquired mental health information before receiving the magazine, the adolescents recounted learning about mental health from various platforms and programs such as health

facility programs, GRS coaches and other organization programs like DREAMS, and school initiatives such as clubs and existence of guidance teachers, which was also reported by the caregivers and teachers.

I remember we learnt at school that mental health is about people taking drugs or alcohol, I have forgotten about the other things ... but when someone... you have a lot of problems then you start getting sick. [SKILLZ Plus, Lusaka]

I had an idea because of the lessons we were learning with Coach, so the ideas I had is that SKILLZ helps us when someone is suffering from mental health, when someone has bad thoughts or if someone wants to commit suicide. [SKILLZ Girl, Chipata]

3.1.3. Engagement with MindSKILLZ magazine content

Adolescents and young people were asked how often they read the magazine and it was noted at least once in a day during their free time, which improved to at least to twice or four times in a day during the holidays. In the early stages of the magazine distribution, most adolescents mentioned having limited engagement with the magazine due to exam schedules as the magazine was distributed towards the end of the school terms, this resulted in some of the adolescents not being able to fully engage in the magazine until the school holidays, which was partially the same case for YLHIV.

As for me, I only started touching the book today. The time she gave me the magazine I was writing my mock exams and after the book exams were done, I went for holiday and I came back on wednesday. This is when I touched it. [SKILLZ Plus, Lusaka]

Beyond reading the magazine, most adolescents shared having engaged with the magazine activities such as writing and drawing, however, a few adolescents also reported not writing or drawing anything while others mentioned they were unable to draw, hence they opted to write only.

Yes, I wrote about the “rainbow diet,” I wrote on how to communicate. On how to communicate there is a part that says “describe a time in my life when I once used confident communication.” And there are where there are notes, and how I can portray myself if I have to be confident when I am talking to someone or in public. [SKILLZ Plus, Chipata]

When adolescents were asked what they liked about the magazine, some of the interesting responses included the design and content of the magazine, coaches’ lifestyle, drawings, puzzles and also its content around mental health with topics such as stress, expressing emotions and triggers. ‘Conversation starters’ was also highly appreciated among a good number of respondents, however, a few adolescents shared that they did not like activities that required writing with two indicating this response, while one indicated not liking the aspect of drawing. Two adolescents indicated they did not like the spaces while one found some questions difficult.

I like the parts on expressing emotion and also the games. When I feel bad, I would read the magazine and I would feel betternothing I disliked about the magazine, everything is okay... how it looks, how it smells, just everything about the magazine is okay. [SKILLZ Girl, Chipata]

Although adolescents reported having engaged with content in the magazine, a few alluded to being absent from school or having left school premises at the time of distribution as potential barriers that would have prevented them from receiving the magazine. One of the non-SKILLZ participants highlighted that not having prior knowledge about GRS would have also prevented them from receiving the magazine.

Because I did not know much about Grassroot Soccer that would have prevented me from collecting the magazine. [Non-SKILLZ Girl, Chipata]

3.1.4. Shared or talked about the MindSKILLZ magazine with others

Most adolescents reported having shared or talked about the magazine with their parents, siblings and friends who appreciated the content in the magazine. However, a few adolescents also mentioned having encountered some challenges sharing the magazine with others as highlighted by two adolescents who indicated the magazine contained personal information. Four adolescents mentioned resistance and fear of being scolded as a reason for not sharing the magazine, for instance, one of the adolescents shared how the brother could not accept the topic on 'gender' and regarded the magazine as just a book which shouldnt be taken seriously.

I have shared it with my friends in the community, my three cousins and my sister. They were happy and.... said that this magazine is good and that it helped them. One of my friends said that she felt down but after reading through she felt better. [Non-SKILLZ Girl, Chipata]

As for me, I shared it with my partner. I approached my girlfriend and she felt nice, at first I wasn't sure if I could share with her and so I had to study her reactions to the mini questions I asked her that were from the magazine. [SKILLZ Plus, Lusaka]

3.1.5. Use of knowledge or skills from the MindSKILLZ magazine

Interviews with adolescents revealed use of some of the knowledge and skills in the magazine to address some of the mental health challenges they later experienced. Some adolescents cited having used magazine content to help identify and understand their emotions better, and avoid engaging in alcohol and drug abuse, which was mostly reported by adolescent boys. Additionally, the adolescents revealed that they turned to the magazine when they were feeling upset to uplift their mood with use of the "Take 5" technique.

How have I used it? at home when they shout at me and I get upset and I start to cry but when I get the magazine and read on the expressing emotions and I write on it and I describe the emotion on what state am in and describe the how I feel at that particular time and it encourages me and on the 5 things like breath in and breathe out. [SKILLZ Girl, Chipata]

Before I got the magazine, my mom used to stress me a lot about school so I would shout, scream and throw things around but after reading the magazine I have learnt to think about the consequences of my actions. [Non-SKILLZ Girl, Chipata]

3.2. Feasibility of engaging teachers and caregivers as co-distributors/facilitator of MindSKILLZ magazine

3.2.1. Adolescents' feedback on magazine distribution

When asked how the adolescents received the magazine, some of the common responses included having coaches, teachers and caregivers as channels used to receive the magazine. We noted that some of the coaches would deliver the magazine side by side with either the teachers or caregivers. The adolescents recounted receiving the magazine from home or health facility in a group setting, as the case of YLHIV, while the AGYW mostly received their magazines from school after lessons, that was in a classroom setting during prep (study sessions) or at the school ground. In some schools, the adolescents received the magazine during open-day: a platform designated for parents to go to school with their child to receive their child's performance report for the previous term. Some adolescents also recounted being

phoned before being visited at their homes, of which one adolescent opted to receive the magazine from the market.

I came to school with my mom to collect the results... the other teacher who asked us to pass through the corridor to get the magazine. [Non-SKILLZ Girl, Chipata]

The Coach called me since she did not know where I was staying and I informed her I was at the market place where I'm mostly found and I asked them to meet me at the market. [SKILLZ Plus, Lusaka]

When asked how adolescents felt about receiving the magazine via the mentioned channels, YLHIV expressed excitement over receiving the magazines from their homes and indicated it as their preferred space as the distributors got a chance to meet their parents or guardians to explain what the magazine was all about, for some adolescents this meant a buy in from their parents or guardian. Unlike the YLHIV, AGYW expressed a bit of concern with the group distribution as some of the adolescents who were not vetted, but present at the time of distribution, didn't get to receive the magazine, some of whom found the process unfair. This also left uncertainty among the adolescents as some of them thought the magazines were not enough.

The thing which I disliked was that some people in our class did not receive the magazine because they were not enough for our class, so it wasn't really ok. Some did not read what was in the magazine, did not have that yeah that experience, that wasn't happy... [SKILLZ Girl, Chipata]

3.2.2. Role of teachers, caregivers and coaches on magazine distribution

Information from the teachers and caregivers revealed that their role in the distribution of the magazine involved offering platforms under which adolescents, together with their households, were able to engage with content in the magazine. For instance, one caregiver alluded to their role as a distributor of the magazine as having ensured that they were able to take services to adolescents in their homes. Teachers particularly highlighted their roles as involving facilitation and providing guidance on challenges adolescents face and help respond to some question's adolescents had over the magazine. A few teachers also alluded to their roles as having to include engagements with parents and the same was observed among most facility-based caregivers.

My role first to start with, was to help in the distribution of the MINDSKILLZ magazine that was my major role. To ensure that the magazine was distributed to the intended beneficiaries, who are the learners in this case. Then you know to provide guidance where they...may have some challenges as well... [Group Session Teacher, Chipata]

My role in the MindSKILLZ Magazine is to make sure that I teach the adolescents the content and make sure that they understand what is there in the magazine. [Caregiver, Lusaka]

Similarly, coaches also highlighted that their role involved distribution of the magazine to adolescents and also conducting home visits which enabled them to provide guidance around magazine content, with some indicating being engaged in research activities which allowed them to get more insights from the recipients of the magazine.

So what I liked about this thing was that apart from being a co-facilitator I was also part of the research team. So what I liked about the research was that we were interviewing participants one on one and also group interviews. I liked the fact that participants shared what they learnt through the magazine and told me something I did not know about mental health. [SKILLZ Girl Coach, Chipata]

Most teachers shared that their role in the distribution of the magazine, when compared to other roles held, provided more opportunities to enhance their skills as guidance teachers while providing learners with adequate information on mental health. One teacher mentioned that their role as a distributor of the magazine enabled them to also ensure inclusiveness since the content of the magazine was not just tailored to youths but also fellow teachers and parents.

But when you look at these other programs that I'm running, they are specifically for the boys... Even the topics were tailored in such a way that they're supposed to cater for the boys. But when I look at the MINDSKILLZ magazine.....even as parents, teachers they can also read, there are a lot of benefits that we can get from those same teachers who are also benefiting from the same magazine... It's inclusive. Even as teachers, there are a lot of topics that we can teach from the same magazine. [Group Session Teacher, Chipata].

Coaches on the other hand mentioned a difference in their role since the distribution involved co-facilitation with teachers or caregivers as opposed to how GRS interventions were run. In one of the focus group discussions in Chipata, coaches highlighted that the role was more stressful as they had an overload of work and had to frequently travel, especially those engaged with research activities while in Lusaka, coaches said their role was still similar with conducting interventions, the only differences were the topics covered and perceived the magazine as having less participant interaction.

For me and {name of coach} it was stressful. Why am I saying this? Same Coach has to distribute the magazine and the same Coach has to do the pre-post, that was a bit stressful... the first day, only one adolescent managed to come, the 2nd day only one managed to come at the facility... the rest I have to follow them in their homes. So when I reach their home, I have to spend about maybe 20 minutes waiting for the participant to write the pre-post and I have to go to another place to give out what? the magazine to that participant that was taking too long. [SKILLZ Plus Coach, Chipata]

3.2.3. Likes and dislikes of their roles

Most of the teachers and caregivers shared that what they liked most about their roles was the engagement with adolescents where they were able to ask questions from the MINDSKILLZ magazine. For instance, one caregiver mentioned that they were able to know adolescents and their parents which allowed them to build relationships while another one also mentioned that feedback from adolescents also helped them to like their role. What was commonly shared by both teachers and caregivers was an increase in confidence levels of which some of them indicated they didn't have in the initial stages of the distribution.

It's actually very good because sometimes it's very important that not only the young people can come to you to get help but you take your services to them, reaching out to their homes. So, I feel... I like it basically because it also gives me as a person who works with young people to be in their environment, not only them coming to me, yes and just being with them in their own homes, I wish and I hope that it will continue. [Caregiver, Lusaka]

Just being approached by the learners. For me, it's like because learners were interested in the magazines they did want to know more about the magazine. So, for them to approach me on different topics, It was an interesting part..... you know, not every teacher is approachable. Yes, so that really interested me.... For them to be coming to me, it showed that for sure this learner was reading the magazines and they wanted to know more about the magazines. [Group Session Teacher, Chipata]

Similarly, coaches also shared they liked their roles because they were able to conduct outreach activities to participants, received positive feedback from parents and were elicited when participants had written in the magazine.

I think it's a great opportunity where you try to visit different participants and reach out in their homes, telling them about the magazine, then, the positive feedback that the parents are giving, like in the magazine, I think that's one of the things that I've enjoyed when it comes to the distribution. [SKILLZ Plus Coach, Chipata]

However, when teachers and caregivers were asked what they disliked about their role most of them indicated that there is nothing they disliked but a few cited some adolescents took time to respond to questions while others expressed concern on insufficient time to go through the magazine prior to distributing the magazines. Coaches in eastern province, indicated that they had too many magazines to distribute and what was more commonly expressed by coaches in both sites was the long distance they had to cover, considering there was little or no transport allowance, a concern that was also raised by caregivers in Lusaka. A few other coaches also highlighted that scheduling appointments with parents was sometimes challenging which led to coaches not distributing the magazine to some participants.

I wouldn't say disliked but maybe the discomfort you know certain young people would take long to respond and they would take long to adapt to you as an older person until you create that rapport and that moment you're in the same cage {figuratively} of thinking... [Caregiver, Lusaka]

Other than that, during a discussion with the coaches in Chipata, one of the coaches mentioned it was difficult to distribute the magazine during open-day as most parents were in a rush, this concern was also highlighted by a few teachers.

What I did not like about the distribution of the magazine is when we are distributing the magazine during an open day. So during that time there are some parents who are in a rush, they're in a hurry, they just want to get their platform and go home. So it becomes challenging to just stop them and tell them about the magazine. [SKILLZ Girl Coach, Chipata]

3.2.4. Views from teachers, caregivers and coaches on co-distribution

When coaches were asked about their experiences around co-distribution with teachers and caregivers, most of them described the distribution model as complimentary in skills. Most of the Coaches enjoyed working with the caregivers and teachers because they felt it made the process easier since participants already knew caregivers or teachers. One of the caregivers highlighted during the interview that it was an opportunity for them to see what coaches do in the field as well as learn where the adolescents come from beyond meeting at the facility. Suffice to mention that most caregivers and teachers felt the co-distribution provided an opportunity for learning and support from coaches while doing team work.

It's very good, you know these Coaches know their work and they're able to guide you, they have been working on this for a long time. I was learning things I did not know they taught me and I appreciate, they taught me what I did not know because for the training you can go and be trained but practical is different and so on the practical part the coaches were very there for me. [Caregiver, Lusaka]

That method is a good one, why I say so is that when the pupils see the Coaches it gives them adequate impact. Teamwork is very important. I as the guidance teacher and the SKILLZ Coaches work together, we can achieve a lot than working alone. There are some circumstances that can stop me from giving adequate information but when we work as a team, we are successful in that. [Group session Teacher, Chipata]

Although coaches, caregivers and teachers mentioned having had a positive experience with the co distribution, the model did not go without its own challenges. One of the SKILLZ Plus coaches in Eastern province narrated how the assigned caregiver was mostly unavailable and would redirect him to another facility personnel who barely knew anything about the program and would often demand money when going in the field. However, we still noted a few SKILLZ Plus coaches who shared a different experience as the assigned caregiver was willing to navigate through the community as they had access to a facility motorbike and knew the locations for most of the adolescents, which made the work easy. As of SKILLZ Girl coaches the teachers were mostly available and would help mobilize the different adolescents who needed to receive the magazines.

Because the co-distributor, if they were really co-distributors, even home visits, we were supposed to go with them. I don't know if that was part of their training where because I did not meet with them. Yeah, I don't know if it was part of their training, where we should go together so that we can distribute together. My Co-facilitator was only present at the facility, where we have low numbers where maybe 4 come just like that. Then she just passes by and says maybe one or two things, or maybe she just watches and go back and like they have already said, they think you have money from these co-facilitators. [SKILLZ Plus Coach, Chipata]

Similarly, in Lusaka, coaches who were doing co-distribution had less challenges except, having to tailor their field activities based on the caregiver's ability or schedule, which in some instances slowed down their work. For instance, some of the coaches, in both sites, shared not being able to reach the daily target number of magazine distribution because they didn't want to put a strain on the caregivers who would often get tired or hungry and not be able to reach further places. However, most of the coaches in Lusaka did virtual co-facilitation of the third visit. With the virtual method, the coaches shared they were able to agree with the caregivers prior to scheduling the virtual visit, which worked well for both parties, only in a few instances did the coaches fail to connect with the caregivers.

We liaised with the caregiver before the session on what we are going to be doing and then the session went according to our expectations. [SKILLZ Plus Coach, Lusaka]

During interviews with teachers and caregivers, most of them reported having faced little or no challenges with co-distribution of the magazine as they worked well with the coaches. However, four respondents highlighted having faced implementation challenges with most of the common experiences reflected in form of low attendance from pupils and parents during open day sessions, few magazines available despite more adolescents wanting the magazine including boys, parents or adolescents expecting incentives, communication breakdown and traveling long distance to reach some adolescents.

As for me I don't think there are any challenges that I faced, everything was done smoothly and it was done well, so I don't see any challenge. Maybe it's because we were working in unity with coach Carol, we were working hand in hand. [Caregiver, Lusaka]

The only challenge that I faced, even those who were less than 15 years old, they wanted to get the magazine... even the boys they were complaining about not getting. The other challenge is, the distribution... In the way we distributed we, we had the lists, the names were captured earlier, so the day we were distributing the MindSKILLZ magazine some people were absent, So those who were not on the list, they said why can't you give us those? and i told them We kept those for your friends and so those who we not given were complaining. [Group Session Teacher, Chipata]

In understanding if the coaches, caregivers and teachers understood the role that was assigned to them, there was general understanding of the role among all groups however some of coaches reported not being clear on what was required of the caregivers. For instance, one of the coaches in eastern province shared how it was earlier communicated during the training that the coaches will be going hand in hand with the caregivers to distribute the magazine, but to his dismay, the assigned caregiver would barely go in the field with the coach nor distribute any magazines. Additionally, some coaches narrated that some teachers were not properly oriented on the distribution process, leading to instances where participants who were not on the vetted list almost received magazines.

You give out the magazine, you inform the participants how to go about it and make sure that you see the outcome, to see if these people are going through it, to make sure that they are going through it by checking on them. [Caregiver, Lusaka]

The way I understood the co-distribution, I think there were questions that were even asked in the training. So I said, these co-facilitators, they will also have their own target of distributing the magazine, so when I was going with my magazines to the facility, I expected the co-facilitator at least to say “give me even 20 magazines, these I will handle them, I will distribute!” but they were just quiet. [SKILLZ Plus Coach, Chipata]

3.2.5. Views on training and support from coaches, teachers and caregivers

When asked how well the training and support from GRS helped respondents in their role as distributors or co-facilitators of the magazine, most of the respondents, especially teachers and caregivers, said that the training provided them with information and skills around mental health and as well as enabling them to engage with parents and adolescents. However, two teachers expressed displeasure with the vetting process that made them get rejected from the training but were later re-engaged.

... supported me so much in terms of knowledge because the knowledge I acquired during the workshop was so important that when I was going in the community, I was using the skills acquired... for example how to engage with these children, and their parents. [Caregiver, Katete]

It helped me to have valid information, when we started the distribution, I knew what we were talking about and I knew what was supposed to be done since I was trained. [Caregiver, Lusaka]

Although we noted limited responses around how well the training and support from GRS enabled coaches to function in their roles, a few that responded mentioned that the training was okay despite some topics in the magazine that were not covered and this was particularly common among coaches in Chipata. Lusaka coaches alluded to the training as having enhanced them with information on mental health prior to distribution or engagement of adolescents with magazine content.

The training was very helpful because we went through all the magazine content, we went through all the topics and questions meaning that we had all the

experience before we even delivered to the girls. The first-hand information was with us even when delivering we had more information and that made it easier as we were familiar with the magazine. [SKILLZ Plus Coach, Lusaka]

Most of the respondents, which included coaches, caregivers and teachers were of the view that additional training on mental health information and continuity of magazine distribution as some of the additional support they would require. Some of the caregivers and teachers also requested being given enough information about GRS for ease of work. For coaches, most of them were of the view of additional training with preference for psychosocial counseling and also refresher training to boost their confidence.

I would only request on- going orientation training in terms of mental health. This was not a healthy thing, it is a wide subject or topic, So I need some ongoing training so if there are some resources let them engage me so at least I broaden up my experience. [Katete, Caregiver]

.... conducting training, psychosocial counseling for us coaches so that even as we'll be dealing with mental health, we will be able to also deal with our situations. [SKILLZ Plus Coach, Lusaka]

3.3. Recommendations from adolescents, coaches, caregivers and teachers

3.3.1. Delivery model of the magazine

Most of the adolescents highlighted having preferred to receive the magazine using group-based sessions and home-based delivery for the purpose of comfortability or convenience. One adolescent, a non-SKILLZ participant, shared that they would have preferred not to receive the magazine in the presence of their mother as earlier received. Another adolescent who had received the magazine using the group-based method at school highlighted a preference for either a home visit or a virtual call. One adolescent also highlighted preference for having coaches come with t-shirts and food while another adolescent suggested receiving the magazine using a community club and this was a similar view from one of the caregivers in Lusaka who felt it would be more convenient to distribute magazines to adolescents in one setting than individually following them up.

To form a group in our community and also teach them about the magazine in my area Kapata. [Non-SKILLZ Girl, Chipata]

They should be visiting schools by opening up some clubs and also in the community, that can improve the distribution because that's where most cases of abuse or suicidal happen the most, I feel some of the pupils are left out despite dealing with these adolescents who are on ART, I feel these adolescents in schools need that information. [Caregiver, Lusaka]

Further insights from teachers, coaches and caregivers showed that to improve the facilitation method, there was a need to provide support for transportation, communication, and additional incentives such as t-shirts and caps. One of the coaches also suggested carefully selecting co-facilitators or preparing them adequately while other coaches suggested reducing the number of magazines that each coach had to deliver.

...to support us with some money for communication like you did last week. I was able to communicate with the Madam. [Group Session Teacher, Chipata]

Like booking a motorbike or... yeah that would make the journey easy. Am not saying the roads are bad, but the roads that are bad in rural areas, and so I would ask if the organization would find ways to support transportation to also reach out

to people in villages because sometimes we only reach out to kids close to down and not those in villages. [Sinda, Caregiver]

Coaches in Eastern province also suggested the need to distribute the magazines alongside interventions, to engage participants early on before magazine distribution especially those in rural areas. Additionally, some coaches highlighted the need for co-facilitators to have assigned targets to get them to actively feel engaged in the activity. A few teachers suggested having to explore distribution modalities that will have more teachers engaged, adequate time for teachers and coaches to plan around the distribution. Lastly, teachers suggested distributing the magazine two weeks after schools open, rather than open days, and emphasized the importance of informing parents beforehand as highlighted by the caregivers.

On the part of distribution like I said earlier we can do it after two weeks or when we find time we can communicate on when we should distribute. In such a way it can help us because waiting for open day which only comes once a term is not enough. It can be better to distribute maybe three or four times a term. [Group Session Teacher, Chipata]

The best way is to bring those adolescents to the central place and sometimes, before engaging those adolescents we first call their parents or guardians we have a meeting with them then afterwards that's when we can call the children to distribute the magazine. [Caregiver, Katete]

3.3.2. Magazine content

Most of the adolescents interviewed shared that the content of the magazine should have an inclusion of topics on gender based violence, menstruation, child abuse, HIV/AIDS and positive family communication. While AGYW recommended including information on study tips, drug abuse, exam preparations, relationships and sexual activities, SKILLZ Plus participants in Lusaka mostly requested for more information on entrepreneurship. Additionally, adolescents shared their views for improvements around the design of the magazine with an addition of more spaces for writing, games or puzzles and more pictures that depict celebrities or footballers. Some adolescents were of the view that the color of the magazine should be made attractive with preference for shiny colors and making the cover page with a hard texture to stop it from easily getting destroyed

I would like the topic for gender based violence, because that's a problem in our community, so that if we learn we also teach other people in our society on how we can deal with and find solutions to deal with gender based violence. [SKILLZ Girl, Chipata]

Ummm they should add more puzzle games. They should also add more cartoons and stories, the stories were nice. [SKILLZ Plus, Lusaka]

Some respondents in Eastern province expressed views around having the magazine in different languages and using simple terminologies to cater for adolescents who are unable to write and read in English. Some coaches also shared similar views as adolescents, although a few coaches in Chipata highlighted having magazines differentiated with topics tailored for young and older adolescents separately. On the other hand, coaches in Lusaka were of a different view with considerations for making the jokes in the local language and also removing puzzle answers from the magazine to make it more fun. Lastly, some teachers and caregivers suggested extending the distribution of the magazine to include everyone in the distribution.

I think I can just recommend that maybe the magazine can be written in different languages so that to cover a right section in the side because there are others who don't know how to read English, then they are able to read Nyanja so as to balance up in a local language. [SKILLZ Plus, Petauke]

Maybe trying to differentiate between the magazine of a 10-year-old to somewhere 15 and going up, maybe trying to make those differences. Yeah, because my magazine and a 10-year-old I don't think we have the same understanding and everything, so maybe trying to differentiate, to make two at least, if it's possible. [SKILLZ Plus Coach, Chipata]

Limitations of the evaluation

- Non-SKILLZ teachers provided limited feedback on their engagement in the distribution of the MINDSKILLZ magazine, which was important in establishing how teacher-only distribution worked.
- The Magazines were distributed when schools were about to close, hence the research activities were haunted for a month, which delayed the data collection.
- We could match some of the pre-post results as some of the adolescents meant to receive the post-tests were unreachable, this resulted in 231 matched pre-post out of the 234.

4. Discussion of results

Overall, our findings reveal that the magazine is effective in ensuring adolescents and young people have improved mental health knowledge and attitudes post engagement with the magazine content. However, there were variations in MH knowledge and attitudes among adolescents based on their geographical locations and past engagement with SKILLZ Health programmes. AYP who had previously engaged with GRS SKILLZ Health activities showed improved MH knowledge and attitudes compared to those who did not have prior exposure to SKILLZ Health activities. Although AGYW had higher pre-scores, as they had prior knowledge to mental health before engaging in the magazine, the magazine proved to have a significant effect among YLHIV, perhaps which could be as a result of reinforcement on some of the topics covered in the SKILLZ Plus curriculum which has mental health content and similar topics unlike the SKILLZ Girl curriculum.

The findings also point to the less engagement with the magazine that was observed from non SKILLZ Girl participants, who may have not had prior-exposure to some of the topics and may have had struggled to understand these topics. In addition to this, the delivery of the magazine entailed having teachers only distribute the magazine to the non-SKILLZ girl participants, with little or no home visits made. The essence of the home visit was to ensure that AYP had an understanding of the content in the magazine and address any challenges that the AYP were facing. The limited post-interaction that non-SKILLZ Girl had with the teachers or coaches is more likely to result in the low engagement with the magazine that was observed among the non-SKILLZ girl participants.

Unlike YLHIV, AGYW received their magazine through group based sessions, despite scoring a higher pre-score, it was observed that adolescents that received the magazine via individual based delivery model using home visits had improved MH knowledge and attitudes up-to three times as compared to those who received the magazine using the group based model. Individual sessions proved to be more effective, and this might be attributed to positive relationships that created safe spaces and open dialogues for discussion around mental health between GRS coaches and adolescents.

In this evaluation, most adolescents reported having shared the magazine with their parents, siblings and friends hence signifying positive family level support around mental health. This can also be attributed to the home-based distribution that allowed coaches, and in some instances, caregivers, to distribute the magazine in the presence of at least a family member. Besides that, conversation starters, a topic

covered in the magazine, gave confidence to some of the AYP to be able to share the magazine or its content to other people. AYP's willingness to share the magazine proved to have had a positive effect on third parties, however this also leaves room for further exploration. Adolescents and young people's willingness to share the magazine with others also showed that the magazine was fundamental in creating an enabling environment for adolescents and young people to use the skills and knowledge with their wider communities, this affirms a potential use of the magazine in promoting positive youth development approaches.

Further, recommendations from adolescents point to the different needs that the two types of adolescents engaged may have. While the needs of SKILLZ/ non-SKILLZ Girl were centered around educational needs, which was not commonly noticed among YLHIV, the different needs may have an implication on how the magazine is viewed relevant among the two groups. Other than that, there was a high demand for age-specific magazine content, which is also vital in ensuring that the magazine is relevant to the target audience.

In relation to the learning goal of exploring whether engaging teachers and facility caregivers as co-distributors of the magazine, alongside GRS coaches, will improve mental well-being of AYP, there is still room to further investigate the outcome of AYP who received the magazine using coaches, teacher or caregiver independently compared to those who received the magazine through co-distribution. However, from the findings presented above, there was less effect of the magazine on non-SKILLZ girls who received the magazine through teachers only. Some of the factors could be attributed to this, included teachers not being equipped with enough information on magazine related topics, no follow-up visits provided to AYP, poor coordination between GRS staff or coaches and the teachers but to mention a few.

On the other hand, teachers and caregivers engaged in co-distribution reported complimentary skills and capitalizing on each other's strength, which is very important in improving mental health outcomes among AYP. More specifically, involvement of guidance teachers and facility counselors who closely work to address challenges, including mental health challenges, that AYP face may have positive outcomes on the mental well-being of AYP. In addition, the MindSKILLZ magazine builds on more knowledge and skills of teachers and caregivers around positive youth engagement due to its youth friendly approach as such, and can be a useful tool in their careers away from GRS role.

Finally, although the co-facilitation model was noted as feasible in improving the mental well-being of adolescents and young people, critical challenges associated with this model need to be considered as they have a potential to affect future scalability of this model. One of the challenges experienced by caregivers and coaches who were distributing magazines from homes, was covering long distances with little transportation support, therefore an alternative approach would be integrating the distribution of the magazines in already existing platforms where adolescents meet in groups at health facilities to make the role easier for caregivers as observed from teachers. It is important to note however, the downfalls of group-based distribution earlier highlighted, hence the need to find a comprehensive way to improve the effect of group-based distribution.

5. Conclusion & Recommendations

The MINDSKILLZ magazine is an effective tool for promoting mental well-being among adolescents and young people of different statuses. From the three different groups of AYP engaged in the evaluation, it can be deduced that the magazine is even more effective when distributed to AYP who have prior exposure to GRS curricula or supported with follow-up visits, to ensure that the needs of AYP engaging in the magazine are addressed. Subsequently, irrespective of individual or group-based intervention, it is vital that follow-up visits of AYP who receive the magazine through group-based sessions are strengthened to address the fallpits of this delivery model.

With regards to co-distribution, pairing coaches with teachers and caregivers proves to be a more effective model due to complementary skills and knowledge which is important in ensuring that not only AYP receive different support but it also builds on the knowledge and skills that teachers and caregivers have which is beneficial in their role of working with AYP away from the magazine. While coaches are

able to distribute the magazine independently as they are more equipped considering past experience with GRS interventions, however, for teachers or caregivers to distribute the magazine independently, it may require long term support while putting into consideration attrition. Interval training, field support and proper coordination may help ease this process and ensure that teachers and caregivers are readily available to support the distribution of magazines. Lastly, engagement of teachers and caregivers in the distribution of the magazine is instrumental in building partnerships for the scalability of MindSKILLZ magazines.

Recommendations

In view of the evaluation findings, the following are the proposed recommendations:

- **Enhanced integration of mental health information in existing SKILLZ Health curricula** to ensure that AYP has a basic foundation on mental health prior to magazine engagement.
- **Increased capacity building to teachers and caregivers around adolescents mental health programming** using academy sessions and support visits with clarity on roles in MINDSKILLZ magazine activities. While considering revising engagement of teachers using the open day model due to challenges associated with this model.
- **Enhanced partnerships for MINDSKILLZ programming to enhance government and civil society organization adoption.** For government ministries the MINDSKILLZ magazine provides an opportunity for strengthening school guidance activities and hence scaling it to other geographies in partnership with like minded youth serving organizations.
- **Increased magazine distribution with at least two magazines per household** so as to build more uptake of MH information since adolescents generally reported having shared the magazine with their family members and friends.
- **Increased utilization of home visits as entry points for magazine distribution** prior to group based activities, to ensure peer to peer support and individualized safe spaces.
- **Increased magazine distribution during school holidays** to enhance AYP engagement with magazine content and activities.
- **Revised magazine content and features with consideration for age-appropriateness by having magazines for young and older adolescents.**

Further research

- There is a need to further investigate the experiences of non-SKILLZ teachers in order to document their experiences that are important in determining the feasibility of teachers distributing the magazine independently.
- Explore the magazine effect at household level to help determine the effect that the magazine has on third party recipients of the magazine.
- Further compare magazine outcome on different AYP who have interacted with the magazine based on delivery model i.e independent teacher/caregiver distribution against co-distribution.