

STRONG BODIES, STRONG MINDS

MIDLINE 2 EVALUATION 2023 - End of Project Phase 1

April 20th, 2023

Executive Summary

Grassroot Soccer Zambia (GRS) undertook a second 'midline' evaluation of the Strong Bodies, Strong Minds (SBSM) project at the end of the period of partnership with StrongMinds Zambia (SMZ) in April 2023. The SBSM project aimed to integrate depression screening for youth living with HIV (YLHIV) participants into the SKILLZ Plus program using the PHQ-9 tool, connecting depressed participants to IPT-G therapy groups facilitated by SKILLZ Plus Coaches. This report presents the results of this second midline, which includes qualitative data from GRS Coaches and GRS and SMZ staff members, as well as quantitative data from PHQ-9 screening and IPT-G therapy participants. Qualitative feedback from Coaches and staff indicates that their experiences in the project were positive overall, with high recognition of the importance of mental health support for YLHIV. The training and supervision provided by SMZ were perceived as adequate, though some Coaches found the mode of supervision challenging at times, in contrast to typical GRS approaches. The contrast in methods of GRS SKILLZ programming and IPT-G also presented challenges for some Coaches, where SKILLZ is more active, fun, and engaging, and IPT-G is more structured, serious, and has a higher burden of required monitoring tools. Respondents recommended expanding the program to include more adolescents, including those without HIV, and continuing to provide mental health support for Coaches. Quantitative results demonstrated gaps in monitoring and data sharing between SMZ and GRS, but data from IPT-G participants indicates that the therapy groups were highly effective at reducing depression symptoms, both when implemented by SMZ staff in 2021, and when implemented by GRS Coaches in 2022.

Background

As part of the Strong Bodies, Strong Minds project, GRS aimed to evaluate the integrated model of SKILLZ Plus and IPT-G to provide mental health support for YLHIV participants. The evaluation comprised of a baseline conducted prior to implementation, a first midline conducted in late 2021-early 2022, and the second midline analysis presented below.

The baseline qualitative work completed was by external consultants, and included gathering perspectives from YLHIV, parents/guardians, and adult stakeholders in implementation communities on support needs for YLHIV, mental health, and available services. The first

midline also included qualitative work with the same groups of stakeholders to understand the effects of GRS programming since the start of the project.

As GRS has received an extension of funding for the project but will be working with a different partner and amending the specific interventions used, GRS aimed to prepare a second midline that summarises the first phase of the SBSM project, with the overall evaluation objectives in mind:

- 1) Assess feasibility, acceptability, effectiveness, and sustainability of the integrated SKILLZ Plus & IPT-G model
- 2) Assess the scalability of the integrated model

Methods

Qualitative

To supplement the routine quantitative data collected by SMZ and GRS, GRS additionally undertook qualitative data collection in March-April 2023. The objectives of this qualitative work were to:

- a) Understand Coach perspectives on the SKILLZ Plus + IPT-G model, particularly on implementation of the group therapy intervention
- b) Explore GRS and SMZ staff perspectives on the integrated model, including implementation of IPT-G and considerations for scale

The GRS Research Team developed interview guides for both Coaches and staff, and interviews were conducted either in-person or via phone. Respondents are detailed below:

Site	Respondent Type	Number
Lusaka	SKILLZ Plus Coach	5
Lusaka	GRS Zambia Staff	3
Lusaka	SMZ Staff	1
Chipata	SKILLZ Plus Coach	2

Interviews were recorded and transcribed by GRS team members, and transcripts were analysed with a thematic analysis approach using Google jamboard.

Quantitative

GRS requested data from PHQ-9 screening and IPT-G from SMZ, and SMZ shared summary key performance indicator data, as well as datasets that included individual level

data by year. The focus of quantitative analysis was to use the datasets provided by SMZ to replicate the summary results shared. This involved cleaning the data, preparing descriptive statistics, and calculating percentages and cross tabulations for outcomes of interest where appropriate.

Results

Qualitative

Coaches and Staff experience with Strong Bodies, Strong Minds Project

Both Coach and staff respondents had an overall positive experience working on the SBSM project and some Coaches described the experience as life-changing. However, many respondents noted the different experience working on the SBSM program compared to other GRS programs. For most Coaches, the difference was felt due to a shift from the GRS culture and way of delivering activities as a result of the program being implemented with a partner organisation. This contrast was highlighted as the IPT-G therapeutic approach requires a more rigid structure than activities in a GRS SKILLZ curriculum. Coaches highlighted these differences, especially in supervision and management:

IPT-G is not as fun and light-hearted, it would even give you depression even if you are the one leading that group. The supervisors from StrongMinds also contribute to that because they will call immediately after the session, send the report, and send the register.... The energizers were different compared to traditional energizers, no kilos or anything like that, all you do are breathing exercises. It was difficult for other participants who had attended the SKILLZ intervention. [Female Coach 4, Lusaka]

There is a big difference between this program and the GRS program because with the GRS program, it's whereby you are in the field teaching the participants, it's different with IPT-G, whereby if you are teaching IPT-G, it seems as if you have to be quiet, there is nothing like energizers, like jumping and doing other activities like we have in the SKILLZ Plus Curriculum. [Female Coach 1, Chipata]

Coach IPT-G Training & Implementation

All of the respondents reported that the IPT-G training adequately equipped the Coaches to conduct IPT-G sessions, where the Coaches were brought to light on some of the things they should expect during the sessions such as adolescents emotionally breaking down. However, some Coaches expanded to say that the role plays during the training didn't bring out a real visual, as they were conducted Coach-to-Coach, while during the sessions, the Coaches faced more real and unexpected events, to which they had to adapt:

The training prepared me 100% because I experienced the things that I was trained on while implementing the interventions. Let's say, when I am doing the sessions, it is possible for a participant to start crying and you cannot stop the session even when they are crying. [Male Coach 1, Lusaka]

They really had hands-on training, there was enough preparation. You know when you are starting something for the very first time, the role plays that they did as a team it was easy, but when they went on the ground it was a different story because each one had to implement on their own and that's where we needed more support. [GRS Staff 3, Lusaka]

The Coaches and staff also shared how the session rollouts (preparations) before each IPT-G session helped them to better deliver the activities, considering that they were trained months before they started implementing the activities and were prone to forgetting some things. In contrast a few Coaches felt it was time consuming, inconvenienced the flow of activities or questioned their competence to deliver the activities.

Why am I saying they were well-prepared? We took them through refresher training. Because the time they had stayed was too long, so we decided to take them through refresher training.... you can't just let them be, to say 'oh so you've done the training so be on your own.' We were there working hand in hand, doing all the session roll-outs before each session. [SMZ Staff 1, Lusaka]

It was not until I started doing the sessions because before doing the sessions I have to go through the session with the mentor from StrongMinds so that's how I learned a lot of things otherwise at the training I did not learn a lot of things but I learnt a lot of things in the field when I am going to facilitate. [Female Coach 1, Chipata]

Nevertheless, the Coaches appreciated the experience they got from facilitating IPT-G sessions as it helped raise their knowledge on mental health and gave them an understanding of how to address some of the mental health issues they could be facing in their own lives, through the shared experiences from the adolescents. It also gave them an opportunity to be able to help out adolescents facing different mental health issues. The Coaches also shared how they were happy to see the participants utilise some of the skills and knowledge they had learnt from IPT-G to respond to real life experiences.

I enjoy implementing IPT-G as a Coach because there are times when a participant will come with their problems, then we try to resolve them together, we help each other.... you find that the problems that adolescents are going through, you find that

you were also going through them, you learn from how they handled it and if they come out of it, what can stop you as a Coach? [Female Coach 5, Lusaka]

The things I liked about the sessions, is that those sessions bring out the things that are not planned to come so the sessions itself will make the participants bring out some information you are not expecting. For example, I had this participant who said the triggers for her depression was grief, she had lost her mother, then she told us the story, we supported her, from that another participant came out and said I also have such an instant where I lost my father. From there it brought a lot of interaction among us. [Male Coach 2, Chipata]

Maintenance and Scaling

All respondents interviewed were of the view that the project should be scaled and indicated that more adolescents would be interested to go through the IPT-G sessions. The respondents expressed various views on how the project can be scaled or maintained, such as using a decentralised model in remote or rural areas. It was envisioned that there are myths surrounding mental health in rural areas, and the use of community structures will not only help raise awareness and acceptance of the project in the communities but also cut down on the distance and transport related cost that would affect the attendance of adolescents.

When introducing something new in the community, the first thing to do with acceptability because mental health issues are quite sensitive, and if you look at the perceptions that people have, especially in the villages, they take it to say mental health is related to issues to do with witchcraft and all so we need a lot of awareness.... Create a lot of awareness as we introduce it in the communities and then also make sure we have a buy-in from the parents and guardians that we will bring on board to make sure that these activities are being implemented. [GRS Staff 3, Lusaka]

The respondents were also of the view that in line with scaling, the project should not only include adolescents who are living with HIV or health facilities, but also include adolescents who are HIV negative, as mental health affects everyone. In some cases, the Coaches shared how participants who had not qualified for the IPT-G, would also request to undertake the sessions. In consideration of this, some staff recommended using a holistic approach to scale and maintain the project.

I think they {GRS} need to expand, like to go into communities, not only to limit themselves to be within the facilities, but also to check adolescents in the

communities, including those who are not on ART. Participants used to be there in the facilities, but the thing is we were limited.. [SMZ Staff, Lusaka]

There are so many reasons for that, it's not only those who are HIV positive, even others, they also have issues with mental health. If that is detected early, we can help one or two people. [GRS Staff 2, Lusaka]

Active involvement of facility staff was also suggested as a way to help GRS maintain and support the program, this entails involving the staff not only in stakeholder meetings but also training and allowing them to integrate the IPT-G program in other activities that they may have as a facility. In line with the same, one staff member suggested looking at the best practices scored during implementation which we can use to inform our future partners.

Involve any of the staff members, if it means they are invited for a training, they also take part in the training, so that if they can offer any type of support, they offer based on informed kind of knowledge, rather than through a meeting, you explain and they offer support, but if you do the training to any staff member who will be at the facility or venue at a longer period of time, not you train this person, two months later they go, which means the sustainability will be killed. [GRS Staff 2, Lusaka]

We need to look at the best practices that we scored during implementation and also share. I know when it comes to scaling, we can not be everywhere but we need to depend on our partners to scale out the activities. Share the best practices with them. [GRS Staff 3, Lusaka]

In terms of technical support that GRS would need to implement such a program, the staff members suggested bringing in external experts who would help the facilitators/Coaches to fully understand the concept of therapy and mental health as a whole so that they can effectively deliver these sessions. The staff members had this to say:

The only area where I would say we need technical support is understanding more of the content of therapy itself, otherwise, the mode of delivery, GRS can still do that. Just the actual content and how that's supposed to be applied to real life situations for young people to be able to help them. [GRS Staff 2, Lusaka]

I think training, training is key because we do not have a strength in mental health as an organisation, so that really needs more support and also material development, GRS has to be taken on board to just understand the process and also making sure that we are having a proper understanding to implementation of the activities because we have our own strength as an organisation but when it comes to when it

comes to mental health, we are dependent on a partner and for this project. [GRS Staff 3, Lusaka]

I mentioned something to do with external facilitators, so even in mental health, there are things that Coaches are not trained in, and it's quite very hard for Coaches to bring more information on maybe particular subjects that may come about during the discussions that they are having with the participants. [GRS Staff 1, Lusaka]

IPT-G Implementation Challenges and Recommendations for Improvement

As much as the IPT-G training equipped the Coaches to facilitate the sessions, SKILLZ Plus Coaches are involved in a number of activities which can be overwhelming. Coupled with having to deal with a number of issues that adolescents are going through, the Coaches risk experiencing high stress or 'compassion fatigue.' One of the male Coaches highlighted his least favourite experience as seeing adolescents emotionally break down. To resolve these issues, the respondents recommended developing a platform that will constantly check on the Coaches' well-being or have Coaches undertake IPT-G sessions prior to facilitating the sessions. In terms of the overwhelming activities that SKILLZ Plus Coaches have, some respondents recommended having Coaches specifically for IPT-G or the Coaches sharing their schedules prior to the task.

Once a Coach is done with IPT-G, check on them and teach them on mental health too. Check on Coaches after interventions, because after the intervention, we soak in a lot from the participants so we also need a therapy or check-up so we can also be helped with our mental health. [Male Coach 3, Lusaka]

I think if Coaches can be equipped with more knowledge and also undergo therapy, to make sure that they are not a victim of mental health issues before they are exposed to young people who they will be mentoring with regards to mental health services. [GRS Staff 2, Lusaka]

SKILLZ Plus Coaches are involved on a number of projects so you find that there is a Coach you need at this particular point of time and you find that they are not available because maybe the other Organisation needs them for a certain activity, and you also need your activity to be implemented, so you find they weigh where to go to so if schedules can be shared with us so that we know how these activities can be well planned and not really lack behind. [GRS Staff, Lusaka]

Another challenge that was seen to affect the implementation of the project was the initially hesitant response of the adolescents towards IPT-G. The Coaches highlighted how the majority of the adolescents did not understand the relevance of the IPT-G or mental health

itself, prior to attending the sessions, this often resulted in underscoring during the screening process or poor attendance. Considering that the project utilises an integrated model, the respondents suggested improving the mental health content in the SKILLZ Plus curriculum as they were of the view that this would help improve mental health knowledge among adolescents and ultimately help them fully understand the reason why they have to go through IPT-G for adolescents who screen with depression.

I would suggest we add in some practices that would really help spark the conversations between the Coach and the participant, even as they transition to go to the IPT-G sessions, already they have that full preparation of what mental health is all about, how its structured, at the time that they are being screened, it's something that will be very easy for them to run through and understand the background even as they transition to go to the next group. [GRS Staff 3, Lusaka]

On the part of management of the project, the staff respondents felt there was lack of proper coordination and communication between the partners involved which also had an implication on the delivery of activities. While one partner felt they were misinformed at times, the other partner highlighted a conflicting schedule as a factor, of which they indicated as an area for improvement. The Coaches also suggested that there shouldn't be an obvious difference in the delivery of SKILLZ Plus and IPT-G, in as much as the project is being implemented in partnership with another organisation.

Sometimes we would have challenges like I highlighted, busy schedules and all, we need to meet, meetings being postponed, maybe that meeting was urgent and you didn't meet, it puts you on hold in terms of making sure that activities go on well in the field. [GRS Staff 3, Lusaka]

For me I found it so hard in terms of communication because if you don't reach out to the person I was working hand in hand with was from GRS, it was difficult for me to know what was happening unless I reached out. if you're just there to say 'they'll give you this they'll give you that'... Communication, it wasn't very effective. [SMZ Staff 1, Lusaka]

Another implementation recommendation that was given was to have different Coaches implement therapy compared to those that adolescents were already familiar with, in the case that adolescents would be more comfortable to share their experiences with someone whom they don't frequently see within the community.

Maybe we can be switching Coaches, ...so that participants should be able to open up when they have a neutral person rather than a person they see everyday in the

community. So it's a two way thing, some may be comfortable, some may not be comfortable. [GRS Staff 2, Lusaka]

On the contrary, one of the Coaches shared how there was poor turn out of adolescents after he switched sites with another Coach, which could be attributed to the fact that adolescents often create trust in the Coaches before they begin to open up and share some of the mental health challenges that they could be facing. The contravening suggestions leaves room to explore in which settings and among which groups this method can be best applied. One of the respondents however suggested allowing the adolescents to voluntarily choose which Coach they would be comfortable with or rather having one on one sessions to complement the group therapy:

Allowing young people or adolescents to have a say after the assessment {Screening} is done and we have a number of them who are in need of IPT-G, we engage young people to say, do you want to work with this Coach or do you want us to bring another Coach, let them have a say. Are you comfortable here? [GRS Staff 2, Lusaka]

If there is a way on how this can be changed, because therapy, having it in a group, some young people, some participants are not comfortable to open up to talk about their issues when they see other people. So one on one, if that can be introduced, we can start with group work of course, then after group work we can be doing one on one, that can be part of the whole design of the session. That would be better, because sometimes I could have opened up but because I have seen two or three people, I am not comfortable. [GRS Staff 2, Lusaka]

Lastly, with regards to the IPT-G tools, Coaches recounted experiencing challenges with the screening tools, which are the PHQ-9/PHQ-4. The Coaches described the items making up the tools as being difficult for the adolescents to understand, including where the Coaches had to translate items into a local language, inasmuch as the PHQ-4 was a summarised version. The SMZ staff member also indicated that this posed more of a challenge for younger adolescents who risked being disqualified for IPT-G due to lack of understanding. Other than that, some Coaches felt the IPT-G component involved a lot of tools which could be reduced. One Coach gave an example of the weekly mood inventory, an M&E tool that required Coaches to ask participants about their mood in the last week at every session:

So they were wondering if I am not going to show other people what I am writing. That would pose a challenge! So you find that when they are talking, I just write down points in a hardcover book so that I can go and transfer in the weekly mood when I get home. if they can reduce on the weekly mood, yes we can be asking them but

when it comes to writing on the weekly mood, so that when an adolescent is talking, we pay attention to them rather than writing. Then in the notes if you feel like there is something that needs to be written, we write down.[Female Coach 5, Lusaka]

I don't know if it's possible, maybe we could have used a different tool. This one {PHQ9/PHQ4}, even if you tried by all means to simplify, it was still hard for them. For you just to come up with the scores, it was hard... It was difficult to put them in the sessions because of that. I don't know the best route to use for it to be more simplified for those young ones. [SMZ Staff 1, Lusaka]

Quantitative

In 2021, 2232 adolescent participants were administered the initial PHQ-9 screening, and slightly less than 30% qualified as depressed. Only about 42% (n=271) of those eligible for therapy were enrolled and took part in the pre-group assessment. Of those enrolled in therapy, 81% (n=219) were female and 32% (n=87) were from the NIH programme (i.e., SKILLZ Girl). The average age was 18 years, and ranged from 11 to 27 years (mode and median are 17 and 18 respectively). Of the total 271, 205 participants were in Lusaka, and 66 were in Chipata.

Table 1 below presents 2021 Key Performance Indicators for PHQ-9 screening and IPT-G participation, with SMZ results and the GRS calculated result shown side by side, along with narrative comments from GRS.

Table 1: 2021 Key Performance Indicators

Key Performance Indicator	SMZ Result	GRS Result	GRS Narrative
Total screened at pre-assessment	2232	2232	Total number of adolescents administered initial PHQ-9 This figure is the same as that reported by SMZ
Total depressed (eligible for therapy)	651 (29.1%)	647 (28.9%)	Total screened as depressed (scoring 10 or higher on PHQ-9 or reporting suicidal ideation) This number is nearly the same as that reported by SMZ
Average PHQ-9 at pre-group	14.321	14.6 (n=271)	14 represents the upper end of the score category for moderate depression - a score of 15 is considered moderately severe

			depression Of note, only 271 of 647 eligible participants (roughly 42%) were enrolled in therapy.
Attended at least 1 IPT-G session*	220	219 (81%)	219/271 screened at pre-group attended at least one IPT-G session, indicating that 52 participants screened at pre-group did not attend any IPT-G sessions. This figure is nearly the same as that reported by SMZ.
Attended at least 5 IPT-G sessions*	178	165 (65%)	165 participants /271 screened at pre-group attended >5 therapy sessions This figure is close to that reported by SMZ - according to GRS calculations, 47 participants were missing attendance data.
Average score change (decrease in PHQ-9)	11.601	11.77 (n=161)	161/271 screened at pre-group also completed the termination PHQ-9. The average calculated by GRS is similar to that reported by SMZ.
Depression free at termination (%)	50%	52% (n=84)	84/161 The proportion calculated by GRS is similar to that reported by SMZ.
Mild depression at termination (%)	47%	45% (n=72)	72/161 The proportion calculated by GRS is similar to that reported by SMZ.
PHQ-9 change of 5+ points	96.86%	98% (n=158)	158/161 participants who completed the termination PHQ-9 demonstrated a clinically significant change in PHQ-9 score. The proportion calculated by GRS is slightly higher than that reported by SMZ.

* 47 participants were missing data on attendance of therapy sessions; ^ 110 participants were missing termination PHQ-9 data

As shown in the table above, nearly two-thirds (61%) of participants who initiated therapy attended at least 5 sessions, representing high retention. The average PHQ-9 score change

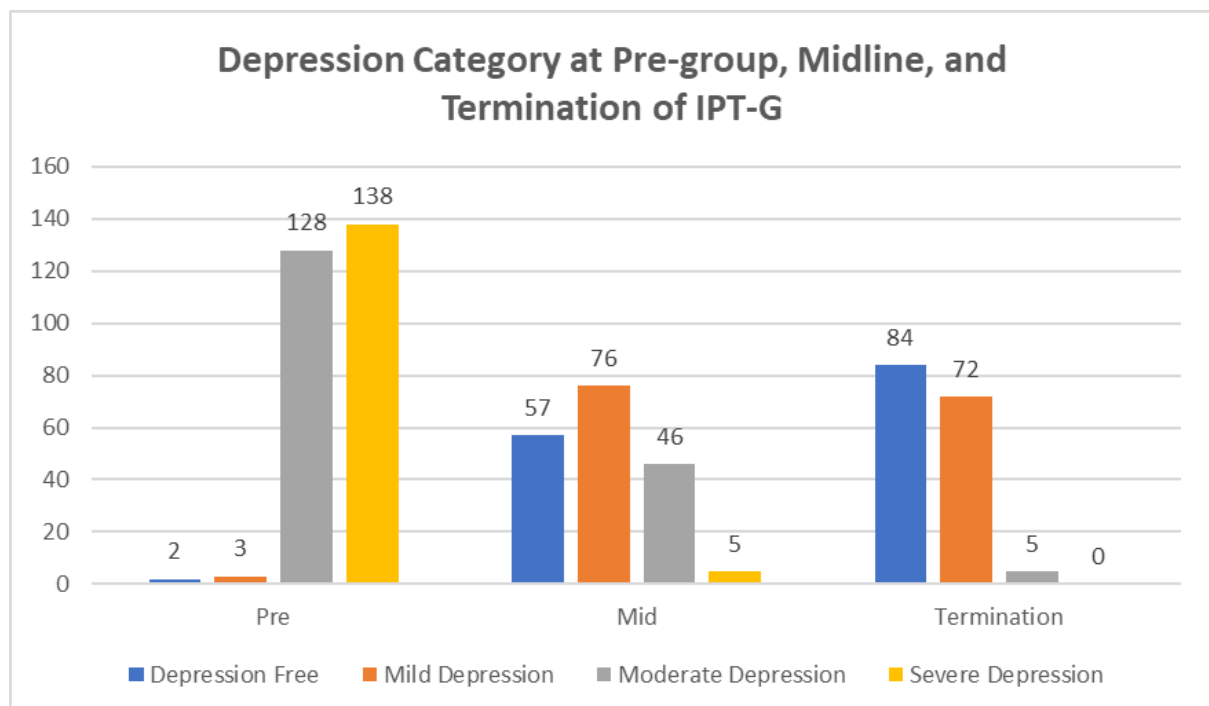
(meaning the decrease in PHQ-9 score from pre- to termination assessment) of over 11.6 also exceeded the typical SMZ target, which is 8 points. This average score change also means that for participants who completed therapy, on average they achieved improvement of more than two categories of depression, such as moving from moderate depression to depression-free, or moderately severe depression to mild depression below:

Table 2: PHQ-9 Score interpretation

PHQ-9 Score	Depression category
0-4	None or minimal depression (depression-free)
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

2021 IPT-G participants' improvement by depression category is also illustrated by Figure 1 below:

Figure 1: Depression Category at Pre-group, Midline, and Termination of IPT-G (2021)



IPT-G participants in 2021 included participants in both SKILLZ Plus and SKILLZ Girl interventions, as some SKILLZ Girl participants were recruited from the NIH study in partnership with CIDRZ. Summary results by programme, and GAD-7 results are presented in Appendix A.

In 2022, 725 participants screened were eligible for IPT-G and enrolled in therapy, 497 of which were female (69%). The average participant age was 17 years (range 9-30 years). Only SKILLZ Plus participants were included in the analysis below.

Table 2: 2022 Key Performance Indicators

Key Performance Indicator	SMZ Result	GRS Result	Narrative for GRS result
Total screened at pre-assessment	3756	1195	Total number of adolescents administered initial PHQ-9 This number is much lower than that reported by SMZ
Total screened at pre-group	–	725	Total who screened as depressed initially and were included in pre-group PHQ-9
Average PHQ-9 at pre-group	14.76	14.76 (n=725)	14 represents the upper end of the score category for moderate depression - a score of 15 is considered moderately severe depression. This figure is the same as that reported by SMZ.
Attended at least 1 IPT-G session	639	617 (97%)	617/636 participants who had attendance data attended at least 1 session. This figure is slightly lower than that reported by SMZ
Attended at least 5 IPT-G sessions	536 (84% of 639)	535 (79%)	535/636 participants with attendance data attended >5 therapy sessions. The number is similar to that reported by SMZ, but the percentage is different due to the different denominator
Average score change (decrease in	11.91	11.86 (n=530)	530 participants completed both pre-group and termination PHQ-9

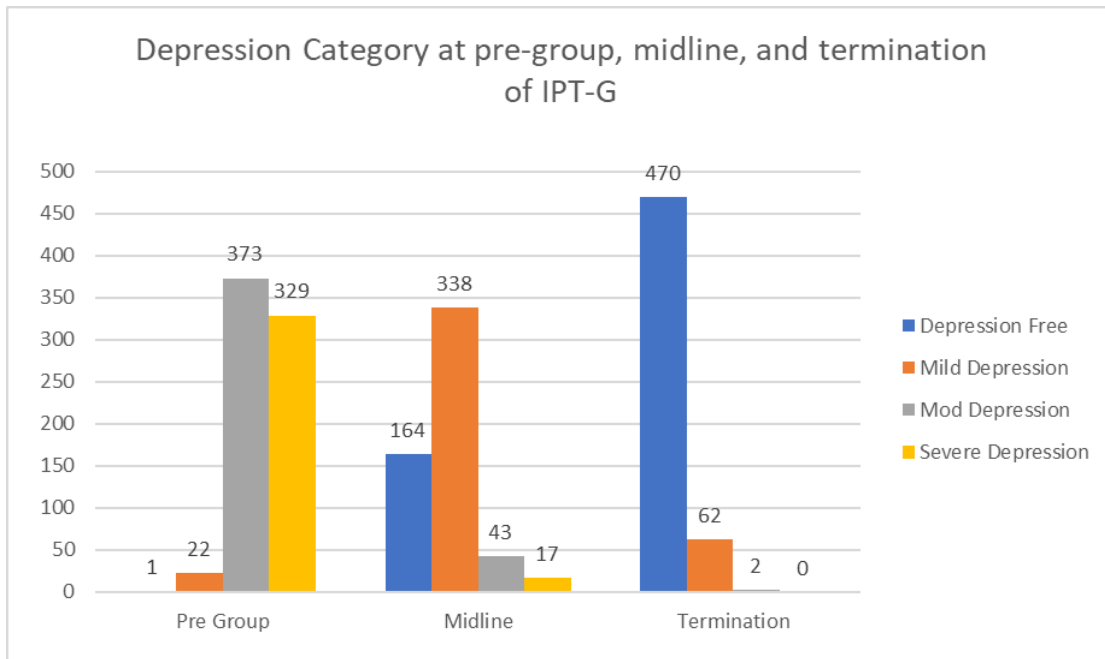
PHQ-9)			AND had attendance records. This finding is similar to that reported by SMZ.
Depression free at termination (%)	88%	88.3% (n=468)	468/530 participants who completed both pre-group and termination PHQ-9 with attendance records. This percentage is the same as that reported by SMZ.
Mild depression at termination (%)	12%	11.3% (n=60)	60/530 participants who completed both pre-group and termination PHQ-9 with attendance records. This percentage is nearly the same as that reported by SMZ.
PHQ-9 change of 5+ points	96.23%	96.4% (n=511)	511/530 participants had a clinically significant score change. This percentage is the same as that reported by SMZ.

As seen in Table 3 above, the largest discrepancy between SMZ and GRS results is in the total number of adolescents screened. Despite repeated requests from GRS, SMZ did not provide individual level data to support their figure of 3756 adolescents screened. The denominator of total screened is a critical missing piece to estimate the prevalence of depression among those screened, which is roughly 19% if using the figure from SMZ or 60% if using the figure GRS could verify (n=1,195).

However, looking at depressed participants who took part in therapy shows that 79% attended at least 5 sessions, which represents higher retention than in 2021. The average PHQ-9 score change in 2022 was 11.86, slightly higher than that reported in 2021, and over 96% of participants achieved a PHQ-9 score change of at least 5 points, compared to 98% in 2021.

2022 IPT-G participants' improvement by depression category is also illustrated by Figure 1 below, where 329 participants were severely depressed at pre-group, dropping to zero by termination, and the number of depression-free participants increased to 470 at termination:

Figure 2: Depression Category at Pre-group, Midline, and Termination of IPT-G (2022)



Examining results from 2022 compared to 2021, it is important to note that in 2021, IPT-G was facilitated by SMZ staff due to COVID-19 pandemic travel restrictions that prevented the training of GRS SKILLZ Plus Coaches. In 2022, IPT-G sessions were facilitated by GRS SKILLZ Plus Coaches, and achieved nearly the same average score change and proportion of participants with clinically significant improvement in depression.

Key indicators for 2022 are additionally broken down by gender in Table 4 below:

Table 4: 2022 Key Indicators by participant gender

Key Performance Indicator	Male	Female	GRS Narrative
Total Adolescents screened	228	497	Total 725 adolescents screened at pre-group
Average PHQ-9 score at pre group	14.47	15.37	Total 725 adolescents screened at pre-group
Attended >1 session	196/204 (96%)	421/432 (98%)	Total of 636 adolescents with attendance data; 204 male and 432 female
Attended >5 session	169/204 (82%)	366/432 (85%)	Similar rates of retention among male and female participants
Average Score Change (i.e., decrease in PHQ9 score)	12.9 (n=165)	11.4 (n=365)	Total 530 participants with pre-group PHQ-9, attendance data, AND termination PHQ-9

% depression free (minimal)	87.4% (n=145/165)	88.3% (n=323/365)	% of each gender who scored as depression free at termination
% mild	12.0% (n=19/165)	11.4% (n=41/365)	% of each gender who scored as mild depression at termination
5+ Score Change (i.e., decrease in PHQ9 score)	94% (n=157/167)	97% (n=355/365)	% of each gender achieving clinically significant decrease in depression symptoms

Retention was similar among male and female participants, though male participants showed a slightly higher average PHQ-9 score change, even though female participants had a higher average PHQ-9 score (more depressed) at pre-group.

Conclusions and Recommendations

Conclusions

The integrated model of SKILLZ Plus and IPT-G implemented in the Strong Bodies, Strong Minds project appears to be highly acceptable for participants, Coaches, and staff. The Findings also provide preliminary support for the effectiveness of the integrated model of SKILLZ Plus and IPT-G. Reductions in depressive symptoms were observed in both 2021 and 2022. Based on qualitative feedback, the model appears relatively feasible to implement, but areas for improvement remain, including monitoring of all project components. While Coaches generally had a positive experience implementing the integrated model and recognized the importance of IPT-G, the contrasting methods of GRS SKILLZ programming (active, fun, engaging) and IPT-G (more rigid, serious, lacking energizers) presented challenges for some. The IPT-G training that Coaches underwent was generally reported as adequate, but some respondents also highlighted the value of the pre-session preparation conducted with the SMZ supervisor, and experience in the field as more valuable in preparing them for facilitating therapy. Respondents generally viewed the integrated model positively and recommended that it be expanded, also including adolescents not living with HIV, recognizing the need to improve mental health support for all. Staff respondents also noted the potential for involving health facility staff members in the integrated program model to improve sustainability. Respondents recommended expanding SKILLZ Plus mental health content, improving coordination and communication between partners, and reducing the number of monitoring tools that Coaches are required to complete, as well as continuing to provide mental health support for Coaches.

Quantitative results from 2021 and 2022 demonstrate the effectiveness of IPT-G for YLHIV participants experiencing depression in this project. In both years, greater than 96% of participants completing therapy showed an improvement of at least 5 points on the PHQ-9, representing clinically significant improvement in depression symptoms. This was similar in both 2021 when IPT-G was facilitated by SMZ staff and 2022 when GRS SKILLZ Plus Coaches were facilitating therapy groups. A study limitation concerns the missing data for some participants, which should be addressed in the future through further partnership and coordination efforts.

Recommendations

Based on qualitative feedback, quantitative results, and understanding of the SBSM project, GRS presents the following recommendations for SKILLZ Plus and mental health programming:

- **Continue to prioritise the mental well-being of Coaches delivering IPT-G or any mental health intervention:** ‘caring for the carers’ is critical to avoid burnout and continue to support Coaches.
- **Wherever possible, reduce the number of M&E tools and simplify/streamline those required:** the monitoring required for IPT-G in this project presented a continued challenge to implementation, frustrating Coaches and potentially reducing the number of adolescents who were connected to therapy groups. A simplified screening process could also make the intervention more inclusive of younger adolescents.
- **Continue to build Coach capacity in therapeutic interventions:** GRS can benefit from continued technical support for building understanding of therapy and mental health concepts.
- **Consider expanding mental health content in the SKILLZ Plus curriculum to increase participant exposure to and understanding:** in line with GRS strategy to integrate mental health into all core SKILLZ programs, this could also help participants understand the screening and therapy process for IPT-G.
- **Improve monitoring and data sharing procedures with future partners:** missing data impacted GRS’s ability to learn from this project and make decisions around future programming. Improved management of and communication with partners could help mitigate these challenges in the future.

Appendix A: Additional Tables and Figures

Table A: 2021 Key indicators by Programme

Key Performance Indicator	NIH	Skillz Plus
Total Adolescents screened	88	183
Average PHQ-9 score at pre group	15,4	15,1
Attended >1 session	72/88 (81%)	147/183 (80%)
Attended >5 session	62/88 (70%)	103/183 (56%)
Average Score Change (i.e., decrease in PHQ9 score)	11,59	11,79
% depression free (minimal)	33/58 (57%)	51/102 (50%)
% mild	20/58 (34%)	52/102 (50%)
5+ Score Change (i.e., decrease in PHQ9 score)	56/58 (97%)	102/102 (100%)

Figure A: 2021 IPT-G participant GAD-7 scores

