



Flourishing amidst adversity: Exploring mechanisms of change in a spiritually based character strengths intervention using the PERMA framework in Zambia

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Abstract: Unhealthy substance use is high among adolescents and young people in Zambia. Conceivably, a character strength approach could help reduce alcohol and other psychoactive substance use among young adults. We tested the efficacy of a positive psychology based group-based character strengths prevention and recovery program for alcohol risk reduction among Zambian young adults. The primary study participants included schoolchildren and community members. We conducted 8 focus group discussions (FGDs) with school students (aged 13 to 17) and community youth (ages 18–24), 12 FGDs with parents, teachers, family, friends, and group leaders. Moreover, we conducted 8 key informant interviews who had significant contact with primary participants. We utilized the widely recognized PERMA model from positive psychology to guide our assessment of overall impact across multiple dimensions of well-being. Thematic analysis indicated rehabilitative effects of experiencing greater positive emotions (joy, hope, and gratitude); developing stronger relationships with peers, family, and God; finding a clearer sense of meaning and purpose; and achieving personal goals such as employment, education, academic improvement, and reduced alcohol and substance use. Our findings suggest that the synergistic effect of combining character strength training is likely to increase emotional and spiritual flourishing and reduce unhealthy substance use behaviors.

Keywords: unhealthy alcohol use; PERMA; character strengths; spirituality

Introduction

Unhealthy Alcohol Use (UAU) is a global problem that affects individuals, families, and societies (MacKillip et al., 2022). Overuse is associated with negative physical and mental health outcomes (Wang et al., 2023; Pohl et al., 2021). Compared to other age groups, children and adolescents are more susceptible to alcohol-related harm. Young individuals are more likely to consume dangerous amounts, contributing to the three leading causes of death in this demographic: suicide, homicide, and unintentional injury (Lima et al., 2020). Alcohol is the leading risk factor for premature mortality and disability among those aged 20–39 years (World Health Organization, 2024). Moreover, a higher frequency of alcohol use during early adolescence is associated with major depressive disorder later in adolescence (Shanaube et al., 2022) and a higher future risk of addiction. Research is needed in low- and middle-income countries such as Zambia to identify strengths-based, contextually relevant approaches to preventing and reducing alcohol use among vulnerable young people.

Strengths-based approaches

For more than a decade, positive psychologists have noted potential for the field of positive psychology to develop and test theory-based prevention and intervention programs for

substance use disorders (Krentzman, 2013). The Global Resilience Oral Workshops (GROW) team began such an effort in 2018 by piloting GROW Zambia, a spiritually based character-strength training program among 10- to 14-year-olds. Study participants demonstrated increased levels of resilience and hope (Seale et al., 2022) and a significant reduction in alcohol consumption (Seale et al., 2020).

The PERMA model

The PERMA model is a positive psychology approach with evidence for efficacy in raising well-being. PERMA refers to five pathways that contribute to greater human flourishing: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishments (Heshmati et al., 2023). Positive Emotion refers to the experience of positive feelings such as happiness, joy, gratitude, love, and hope (Seligman, 2011). Positive emotions are important for well-being, strongly related to life satisfaction, and helpful for developing resilience when faced with difficult situations (Coffey et al., 2016). Engagement refers to the state of being fully immersed and captivated by activities that challenge and stimulate us, often performed and enjoyed for their own sake rather than for external rewards (Seligman, 2011). When engaged in these pleasant activities, people are more likely to experience fulfillment



and satisfaction. Complete immersion, “flow,” is the state of being so mesmerized by an activity that one may even lose all sense of time (Csikszentmihalyi et al., 2005).

Relationships refer to nurturing meaningful personal connections with others. The significance of social relationships is evident in the value humans place on establishing and maintaining connections with significant others. These critical relationships significantly contribute to wellbeing. Having even one positive, caring relationship with a stable adult contributes greatly to children’s resilience (Werner & Smith, 2001). Meaning refers to belonging to and serving something greater than ourselves. Having a sense of purpose, which may come from belonging to a family or community (Stroope et al., 2013), helps individuals focus on what is important in the face of significant challenges or adversity (Seligman, 2011). Accomplishment pertains to the attainment of one’s goals and the resulting fulfillment that comes with it (Seligman, 2011).

Spirituality is not described by Seligman (2011) as a separate pathway to wellbeing, but may contribute to several of these pathways. Religious practices, such as prayer and worship, may foster positive emotions, such as joy and gratitude. Engagement may occur as individuals become fully immersed in and captivated by spiritual activities such as song, dance, prayer, and meditation. Enriching or deepening one’s relationship with God is also a goal and product of many spiritual activities. Spirituality may contribute to a sense of meaning as individuals connect with their God-given purpose in life.

The Zambian context

A variety of interventions and measures have been implemented in Zambia to regulate the consumption of alcohol. Among these, the Liquor Licensing Act of 2011 governs the sale and production of alcoholic beverages. The Act mandates that only licensed vendors may sell alcohol and prohibits its sale to those under 18 (Government of the Republic of Zambia, 2011). Additionally, the National Alcohol Policy of 2018 establishes a framework for reducing alcohol consumption through multisectoral collaboration (Government of the Republic of Zambia, 2018). Furthermore, the Drug Enforcement Commission (DEC), the Ministry of Health, and the Ministry of Education implement initiatives to reduce substance use in schools (Masiye & Ndhlovu, 2016).

Despite these measures, UAU remains a challenge in Zambia. It has been reported that 53% of individuals between the ages of 15 and 19 use alcohol (Mungandi et al., 2022), and about 10.9% of Zambians report engaging in excessive episodic drinking of six or more standard drinks at a time (Taylor et al., 2020). One study of 416 patrons of bars and other establishments that sell alcohol in three different areas of Zambia found that 19% of participants had visited the hospital due to a drinking problem (Zyambo et al., 2025). Among those aged 15 to 29, identified factors contributing to UAU include peer pressure and limited employment opportunities. Furthermore, the availability of cheaper home-distilled spirits further increases use, especially among low-income individuals (Matenga et al., 2025). Various interventions have shown promise in

reducing alcohol use in Zambia. One such intervention utilized the Common Elements Treatment Approach (CETA), a multi-session, evidence-based transdiagnostic treatment administered by lay counsellors, and it demonstrated a decrease in alcohol use among individuals living with HIV (Kane et al., 2022).

The “GROW Hopes for Life” strengths-based intervention

Building on the success of GROW Zambia (Seale et al., 2020), we created a strengths-based intervention designed to prevent or reduce UAU among secondary school learners and young adults, namely the Ziyembekezo Za Umoyo (“GROW Hopes for Life”) Program (Tirrell et al., 2025; Mulavu et al., 2025). This is a one-year, weekly, group-based prevention and recovery program that utilizes multiple positive psychology and spirituality interventions to enhance five-character strengths correlated with lower alcohol and substance use: forgiveness (Webb et al., 2017; Logan et al., 2010), spirituality (Rezende-Pinto & Moreira-Almeida, 2023), self-control (Logan et al., 2010), hope (Baines et al., 2016), and prudence (Kabakci, 2019; Logan et al., 2010).

Our hypothesis was that strengthening these five-character strengths through the implementation of evidence-based positive psychology and spirituality interventions would raise spiritual and emotional wellbeing, as defined by the five dimensions of PERMA; increase resilience; and decrease alcohol and other substance use. Quantitative analyses from a cluster-randomized controlled trial, GROW Hopes for Life, found significant increases in character strength and resilience and decreases in alcohol use (results reported elsewhere; currently under review), but did not elucidate the mechanisms underlying these changes.

Goals of the current study

This study aimed to explore the mechanisms underlying participants’ increased well-being and decreased substance use. Guided by Seligman’s PERMA framework (Seligman, 2011), this qualitative evaluation examined the extent to which participants described possible changes in positive emotion, engagement, relationships, meaning, and accomplishment, which may have served as a pathway to greater flourishing and lower substance use. By identifying the spiritual and psychological processes that supported growth and resilience, this study aimed to inform future strengths-based approaches to substance use prevention and recovery in low-resource settings. Our specific research questions were:

- (1) How did participation in the GROW Hopes for Life program influence participants’ psychological and spiritual well-being through the dimensions of the PERMA model?
- (2) In what ways did participants experience changes in positive emotions, engagement, relationships, meaning, and accomplishment that contributed to reductions in alcohol and substance use?

Methods

Study design

We employed a quasi-experimental design following the GROW Hopes for Life intervention study (Tirrell et al., 2025; Mulavu et al., 2025). Briefly, the intervention program was comprised of two major components: GROW Strong and GROW Free. We combined two character-based curricula: GROW Strong and GROW Free. GROW Strong is an adaptation of the prevention and self-development curriculum from GROW Zambia that teaches the 24 Values in Action (VIA) character strengths (Values in Action, 2024) through 24 Bible stories, with exercises modified for older adolescents. GROW Free is an alcohol and drug recovery/intervention program that teaches 12 life practices that are based on 13 foundational character strengths that promote an alcohol-free lifestyle. These include 12 of the 24 VIA character strengths, plus the character strength of joy.

The two programs were taught back-to-back over a one-year period by trained lay volunteers through 90-minute weekly sessions. Both programs include multiple weekly evidence-based exercises to build resilience and well-being, including singing, dancing, storytelling, meditation, boundary setting, problem-solving, goal-setting, relationship-building, and drama. For the purposes of the study, we translated the program's name into the local language, calling it "Ziyembekezo Za Umoyo" (Hopes for Life, or HFL). Students in the prevention-focused arm of the trial first received 24 weeks of GROW Strong instruction, followed by 12 weeks of GROW Free. Community participants in the intervention-focused arm of the trial who reported a history of alcohol-related problems first received 24 weeks of instruction in GROW Free, followed by 24 weeks of GROW Strong. Both interventions were delivered over a one-year period. Waitlist control participants received the interventions the following year.

Participants and setting

The study was conducted in Lusaka (urban) and Sinda (rural) districts in Zambia. The study sites were purposively selected to compare the intervention across an urban and a rural setting. A total of 460 grade eight students ages 13–17 in secondary schools (49% wait-list control) and 451 young adults ages 18–24 from community-based settings (50% wait-list control) took part in the intervention study. Following the end of the intervention after 1 year, a subset of participants from the intervention arm took part in Focus Group Discussions (FGDs) alongside people in close proximity to them.

Sampling approach

Purposive sampling was used to select participants employing a maximum variation approach. We used a maximum variation approach in order to capture a wide range of perspectives across the different age groups. Age was identified as a significant characteristic that would likely shape experiences and perceptions of the intervention. For both school and community groups, we selected older participants and younger participants by categorizing them into two age groups. This recruitment was done with the aid of registers. Throughout the intervention, registers

were maintained containing information on all participants. Information such as participant ID, age, and sex was collected and stored. These lists were used to recruit participants for the FGDs. The lists were first divided by gender. Thereafter, the oldest males and youngest males were selected for an FGD, with 5 older and 5 younger participants. The same procedure was used to select female participants. This procedure was used for both the school and community participants.

Further discussions included two focus groups with parents of school pupils, recruited through flyers delivered by their children, who were student participants in the Ziyembekezo program. Two other focus groups were composed of family and friends of community participants. Community Ziyembekezo group participants recruited these individuals by identifying friends or family members who had regular contact with them and were willing to participate in a focus group designed to assess the impact of the Ziyembekezo program. One focus group was composed of teachers and school administrators, recruited from students who were frequently involved in the school program. Lastly, one FGD targeted Ziyembekezo group leaders who were responsible for leading both school and community groups and had weekly contact with program participants. This broad range of participants was selected to provide context and an external, more objective perspective on the findings from the primary participants (school and community participants) who took part in the yearlong intervention.

Furthermore, additional interviews were conducted among Key Informants (KIIs). These KIIs were purposively selected based on their influence and interaction with the Ziyembekezo program. School KIIs were headmasters from the schools where the school interventions were conducted. Community KIIs were church leaders who assisted with the running of the intervention on their church premises and headmen of participating rural communities. The total number of KIIs and FGDs, including their makeup, is highlighted in Table 1.

Table 1 provides a summary of Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) by site.

Data collection

A qualitative case study approach was utilized for the study. It was an appropriate approach because it provided an opportunity to explore in detail the perspectives and experiences of different participants (Yin, 2009). Data collection took place at two schools and two communities in both locations of the intervention arm of the study. Research assistants were trained in data collection procedures using semi-structured focus group and key informant interview (KII) guides developed in English and Chinyanja (a widely spoken local language in both study sites). FGDs took place in schools and community settings such as churches.

Interviews ranged from 60 to 90 minutes. Interviews with the school and community groups primarily centered on the participants' experiences in the program, lessons learnt, and the development of character strengths. Participants gave responses to questions such as 'Tell me about

Table 1. FGDs and KII interviews

Participant group	Lusaka	Sinda	Total
School-related FGDs (Boys, Girls, Teachers/Admin)	3 FGDs	3 FGDs	6 FGDs
Parents FGDs (Male & Female)	2 FGDs	2 FGDs	4 FGDs
Community FGDs (Male & Female)	2 FGDs	2 FGDs	4 FGDs
Family & Friends FGDs (Male & Female)	2 FGDs	2 FGDs	4 FGDs
Group Leaders FGDs	1 FGD	1 FGD	2 FGDs
Key Informants-School	2 KIIs	2 KIIs	4 KIIs
Key Informants-Community	2 KIIs	2 KIIs	4 KIIs

a time when you felt joy and happiness?', 'Describe a time where you felt fully engaged in an activity?', 'Tell me about your relationship with your friends?', 'What gives your life purpose?', and 'What accomplishments have you experienced lately?' Parents of learners, as well as family and friends of community participants, provided feedback on any character-strength growth of the individuals participating in the program and any other changes they observed in them as a direct result of their involvement. They gave responses to questions such as 'What observable changes have you noticed in your child/family member since they started taking part in the Ziyembekezo program?' Ziyembekezo group leaders and school staff were also interviewed about significant changes they had observed in participants. They gave responses to questions such as 'Tell me about the character of the person taking part in the Ziyembekezo program?'. The key informants were asked for their perspectives on the Ziyembekezo program and the level of assistance they provided.

Data management and analysis

Every interview was audio-recorded and transcribed verbatim. The research team stored the gathered data safely on a password-protected computer. Data coding was led by Mataanana Mulavu, Oliver Mweemba, Mwitwa Mugode, Shimeo Sakanya, and Tulani Francis Lufungulo Matenga. Data coding began with the coders reading the transcripts several times to become familiar with them. All data coders are experienced in conducting qualitative research, with some holding a Master of Public Health (MPH) and one holding a PhD. Data coding involved an iterative process in which coders read the text and assigned codes. During this process, discussions were conducted, and codes were compared among the coders. Further discussions and deliberations were held to review the coded data among the five coders. This was a back-and-forth process, and disagreements over codes were discussed in detail among the coders to reach consensus. The data were analyzed using thematic analysis as outlined by Braun and Clarke (2006), specifically framework analysis based on the constructs of the PERMA model. The coding framework was developed based on the PERMA model domains. The themes were determined deductively by extracting them from the PERMA model's fundamental constructs. Nvivo 12 was used to code the data and explore patterns and relationships using framework matrices, memos, and case and relationship codes.

It must be noted that the research team comprised individuals with backgrounds in psychology and public health,

as well as prior experience in community engagement programs. This positionality informed our understanding of the cultural context but may also have introduced biases, including cultural and disciplinary biases. To address these issues, we involved multiple researchers in data collection and analysis. We also had dissemination sessions to ensure that interpretations were grounded in participants' narratives rather than our preconceptions.

Findings and Discussion

The results provide insights from the five PERMA domains and the associated themes. The theme of positive emotion indicates an enhancement in joy and happiness. Engagement includes absorption in meditation, music, and dance. Relationships foster the development of social skills and teamwork. Concerning meaning, we see spiritual development, whereas under achievement, we identify themes such as academic excellence and the cessation of substance use.

Table 2 presents the study themes from the school groups (prevention-focused) and community groups (treatment-focused), organized according to the PERMA framework.

Theme 1. Positive Emotion

Every lesson in the GROW Hopes for Life was designed to foster positive emotions. According to the participants, the project promoted positive emotions. It instilled values of self-worth, self-confidence, and courage to deal with challenging situations and to lead others when called upon. Participants described greater joy, gratitude, and hope.

I learned about joy that no matter how difficult this situation you must be happy, and the other thing is to be grateful, so I learned that when somebody gives you something or does something good for you will need to show gratitude. (Sinda, School participant, Female, R8)

Participants also described gratitude for learning skills in self-control, which helped enable them to resist substances.

I am grateful to the Ziyembekezo program for helping me change, because previously I did not have self-control; whatever I thought and wanted to do, I would do, if it meant smoking, I would go ahead and smoke, but after learning about self-control. I am able to exercise self-control. (Sinda, Community participants, male, R6)

Parents and caregivers described a greater joy in their children, attributing it to the program.

For me, I am just grateful to this program; my child is a very happy person, always laughing, and now he has become even a better person. From the time he

Table 2. Study themes

PERMA indices	Themes
Positive emotions	Joy and happiness; Gratitude; Hope
Engagement	Immersion in creativity and skill building; Immersion in singing and dancing; Immersion in meditation
Relationship	Practicing teambuilding with others; Social skills building; Respect towards friends and family
Meaning	Greater connectedness to God; Greater connectedness to community of friendships and church
Accomplishment	Self-confidence; Academic excellence; Discontinuing substance use; School enrolment

started this Ziyembekezo program he is happy and always glad to share what he learns, so this program has really changed our children. (Lusaka, Parents of school pupils, Female, R8)

Participants described greater positive emotions and feelings of hope as a result of their participation in the program.

The Ziyembekezo program has taught me to have hope. Before the program came, I did not have hope. (Sinda, School participant, Female, R9)

Exercises designed to increase hope were particularly important for one child dealing with grief and severe depression after the death of her father. Her mother described a new sense of hope that she stated had possibly saved her child from committing suicide.

For me, the main reason that made me allow my child is because I passed through some problems after their father died (. . .), my child wanted to commit suicide (. . .), and here at the group where they are, because they are together with her friends, this one shares their problem that they have, she also shares. So, she came to tell me at home, saying Mummy, I wanted to kill myself, not knowing there are people with big problems (. . .). So I can only say thank you, you have helped me personally because my child would not even have been here by this time..., she just wanted to kill herself. (Lusaka, Parents of school children, female, R1)

Community participants also felt that the program increased their feelings of hope. Hope was taught as one of the character strengths, and through hope, one participant narrated how he was able to stop drinking alcohol.

The other thing I liked is hope, the Bible says thou shall not worry about what you will eat or wear, initially I was full of doubts if at all I could even stop drinking beer, but through those words I was able to quit alcohol, so I really like those words and I still make use of them every day, I don't want to be pessimistic. (Sinda, Community participants, male, R3)

These findings highlight the importance of positive emotions such as joy, hope, and gratitude. Positive emotions are associated with greater well-being (Sultana et al., 2023; Tolcher et al., 2024) and greater physical health (Boehm et al., 2020). Participants described how participation in the program contributed to positive emotions, thereby enhancing emotional well-being. Through the cultivation of positive emotions, participants were able to find self-control when faced with the temptation to use substances. This finding is similar to that of Akhtar and Boniwell (2010), who found that adolescents in a positive psychology group intervention showed increased

happiness, optimism, and positive emotions, along with decreased alcohol consumption and lower scores on an alcohol dependence measure. Focus group participants described how their positive emotions contributed to their overall resilience in difficult situations. The link between positive emotions and resilience confirms earlier findings (Gilchrist et al., 2023).

The cultivation of hope emerged as an important finding. For several school participants, hope emerged as an important psychological resource that transformed their outlook on life. One parent's account of their child's recovery from grief and suicidal ideation demonstrates the potential protective function of hope-building activities. Community participants also highlighted hope as instrumental in changing behaviors centered around substance use. Narratives about hope highlight its importance in supporting cognitive framing and goal-directed action, a process widely recognized in positive psychology as cardinal to well-being and behavioral change (Hartmann et al., 2018; Murphy, 2023).

Furthermore, gratitude enhanced participants' well-being. Community participants expressed gratitude towards the program for equipping them with relevant skills aimed at self-control, which was linked to control over alcohol consumption. This relationship between gratitude and behavioral self-control aligns with evidence that gratitude fosters prosocial motivation and reinforces self-regulation (Man & Jing, 2025). Taken together, these findings demonstrate that positive emotions functioned not merely as outcomes of the intervention but were essential in the change process. Through GROW lessons that cultivated joy, gratitude, and hope, the program appeared to have facilitated psychological resilience.

Theme 2. Engagement

Each session in both GROW Strong and GROW Free offers opportunities for students to engage through creative brainstorming for solutions, group games, drawing, meditation, drama, song, and dance, and goal setting. One student shared that practicing creativity during the group sessions carried over into his daily life as he became more hands-on and more willing to take on daily tasks.

I could see in the past few days if something breaks, I couldn't repair I didn't even have the hope to repair it. So, if something broke down, I would just throw it. So, after Ziyembekzo taught us about creativity that's when I learnt, let me try to make it this way, this and that way, if it works, then will continue. (Sinda, school participant, male, R3)

Another student highlighted how immersive experiences, such as singing and dancing, affected her joy and social interactions.

For singing and dance like we would get to interact with our friends, those that we don't usually talk to, we get to have fun with them. We get to sing with them and be joyful with them. (Lusaka, school participant, female, R1)

Similarly, for community participants, engagement in singing brought feelings of joy and a sense of putting aside life's problems.

I liked singing, sometimes you would come from home annoyed. When you get here in church [the program meeting place], you sing in the choir, now you become free. You even forget what you were doing at home, you forget the pressures that you had at home when you come here. (Sinda, Community Participants, female, R5)

Each session included a guided meditation for silent self-reflection. The meditation included deep breathing, moments of mindfulness through eight reflection questions, and silent pauses. One student describes the impact that she felt from meditation.

Meditation and affirming our purpose, so when we meditate in silence, I used to feel very nice, and then affirming our purpose. (Sinda, School participant, female, R4)

Community participants also noted the value of meditation and its usefulness in developing clarity of thought.

Meditation, why I liked meditation, when a person is worried, that moment when you are quiet, you think about a lot of things, like I have made mistakes on this and that, that friend that I have done this and that, I must forgive them, that is why I like meditation. (Sinda, Community participants, female, R1)

Despite active participation in meditation, some school participants struggled to concentrate.

Some of the challenges that I was facing was on meditation. You find that as am meditating, some of my friends are disturbing me, you find that am not focusing my mind on one thing, so that was quite challenging for me. (Lusaka, School participant, male, R7)

Furthermore, challenges with active engagement in group activities were noted during a story-acting activity among the school participants.

Yes, the challenges I found is if you are participating in a given activity like acting or brainstorming and others don't want to participate and then the same people or when you do something wrong, they will start laughing at you instead of maybe correcting you. (Lusaka, School participant, male, R5)

Community participants also noted similar problems with some of the activities. Despite active engagement, some participants did not appreciate certain program activities, even when they participated. One participant expressed her discomfort with dancing.

When it comes to dancing, I never used to like it because I don't know how to dance. (Lusaka, Community participants, female, R3)

Previous studies have found that engagement influences mental health, affecting both anxiety and depression (Choi, 2020; Gander et al., 2016). It is also a powerful determinant of wellbeing (Aho et al., 2022). Engagement in creative activities was shown to enhance students' problem-solving skills and taking initiative. Furthermore,

immersion in experiences such as singing and dancing fostered social interaction, thereby offering temporal relief from daily stressors. Earlier studies have found that engagement in activities such as art or music therapy enhances psychological well-being (Noguchi & Shang, 2023; Croom, 2015). Meditation provided participants an avenue for introspection, emotional regulation, and cognitive clarity, thereby supporting self-awareness and interpersonal reflection. The connection seen between meditation and greater well-being in this study is similar to earlier findings (Dasanayaka et al., 2022; Rutkowska et al., 2024).

Participants further narrated how these activities helped them to develop social connections. This relationship between engagement and social relationships reinforces Ibrahim et al. (2023) findings that when individuals are engaged, they are more likely to experience positive emotions, develop strong relationships, find meaning in their activities, and achieve their goals. Through engagement, we can see how one PERMA domain influences others. Our findings also highlight barriers to engagement, such as difficulties concentrating during meditation and discomfort with certain activities. These challenges highlight the need for structured facilitation strategies from Ziyembekezo group leaders and for creating a safe environment that supports deep engagement. Participants also described the role of learned creativity in shaping engagement in everyday tasks at home. One of our new findings was that engagement through song, dance, and meditation can be taught as life-giving practices that require minimal resources. This is an important finding for low-resource communities. Overall, the program's participatory activities fostered meaningful engagement that contributes to emotional well-being, socialization, and creativity. Therefore, engagement functioned as a mechanism through which participants experienced personal and social transformation.

Theme 3. Relationships

One of the goals in each GROW session was to build strong positive relationships among the participants. Participants reported that they learned how to interact with others in ways that could sustain relationships and to treat all with respect.

Before joining the program, I didn't know how to work with my friends, so at the moment I now stay behind to work with my friends. As you know, we are in grade 9 [exam class], so working together really helps because each one of us has strength in different areas... (Sinda, school participant, female, R9)

Parents noticed that the program helped improve their children's social skills, enabling them to build meaningful relationships and stronger communication skills. According to one parent, these relationship-building skills carried over even into family life, particularly in respect for those who were older than they were.

[The program] has added value to the family in a way that she can communicate with her friends (...) now she knows how to talk to people (...). Now she knows how to talk to elderly people with respect. She can interact with people in different ways from how she used to interact

with them before joining. **(Lusaka, Parents of pupils, male, R6)**

For community participants, the findings indicated that not only were strong positive relationships built within the group, but that these newfound skills also impacted their family relationships and friendships.

I used to feel like when my parents were talking to me, I would look at it like it is just a child who was talking to me. But since Ziyembekezo started teaching us, I have become a child that listens to the parents. **(Sinda, Community participant, female, R6)**

Some parents also observed an improvement in family relationships at home. Parents shared that some of their children used to be difficult to manage, but they have now noticed maturity in their children's reactions and in how they manage their time for domestic activities.

My child has been restored because she used to be stubborn, even when she is answering the elder sibling you would think she is the older one, or even when the father sends her, [in the past] she would make facial expressions as if it's not the father sending her, but now she become respectful, she even does house chores even when am not around am not worried because I know she will take care of the house. **(Family and friends of community participants, Lusaka, female, R5)**

The findings above show that relationship building played an essential role in facilitating change among the participants. Through Ziyembekezo group activities, participants developed their communication skills, gained respect for others, and formed strong interpersonal bonds. Students described learning how to collaborate with peers. Parents noticed enhanced communication and respect towards elders, thereby indicating that skills acquired in the program transferred into family contexts. Similarly, community participants reported changes in family interactions, including increased listening and mutual respect. According to the literature, strong positive relationships are essential for overall well-being. They offer support, love, and companionship, which are vital for mental health (Tough et al., 2017). They are crucial in helping individuals navigate life's challenges. Studies have even shown that support systems provided by strong relationships can buffer against stress, anxiety, and depression (Cho et al., 2022). This social support is beneficial in both times of crisis and everyday life, making joyful moments more fulfilling and difficult times more bearable (Ruiz-Rodriguez et al., 2022). They also play a crucial role in addressing substance use problems and ongoing challenges with relapse (Liu et al., 2020; Cao & Zhou, 2021).

Comments from our FGDs suggest that relationship-building skills are not intuitive to everyone, but they can be learned. Participants and their parents particularly described new understandings and well-being benefits of practicing respect and inclusiveness. These developments highlight the importance of positive relationships as a foundation for psychosocial well-being and behavioral change. These supportive relationships provide emotional security, promote prosocial behavior, and reinforce learning.

Theme 4. Meaning

Meaning is often described as a sense of belonging to something much greater than oneself. Meaning is fostered in the program through deepening and cultivating a sense of connectedness to both the GROW group and to God through various GROW practices, such as self-affirmations about God's love. School pupils felt the program gave their lives meaning by enhancing their spiritual growth and by building a close relationship with God.

Building others and affirming God's love. On building others, when my friends are motivated, they also feel good builds courage in what I do, and on affirming God's love, I need to always know that if I do wrong, God will not be happy with me because he loves me. **(Sinda, school participant, female, R7)**

Group leaders and parents also observed spiritual growth in the participants over the course of the program. They also noted that some participants were able to pray and meditate on their own.

So, for the school, I've seen massive change in terms of the way pupils conducted themselves way back when we introduced this program... they are able now to pray on their own, they are able to meditate on their own. **(Group leader, Lusaka)**

I believe that they are learning a lot from the program, and one of the things is that he now has heart or commitment of always wanting to go to church and always encouraging his friends or relatives to go to church, and whatever he learns from church, he does not just keep to himself, he will come back and share with his friends. **(Sinda, Parents of school pupils, male, R3)**

Meaning for community participants was cultivated through a sense of connection to the Ziyembekezo group and a strong positive connection to God.

I have learnt a lot, and now even my life is going on well. And I didn't have faith, even believing in God that he is the one who does things. I didn't have, but after starting to learn here, I believed that God exists. **(Lusaka, Community participants, female, R3)**

These findings highlight the critical role of meaning in the mechanism of change in the Ziyembekezo program. Meaning was enhanced through practices that deepened participants' spiritual connection. Studies have shown that meaning can be derived from various sources, including work, relationships, hobbies, and spiritual beliefs (Wissing et al., 2020; Błachnio et al., 2025; Yamamoto et al., 2023). Religion and or spirituality provide a framework for understanding the world, thereby offering a sense of meaning that transcends individual existence (Hirshbein, 2020). Other studies have explored the concept of inner strength, emphasizing the role of spiritual grounding as a source of resilience and fortitude in confronting life's trials (Schwalm et al., 2022; Manning et al., 2019). Spirituality promotes healthy development in adolescents, enhances coping skills, and leads to positive outcomes in mental health, psychological well-being, and academic learning (Kim & Esquivel, 2011). By cultivating a robust spiritual foundation, individuals are empowered to navigate life's challenges with clarity and purpose, thereby reducing their

susceptibility to drug-related issues (Hai et al., 2019). Our study found similar findings.

Beyond this, we found that a spiritual sense of meaning can be elevated through spiritual practices such as meditation, prayer, and a deeper understanding of God's personal love and purposes. We also saw that as some participants grew in this sense of spiritual meaning, they desired to connect with others interested in spirituality at church and to invite others to attend and grow with them. Within the PERMA framework, meaning helps create a sense of purpose and connection to something larger, fostering wellbeing (Seligman, 2011). Therefore, by integrating spiritual practices into group activities, the program promoted personal meaning, thereby supporting individual transformation.

Theme 5. Accomplishment

Accomplishment was fostered in the program through focused teaching on character strengths such as perseverance, hope, love of beauty and excellence, leadership, and love of learning. Weekly practices that facilitated "accomplishment" included personal goal-setting, drama performances, memorizing Bible verses, sharing something good that happened during the week, and a graduation ceremony at the end of the program for those who met the attendance requirements. When interviewed, some participants shared that prior to the program, they did not have the confidence to speak in a classroom, or even during the program, but the longer they were in the program, the more they stopped shying away from participation. They considered this an important accomplishment, as they were now able to ask for clarification during classes, which played a critical role in their academic performance.

As for me, when it comes to participating, I feel shy most of the time, even in class when the teacher asks a question I used to fail to answer. So now, since I started participating in Ziyembekezo Za Umoyo, I stopped feeling shy. (Lusaka, school participant, female, R2)

One student noted that an important achievement for him was setting a boundary around alcohol.

So, the program has really helped me because initially I used to drink beer while in school, although no one knew about it, but after going through the lessons, I stopped (Sinda, school participant, female, R7)

Parents of participants also observed that the program gave their children direction and enabled them to develop their goals. This new skill of goal setting resulted in noticeable improvements in academic accomplishments and the development of purpose.

His performance at school has improved because previously he used to be very playful, he was not determined and lacked direction, he was all over, we could not even predict what he wanted for his life, whether to be in school or not, but this time around, he has a goal on what he wants to do. (Sinda, parents of school pupils, male, R1)

For the community participants, accomplishment was attained by decreasing negative behaviors like alcohol and drug use and attaining new positive behaviors like self-care and building positive relationships. Some participants reported moving away from negative behaviors and embracing positive ones.

I would come back in the night drunk, drinking alcohol and sniffing tobacco and other drugs like that, but when the program for Ziyembekezo came, I felt very good, I even changed, even alcohol, now I don't drink at all. (Sinda, Community participant, female, R8)

One participant who went back to school was able to write his secondary school final exams and passed.

When the Ziyembekezo program was introduced here, I was already abusing alcohol and smoking and had even stopped going to school, so when the program was introduced here, I started taking part and learnt some lessons, and afterwards I decided to go back to school and even sat for my General Certificate of Education (GCE) exams and passed. (Community Participant, Sinda, male, R9)

These findings illustrate that the GROW program cultivated a sense of accomplishment among participants through focus on character strengths, goal setting, and behavioral change. Engaging in small weekly goal-setting related to character strengths and reducing alcohol use appears to have had a spreading effect, leading to setting larger goals for their everyday lives. In addition to reduced alcohol use, there was improvement in academic performance. Some individuals who had left school decided to return. Others who were unemployed found jobs and went back to work. Some even started their own small businesses.

Earlier studies have demonstrated multiple benefits associated with accomplishments (Kronsbein et al., 2023). They foster a sense of self-efficacy and ameliorate depressive symptoms (Gander et al., 2016). They also build self-confidence, motivation, and resilience (Khorfan et al., 2021). Accomplishment also contributes to overall wellbeing by providing a sense of purpose and meaning (Hojat et al., 2010). Rai and Vandana (2022) found that life skills and attitudes toward alcohol use can influence students' academic achievement. Our study confirmed these findings.

Conclusion

This study makes a valuable contribution by illustrating the mechanisms of change fostered through a spiritually integrated, character-building program rooted in positive psychology. Our analyses affirmed that the five PERMA domains of well-being served as pathways through which participants developed resilience, thereby reducing their susceptibility to substance use. There were no additional emergent inductive themes that fell outside the PERMA model. Results indicate that positive change occurred and that specific PERMA domains interacted to facilitate growth. In addition, two additional character strengths beyond the 24 VIA character strengths, joy and respect, emerged as important factors in participants' well-being and behavior change. Moreover, our findings highlight the synergistic impact of multiple positive interventions on well-being, rather than any single program component, and demonstrate how human flourishing can promote sustainable behavior change within an effective model for substance use prevention and recovery.

The PERMA domains interacted dynamically, creating a holistic transformation among participants. Positive emotions such as joy and hope promoted engagement in

activities like singing, dancing, and meditation, deepening social connections. These relationships, in turn, provided encouragement and accountability that helped participants pursue new goals and sustain accomplishments in education and reduce substance use. Spiritual meaning served as a core mechanism through which participants experienced emotional healing, growth, and personal achievement. In this way, the program fostered a reinforcing process in which progress in one domain amplified flourishing in others. Together, these interactions illustrate an overarching narrative of change, in which integrating spiritual meaning and positive psychology cultivates resilience and serves as a protective mechanism against substance use.

Limitations

This study has several limitations. First, the findings are based on qualitative, self-reported data, which may reflect participants' desire to present themselves or the program in a positive light. Secondly, the intervention was implemented within a Christian framework in a predominantly Christian Zambian context. While this alignment likely enhanced participant connection and engagement, it also limits the generalizability of the findings to populations with different faith traditions or secular contexts. Thirdly, the sample size was relatively small and may not reflect the diversity of youth and community members across Zambia. Finally, some of the interviewers were Christians, which may have introduced potential bias despite efforts to maintain reflexivity, transparency, and analytic rigor. Future studies should address these limitations by testing similar spiritually integrated, character-based interventions across diverse cultural and faith settings, incorporating quantitative measures of well-being and substance use outcomes, and using longitudinal or mixed-method designs to assess the sustainability of change over time.

Implications for Research and Practice

Future research should further explore the interaction between spirituality and the PERMA framework as mediating pathways of change, examining how growth in one domain fosters development in others. Comparative studies could assess spiritually grounded, character-based interventions alongside secular positive psychology programs to evaluate their relative effectiveness in reducing substance use and promoting well-being.

These findings also carry important implications for policymakers seeking cost-effective and sustainable approaches to substance use prevention and recovery. Partnerships with faith-based organizations could support the development of character-based, positive psychology after-school programs that train youth in well-being, resilience, prevention, and recovery skills.

The current program was implemented through trained volunteers rather than professional clinicians, making it both scalable and self-sustaining. Given that this study was conducted among Christians in a predominantly Christian African context, churches offer an existing infrastructure for dissemination. Future studies should examine the adaptation and implementation of this program among communities and individuals from other spiritual or cultural backgrounds to explore its broader applicability.

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