"In this place we have found sisterhood": perceptions of how participating in a peer-group club intervention benefited South African adolescent girls and young women

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ABSTRACT
A combination sexual and reproductive health (SRH) intervention for adolescent girls and young women (AGYW), implemented in South Africa 2016–2019, included facilitated peer-group clubs designed to build AGYW self-esteem, foster supportive peer networks, and provide SRH education. We conducted qualitative in-depth interviews and focus group discussions with AGYW who had participated in peer-group clubs, club facilitators, teachers and intervention implementers. Perceived benefits of participation in peer-group clubs included increased peer support, self-esteem, and gender empowerment, access to safe spaces, improved ability to access emotional support, and positive role modelling, which in turn contributed to improved well-being and mental health. Findings show that peer-group club interventions can be successful in promoting self-esteem, well-being and perceived social support amongst AGYW in South Africa. Given the protective role that social support and mental health have on positive SRH outcomes for AGYW, it is critical that combination interventions incorporate relevant and effective components.

Introduction
In the context of South Africa’s HIV epidemic, the largest in the world, adolescent girls and young women (AGYW) have been highlighted as a priority population for the national response to HIV (SANAC, 2017; Simbayi et al., 2019). Estimates suggest that a quarter of all new HIV infections occurring in South Africa are amongst AGYW aged 15–24, three times higher than amongst males of the same age (SANAC, 2017; Simbayi et al., 2019). Recognizing that HIV prevention interventions for AGYW need to include behavioural, biomedical and structural components, one of the stated strategic objectives of the South African National Strategic Plan on HIV, STIs and TB (2012–2016) was to develop interventions to focus on wellness, inclusive of both physical and mental health (South African National AIDS Council, 2011).

The peer-group club model
‘Peers’ are defined as members of similar age or status groups, who share specific characteristics, circumstances, and experiences (Simoni et al., 2011; Sun et al., 2018). Peer to peer interactions have
been framed as a mechanism for enhancing social learning and providing psychosocial support, through the fostering of a supportive and empathetic socioemotional environment (Swartz et al., 2012).

Peer-led approaches, particularly for adolescents and young people, have been popular and widely endorsed strategies for sexual health education, health promotion and HIV prevention for the past two decades, although there has been limited empirical evidence of their efficacy in changing behaviour (Simoni et al., 2011; Sun et al., 2018; Tolli, 2012). However, there is evidence to suggest that small peer-group interventions can have a positive impact on promoting self-esteem and social support, equipping adolescents with positive life and communication skills, improving knowledge, and increasing self-efficacy, all necessary precursors to positive behaviour change (Sun et al., 2018; Thurman et al., 2016; Tolli, 2012). Peer approaches have been based on concepts relating to social influence on behaviour, including ideas that behavioural norms are developed through interactions, that social support plays a protective role in health, and that peers can be useful sources of information, and social support (Campbell & MacPhail, 2002). The majority of empirical evidence on the protective effects of social support has been based on naturally occurring social relationships, such as family and friends; there have been many attempts to replicate these positive effects through interventions, with varying success (Casale et al., 2019).

Some of the key psychosocial processes and behavioural theories that have been used to explain the success of peer-led approaches and positive peer role modelling are (1) shared ‘experiential knowledge’, when another individual who has experienced similar circumstances has successfully resolved their problems, it serves to increase self-confidence and empowerment to overcome challenges; (2) social learning theory suggesting that peers are more credible role models for positive behaviour change; interacting with successful peers can enhance self-efficacy, positive coping mechanisms and hope for achieving future aspirations; and (3) social comparison theory which posits that through interaction with others who have experienced and overcome similar challenges, individuals are given a sense of optimism and hope, and incentive to strive for their aspirations (Solomon, 2004).

**The intervention**

In line with the South African government’s target of reducing HIV incidence among AGYW aged 10 to 24 years by 50% over a 2 year period, The Global Fund invested in a combination SRH prevention intervention for AGYW comprising a comprehensive package of health, education and support services for AGYW, in and out of school, aged 10–24. The intervention was implemented from 2016 to 2019, in ten districts in South Africa characterized as being high priority for HIV, with the aim of reducing new HIV infections amongst AGYW, and reducing rates of teen pregnancy (The Global Fund, 2018a). The South African intervention formed part of The Global Fund’s 2017–2022 strategy, which in recognition of the role of gender inequalities in AGYW HIV risk, focused on gender-sensitive programming and interventions with the aim of transforming gender relations, empowering AGYW and addressing factors that contribute to gender inequities which impede AGYW access to health services (The Global Fund, 2018b). Following the trend of increased recognition of the importance of including mental health and psychosocial support components in combination interventions for AGYW sexual and reproductive health (Docrat et al., 2019; Duby et al., 2020), the Global Fund identified psychological support, peer to peer counselling and integrated social support for inclusion in their combination intervention approach (The Global Fund, 2018b).

Informed by positive results from previous interventions showing peer-support structures have a positive impact on AGYW (Salam et al., 2014), the peer-group youth club model was identified as a mechanism through which to implement life skills, behaviour change and empowerment for AGYW, in and out of school, and was prioritized for inclusion into the programmatic design of the South African comprehensive combination HIV prevention intervention for AGYW (The Global Fund, 2018a). Peer-group clubs were also identified as a means through which to address unequal gender power relations; responding to the feminization of the HIV epidemic in South Africa, and the local level gender-specific risks faced by AGYW, the peer group clubs also included gender empowerment activities, designed to boost AGYW feelings of self-worth and promote gender equity.
The peer-group club components of the South African combination intervention were offered to AGYW aged 15–24 in and out of school, and comprised (1) The Keeping Girls in Schools programme, designed by the South African National Department of Basic Education in 2014, providing, amongst other things, life skills and peer support to AGYW; and (2) Rise Young Women’s Clubs, offered to AGYW aged 15–18 years in secondary school, and those aged 19–24 years who were out of school or in post-secondary education, with an emphasis on fostering peer-to-peer support. The peer-group clubs included specific aspects designed to build self-esteem and self-confidence amongst AGYW, in addition to providing supportive peer networks. Topics such as sexual and reproductive health rights and gender equality were included in the peer-group clubs discussion curricula and magazine that participants received.

For the purposes of this paper, we explored the perceived benefits of participation in peer-group clubs to better understand how combination interventions can incorporate social support and mental health components in a manner that ensures that their relevance and effectiveness are optimized. There is a need for a better understanding of how combination interventions for AGYW can best incorporate social support and mental health components in the South African context (Das et al., 2016). Interventions have to be responsive to different sociocultural contexts, and need to consider the differing dynamics of gender, age, socioeconomic status, and culture (Das et al., 2016). Evidence is needed to inform the design and focus of future combination interventions, and ensure that their relevance and effectiveness are optimized (Das et al., 2016).

Methods

Study sample

This research was part of a larger evaluation of the South African combination HIV prevention intervention for AGYW. Further information about the intervention and the overall evaluation can be found at https://www.samrc.ac.za/intramural-research-units/HealthSystems-HERStory. Data collection for this study took place between August 2018 and March 2019 in five districts: City of Cape Town, Western Cape; King Cetshwayo, KwaZulu-Natal; Gert Sibande, Mpumalanga; Bojanala, North West; and Nelson Mandela Bay, Eastern Cape. Included in the analysis for this paper are qualitative data from 57 in-depth interviews (IDIs) and 19 focus group discussions (FGDs) with 185 AGYW who participated in the intervention (147 aged between 15 and 18 years, and 38 AGYW aged between 19 and 24 years). In addition, IDIs were conducted with 10 teachers; 11 IDIs, and 2 FGDs conducted with 14 club facilitators; and IDIs with 13 intervention implementers.

Within each district, intervention implementers assisted with providing the contact details and linking the research team to potential participants. Schools in which the intervention clubs had been implemented were purposively selected. Out-of-school intervention clubs were also selected from lists provided by the implementers in each district. The research team identified eligible AGYW participants, club facilitators, teachers, intervention implementers, and community leaders, from the sampled schools, clubs, and communities, and invited them to participate.

Study procedures

Individual in-depth interviews lasting between 20 and 40 minutes, and FGDs lasting 40–90 minutes, were conducted in participants’ language of choice (selecting from English, isiZulu, isiXhosa, seTswana, or siSwati). Data collection was conducted by a team of experienced female qualitative interviewers, accompanied by female research assistants, all of whom had received training on the study protocol, design and research tools. Interviews and FGDs were semi-structured, following topic guides with open-ended questions and probes for potential additional issues, allowing for iteration, probing and digression on relevant themes. Sections of the topic guide relevant to this analysis included the following: ‘We are interested in hearing your stories and thoughts about how the programmes have affected your life. How much and in what ways has the programme, or things you learned in the programme changed your daily life, how you feel about yourself, and how you plan for the future?’ (for AGYW). ‘How would you describe your experience of participating as
a facilitator in these clubs?’ (for intervention facilitators and teachers); ‘To what extent do you think that the intervention peer-group clubs make a difference in the lives of AGYW?’ (for intervention facilitators, implementers, and teachers).

**Ethical considerations**

Informed consent was obtained from all participants 18 years and older. Written assent with written guardian consent was obtained for those younger than 18 years. AGYW participants were provided with a ZAR50.00 (approximately US$ 3.00) supermarket voucher, transport reimbursement, and refreshments. The study protocol and research tools were approved by the South African Medical Research Council’s Human Research Ethics Committee (HREC), and by the Associate Director for Science in the Center for Global Health in the Centers for Disease Control and Prevention. The research team received training on the study protocol and procedures for reporting and managing social harms and adverse events, as outlined in human subject research ethical guidelines. During data collection, private-sector social workers were procured to assist with ensuring access to social support services for participants who needed psychosocial support.

**Data preparation and analysis**

We used a four-step translation process (Guest et al., 2013): (1) audio recordings of IDIs and FGDs were transcribed verbatim into their original language; (2) original language transcripts were then reviewed by the original interviewer for accuracy; (3) approved original language transcripts were translated into English; (4) English transcripts were reviewed by the interviewer to ensure correct interpretation and accuracy.

Data analysis followed a thematic approach, in which a pre-determined deductive codebook reflecting the overall study aims and research questions, underwent cyclical review, adaptation and refinement (Bradley et al., 2007; Nowell et al., 2017; Vaismoradi et al., 2016). Collaborative interpretation by the research team, comprising the two interviewers who were also co-investigators, along with four other co-investigators, included individual data immersion and familiarization, repeated deep readings of transcripts, documentation of reflective thoughts, and sharing growing insights about the research topic during regular team discussions. The codebook was entered into NVivo 12 software, which was used to organize and label relevant text from the transcripts. As concepts and themes emerged, the team collaboratively reviewed them, returning to the data, and refining themes. Weekly research meetings were held throughout the data collection and analysis phases allowing for team debriefing and examination of how thoughts and ideas were evolving as they engaged with the data. In order to ensure reliability and validity of the analysis, three member-checking feedback workshops were held with 32 AGYW intervention recipients aged 15–24 at three of the study sites, some of whom had previously participated in IDIs and FGDs, and some who had not. The objective of these workshops was to review and discuss the preliminary analysis and interpretations, ensure accurate and appropriate interpretation of the data, clarify misunderstandings, and confirm findings and interpretations. During the workshops, the research team summarized and presented key themes and findings to the participants, who were then invited to give feedback, discuss their interpretation of the findings, and expand or elaborate on themes. Facilitated discussions on each theme were captured through notes and audio recordings, transcribed and reviewed, and included in the overall analysis.

The research team engaged in an on-going reflective process of note-taking and debriefing discussions, which formed part of the collaborative interpretation discussions and analysis process.

**Findings**

**Participant demographic characteristics**

Of the 185 AGYW study participants aged 15–24, the majority (39%, N = 92) listed isiXhosa as the predominant language spoken at home, with isiZulu (25%, N = 59), and siSwati (15%, N = 35) being the next most common. The majority of AGYW (74%, N = 165) reported that they currently live with
a parent, with a grandparent (19%, N = 41), or another family member (24%, N = 54). The majority of AGYW participants had achieved some secondary school education (94%, N = 222).

The findings presented below are arranged into key thematic areas that emerged during analysis: self-esteem; empowerment, self-worth and self-respect; improved well-being and coping through communicating emotions; peer support; emotional support and guidance; and peer facilitation. Illustrative quotations are excerpts from English transcripts; in brackets are details of the participants’ site and sample group.

**Self-esteem**

Participants of the peer-group clubs felt that their participation had positively affected their well-being through building self-esteem:

> The clubs helped my self-esteem … when people call you ugly names, and don’t show respect, don’t treat you as a human being, that brings your self-esteem down. As people, we like to be respected … (participating in the clubs) really helped, a lot … for me to feel that my self-esteem is better. *(AGYW 15–18 years)*

A newfound social confidence, inclusive of the ability to talk, share and laugh with peers was described by participants:

> The club helped me gain confidence. Before, I was very shy … I didn’t talk to many people, but now since I joined … I like to talk, I like to speak, and I like to laugh … I like to laugh a lot! *(AGYW 15–18 years)*

Improvements in self-esteem and self-confidence in AGYW intervention recipients as a result of participating in the clubs and accessing emotional support, were also observed by school teachers:

> Those girls who have participated in this programme have self-esteem, and better self-confidence. Because now she has support, there is a place where she can go to and talk about her problems. *(Teacher)*

**Empowerment, self-worth and self-respect**

Through participating in the intervention, AGYW felt empowered, articulating improved feelings of self-worth and emotional strength.

> I don’t entertain anyone who calls me names … because when you entertain that person, you are giving them more power. *(AGYW 15–18 years)*

Participation in the intervention components that has specifically been designed to challenge gendered power inequities and social norms that disempower women, AGYW felt empowered as women.

> The Rise Club awareness has taught us to respect ourselves as women, because when you don’t respect yourself other people won’t respect you. You must respect your own body to show others that they must respect you as a woman. *(AGYW 15–18 years)*

Learning the importance of self-respect and gender equality was regarded as a positive effect of participating in the clubs.

> To be honest … before I entered the Rise Club … I used to think that I’m a girl so most guys won’t respect me, because … they look down on women … until there was a Rise Club, where we learnt about respecting yourself as a woman. *(AGYW 15–18 years)*

Feeling empowered also came from positive role modelling from other peer-group club members and the club facilitators, fostering hope and improved future aspirations:

> It shows you that there are woman who are like you … they were also like you but … then they have tried to pick themselves up because of Rise … it empowered them … you see others are still in school, others are working then you ask them how they did it … you realise that you are still in the darkness, and should be in the light with them … they were in the same situation as mine … but they found a way out. *(AGYW 19–24 years)*

The excerpt below from an FGD illustrates AGYW perceptions of the empowerment gained through intervention club participation:
Respondent 1 Rise empowers us young women ... it uplifts us, it helps us so that we can be able to help each other ... amongst ourselves, on our own ...

Respondent 3 Rise helps us to be independent ... Most young woman are vulnerable ... we cannot stand on our own. Rise helps us to stand on our own.

Respondent 4 It can set you free ... you can talk ... be comfortable without fear of anything (AGYW FGD, 19–24 years)

**Peer support**

Peer-to-peer support was a central aspect of the intervention clubs; as well as receiving support from others, AGYW commented on how they had learnt sharing and listening skills:

I am now able to share my problems with other people ... (before) I was unable to live in harmony with people ... At (the intervention club) ... they teach us the skill of sitting down with people and talking, when we need to talk ... I am able to do it now. (AGYW 15–18 years)

The building of peer relationships and a peer support network from the intervention clubs was described as a ‘sisterhood’ of peers with which AGYW could share their worries and receive emotional support:

We as girls deal with a lot of emotions ... we can be afraid to talk to people ... we need people that we can talk to and can trust. (AGYW 15–18 years)

It has helped me ... you open up and then there is an empowerment, being with different girls who are the same age as you. (AGYW 19–24 years)

The sense of a ‘sisterhood’ of peers emerging through fostering of peer relationships and peer support networks in the intervention clubs was also described by club facilitators:

They (AGYW club members) were telling me ... in this place we have found sisterhood. (Club facilitator)

The peer-group clubs provided participants, particularly those AGYW aged 19–24 in the out-of-school clubs, with a safe space in which to discuss concerns related to issues such as sexual and reproductive health and relationships:

We are all peers ... even when one of us is pregnant they can say anything they want ... we explain to her (about) going to prevent (use contraceptives) ... (We create that safe space) with each other who are close (in age). (AGYW 19–24 years)

Issues related to gendered power dynamics, sexual rights, empowerment to refuse sex, or negotiate condom use were also discussed in the group setting:

We sit down and discuss ... how girls should talk to boyfriends, we have our own rights to refuse if you feel uncomfortable at that moment ... having sex with your partner ... these are the things that we speak about ... we explain everything. (AGYW 19–24 years)

If bae (boyfriend) does not want to use a condom ... or he tells me that I can’t go somewhere, I talk to Rise members about those kinds of things, wondering do their baes do the same thing ... Those are the people I talk to about such things. (AGYW 19–24 years)

Discussing relationship issues, and sexual and reproductive health concerns was described to be easier with peers of the same age than with an older person:

There are challenges that I feel I should rather share them with my peers ... To see what they would say and what advice they’ll give me ... members from Rise ... that’s who I talk to ... things such as challenges I face in my relationship. (AGYW 19–24 years)
Girls are shy to ask about issues of sex with an older person . . . when one is older than you are, you obviously regard them as your mother then some girls think that to be discussing about sex with someone who is elderly you understand it’s not something they are comfortable with. (AGYW 19–24 years)

Relating to the idea of ‘safe spaces’, most club members felt that confidentiality was respected by other members:

It was very comfortable because I know that what we talk about here is confidential, and that made me free to talk about anything like sex and other stuff because I know that it will stay here. (AGYW 15–18 years)

A minority of AGYW shared their concerns about breaches in confidentiality relating to personal information or experiences shared in the club context.

**Improved well-being and coping through communicating emotions**

According to respondents, participation in the clubs resulted in improved mental health and wellness, through participants learning how to communicate feelings and emotions:

I learned to communicate, and I learned that it is not healthy to keep secrets in you that might damage you. (AGYW 15–18 years)

I never used to be able to talk about how I feel, even when hurt I couldn’t open up because I felt ignored, but when I joined (the club) I was taught to open up, and now I can speak up for myself and I stop keeping quiet. (AGYW 15–18 years).

Those AGYW who previously would try to cope with feelings of stress on their own, found relief in sharing:

I used to say I prefer to stay alone with my problem, and it stresses me . . . but in these programmes, sharing, talking . . . it helped me . . . to share my story. (AGYW 19–24 years).

For those AGYW who felt they were unable to access emotional support at home, the clubs provided a valuable resource:

I have changed a lot because I am able to talk to people now, I am no longer scared because there are people who have shown me that I can share my problems with them. (AGYW 15–18 years)

Having participated in the intervention, AGYW perceived themselves to be better equipped to take control of their own lives and find ways to cope with difficult situations. Several intervention recipients reported that through the sessions, they learnt strategies for coping with emotional challenges:

They taught us that if you feel sad . . . there are so many things you can do: you can talk to an adult, to help you, tell them your problem . . . the facilitator . . . for this project (club) . . . she will advise you . . . (also) . . . you take a paper and write down all that was hurtful and burn it . . . and then you forget about it and move on. (AGYW 19–24 years)

This newfound ability to communicate feelings in turn resulted in an improved ability to access emotional support in times of need, which enhanced the ability to cope:

I was unable to express my emotions . . . I was unable to cry or I would keep that pain to myself and it will hurt me for a long time. Here, I was taught that, the right approach is to get someone who you can trust and talk with, or cry if needed, so that you can be have peace. (AGYW 15–18 years)

**Emotional support and guidance**

The sharing of experiences was one way in which the club members bonded and received emotional support:

It was comfortable because we are all in one age group, we all speak about the same things that we know, things that we have experienced and things we have been taught, things we have heard from our friends. (AGYW 15–18 years)

Mutual support was described as a key aspect of the peer-group club experience:
If you have problems, you can talk in the group, then we are able to help. (AGYW 19–24 years)

Reciprocal interactions of talking, sharing, listening and supporting were described as beneficial:

Rise has done only good . . . taught me a lot . . . if you have a problem you must be able to talk and be able to receive help . . . Our Rise group . . . has shown us that when a person has a problem, you must talk, maybe there is something we could help with. (AGYW 19–24 years)

Improved mental health due to peer support and improved communication of emotions was reported to also have a positive impact on education:

Some of us girls become depressed because of certain things like rape by family members, and are unable to talk, but when you share with (fellow club members) the weight on your shoulders will be much lighter, and then you can focus more on school work than on depression and anxiety. (AGYW 15–18 years)

School teachers also recognized the value and positive impact of the intervention in terms of providing much needed emotional support to AGYW, that teachers are often unable to provide:

These programs have value . . . it’s difficult for teachers to speak with them (AGYW) about other issues . . . it’s better when they meet with (the intervention club), they are able to speak . . . (These clubs) are very helpful . . . children that we meet have different problems . . . (in the club) she can talk about her problem and hear others’ problems and how to solve them. (Teacher)

A noticeable change in the willingness and ability of AGYW to seek emotional support from teachers was observed:

It is now simple for them (AGYW) to share their problems with us . . . unlike before (the intervention) where you will find that a person is always lonely . . . you will discover after some time that this person has such and such a problem, but now they are able to talk . . . I see a big difference. (Teacher)

Intervention implementers also witnessed an increased ability in AGYW to seek emotional support:

These learners are now able to open up, especially during the peer sessions . . . once you talk about a situation which is similar to what they have experienced, what they are currently going through . . . Before the child would simply go out or cry somewhere in a corner, or sleep on the table and not talk. Or stand outside and wait for you so that when you move out of the class, then the child calls you, and asks to talk to you in private. (Club Implementer)

**Peer facilitation benefits**

AGYW spoke about the ways in which intervention club facilitators had provided emotional support and counselling:

I was sexually harassed . . . (and) I wanted to commit suicide. Then (the club facilitator) told me . . . things that I am supposed to do instead of wanting to commit suicide . . . what I have learnt . . . is that do not hold on to the past while life is carrying on. (AGYW 15–18 years)

In support of this comment, one of the intervention club facilitators described the emotional support that they had provided intervention participants with, explaining the positive impacts this had:

The other support (we provided) is listening to them when they speak their heart out, and giving them some advice. Some of the girls, they were on the brink of suicide but we managed . . . they must feel that the genuine love flows through from their facilitator . . . you choose to go an extra mile for them. (Club facilitator)

AGYW described the comfort they felt with the club facilitators, being able to relate to them on a peer-to-peer level, as the discussion below from a focus group discussion demonstrates:

Respondent 1 (The club facilitator) was very frank and open with us . . . like speaking to friend. She gives us sound advice . . .

Respondent 2 . . . she was like a friend to us, when we joined Rise club we did not open up completely because we were under the impression that she is an adult and will not understand what we were going through so we limited ourselves. (She) told us to open up because while we were at Rise club
we are all the same and experiencing the same things, including her so we must talk and learn to be confident . . .

Respondent 3 . . . she’s very cool . . . it is weird for me to say the word “penis” but she would say “penis” and ask us to say that, now that makes it easier to interact. She is an open person you can go to her with anything and talk to her and she will advise, I can go to her crying then she will tell me that things will be okay.

Respondent 4 (She) is an open person . . . she talks openly and she tells that it does not help hiding . . . It’s easy talking to her it feels almost as if you are talking to a friend, its comfortable . . . We love her for what she is to us and how she is to us. (AGYW FGD, 15–18 years)

Peer facilitation was also regarded as beneficial by AGYW who articulated their preference for receiving SRH from someone of a similar age to themselves, rather than an older adult:

> When the information comes from your peer, you absorb it and it is not boring. (AGYW 15–18 years)

**Discussion**

Participation in the peer-group club components of the combination intervention was perceived to improve AGYW’s self-esteem, self-worth, and well-being, foster a sense of empowerment, and perceived ability to access emotional support, which in turn contributed to overall improved well-being and mental health. Given the protective role of self-esteem, well-being, and perceived social support for positive SRH outcomes for AGYW (Duby et al., 2020), it is critical that combination interventions incorporate social support and mental health components.

**Peer support**

The sense of a ‘sisterhood’ of peers, with which to share feelings and be part of a reciprocal social support network, was created amongst members of the AGYW peer-group clubs. Social support, a form of social capital individuals can draw upon to help them cope with daily stressors, significantly affects a mental health, and therefore sexual and reproductive health, outcomes during adolescence (Cheng et al., 2014; Colarossi, 2001; Duby et al., 2020). In relation to health, social support includes supportive relationships that provide emotional, informational or instrumental assistance required for someone to remain healthy or adapt to stress (Casale et al., 2019). Adolescent girls and young women have higher rates of self-disclosure to peers about feelings and problems and greater emphasis on mutual support than males of the same age, suggesting AGYW are more oriented towards peers than adults for support (Colarossi, 2001).

AGYW in our study described the bonds they formed with other group members, and with facilitators. ‘Bonding social capital’ refers to networks comprised of peers whose similar status, ‘bonding’ takes the form of in-group trust, loyalty, and social support, which help individuals in the group cope with life (Grønlie & Dageid, 2017). The perception of social support, and the availability of someone trustworthy to confide in, is a crucial element to an individual’s healthy coping ability, particularly during stressful situations, or in high-stress circumstances (Fiorilli et al., 2019; Harrison, Loxton & Somhlaba, 2019). In fact, the perception of the availability and adequacy of support is more important for mental health than actual support received (Casale et al., 2019). Social support, real or perceived, given by social networks, may be an important psychosocial buffer in the face of other risk factors, and serves as a protective mechanism in mitigating psychological distress and ensuring good mental health (Camara et al., 2015; Casale et al., 2019; Cheng et al., 2014; Duby et al., 2020; Fiorilli et al., 2019; Kuringe et al., 2019; Osok et al., 2018).
Emotional support

A key benefit of the peer group clubs described by respondents was the emotional support that club members received from other group members, and club facilitators. Emotional support is the most appreciated kind of support for adolescents, the feeling of being listened to is valued more than receiving actual advice (Camara et al., 2015). The perception of being able to share one’s emotions in the context of a supportive relationship, as felt by the AGYW club members in our study, is a critical component for good mental health (Duby et al., 2020; Meyer & Kruger, 2015). Emotional support encompassing behaviours such as listening, expressing love, and appreciation is the most beneficial type of support for people suffering from depression, helping to alleviate depressive symptoms, and engender a sense of acceptance that reinforces self-esteem (Camara et al., 2015; Meyer & Kruger, 2015).

Reciprocity

One critical aspect of the emotional support that peer group club members experienced, was its reciprocal nature; reciprocal interactions between the group members, in which AGYW both received and gave support and advice to each other, were perceived as a key benefit. Reciprocity and interdependence in peer interactions is important, and supportive relationships are more effective when they are reciprocal, with the giving of support being inseparable to the process of receiving support (Arndt & Naudé, 2017; Camara et al., 2015). One of the key elements of success in peer support environments for mental health and wellbeing is the mutual giving and receiving of support, the sharing of emotions with others who have had similar experiences (Solomon, 2004; Watson et al., 2016).

Self-esteem, self-worth and self-respect

In our findings, AGYW reported that participation in the peer-group clubs was empowering, with positive effects on their self-esteem and self-worth. Through participating in empowerment activities designed to promote understanding of gender equality, AGYW described learning to respect themselves as women, gaining confidence, and building hope and aspirations for the future. A fundamental component of ‘wellness’ or ‘well-being’ is an individual’s subjective experience of themselves, inclusive of their self-belief in their ability to move towards the fulfilment of their goals and ambitions, and attain satisfaction (Gronlie & Dageid, 2017; Manwell et al., 2015; Van Den Berg et al., 2013). Subjective well-being refers to the assessment an individual makes of their own lives, physical bodies, and the circumstances they live in (Gronlie & Dageid, 2017). Subjective well-being is correlated with high self-esteem, and is considered to be a prerequisite for the promotion of good mental health in adults or AGYW (Lampropoulou, 2018; Mann et al., 2004).

Improvements in self-esteem and self-confidence in AGYW intervention recipients were observed by participants themselves, as well as others in their social environments. Self-esteem, or self-evaluation, is an individual’s evaluation of themselves, and includes feelings of self-worth (Wild et al., 2004). Importantly for adolescents, self-esteem is a motivational force that positively influences an individual’s aspirations, personal goals and interaction with others (Mann et al., 2004). Positive self-esteem, in addition to being a key feature of good mental health, is also central in the promotion of self-worth, self-belief in the ability to achieve, be successful, attain satisfaction, and cope with stressors, whereas adolescents with low self-esteem feel incompetent, worthless, and are more likely to engage in risk behaviours, and more likely to experience substance dependency, social problems, and poor mental health (Fiorilli et al., 2019; Kalina et al., 2011; Mann et al., 2004). Importantly, high self-esteem alone is not sufficient to enable an individual to cope with stressors and maintain good mental health, but needs to be bolstered by strong social support and social policies (Mann et al., 2004).

Gender empowerment and equity

As perceptions relating to unequal power between men and women impact negatively on AGYW self-esteem and consequential sexual risk behaviour, it is important that in addition to building self-
esteem and self-worth among AGYW, interventions take a ‘gender transformative’ approach in order to challenge underlying socio-cultural values and gender inequitable norms which inform AGYW self-evaluation and in turn, risk behaviours (Dworkin et al., 2013; A. Harrison et al., 2016). Peer-group clubs interventions can be gender-transformative through providing opportunities for adolescents and young people to develop a critical consciousness of socially constructed gender norms and power dynamics that impact on HIV risk and sexual and reproductive health (Campbell & MacPhail, 2002; Dworkin et al., 2013; Jewkes & Morrell, 2010).

**The ‘group’ based model**

Importantly, group-based interventions for improving AGYW sexual and reproductive health outcomes have been shown to be more effective than one-on-one delivery, for improving self-esteem and social networks (Plourde et al., 2017). Critical for the development of well-being and positive self-esteem during adolescence, are perceived positive social relationships and emotional support, or ‘social capital’, specifically approval and support from family and peers (Grønlie & Dageid, 2017; Manwell et al., 2015; Van Den Berg et al., 2013). Notably, during the period of adolescence, interpersonal relationships with peers take on increasing significance, sometimes surpassing the importance placed upon relationships with family, and become increasingly significant in determining emotional well-being and self-esteem (Fiorilli et al., 2019; Wild et al., 2004). Peer groups become important systems through which adolescents’ views of self and self-worth are negotiated; positive peer group interactions are associated with higher self-esteem and well-being (Arndt & Naudé, 2017). An adolescent’s perception of having support enhances self-esteem and a positive self-perception and ability to cope with stressors. The extent to which an adolescent feels connected to and supported by their peers is a critical component of well-being and assessment of self-worth (Van Den Berg et al., 2013). Particularly for out-of-school AGYW, or those without access to formal educational settings, peer group clubs are a feasible way of providing social support, as well as improving health literacy (Naserirad et al., 2019).

**Safe spaces**

In addition to the stated preference for receiving SRH advice through peer-led sessions, AGYW in our study, particularly out-of-school AGYW aged 19–24 years, described the way in which they were able to open up and discuss their feelings and concerns in the context of the peer-group clubs, knowing that they would not be judged, and that other club members may have had similar experiences. Our findings corroborate evidence showing it is possible to create ‘safe spaces’ for AGYW to access emotional support and SRH advice using peer-group clubs (Plourde et al., 2017). Close peer connections such as those created in the peer group clubs, enable adolescents, particularly female adolescents, to disclose, and thus seek support, as peers become the preferred support-givers by late adolescence (Camara et al., 2015; Colarossi, 2001). Adolescents and young people are more likely to have candid discussions about their sexual behaviours with their peers than with adults (Visser, 2007). Peer-group spaces can engender a feeling of safety amongst members, in which individuals feel free to share concerns and discuss issues such as sexual and reproductive health without fear of judgement (Swartz et al., 2012).

**Peer facilitation**

With regards to the role of the peer-group club facilitators, AGYW respondents in our study felt that the facilitators had provided emotional support and counselling, in addition to SRH advice and information. The observed preference participants indicated for receiving SRH education through the medium of peer-led sessions as compared with adult-led sessions may be due to the way in which adolescents can relate to someone of a similar age, believe them to be credible sources of information, and receive information in a language that is understandable and accessible to them (Harden et al., 2001; Visser, 2007).
**Positive role modelling**

Additionally, peer-group club facilitators and other club members were regarded by AGYW intervention recipients in our study as role models for maintaining hope and future aspirations. In addition to offering critical psychosocial support, peer interactions can provide positive role-modelling for adolescents (Swartz et al., 2012). In the peer-group club environment, adolescents and young people can provide each other with positive role modelling, trust, comfort, and familiarity (Sun et al., 2018). Peer group discussion and debate over sexual, relationship and gender norms, are useful mechanisms for positive behaviour change, role patterning healthy social norms, and challenging peer norms that promote high-risk behaviours (Campbell & MacPhail, 2002; Naserirad et al., 2019; Visser, 2007).

**Limitations**

One limitation that should be noted, which was also highlighted in an earlier process evaluation of one of the intervention components, was that implementation of the peer-group model was inconsistent across sites and implementing partners, and in some cases club facilitators, who were initially supposed to be trained ‘peer-educators’, were not of a similar age to the AGYW, and sessions were more didactic and adult-delivered than the intervention designers intended (Clacherty et al., 2019). In the intervention design, clubs were initially intended to be facilitated by ‘learner peer educators’, who were to receive training to run the sessions, with facilitation assistance from a school teacher/educator. However, in reality, implementation of the intervention components varied among implementing partners, due to various structural and contextual challenges such as attrition and lack of capacity (Clacherty et al., 2019). In some cases the staff who were intended to provide training to the peer educators delivered the sessions themselves, instead of a learner peer educator (Clacherty et al., 2019). As such, the peer-group clubs were, on the whole, organized by the AGYW themselves, with assistance and support from a facilitator.

Other study limitations include the possibility of social desirability influencing reporting of positive perceptions of the intervention. Efforts were made to emphasize that the research team were external to the intervention implementation; however, it is possible participants viewed them as somehow connected to the implementers, and felt it would be beneficial to report positively on the intervention. While it is valuable to note AGYW who participated in the intervention expressed their feelings that it had a positive effect on their mental health, it is also important to acknowledge that improving mental health was not a primary objective of the intervention. In addition, it was not always possible to delineate findings according to the different intervention components, namely the Rise clubs, or Keeping Girls in School. For the purposes of this paper, we refer to ‘the intervention’, which includes both of these components. Also, of note is the degree of variability in intervention implementation, with the structure, facilitation, and conduct of peer-group clubs differing between implementers and contexts, varying degrees to which implementers may have integrated specific aspects related to self-esteem, well-being, and mental health into the intervention activities. Lastly, another limitation that should be noted is that our sample of AGYW comprised a far greater number in the 15–18 years age group, than in the 19–24 age group, which may have affected the findings.

**Conclusions and recommendations**

Combination interventions are likely to be more effective in preventing negative sexual health outcomes such as HIV infection and early pregnancy if they incorporate psychosocial and mental health components which help to build self-esteem, well-being and emotional support among AGYW (Duby et al., 2020; Hill et al., 2017; Thurman et al., 2016). Support from peer relationships can serve as protective factors for physical and mental health and should be considered for inclusion into combination interventions for AGYW (Colarossi, 2001). Structured interventions and group programmes designed to foster social and emotional bonds between peers, and provide nurturing environments, have the potential to significantly improve subjective well-being
AGYW benefit from facilitated social support networks and safe spaces in which they can share their feelings, discuss with peers, and seek advice from trained facilitators. Interventions for AGYW that consist of group-based interventions for improving AGYW SRH and reducing HIV risk by providing access to safe social spaces where participants are able to develop and strengthen their peer networks, receive curriculum-based education on SRH and gender can improve self-esteem and social networks, as well as improve SRH knowledge and promote safer sexual decision-making (Plourde et al., 2017). Peer-group models can be challenging to implement but, when applied successfully, the supportive peer networks provided in small facilitated peer-groups can help to protect AGYW from the negative effects of stressors and promote more positive mental health outcomes, and in turn lead to a reduction in sexual risk taking and early pregnancies (Cheng et al., 2014; Clacherty et al., 2019). Importantly, strategies for ensuring that confidentiality is maintained in the peer-group club context need to be included.

Our findings suggest that AGYW can benefit from facilitated peer support networks and safe spaces in which they can share and discuss their feelings, discuss with peers, and seek advice from trained facilitators. Through participation in the peer-group clubs, AGYW experienced improved self-esteem, emotional well-being and increased perceived social support. Peer-group clubs became safe spaces where AGYW felt comfortable to talk openly about their feelings, share their problems, and access support, thus providing AGYW with a social support network to both receive, and provide support to others. The improved ability to communicate feelings formed part of broader improvements in AGYW’s ability to cope with problems and stressors. Our findings suggest that small peer-group club interventions can be successful in promoting self-esteem, well-being and perceived social support amongst AGYW in South Africa. Participants across sample groups described positive effects the intervention had on AGYW self-esteem and feelings of self-worth, improved ability to communicate feelings and access emotional support, increased perceived peer support, all of which contribute to overall improved well-being and mental health among AGYW, and in turn can enable healthy sexual and reproductive health decisions and behaviour.

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Data availability

The data that support the findings of this study are available on request from the corresponding author, ZD. The data are not publicly available due to participant confidentiality protection.

Disclaimer

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the funding agencies.

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References

Arndt, N., & Naudé, L. (2017). Responsibility in the face of adversity: Adolescents’ sense of self in reciprocal relationships. *Youth & Society, 52*(2), 288–307. https://doi.org/10.1177/0044118X17743992

Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: Developing taxonomy, themes, and theory. *Health Services Research, 42*(4), 1758–1772. https://doi.org/10.1111/j.1475-6773.2006.00684.x

Camara, M., Bacigalupe, G., & Padilla, P. (2015). The role of social support in adolescents: Are you helping me or stressing me out? *International Journal of Adolescence and Youth, 22*(2), 123–136. https://doi.org/10.1080/02673843.2013.875480

Campbell, C., & MacPhail, C. (2002). Peer education, gender and the development of critical consciousness: Participatory HIV prevention by South African youth. *Social Science & Medicine, 55*(2), 331–345. https://doi.org/10.1016/S0277-9536(01)00289-1

Casale, M., Boyes, M., Pantelic, M., Toska, E., & Cluver, L. (2019). Suicidal thoughts and behaviour among South African adolescents living with HIV: Can social support buffer the impact of stigma?. *Journal of affective disorders, 245*, 82–90. https://doi.org/10.1016/j.jad.2018.10.102

Cheng, Y., Li, X., Lou, C., Sonenstein, F. L., Kalamar, A., Jejeebhoy, S., Delany-Morettwe, S., Brahmabhott, H., Olumide, A. O., & Ojengbede, O. (2014). The association between social support and mental health among vulnerable adolescents in five cities: Findings from the study of the well-being of adolescents in vulnerable environments. *Journal of Adolescent Health, 55*(5), S31–S38. https://doi.org/10.1016/j.jadohealth.2014.08.020

Clacherty, G., Sonko, R., Nyasulu, P., Ondongo, I., Otwormbe, K., Mataboge, R., & Makiwa, R. (2019). *Keeping girls in schools (KGS): Process evaluation*. Strategic Analytics & Management and Clacherty & Associates.

Colarossi, L. G. (2001). Adolescent gender differences in social support: Structure, function, and provider type. *Social Work Research, 25*(4), 233–241. https://doi.org/10.1093/swr/25.4.233

Das, J. K., Salam, R. A., Lassi, Z. S., Khan, M. N., Mahmood, W., Patel, V., & Bhutta, Z. A. (2016). Interventions for adolescent mental health: An overview of systematic reviews. *Journal of Adolescent Health, 59*(Supplement), S49–S60. https://doi.org/10.1016/j.jadohealth.2016.06.020

Docrat, S., Besada, D., Cleary, S., Daviaud, E., & Lund, C. (2019). Mental health system costs, resources and constraints in South Africa: A national survey. *Health Policy and Planning, 34*(9), 1–14. https://doi.org/10.1093/heapol/czz085

Duby, Z., McClinton Appolis, T., Jonas, K., Maruping, K., Dietrich, J., LoVette, A., Kuo, C., Vanleeuw, L., & Mathews, C. (2020). “As a young pregnant woman … the challenges you face”: Exploring the intersection between mental health and sexual and reproductive health amongst adolescent girls and young women in South Africa. *AIDS and Behavior, 56*(1), 1–10. https://doi.org/10.1007/s10461-020-02974-3

Dworkin, S. L., Treves-Kagan, S., & Lippman, S. A. (2013). Gender-transformative interventions to reduce HIV risks and violence with heterosexually-active men: A review of the global evidence. *AIDS and Behavior, 17*(9), 2845–2863. https://doi.org/10.1007/s10461-013-0565-2

Fiorilli, C., Capitello, T. G., Bami, D., Buonomo, I., & Gentile, S. (2019). Predicting adolescent depression: The interrelated roles of self-esteem and interpersonal stressors. *Frontiers in Psychology, 10*(Article565), 1–6. https://doi.org/10.3389/fpsyg.2019.00565

Grenlie, A. A., & Dageid, W. (2017). Subjective well-being among HIV-positive South Africans: The influence of resilience and social capital. *Social Indicators Research, 131*(3), 1251–1268. https://doi.org/10.1007/s11205-016-1280-y

Guest, G., Namey, E., & Mitchell, M. (2013). *Collecting qualitative data*. SAGE Publications, Ltd. https://doi.org/10.4135/9781506374680

Harden, A., Oakley, A., & Oliver, S. (2001). *Peer-delivered health promotion for young people: A systematic review of different study designs*. *Health Education Journal, 60*(4), 339–353. https://doi.org/10.1177/001789690106000406

Harrison, A., Hoffman, S., Mantell, J. E., Smit, J. A., Leu, C.-S., Exner, T. M., & Stein, Z. A. (2016). Gender-focused HIV and pregnancy prevention for school-going adolescents: The Mpondombili pilot intervention in KwaZulu-Natal, South Africa. *Journal of HIV/AIDS & Social Services, 15*(1), 29–47. https://doi.org/10.1080/15381501.2014.999183

Harrison, C., Loxton, H., & Somhlaba, N. Z. (2019). Stress and coping: Considering the influence of psychological strengths on the mental health of at-risk South African adolescents. *Child Care in Practice, 27*(1), 72–87. https://doi.org/10.1080/13575279.2019.1604492

Hill, L. M., Maman, S., Kilonzo, M. N., & Kajula, L. J. (2017). Anxiety and depression strongly associated with sexual risk behaviors among networks of young men in Dar es Salaam, Tanzania. *AIDS Care, 29*(2), 252–258. https://doi.org/10.1080/09540121.2016.1210075

Jewkes, R., & Morrell, R. (2010). Gender and sexuality: Emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *Journal of the International AIDS society, 13*(1), 1–11. https://doi.org/10.1186/1758-2652-13-6

Kalina, O., Geckova, A. M., Klein, D., Jarcuska, P., Orosova, O., Van Dijjk, J. P., & Reijneveld, S. A. (2011). Psychosocial factors associated with sexual behaviour in early adolescence. *The European Journal of Contraception and Reproductive Health Care, 16*(4), 298–306. https://doi.org/10.3109/13625187.2011.586076

Kuringe, E., Materu, J., Nyato, D., Majani, E., Ngeni, F., Shao, A., et al. (2019). Prevalence and correlates of depression and anxiety symptoms among out-of-school adolescent girls and young women in Tanzania: A cross-sectional study. *PLoS ONE, 14*(8), e0221053–22.
Lampropoulou, A. (2018). Personality, school, and family: What is their role in adolescents’ subjective well-being. *Journal of Adolescence, 67*, 12–21. https://doi.org/10.1016/j.jadolescence.2018.05.013

Mann, M., Hosman, C. M. H., Schaalma, H. P., & De Vries, N. K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research, 19*(4), 357–372. https://doi.org/10.1093/her/cyg041

Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ Open, 5*(6), 1–11. https://doi.org/10.1136/bmjopen-2014-007079

Meyer, K., & Kruger, L.-M. (2015). “You get angry inside yourself”: Low-income adolescent South African girls’ subjective experience of depression. *Social Work/Maatskaplike Werk, 50*(2), 174–191. https://doi.org/10.15270/51-2-441

Mundell, J. P., Visser, M. J., Makin, J. D., Kershaw, T. S., Forsyth, B. W. C., Jeffery, B., & Sikkema, K. J. (2011). The impact of structured support groups for pregnant South African women recently diagnosed HIV positive. *Women & Health, 51* (6), 546–565. https://doi.org/10.1080/03630242.2011.606356

Naserirad, M., Ayari, F., Hamdini, A., & Hadiji, K. (2019). Effectiveness of a peer-led HIV/AIDS education program on HIV-related health literacy of jailed adolescents in Tunisia. *Journal of Public Health, 27*(4), 425–433. https://doi.org/10.1007/s10389-018-0975-8

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1609406917733844–13. https://doi.org/10.1177/1609406917733847

Osok, L., Lambert, E., Makoae, P., Saha, K., & Visser, L. (2018). Depression and its psychosocial risk factors in pregnant Kenyan adolescents: A cross- sectional study in a community health centre of Nairobi. *BMC Psychiatry, 18*, 18(36), 1–10.

Plourde, K. F., Ippoliti, N. B., Nanda, G., & McCarraher, D. R. (2017). Mentoring Interventions and the impact of protective assets on the reproductive health of adolescent girls and young women. *Journal of Adolescent Health, 61*(2), 131–139. https://doi.org/10.1016/j.jadohealth.2017.03.002

Salam, R. A., Haroon, S., Ahmed, H. H., Das, J. K., & Bhutta, Z. A. (2014). Impact of community-based interventions on HIV knowledge, attitudes, and transmission. *Infectious Diseases of Poverty, 3*(1), 1–11. https://doi.org/10.1186/2049-9957-3-26

SANAC. (2017, May 25). *LET OUR ACTIONS COUNT: South Africa’s National Strategic Plan for HIV, TB and STIs 2017-2022*. South African National AIDS Council.

Simbayi, L. C., Zuma, K., Zungu, N., Moyo, S., Marinda, E., Jooste, S., et al. (2019). *South African national HIV prevalence, incidence, behaviour and communication survey, 2017*. HSRC Press.

Simoni, J. M., Nelson, K. M., Franks, J. C., Yard, S. S., & Lehayot, K. (2011). Are peer interventions for HIV efficacious? A systematic review. *AIDS and Behavior, 15*(8), 1589–1595. https://doi.org/10.1007/s10461-011-9963-5

Solomon, P. (2004). Peer support/peer support provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal, 27*(4), 392–401. https://doi.org/10.2975/27.2004.392.401

South African National AIDS Council. (2011). *National strategic plan on HIV, STIs and TB,2012−2016*. South African National AIDS Council.

Sun, W. H., Miu, H. Y. H., Wong, C. K. H., Tucker, J. D., & Wong, W. C. W. (2018). Assessing participation and effectiveness of the peer-led approach in youth sexual health education: Systematic review and meta-analysis in more developed countries. *Journal of Sex Research, 55*(1), 31–44. https://doi.org/10.1002/jsex.2016.1247779

Swartz, S., Deutsch, C., Makoae, M., Michel, B., Harding, J. H., Garzouzie, G., Rozani, A., Runciman, T., & Van Der Heijden, I. (2012). Measuring change in vulnerable adolescents: Findings from a peer education evaluation in South Africa. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance, 9*(4), 242–254. https://doi.org/10.7290376.2012.745696

The Global Fund. (2018a). Accelerating HIV prevention among adolescent girls and young women (age 15−24 years) in South Africa: Implementation plans for global fund-supported programs.

The Global Fund. (2018b). Position paper – Adolescent girls and young women and HIV march 2018.

Thurman, T. R., Kidman, R., Carton, T. W., & Chiropr, P. (2016). Psychological and behavioral interventions to reduce HIV risk: Evidence from a randomized control trial among orphaned and vulnerable adolescents in South Africa. *AIDS Care, 28*(sup1), 8–15. https://doi.org/10.1080/09540121.2016.1146213

Tolli, M. V. (2012). Effectiveness of peer education interventions for HIV prevention, adolescent pregnancy prevention and sexual health promotion for young people: A systematic review of European studies. *Health Education Research, 27*(5), 904–913. https://doi.org/10.1093/her/cys055

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice, 6*(5), 100–110. https://doi.org/10.5430/jnep.v6n5p100

Van Den Berg, H. S., George, A. A., Plessis, E. D. D., Botha, A., Basson, N., De Villiers, M., & Makola, S. (2013). The pivotal role of social support in the well-being of adolescents. In M. P. Wissing (Ed.), *Well-being research in South Africa* (Vol. 4, pp. 315–339). Springer Netherlands. https://doi.org/10.1007/978-94-007-6368-5_15

Visser, M. (2007). HIV/AIDS prevention through peer education and support in secondary schools in South Africa. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance, 4*(3), 678–694. https://doi.org/10.1080/17290376.2007.9724891

Watson, E., Lambert, M., & Machin, K. (2016). Peer support training: Values, achievements and reflections. *Mental Health Practice, 19*(9), 22–27. https://doi.org/10.7748/mhp.19.9.22.520

Wild, L. G., Flisher, A. J., Bhana, A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology and Psychiatry, 45*(8), 1454–1467. https://doi.org/10.1111/j.1469-7610.2004.00330.x