Describing an Online Co-development Process of VAWG Prevention Intervention Activities with Young High School Learners, in Eastern Cape Province, South Africa.

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Describing an Online Co-development Process of VAWG Prevention Intervention Activities with Young High School Learners, in Eastern Cape Province, South Africa Evidence suggests that co-developed participatory interventions to prevent violence against women and girls (VAWG) may support behaviour change. Yet, adolescents are often excluded from intervention development. Moreover, there remains a gap in understanding if intervention co-development can occur online. Our study explored the feasibility of undertaking an online co-development process for a participatory VAWG prevention intervention. We worked with a small group of high school learners (18-19 years), from the Eastern Cape Province, South Africa. We collected session notes and audio recorded sessions. Adolescents enjoyed the level of autonomy and their depth of involvement in the process. They were eager to be involved, and they appreciated being 'heard'. Adolescents found it easy to build rapport online amongst each other, and with the facilitator. There were also challenges, the main one being young people's, and facilitator's, histories of didactic communication. Understanding the strengths and limitations of online co-development processes is crucial, to strengthen them.

Key words: Co-development; Interventions; VAWG; South Africa; Young people

Introduction

Violence against women and girls (VAWG) is highly prevalent and negatively impacts on women's and girl's health and wellbeing (World Health Organisation, 2014; World Health Organisation & Pan American Health Organisation, 2012). Evidence suggests that globally, of ever partnered women aged 15 years and above, 26% have experienced intimate partner violence (IPV) and 6% have experienced non-partner sexual violence (NPSV) in their lifetime; with 10% of women having experienced IPV at least once in the year preceding the survey (Sardinha et al., 2022; World Health Organisation, 2021). Amongst adolescents, VAWG experience remains high (Stark et al., 2021; Stöckl et al., 2014). Current evidence shows that 24% of women aged 15-19 years have experienced IPV at least once in their lifetime, since they turned 15 (Sardinha et al., 2022).

Studies suggest that IPV is common in sub-Saharan Africa, with studies suggesting a lifetime and past 12 months IPV experience prevalence of 33% and 20% respectively (World Health Organisation, 2021). In South Africa, a recent nationally representative cross-sectional study amongst adolescents aged 15-17 reported a sexual violence experience prevalence of 10.0% and 14.6%, amongst boys and girls, respectively (Ward et al., 2018). Specific to the Eastern Cape Province of South Africa, where this study occurred, a cross-sectional study among women aged 17-24 years at a tertiary institution found sexual violence was common with a lifetime prevalence of 37.9% and past year prevalence of 25.3% (Ajayi & Ezegbe, 2020).

Research has linked experience of VAWG to poorer mental health (Beydoun et al., 2012; Brown et al., 2020; Devries et al., 2013), increased substance misuse (Bacchus et al., 2018; Berg et al., 2017; Devries et al., 2014; Ramsoomar et al., 2021; Ullman & Sigurvinsdottir, 2015), increased mortality (Stöckl et al., 2013) and worse educational outcomes (Burton & Leoschut, 2013).

Increasing efforts are being geared towards developing and evaluating interventions to prevent VAWG targeting adolescents (De Koker et al., 2014; McNaughton Reyes et al., 2021). Focusing on prevention in adolescence is important as many risky health behaviours, including violence perpetration and experience, risky sexual behaviour, emerge during adolescence (Balocchini et al., 2013; Terzian et al., 2011). Studies have found that adolescents are more susceptible to substance misuse, risky sexual behaviour, engaging in violent and other criminal behaviour, and having fatal or serious accidents, than adults (Balocchini et al., 2013). Additionally, adolescence has also been reported to be a critical stage for effecting behavioural change owing to biological (Balocchini, Chiamenti, & Lamborghini, 2013) and psychological (Erikson, 1980) reasons. As such, adolescence provides a particularly important moment to intervene directly to address IPV, as well as on known risk factors, to achieve maximum impact.

One dominant approach to the prevention of VAWG among adolescents are groupbased participatory interventions, and there is emerging evidence that these are generally effective (Jewkes et al., 2020; Kerr-Wilson et al., 2020). The majority of interventions which have been evaluated are focused on transforming gender norms (Kerr-Wilson et al., 2020) and are delivered in schools, mostly in high income countries (HICs) (McNaughton Reyes et al., 2021).

There are a range of challenges with current VAWG prevention interventions delivered through schools, which may limit their effectiveness. Firstly, school-based interventions are often delivered in class time by teachers (Kerr-Wilson et al., 2020). Yet teachers often report being uncomfortable discussing issues of sexuality (Pokharel et al., 2006) and are often not properly trained on facilitating topics related to sex and sexuality (Francis, 2011; Monzon et al., 2017; Ogolla & Ondia, 2019), sliding into didactic modes of delivery (Campbell & Macphail, 2002; Ngabaza & Shefer, 2019). Additionally, studies show that the more effective

interventions for adolescents are delivered over longer periods (Kerr-Wilson et al., 2020; McNaughton Reyes et al., 2021), but time in schools for intervention is often limited, as more attention is devoted to the formal education.

There is growing interest as to whether interventions to prevent VAWG among adolescents can be delivered online, to overcome the challenges of in-school intervention delivery, as well as provide additional benefits that online delivery may offer. Online interventions have also been spurred by the COVID-19 pandemic lockdowns, which has led to a growth in these approaches (Emezue, 2020; O'Campo et al., 2021). However, online interventions are often in the form of apps (Glass et al., 2015; Wirtz et al., 2013), social media messaging, such as on Instagram (Carlyle et al., 2019; Kim et al., 2021), and websites (Salazar et al., 2014), and are often focused on either secondary prevention (Rempel et al., 2019), educational activities (O'Brien et al., 2019) or emergency or protective solutions (for example safety apps) (Eisenhut et al., 2020; Maxwell et al., 2019). Yet current evidence points to group-based participatory interventions as having the potential to support behaviour change and the primary prevention of IPV (Jewkes et al., 2020; Kerr-Wilson et al., 2020). Thus, in this study, we sought to co-develop an online group-based participatory VAWG prevention intervention with young learners.

Co-development of group based participatory VAWG prevention interventions

The importance of co-developing VAWG prevention interventions is increasingly recognised (Mannell et al., 2019). Co-development refers to a process whereby intervention developers and beneficiaries work together equitably, to enhance the relevance and acceptability of interventions (Gagliardi et al., 2016; Majid et al., 2018) and ensure beneficiaries' voices are heard. Current evidence suggests that interventions developed

without meaningful engagement with the people they are intended for are more likely to fail (Mannell et al., 2019; Schoen et al., 2017; Sukarieh & Tannock, 2019).

Despite recognition of the importance of co-developing interventions to prevent VAWG, young people are often excluded from this process (Meinck et al., 2019). One reason for the exclusion of young people from intervention development is assumptions that young people are sexually naïve, in need of protection, and are passive actors in their lives (Albury, 2015), this exclusion denies them agency to critically think about their sexual lives (Albury, 2015; Coll et al., 2018; Renold & Ringrose, 2008). The exclusion of adolescents from intervention design creates a dissonance between the intervention content and what young people are curious about (Byers et al., 2013), and as a result fails to capture the manner in which issues of sex and gender affect adolescent's lives (Youdell, 2005).

Although young people are generally excluded from intervention development, studies increasingly demonstrate that young people are capable of being active experts in critiquing their circumstances and mapping out change needed in their lives (Coll et al., 2018), positioning young people as experts of their own experiences (Scott et al., 2020). Moreover, adolescents are capable of thinking abstractly about the issues of the society, and they have the capacity to conduct higher-order reasoning skills as posited by Jean Piaget in his theorising the formal operational stage exhibited in adolescence (Louw & Louw, 2007). Thus, adolescents should be supported to take charge in re-imagining and designing their interventions, and assessing the value of these interventions, as opposed to simply telling them what effective interventions mean and include (Allen, 2005; Coll et al., 2018; Mannell et al., 2019).

Co-development needs to go beyond consultation to actively involving participants in the entire process, in an endeavour to achieve *relevant* interventions which reflect participants lived realities (Cornwall, 2008; Cornwall & Jewkes, 1995). Specifically, co-

development should provide adolescents with a space that allows for equitable, dialogical, and democratic input from young people (Fielding, 2011). Further, an empowering intervention co-development process should involve listening to adolescents' and taking their perspectives seriously, with the intent to change practice, based on the adolescents' input (Cook-Sather, 2007).

There are, however, challenges to co-development processes. One issue relates to who has the power to speak in groups (Cook-Sather, 2007; Fielding, 2011), some participants may not be comfortable to speak openly and honestly as they have only had experiences of being lectured to, and fear giving the wrong answer (Brear, 2020). Facilitators of co-development processes, who should ideally "prompt and question" participants (Freire, 1993; Gibbs et al., 2015a; Hatcher et al., 2011) have often reverted to didactic methods of engagement and assume positions of power (Campbell & Macphail, 2002; Gibbs et al., 2015b; Hatcher et al., 2011) thus undermining the space for young people to speak openly. Further, co-development processes may unintentionally reinforce existing inequalities (Brear & Tsotetsi, 2021; Chilisa, 2017) driven by broader issues sitting outside of small co-development group contexts, such as differences in education and poverty. Specifically, researchers have discussed how co-development efforts are often thwarted by challenges such as lack of resources (e.g. formal training) and time constraints imposed by funders (Brear et al., 2020) to meaningfully engage in co-development projects. There are also very practical barriers, including that 'experts' may focus on achieving a set goals such as an intervention, at the risk of de-legitimising the principles of co-development processes (Pamment, 2016).

Co-development processes are often not adequately documented, particularly ones focused on young people. There is also a lack of guidance and reflection on co-development processes (Bell & Pahl, 2018; Brear et al., 2020; Shahmanesh et al., 2021). The research question guiding this study was: what would the co-development of a quality online VAWG

prevention intervention with adolescents entail? The authors, guided by The *6 Essential Steps for Quality Intervention Development* (6SQuID) intervention development framework (Wight et al., 2015), thus purposed the study to describe a process of co-developing a quality group based VAWG prevention intervention through online activities in conjunction with high school learners and provide reflections on the strengths and limitations of this process.

Methods

This study formed part of a broader research project (Figure 1) focused on assessing the acceptability and feasibility of delivering online group-based VAWG prevention interventions for young people from the perspectives of young people and 'experts'. The entire study was guided by steps one to four of the *6 Essential Steps for Quality Intervention Development* 6SQuID intervention development framework (described below). In this work, we refer to the adolescents as 'learners', a term used in South Africa when referring to high school going students. The researcher was a resident in the region of the study and had previously worked with high school learners on numerous occasions.

Research framework

The 6 Essential Steps for Quality Intervention Development (6SQuID) intervention development framework (Wight et al., 2015) provides a clear framework for developing theoretically and contextually relevant interventions (Wight et al., 2015), while also placing importance on both modifiable and contextual factors (Card et al., 2011).

Step one of the 6SQuID process, *defining and understanding the problem and its cause*, involves taking existing evidence to the intervention stakeholders and clarifying the problem with them. This allows for a clear definition of the problem to avoid ambiguity. It is also essential to establish how the 'problem' is understood in the target community and how

widespread the 'problem' is, either through qualitative or quantitative research. It is also important to clarify the proximal and distal drivers of the 'problem' (Wight et al., 2015).

Step 2, *clarifying causal or contextual factors that are malleable and have greatest scope for change*, involves assessing which of the risk factors can be changed, and which of these changes would have the most effect (Wight et al., 2015).

In step 3 *identifying how to bring about change: the change mechanism*, intervention developers utilise theories to understand how the intended change will be achieved (Funnell & Rogers, 2011). At the core of this theory is the change mechanism, "the critical process that triggers change for individuals, groups or communities" (Wight et al., 2015). Intervention theories of change include, for example, cognitive behavioural therapy and transformative communication.

Step 4 of 6SQuID involves *identifying how to deliver the change mechanism*. This includes identifying the availability and suitability of the delivery team, the delivery activities, and/or even the delivery contexts (Wight et al., 2015). This step also involves identifying and mitigating potential harm that could emerge in the intervention delivery, such as psychological harm, equity and opportunity (Lorenc & Oliver, 2014).

In step 5 the intervention is *tested and refined on a small scale*. This step involves testing the intervention to investigate its feasibility and acceptability. Through testing and refining on a small scale, intervention modifications can occur, and changes can happen that allow for the intervention to be strengthened.

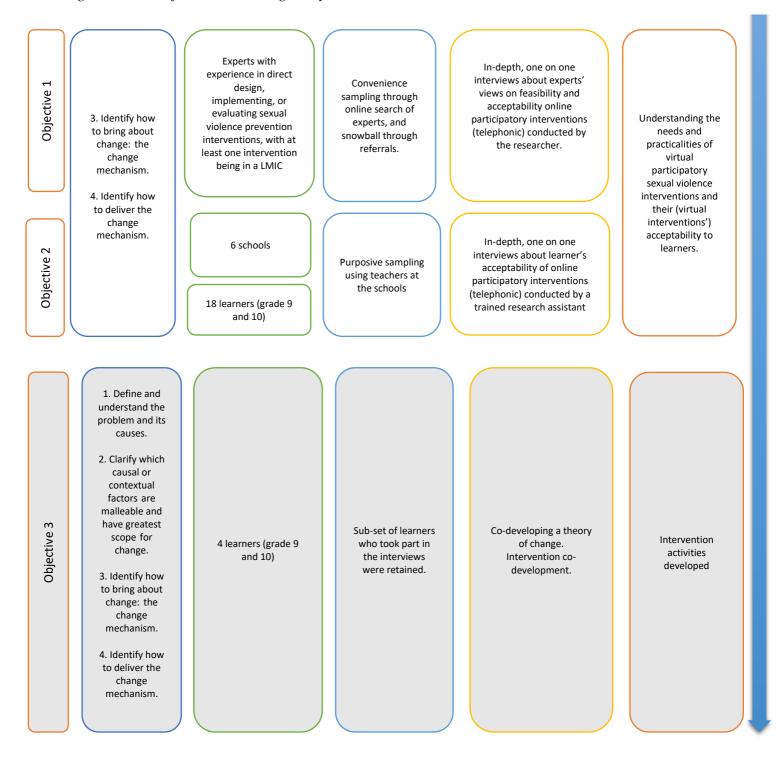
Finally, in step 6, *sufficient evidence of effectiveness is collected to justify rigorous evaluation/implementation*. This step provides evidence, such as if the intervention is working as envisioned, or whether it is causing harm (Moore et al., 2015). The proposed way to collect evidence in this stage with limited resources, is through pre-tests and post-tests, and if possible, utilising a control group (Wight et al., 2015). The evidence gathered in this stage

is crucial, as it informs practitioners if further investment should be made into the intervention and whether it should be brought to scale.

This paper describes the online co-development process with learners, which was guided by steps one to four of the 6SQuID process (Figure 1). Prior to the co-development, we undertook a needs assessment with 18 learners via in-depth interviews (Ndungu, Magnolia, et al., 2022), and in-depth interviews with 20 researchers and practitioners in the field of VAWG prevention (Ndungu, Ngcobo-Sithole, et al., 2022a, 2022b), to explore the acceptability and feasibility of delivering VAWG prevention interventions online. In this paper, we report on the co-development process (Objective 3 – shaded in grey in Figure 1).

Figure 1

Showing the Outline of the Overarching Study



Recruitment of participants

Ethical clearance for the study was obtained from the Research Ethics Committee (Human). Permission to conduct the study was also received from the provincial Department of Education and high school principals. All learners provided informed assent, and their parents/guardians provided informed consent. Assent from the learners was sought on a rolling basis – throughout the online co-development process – by asking learners at the beginning and during the sessions if they were happy to continue.

Participants for the co-development process were recruited from learners who had taken part in earlier in-depth interviews (Ndungu, Magnolia, et al., 2022). At the end of each interview, we asked if the learner would be interested in being more involved and those who expressed interest were invited to participate in the co-development process. Initial inclusion criteria for the in-depth interviews were being a high school learner in either grade 10, 11 or 12; able to communicate in English; having access to a phone or laptop that could access the online platform; having capacity to provide informed consent/assent to take part in the study; and provision of informed consent from a parent (if the child was under 18).

Four learners from three schools in the Eastern Cape Province of South Africa were recruited and provided informed consent to taking part in the study (and their parents also provided informed consent). Although the learners were all over 18 and as such were able to provide informed consent, the schools requested that we obtain parental consent as well.

Learners gave themselves pseudonyms which they used during the co-development sessions, and we changed again for the paper to promote anonymity. Participants were two males and two females, aged 18-19. All provided brief reasons as to why they were interested in becoming involved in the co-development process (Table 1).

Table 1

Learner	Age	Gender	Number of	Brief description
(Pseudonym)			sessions	
			attended	
Тор	19	Female	5	• Friends with Pink
				• In final year of high school
				• Was already interested in the topic
				• Wants to be a lawyer
Pink	18	Female	5	• Friends with Top
				• In final year of high school
				• Was already interested in the topic
Tech	18	Male	5	• In final year of high school
				• Was already interested in the topic
Knight	18	Male	4	• Friends with Pink
				• In final year of high school

Demographics of the Learners involved in the study

Overview of the Co-development Process with Young High School Learners

The high school learners and the first author (facilitator) worked through the first four steps of the 6SQuID framework in five sessions, all which were online because of COVID-19 regulations which were in place at the time (Table 2). All sessions were conducted in English and all participants were fluent in English. During sessions we sought to establish a dialogue between the participants and the facilitator who led through questioning. Where necessary information was also presented via 'slideshow' and people's thoughts and comments were written into it, to provide an interactive space.

Four of the five sessions were held during school holidays and as such it was easy to find time to work together. The fifth session, held after schools had resumed, was harder to schedule, which led to one learner missing the final session. Overall, of the four learners who agreed to participate, three attended all sessions and one attended four out of five sessions.

The sessions were held on the Zoom platform and lasted approximately one hour fifteen minutes each. To allow for more 'real' interactions and promote trust, as suggested by researchers and practitioners (Ndungu, Ngcobo-Sithole, et al., 2022b), videos were on during the entire session. Internet data were provided daily to participants to enable video participation. Data consumption per session was approximately 2GB, thus we provided participants with 3GB data for each session.

Throughout the process, we engaged in discussions on learners' own experiences and views on the topics. In this analysis we sought to understand what aspects of the codevelopment process the young leaners enjoyed and which ones they didn't, how the process differed or was congruent with what they expected to find in the process and anything else pertinent to improving the co-development process.

Table 2

Session	Length of session	Nº	Content covered
		participants	
1	45 minutes	4	• Meet and greet with the group of learners.
			• Introduction to the process.
			• Brief discussions on the expectations of the
			process.
2	27 minutes	4	• Definition of the problem. (Supplementary
			file)
			• Discussion on why it is a problem.
			(Supplementary file)
3	56 minutes	4	• Developing the problem tree. (Figure 2)
			• Discussions on some things that can be done to
			address the problem. (Supplementary file)
4	79 minutes	4	• Developed problem pathways. (Figures 3-6)
5	85 minutes	3	• Suggested intervention activities
			(Supplementary file)

Description of Sessions with Learners

Data analysis

Data were collected in the form of video recordings of sessions 2-5, fieldnotes and the supplemental material provided. The first session was not recorded as it was a meet and greet and we wanted the learners to get comfortable first. Each session was discussed afterwards by the first and third authors.

The authors first analysed the data using inductive content analysis and organised the emerging dominant themes using thematic network analysis which is presented in the description of the co-development sessions section. Specifically, the authors first coded the data using steps one to four of the 6SQuID framework as a guideline and presents the

findings under headings in line with these steps (description of the sessions section). The authors then, using thematic network analysis, generated web-like maps (problem trees) from the dominant themes emerging from the inductive content analysis and present the learners' discussions in the description of the sessions section.

Thereafter, the authors analysed data using inductive content analysis and coded for the strengths and limitations of the process. These findings are presented in the strengths and limitations of the process section.

In the supplementary file, data are presented raw; as generated by the learners. These data are organised in line with the theoretical framework (6SQuID), illustrating how the learners were guided by the steps of the 6SQuID to identify a problem and think through addressing the identified problem in an intervention development format.

Findings and discussion

Description of the Co-development Sessions

In the following sections we describe each session in detail and reflect on the sessions, drawing on products emerging from the sessions, group discussions and our own reflections on the sessions. The products presented here were generated by the learners. The facilitator only provided prompts to guide the discussions. The sessions were guided by steps one to four of 6SQuID. Specifically, step 1: defining and understanding the problem and its cause (sessions 2, 3 & 4), step 2: clarifying causal or contextual factors that are malleable and have greatest scope for change (session 5), step 3: identifying how to bring about change: the change mechanism (session 5) and step 4: identifying how to deliver the change mechanism (session 5).

Meet and Greet – Session 1

In session 1, held on a Monday, introductions were done, and a broad overview of sessions and what they would cover was provided. Additionally, the facilitator explained her role in the process, emphasising she would guide the learners through it, but the ideas and discussions needed to be their own and that they needed to take ownership and leadership of the process, as they are the experts of their own experiences. The group also established group norms, such as respecting each other's opinion and upholding confidentiality and agreed session times.

Learners' Understanding of the Problem – Sessions 2 & 3

The second and third sessions held on the Tuesday and Wednesday of the same week as session 1, focused on learners identifying the problems they wanted to tackle, the causes of the problems, and why they viewed these as a problem. The learners identified two problems they wanted to talk about: VAWG prevalence, normalisation and acceptance; and discrimination against lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) people. In this paper we focus on the VAWG co-development process. The LGBTQIA discussion will be the focus of another paper.

To support the learners to identify the underlying causes of these issues, we used a 'problem tree process' with pre-defined categories (cause, problem, and effects). To prompt learners, the facilitator provided examples of the root causes of VAWG (in grey shade in Figure 2). From these examples the learners generated other drivers of VAWG. For example, they raised poverty as a driver: "*I don't know if this really counts, but I think poverty might also have some kind of a cause for gender-based violence*" (Tech, speaking in reference to Figure 2). There is substantial evidence supporting the idea that poverty is a key driver of

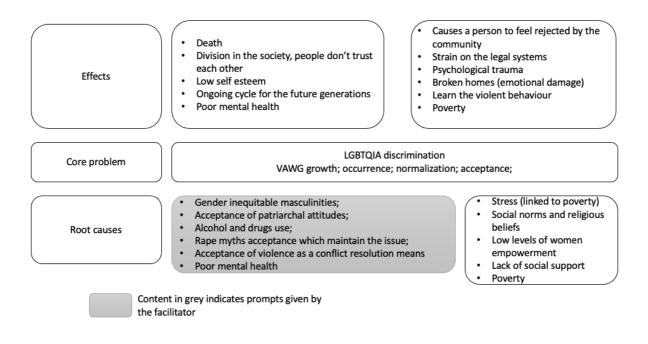
VAWG in South Africa either directly (Gibbs, Jewkes, et al., 2018) or indirectly through driving poor mental health (Ndungu, Ramsoomar, et al., 2020).

Learners were also able to identify consequences of VAWG, such as its strain on legal systems: "I think it [VAWG] also puts a strain on the legal side of it, the law, because to us, it looks like, they're not prosecuting the perpetrators, they're just letting it slide, not knowing that they have 50 other cases where they deal with daily" (Top). Learners also identified mental health as an impact of VAWG: "It [experiencing violence] often leads to psychological trauma and can have psychological consequences for people that have gone through it" (Knight, speaking in reference to Figure 2), similarly reflecting existing literature (Gibbs, Govender, et al., 2018; Jewkes et al., 2018).

Learners' understanding of the underlying causes of violence and its consequences showed young people have the capacity to engage in critical discussion if they are provided with the space to do so. They were able to think widely of the multiple causes and consequences of VAWG, and critique how issues related to VAWG, such as legal process, are handled. At the end of the sessions, learners were encouraged to reflect on the pathways between the root causes of VAWG and its perpetration/experience which would then be discussed further in session 4.

Figure 2

VAWG Problem Tree



Learners' Understanding of Violence Pathways – Session 4

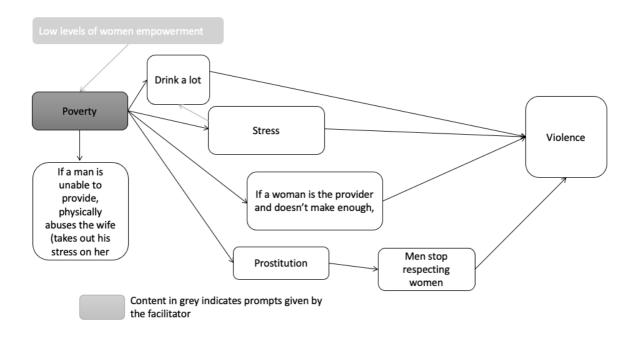
Session 4 was held on Thursday of the same week and sought to support learners to map potential pathways between the root causes of VAWG and its perpetration/experience. Learners drew pathways for four root causes of VAWG: poverty, religion, lack of social support and low levels of women empowerment (Figures 3 to 6).

Poverty to VAWG Pathway (Figure 3)

The learners identified four pathways from poverty to VAWG: alcohol abuse, stress, sex work, and the woman being the breadwinner but not making enough. Learners saw a clear link between poverty and violence via stress and arguments in relationships: "*I guess poverty and stress [lead to violence], because probably, if it's like a household were there's no money, there's stress, it's kind of tense. So, when it's tense, it's kind of easier to snap and argue and fight, and so I guess poverty and stress"* (Top).

Figure 3

Learners' Understanding of Poverty as a Driver of VAWG



Learners also linked poverty to violence via sex work (which they referred to as 'prostitution'): "Poverty, and you can also add prostitution. Because it [poverty] leads to prostitution and that is one of the reasons why we have gender-based violence, because men don't respect women." (Knight). Research has also described the relationship between poverty, sex work, and violence (Coetzee et al., 2018; Coetzee et al., 2017). Implicit in this analysis, though not specifically articulated, was recognition of how gender inequalities were critical to understanding men's use of violence against women.

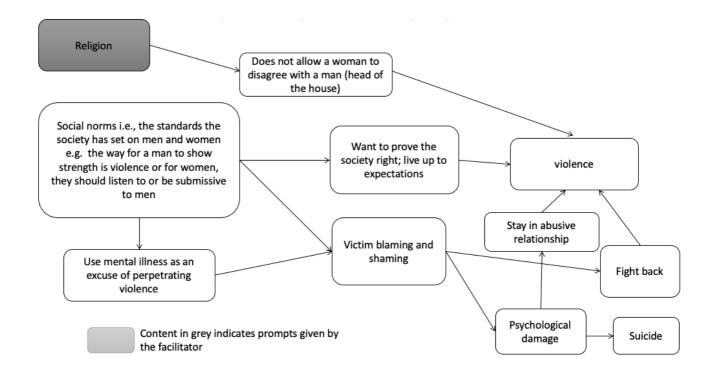
Similarly, the learners also made connections to other pathways, including how poverty led people to drink alcohol heavily, leading to violence, as well as how women's economic strength may lead to a backlash by men. Almost all of these pathways identified by learners have been identified in academic research, including alcohol abuse (Ndungu, Washington, et al., 2020; Ramsoomar et al., 2021), stress resulting from economic strain in the household (Vyas & Jansen, 2018). That young learners identified these issues as drivers of VAWG highlights young people's knowledge on the topic and their ability to engage in current discourse on VAWG.

Religion and Social Norms and pathways to VAWG (Figure 4)

Young learners also described how they understood some social norms and religion to be drivers of VAWG. They drew one pathway from religion to VAWG, via women not being able to disagree with the head of the household. The learners also identified three potential pathways from social norms to VAWG: societal expectations of men, victim blaming and mental ill-health stigmatisation. In terms of society expectations of men, they indicated how broad social norms about men, may lead to VAWG: "the standard that society has for men and women. Like how, the only way to show you're a man is through masculinity and your ability to fight, or like some people even believe your ability to like, hurt a female. That means that you're a man." (Top). Social norms, as key drivers of violence through perpetuating gender inequitable attitudes and normalising the use of violence in relationships are well recognised issues (Gibbs et al., 2020; Jewkes et al., 2015; Machisa et al., 2021; Michau et al., 2015).

Learners also drew a pathway from social norms to victim blaming, arguing that this would lead to violence through the survivor's need to fight back and reclaim some of the dignity that has been taken from them: *Probably in a sense where, it's a case where you fight fire with fire. Because you've been shamed, you've been blamed* [for experiencing violence] *this whole time, you probably kept quiet and didn't say anything, and probably think that that didn't work. So maybe if I fight back, that would.* (Pink)

Figure 4



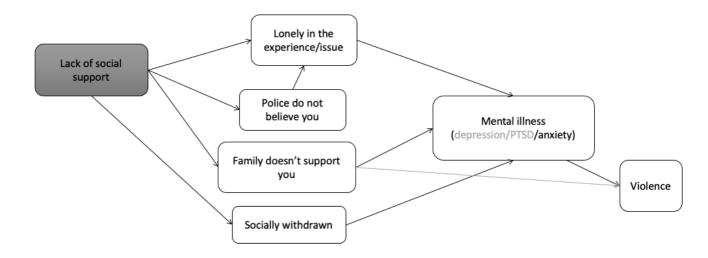
Learners' Understanding of Religion and Social Norms as a Driver of VAWG

Lack of Social Support and pathways to VAWG (Figure 5)

According to the young learners' lack of social support could also lead to poor mental health and consequently experiencing violence. The first pathway learners identified was that lack of social support led to loneliness leading onto poor mental health: "*If there was a lack of social support then it could also lead to mental illness because the person is feeling lonely in that case*" (Tech). The second pathway was via lack of family support, which they explained could lead to poor mental health: "*Sometimes you get maybe molested or something by a step-parent and you tell your actual parent, and they don't believe you. Because [they think] you're just a spoilt child that couldn't get over your parent's divorcing, or maybe something like that. And becomes socially withdrawn*" (Top). Lack of social support was also linked to VAWG experience through social withdrawal. A substantial body of research has described the role of social support in buffering against poor mental health (Carter et al., 2016; Dworkin et al., 2018; Kim, 2017), and how poor mental health is a key risk factor in driving VAWG experience (Devries et al., 2013; Dunkle et al., 2018).

Figure 5

Learners' Understanding of Lack of Social Support as a Driver of VAWG



Low Levels of Women Empowerment pathway to VAWG (Figure 6)

Another important issue learners identified as a key driver of violence was low levels of women's empowerment. Learners discussed how low levels of women's empowerment could leave a women dependent on a man, leaving her vulnerable to violence reflecting previous research (Buller et al., 2018; Gupta et al., 2013):

Tech: I think, if a woman wasn't empowered, they wouldn't have the opportunity to be independent. So, that lack of independence causes the woman to be dependent on the man"

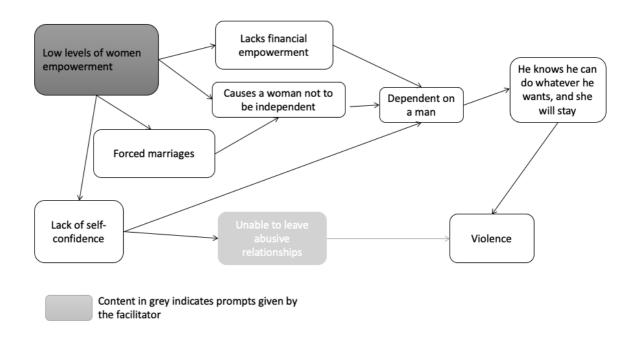
Top: Yeah, and that leaves them vulnerable.

Facilitator: So, if it leaves them dependent on a man, how does that lead to violence?

Top: Well, he now knows he can do whatever he wants and she's still going to stay.

Figure 6

Learners' Understanding of Low Level of Women Empowerment as a Driver of VAWG



Session 5: Learners' Intervention 'Plan'

In the final session (session 5) which occurred a week after the fourth session, the focus shifted onto what interventions to address the issues learners had identified may look like, and which of the problems identified had scope for change. For example, the learners indicated that although they identified poverty as a problem, they thought poverty was an issue beyond their scope and it was better addressed at a national level, such as by the government. For the problems that learner thought had scope for change (within their capacity), such as educating people on the implications of social norms, they suggested different activities (e.g. awareness campaigns) and modalities (e.g. short videos) that could be used to address the causes of VAWG. These activities and modalities are described in the

supplementary file. While the session was not long enough to develop detailed intervention strategies, several key ideas emerged.

The learners felt that young people would prefer online interventions, which could achieve widespread reach: "*it's the easiest way* – [to get to young people] *because you're not guaranteed to reach 1000 people in-person, but your chances are more likely to do that if you're talking on Instagram live.*" (Tech).

Learners also emphasised that online interventions needed to be compelling, as Top commented: "Something that's more eye catching and interesting, that makes you want to know about it and yeah". Top carried on emphasising how short 1-minute Tik Tok clips and YouTube videos were more likely to be watched than lectures by adults: "well the fastest way to get a teenager's attention is watching something. Especially if it's entertaining, so maybe create, maybe just a short clip or video that's not just bunch of people that's sitting around and talking but more something that's interesting to watch and something that's educational also" (Top).

Learners indicated that an online intervention should also be interactive with time to discuss issues. They highlighted that sessions should be facilitated by a peer and worried about adults telling them what to do: "*But then it [group discussions] wouldn't be ideal if it was older people telling younger people about gender-based violence, because that'll be a lecture or like a class. So maybe like a group of teenagers discussing what it is and what it's about. So, yeah, the group discussions would work, but only if it's amongst teenagers.*" (Top). The chance to talk about issues in detail was also important to them: "*I think more face to face for these kind of group discussions. Because it has to be personal*" (Tech). They also highlighted the importance of seeing people online in any session:

Researcher: So, you would have preferred a video instead of just names appearing on the screen?

All: Yes

Finally, young people also emphasised a range of practical issues in intervention delivery. The maximum time of any session should be 30-60 minutes, as any longer would lead to concentration problems. They also highlighted the importance of accessible platforms: *"It should be easy for everyone to access"* (Top), to enable young people to engage.

Strengths and Limitations of the Process

We now shift to reflecting on the strengths and limitations of the co-development process. 6SQuID provided a useful, practical framework of steps to work through with young people in a systematic way. The steps were easy for learners to understand and engage with. The emerging product (supplementary file) illustrates how the framework guided the learners' thinking through the intervention activities development process.

The learners who participated found the co-development process interesting, as seen by the high rates of session attendance (3 attended all five sessions, while 1 attend 4 sessions). They described a few reasons for why they were so involved, including notably, wanted to be heard on these issues: "*I wanted a platform where I can voice my opinion about these matters*." (Knight). Most were already interested in the topic prior to being invited to be part of the study: "*I think it's just something that I want to participate in. It's like, if I could participate in anything, this is the type of thing that I want to be associated with. So, that's why as soon as I saw the poster for this thing, I had to join*" (Tech). It was clear that this group was self-selecting and thus not representative of the student population, although this is likely to be the case for most co-development processes.

Learners were surprised and enjoyed the fact that sessions were not didactic lectures and were encouraged to discuss issues. They described how they had expected to be taught and not heard: "*I thought that we were then gonna come here, you were just gonna talk, talk,*

talk. And we would have to agree with everything you say" (Pink). They were pleased that they had space to discuss their different views in sessions: "I thought it was just going to be like a one-sided thing like, almost like a lecture, yeah. But what I enjoyed the most was like, our discussions and everyone's different opinions, and to just come together and create what we've created, yeah." (Tech).

While learners were happy about the space they were given, to talk about the issues they wanted to, they still sometimes focused on providing 'right answers':

Top: What exactly would like, what options do we have when you say, "creating exciting things online"?

Facilitator: Any activities that you think you want to deliver, that you want to create, that will help us achieve these objectives.

Learners' expectations of didactic education are reflective of their schooling experiences in South Africa (Campbell & Macphail, 2002; DePalma & Francis, 2014; Gibbs et al., 2015b; Shefer & Macleod, 2015). Didactic education does not promote dialogue and critical thinking (Freire, 1993), but rather emphasises rote learning and 'correct' answers, and is often a barrier to participatory, co-development processes as Brear (2020) similarly found. Supporting learners to become confident and create spaces for them to shift towards dialogue and critical thinking is important for meaningful co-development of interventions.

Learners felt that the co-development process gave them a chance to give input on what they thought a relevant intervention would look like. They were quite critical of the idea of interventions developed by 'experts':

"So, I think we're just like, normal people, regular people that you can relate to, it's more realistic. And I would feel better and more comfortable than experts, because that just tells me, you have to have a degree, or you have to have studied, I have to have some background of higher education to actually know what you're talking *about, so I just feel comfortable* [with intervention designed by young people]. *No disrespect but like experts, got it* [knowledge on intervention design] *from a textbook*" (Top).

Learners provided extensive input and were reflective about the process of what may work for them in terms of an intervention to address VAWG. They were knowledgeable on what delivery modes were appealing to them and what sort of activities could be delivered using these modalities, including video clips on Tik Tok. Giving learners the space to talk about and debate how interventions could be delivered provides an opportunity to understand what is meaningful for young people, rather than applying 'standard' intervention approaches to a new generational group, who have different wants and needs.

The co-development process was done online which provided greater flexibility in the process and offered opportunities for young people to participate during school holidays. During school time young people have competing demands, and may not be able to participate, as seen by one participant not being able to attend the last session, once school had restarted. It also allowed us to change session times when people had competing demands. Co-development is intensive and identifying the appropriate times for learners to meaningfully participate is critical.

Learners found it easy to build rapport online amongst themselves, and with the facilitator, and this enabled them to have open discussions about challenging issues. There has been an ongoing debate about the possibility of building rapport and trust online, sufficient to promote open discussions on sensitive topics (Ndungu, Ngcobo-Sithole, et al., 2022b; Sipes et al., 2022; Taddei & Contena, 2013). The ease learners found in building rapport could have been for a few reasons. First, the group was small (only four learners, plus the facilitator), and as such it was easy to establish relationships. Secondly, three participants knew each other prior to working together online: "*We* [referring to Top] *are in the same*

class " (Tech) and thus trust was built on their prior friendship. Third, it could also be because the young learners are generally already comfortable interacting online (Pang, 2018; Xie & Kang, 2015), or because videos were on, thus promoting trust online (Brown et al., 2011; Kelly et al., 2019). Fourth, it may have been because we were talking more generally about issues of violence in society, rather than specifically about their personal experiences and challenges, and thus the discussion was not very personal, which made it easier for them to talk about the topic. What was evident though, is that young people can develop rapport online and this could be enhanced by people already knowing each other, having videos on and working with small groups.

In this co-development process challenges with accessibility to phones/laptops or connectivity were limited, as all participants had their own. A key concern about online activities is lack of accessibility of phones/laptops (Bailey et al., 2015; Feroz et al., 2019), and there is a significant focus on understanding accessibility to the internet of the beneficiary group and their opportunities for online engagement when developing online interventions. One challenge was the high data usage, as videos were on for all sessions, using 2-3GB of data used per person, per session. In South Africa data is expensive and this cost R199 to R249 per person per session (\$13.20 - \$16.60), a total of R3 320 (~\$222) for all sessions and people, which was covered by the project. The relatively high data costs can limit the possibility for online co-development processes.

While young learners were eager and willing to take part in the process, we encountered challenges obtaining consent from parents, leaving us with a small group of learners to work with. Of the ~60 leaners invited to participate, 23 expressed interest, but only four learners could secure parental informed consent. Challenges in obtaining parental consent for children's participation in activities around sexuality are not new (Macapagal et al., 2017; Tabatabaie, 2015) and are a significant barrier to intervention and research

participation. It may have been that the learners recruited into these processes came from families that are already open to engaging in discussions on sexuality, and they may not be reflective of the broader student body. Understanding whether it is necessary for those involved in co-development to be 'representative' of the group they represent and the implications of this requires further research.

A potential criticism of the process is that the learners did not reflect directly on their own lives and experiences in developing their problem trees, but rather spoke more generically about the issue of VAWG that they saw in South Africa. To enable young people to reflect on their own lives and develop problem trees that are shaped by their own experiences, greater time is required to build relationships with each other and a more substantive process to enable them to analyse their lived realities more. Despite their broad perspectives, the models young people developed showed they were acutely aware of the social contexts that they lived in. In an ideal process we would have used these to then ask about their lives and how they fit into these models.

There was also tension between the facilitator's 'expert' knowledge and young people's lack of formal training and prior thinking about the topics, particularly around 'drivers' of violence and effective interventions. For example, the adolescents in the study kept reiterating that creating awareness on VAWG would lead to a reduction in perpetration behaviour, while there is very little evidence of this (Gallant & Maticka-Tyndale, 2004). Thus, the facilitator grappled with how to maintain adolescents' autonomy of thought, while also incorporating 'scientific evidence' in the emerging intervention activities. Differences in levels of training, between the school-going adolescents and facilitator, made equitable participation in the process difficult to achieve. For any co-development process, facilitators' have to balance a tension around how much to 'push back' on community members' ideas using 'scientific evidence'. On the one hand, there is an existing evidence base about what works to prevent VAWG, but this knowledge has been generated and utilised exclusively by experts. On the other hand, research on participatory interventions highlights the risk of shaping communities' participation in order to fit certain parameters, which may reinforce hegemonic sources of knowledge (Vijayakumar, 2018). More research on how to resolve these tension in co-development is needed to strengthen the process.

Conclusion

This paper described the initial online process of co-developing an intervention with young people, through going through the 6SQuID steps two to four. We found that the process was possible to achieve online and was something that young people enjoyed and felt engaged with. Indeed, they found the process very different to what they had expected – to sit and be lectured. Moreover, they were also able to generate many ideas about intervention delivery, which they felt would make any intervention more relevant to them. These are all important benefits of co-development. Despite these positives there were also several challenges in the process, around balancing 'expert' and 'lay' knowledge which need careful reflection and building on in similar future processes.

For effective co-development processes with learners, it is necessary to support young people to shift from didactic to dialogical approaches of engagement. Didactic communication hinders co-development processes, as participants are afraid of giving a 'wrong' answers (Brear, 2020), and thus may expect to be spoon fed (Brear, 2018). Creating a supportive environment where learners can voice their opinions and engage in discussion without a sense of correct answers, is crucial. This requires facilitators with strong skills, particularly in the online space.

It is also important to build in adequate time to the co-development process, to enable people to move from describing the broad reality they lived in, to reflecting on their own experiences. Intervention development requires detailed understandings of risks, and

strategies of young people, and co-development will only work if adolescents have sufficient time, to gain '*critical transitivity*' where they acquire the ability to critically think about issues, which promotes *critical reflection* (Freire, 1993).

Co-development processes are likely to work with a small group of people who may be somewhat 'different' from the wider beneficiary group. This has several advantages such as they may already know each other and have an interest in the topic, making discussion easier. But it also means that it is important to review any co-developed outputs with a wider group of learners to 'check' the resonance of outputs with others. In addition, practitioners could explore utilisation of a blended approach, where a diverse group of learners first meet inperson, for team building exercises, before proceeding to engage in a co-development process online.

Co-development processes are not quick solutions and adequate time needs to be given especially for working with young people, because of their competing school demands. Practitioners should therefore allow for longer co-development period when working with this group. This consideration includes flexibility in terms of rescheduling workshops as shifts occur in schoolwork demands.

Co-development processes provide a unique and important opportunity to ensure the voices of beneficiaries are central to intervention design. The potential to do this online introduces a range of opportunities, but also challenges. Recognising the challenges allows us to address and strengthen these processes and develop further evidence on how best to do these in various contexts – including those with limited access to devices and internet connectivity to ensure all people are included. Improving online co-development processes is critical for when face to face meeting is not possible.

This study has shown that an online co-development process of participatory VAWG prevention interventions is possible. An important next step in making online participatory

interventions a reality will be to move from the theory of change to designing an actual online group-based VAWG prevention intervention. There is also a need pilot participatory interventions that are delivered online, to gain a deeper understanding and build on what is possible. Beyond intervention design, participatory intervention experts are challenged to begin parallel research of evaluating online participatory interventions, to gather evidence on their impact.

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Contributors

JN designed the original study and wrote the protocol. JN conducted the study and developed the analysis plan for this paper. JN undertook the analysis and wrote the first draft of the manuscript. AG supervised the analysis. All authors reviewed the manuscript and provided critical insight into the paper. All authors have approved the final manuscript.

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