USING GROUP WORK INTERVENTIONS TO ADDRESS THE PSYCHOSOCIAL IMPACT OF EXPOSURE TO DOMESTIC VIOLENCE ON ADOLESCENTS

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Abstract

Given the high prevalence rate of domestic violence (DV) in South Africa, one in four adolescents reportedly comes from a home where they are exposed to DV. The effects of exposure to domestic violence on adolescents are adverse and lifelong; therefore, providing effective treatment is crucial. Group work has proven to be effective in some international studies, but South Africa has limited research on this question, particularly on the psychosocial impact of DV exposure and the necessary effective interventions. Through an ethnography qualitative approach, this study aims to expand the limited knowledge base. Participants were observed during a group work process for a period of 8 weeks, the objective being to determine their psychosocial functioning after exposure to domestic violence. Drawing from social learning theory, the findings of the study suggest that adolescents can benefit from group work interventions. The results showed that the group participants’ psychosocial functioning improved significantly after the intervention. Based on the findings, policy and practice recommendations for adolescents exposed to domestic violence are made.

Keywords: adolescents, domestic violence, exposure, group work, interventions, psychosocial impact
INTRODUCTION

Exposure to domestic violence has been shown to result in significant harm and lifelong adverse effects on children and adolescents. Studies have found that children exposed to domestic violence experience a range of negative outcomes, including increased internalising and externalising behaviours (Fantuzzo, DePaolo, Jaffe, Wolfe, Wilson & Zak, 1986, Lambert, Martino, Anderson & Sutton, 1991). Effects of exposure include emotional, cognitive, physical, psychosocial and behavioural problems as well as poor health outcomes (Burton, Ward, Artz & Leoschut, 2015). Recent meta-analyses and reviews of the literature also demonstrate and confirm that exposure to domestic violence is associated with psychosocial problems (e.g. mental and emotional health issues) in children and adolescents (Evans, Davies & DiLillo, 2008; Kitzmann, Gaylord, Holt & Kenny, 2003; Wolfe, Crooks, Lee, McIntyre-Smith & Jaffe, 2003). Exposure to domestic violence in childhood has been linked to a similar set of outcomes, including poor sleeping patterns, low self-esteem, social withdrawal, depression and anxiety (Edleson, 1999; Fantuzzo et al., 1991; Lichter & McCloskey, 2004), as well as poor regulation of emotions leading to aggression, violence and delinquency (Herrera & McCloskey, 2001; Lichter & McCloskey, 2004). There is therefore overwhelming evidence that exposure to domestic violence has severe adverse outcomes on the overall wellbeing of the affected adolescents, calling for urgent interventions and solutions to mediate risks. Several international studies have shown considerable success in various interventions such as group work programmes in addressing the risks associated with exposure to domestic violence (Glodich & Allen, 1998).

Several South African studies (Burton et al., 2015; Makhubela, 2012) have also chronicled the effects of exposure to domestic violence on adolescents, but very few have focused extensively on the psychosocial effects in the South African context and the appropriate interventions. This lack of tested interventions and prevention programmes in South Africa is a shortcoming that calls for more local, evidence-based programmes to address the psychosocial impact of DV (Masinga, 2019). Research has shown that maladjustments caused by exposure to DV during the developmental stage can have a significant impact on the psychosocial functioning of adolescents (Botticello, 2009). It is therefore important to moderate the negative outcomes of exposure by providing effective interventions which seek to improve the affected aspect of an adolescent’s life, in this case, poor psychosocial outcomes. This research therefore seeks to add to that knowledge in the South African context.

Healthy psychosocial functioning reflects a person’s ability to perform activities of daily living and engage in relationships with people in ways that are gratifying to that person and to others, as well as meet the demands of the community in which the individual is living. If the person experiences the negative outcomes of exposure to DV, then their wellbeing, basic functioning, self-mastery as well as interpersonal and social relationships are affected adversely (Ro & Clark, 2009). The experience of exposure to domestic violence might influence developmental changes that can impact on psychosocial functioning and create adjustment problems (Trickett & McBride-Chang, 1995) while also creating difficulties in social adjustment and interactions throughout childhood and adolescence (Pernebo, 2018). As the development and preservation of friendships are a fundamental part of the adolescent developmental stage, Lundy and Grossman (2005) believe that social problems, including poor social and conflict-resolution skills, may make this developmental task unachievable, hence the importance of effective interventions to address these risks.
As indicated by Pingley (2017), more research is required on interventions for children exposed to domestic violence. The research question is whether group work interventions are beneficial for enhancing the psychosocial functioning of adolescents exposed to domestic violence. The purpose of this article is therefore to showcase whether a school-based group work intervention against the backdrop of social learning theory can be effective in improving the psychosocial functioning and outcomes of affected adolescents. This investigation aims to strengthen research on the unique and combined effects of the social work method of group work in enhancing psychosocial outcomes in adolescents exposed to DV in the South African context. The author argues that group work interventions provided in school settings are crucial and beneficial in addressing negative impacts of exposure to DV on adolescents, particularly their psychosocial functioning. Social workers are needed in schools to provide the necessary effective interventions, as without them the risk of intergenerational transmission of domestic violence remains high, further fuelling the DV pandemic in the country (Rasool, 2022). This article will firstly describe the South African context and background, then discuss the social learning theory on which the study is grounded. Thirdly, it will provide a summary of the group work intervention implemented. Fourthly, an overview of the research methodology is presented, followed by a discussion on the findings within a thematic framework and in line with the relevant literature and the theoretical lens. The article will conclude with recommendations for social work practice in schools and policy formulation for adolescents exposed to DV.

BACKGROUND

South Africa has one of the highest rates of domestic violence in the world (Vetten, 2005). Within a violence-prone environment, the interpersonal violence encountered by South African adolescent boys and girls is respectively 8 and 5 times higher than the global average (Norman, Matzopoulos, Groenewald & Bradshaw, 2007). Some statistics indicate that more than 23% of adolescents have reported exposure to domestic violence (Burton et al., 2015). A study in the Western Cape province of South Africa found that 76.9% of adolescents had witnessed home violence, 58.6% had been a direct victim of home violence, and 75.8% had had either direct or indirect exposure to school violence (Kaminer, Du Plessis, Hardy & Benjamin, 2013). Given its impact, this strongly suggests that adolescent exposure to domestic violence is a public health crisis for South Africa, making the need for effective interventions urgent (Donenberg, Naidoo, Kendall, Emerson, Ward, Kagee, Simbayi, Vermaak, North, Mthembu & Mackesey-Amiti, 2020). The affected adolescents are at an increased risk of psychosocial maladjustment as a result of the country’s alarmingly high rates of violence, including domestic violence and femicide (Chitale, 2021). At the same time, it must be noted that mental health programmes for youths in South Africa are inadequately funded and sourced, and in general not readily available (Lund, Boyce, Flisher, Kafaar, & Dawes, 2009; Petersen, Swartz, Bhana & Flisher, 2010). This adds to these adolescents being at higher risk of psychosocial vulnerabilities, because they are unable to access any form of adequate support in instances of victimisation. There are also very few social workers in South African schools (Reyneke, 2018) and this contributes significantly to the problem as risks like these are not identified and addressed timeously. In addition, when the psychosocial impact experienced in adolescence is not identified and treated at an early stage, they may persist and have a direct impact on adolescents’ future functioning and mental health in adulthood (Botticello, 2009). Given the limited resource setting in South Africa and the impact of exposure to domestic violence on adolescents’ long-term psychosocial functioning, it is imperative to examine the psychosocial effects of group work programmes to inform future violence reduction and health interventions (Sui, Massar, Kessels, Reddy, Ruiter & Sanders-Phillips, 2018).

Considering the high rates of exposure to violence for adolescents, there are few programmes available to mitigate the risk factors in South Africa (Donenberg et al., 2020). Additionally, as far as the author can ascertain, some of these programmes have not been evaluated. A school-based intervention may be useful as adolescents spend a significant amount of time in school, thus making school a key platform to provide support for healthy psychosocial functioning. It is crucial that adolescents receive effective interventions as they are at a critical stage of psychosocial development. The development of skills to regulate emotions, navigate complex situations, resolve conflicts and adapt to changing relationships is
paramount at this stage; therefore exposure to violence may interfere with key milestones necessary for psychosocial development (Steinberg, 2005). This article focused on a psychoeducational group work intervention presented in a school-based setting for adolescents exposed to domestic violence.

**THEORETICAL FRAMEWORK**

Social learning theory is the theoretical lens used as the basis for this study. Albert Bandura is one of the key proponents of social learning theory. He posits that aggression is learned by observing the behaviour of others and its consequences. Violence is learned through role models provided by the family (parents, siblings, relatives and boyfriends/girlfriends), either directly or indirectly (i.e. witnessing violence), is reinforced in childhood and continues into adulthood as a coping response to stress or as a method of conflict resolution (Bandura & Walters, 1977). Foshee, Bauman and Linder (1999) also argue that the social learning theory posits that violence is learnt by observing the behaviour of others and its positive consequences. Because learning is more likely to occur when models of behaviour are perceived as having a high status, power and exposure, and are competent; parents who are typically viewed in this way by their children are one of the main sources of learning for children, adolescents included. Adolescents who observe their parents use violence note an entire script for such behaviour.

Unless effective interventions are provided, it is thus no surprise that adolescents who are exposed to domestic violence in their homes end up becoming perpetrators or victims themselves. Foshee *et al.* (1999) and Woollett and Thomson (2016) state that adolescents raised in violent homes may not have the opportunity to witness or learn constructive ways of resolving conflict and the positive consequences associated with these tactics, and consequently use violence as a result of frustration and lack of knowledge about alternatives ways of resolving conflicts. A recommendation is therefore made that interventions can be developed to diminish the negative impact of exposure to domestic violence (Rasool, 2022), hence the need for studies such as this one. Social learning theory is key to unlearning the unhealthy and violent ways of resolving conflicts, whilst at the same time teaching participants new healthy and socially acceptable ways of addressing conflict through resocialisation. In the same vein, participants are given an opportunity to observe constructive ways of resolving conflicts in the group work interventions through vignettes and role-plays designed specifically for learning new life skills that minimise the chances of resorting to violence.

For the purposes of this study, social learning theory was thus best suited as the group work programme was delivered to psychoeducation adolescents and shifted their thinking patterns on conflict resolutions, whilst empowering them with appropriate life skills to prevent maladjustments, regulate emotions and enhance their social skills. This framework will therefore be best suited to analyse and explain improvements or enhancements of psychosocial functioning of the adolescents through the group work process.

**The group work intervention**

The group work intervention was a psychoeducational programme with an embedded life skills approach presented by a qualified social worker over an 8-week period, whilst the author observed all the sessions in her capacity as a researcher. A psychoeducational approach is defined as one that has a strong theoretical background and evolves into a highly interactive experience that fosters growth and development in participants (An, Kim, Choi, Platt & Thomsen, 2017). The group work intervention involved the use of stimulus material in the form of case studies, role plays, vignettes, debates and written exercises as recommended by Kawulich (2005) to avoid boredom and to increase the levels of participation, given the stage of development of the respondents. The intervention also encouraged participants to share perceptions, points of view, experiences, wishes and concerns without pressuring them to reach a consensus (Barbour & Kitzinger, 1999). The programme was based on comprehensive sexuality education (CSE): “We want to learn about good love”, a theory-based intervention that was found to be effective at curbing physical and sexual intimate partner violence among male and female youths (Holden, Bell & Schauerhammer, 2015). Topics covered included life skills such as communication, conflict resolution, self-concept, decision making, experiences of exposure to domestic
violence, gender attitudes, etc. The aim was to empower and improve the life skills of adolescents to enable them to make informed decisions about their current and future relationships (Holden et al., 2015) through reducing the vulnerabilities (such as poor psychosocial functioning) of the exposed adolescents, thereby reducing the chances of DV perpetration and victimisation. In essence, the intervention’s main focus (short-term goal) was to improve the psychosocial functioning of the participants and prevent domestic violence (long-term goal). The psychotherapeutic social work model was utilised for this intervention, as the aim was to enhance the mental health (psychosocial functioning) and self-concept of the adolescent participants (Ezhumalai, Muralidhar, Dhanasekarapandian & Nikketha, 2018).

**Why a group work intervention?**

A group work intervention was the preferred approach in addressing the effects of exposure to DV on adolescents, given its success in various international contexts, as the programme also provides opportunities for social learning and interaction with peers. According to Glodich and Allen (1998:135-137):

> an extensive clinical literature endorses group therapy as the treatment of choice for adolescents and provided the following reasons: (1) adolescents accept comments more readily from peers than from adults; (2) groups offer the advantage of peer interactions and accent the importance of relationships (which is developmentally appropriate); (3) group norms can be powerfully socialising; (4) members can benefit vicariously from the work done by others; and (5) groups give opportunities for listening without demanding immediate participation.

Furthermore, peer relationships are viewed as central in helping adolescents, given that peers play a significant role in their lives at this stage of development. This warranted the use of group work as the preferred intervention to also alleviate silent resistance that can characterise individual therapy with adolescents. Finally, groups readily support and validate corrective experience where “interpersonal styles, social skills, and change can be observed and implemented”. Whilst Chaffin, Bonner, Worley and Lawson (1996) state that the adolescent's isolation and feelings of differentness can be reduced, and in situations where parental or family support remains inadequate, adolescents can learn to rely on peers, thus supporting the use of a group work intervention with adolescents. Holt, Kirwan and Ngo (2015) also confirm the usefulness of the group environment in helping participants share the full extent of their personal experiences in a therapeutic and supportive setting.

**RESEARCH METHODOLOGY**

The study adopted a qualitative approach with elements of ethnography. Participants were purposefully selected from survey results from randomly selected high schools. The survey measured adolescent exposure to domestic violence using the Child Exposure to Domestic Violence (CEDV) scale from Edleson, Shin and Armendariz (2008), with high scores signifying DV exposure. The same survey also measured the psychosocial functioning of the adolescents through a psychosocial functioning scale from Dahlberg, Toal, Swahn and Behrens (2005), where they scored poorly, suggesting poor psychosocial outcomes. Those who were not exposed to DV and had good scores for psychosocial functioning were excluded from the sample. On that basis, 21 participants were purposively selected for inclusion in group work intervention as they presented with risks in the form of poor psychosocial outcomes and DV exposure. The sample size was made up of 21 participants (both genders) who were subsequently assigned to two separate groups (of 10 and 11 group members) and received the same intervention simultaneously in different settings (2 different schools). The 21 participants, aged between 14 and 18, all Grade 8 learners of African origin, then underwent an 8-week school-based group work intervention to address the identified psychosocial issues. This included somatic issues, stress, levels of anxiety, lack of life skills such as conflict resolutions, poor social and interpersonal skills, maladjustment issues, along with low self-esteem and relations with others. The researcher applied elements of ethnography through observations of each individual during the 8-week interaction with them in the different group settings. The aim was to observe how they related with other group members (both genders) and conducted themselves in the group sessions so as to pick up changes (if any) in their relations and behaviours, as
these cannot be detected in surveys. Notes were also taken of the discussions, and the responses from the participants were recorded. As stipulated by Fine (2003), the ethnographic process is one whereby one studies behaviours, experiences and the meanings participants attach to them, as these cannot be measured through surveys. These elements of ethnography allowed for the researcher to observe both verbal and non-verbal behaviours of the participants in a naturalistic setting (Sangasubana, 2011).

To ensure trustworthiness, the researcher engaged in reflexivity throughout the entire research process by using a reflection journal in order to consciously act in a manner that circumvents any biases and subjectivity that could affect the study (Leedy & Ormrod, 2013). The credibility of the study was enhanced through the prolonged engagements with the group participants, given weekly meetings with them for 8 weeks. This was sufficient time to establish a relationship of trust with the group members. Ethics approval was received from the University of Johannesburg Research Ethics Committee prior to the commencement of the study. The Gauteng Department of Basic Education and the School Governing Body of each school also provided permission for the research to be undertaken. Written parental consent and assent from the research participants were also received before the study began. Written permission to record the group work sessions was also provided by the participants.

Data analysis
Information collected from the observations, such as the transcribed texts, recordings, observational notes and memos, were typed into word-processing documents. Significant statements and phrases were identified during transcription. Data were then read and reduced, followed by a search for similarities, differences, patterns, categories, themes and concepts in the continuous process of a thematic analysis. These similar elements were then put in order around a number of broad themes identified. De Vos, Strydom, Fouche and Delport (2011) indicate that in qualitative data analysis significant statements have to be made to generate the meaning. Interpretations were then made for the purpose of drawing conclusions that reflect the interests, ideas and theories that initiated the enquiry (Babbie, 2013). In addition, observations recorded on the group that were reflected in the journal were incorporated into the themes. Narrative accounts, as well as direct quotations from research participants, were also be presented in the data analysis.

FINDINGS
The major themes included peer relations and interactions, engagements and participation in a group setting, personal conduct and behaviour, and lastly life skills empowerment. These themes emerged from the qualitative data analysis process and will be discussed in line with previous study findings and relevant literature. Pseudonyms were used to identify participants to protect their privacy and uphold confidentiality. Participants were from Group A and Group B, since there were two different schools who received the group work intervention.

Peer relations and interactions
The researcher carefully observed all 21 group participants throughout the 8-week long group engagements. They were placed in the two groups (one per school). One group had 10 group participants and the other 11; in both groups there were fewer male participants compared to female participants. This made the ethnographic process easier, given the small number of participants to observe at a given time. During the first 2 sessions in each separate group (Group A in school one and Group B in school two), most of the participants were reserved and there was minimum interaction with each other. It is safe to say that no friendships had been formed by then as there was no cohesion in the group setting. This is normal in any group work process, as it takes time for participants to get used to each other and the group work space before any cliques or friendships can be formed (Toseland & Rivas, 2013). Observations of peer relations and interactions of participants were deemed as important factors to observe, as poor psychosocial functioning is believed to impact on an individual’s ability to relate and interact well with others, including peers (Allen, Moore, Kuperminc & Bell, 1998). Whilst observing the group dynamics, it was interesting to note that participants were grouped along gender lines. The male participants were
sitting closely in their corner and the female members also sat grouped together. The two genders therefore had minimal interactions with each other; this was also evident in group activities and role-plays that they did, as boys preferred working together. The facilitator had to combine both genders for role-plays for them to begin working together, with a little bit of resistance in the beginning. When prompted as to why they preferred grouping themselves along gender lines, the following responses were received:

*Boys and girls don’t sit together, as ‘gents’ we prefer working and mingling with our own.*
(Group A: participant ‘John’)

*Asikho isidingo sokuhlala nabafana* – loosely translated this means that - *there is no need for us to sit with boys.* (Group B: participant ‘Minenhle’)

This confirmed that adolescents are socialised in a manner that differentiates between genders and this reinforces gender stereotypes, as they believe that they are different and therefore should not be mingling much with each other (Ellemers, 2018; De Meyer, Kagesten, McEachran, Chiët-Rosell, Kabiru & Michielsen, 2017; Perry & Pauletti, 2011). The causes of perpetration and acceptance of DV are complex, though commonly understood as being deeply rooted in unequal gender relations and social norms such as harmful notions of masculinity and rigid gender roles and stereotypes (Heise & Fulu 2014). These unnecessary divisions of gender were therefore seen as most likely to lead to poor/unhealthy relations between both boys and girls, and impact negatively on their interactions as peers and in social relations. More group activities and role-plays were done over time to show the importance of gender equality – reinforcing the fact that both boys and girls can have the same roles, not necessarily assigned by gender, as both have similar capabilities. Particular themes addressing this specific issue included gender norms, attitudes and stereotypes. It was also seen as important for the group participants to understand the link between domestic violence and negative gender norms, attitudes and stereotypes so as to assist them in developing healthier relationships with their peers despite their gender, thereby reducing risks of domestic violence perpetration and victimisation (Holt, Buckely & Whelan, 2008; Wolfe, Wekerle, Scott, Straatman, Grasley & Reitzel-Jaffe, 2003). Formation and maintenance of healthy social relations are crucial for an adolescent’s healthy psychosocial functioning (Rubin, Dwyer, Booth-LaForce, Ki, Burgess & Rose-Krasnor, 2004). With themes covered and the progression of time, a shift in peer relations and interactions was seen in the group work setting. Sitting arrangements were no longer based on gender lines as more and more group members began forming relationships with the opposite gender. This shift also improved group cohesion and helped to facilitate reaching the common group goal of improved psychosocial outcomes.

**Engagement and participation in a group setting**

For any intervention to be effective, meaningful engagements and participatory learning is essential. Engagement is seen as making an investment in the group process, whilst participation is viewed as being active in sessions. The researcher therefore observed this from each participant as it also spoke to their commitment to the intervention and expected outcomes. Participation and engagement will also speak of confidence to speak in a group setting and sharing of experiences, which is deemed helpful to the group work process (Kitzinger, 1995). Sharing of experiences is believed to be the first step in the healing process, as individuals get to share how exposure to domestic violence would have affected them (Swanston, Bowyer & Vetere, 2014). Speaking out will thus be considered beneficial to the psychosocial functioning of the affected individual.

The researcher noted that some group members were initially quiet and did not engage or participate except when prompted to do so. This is seen as normal for the beginning phase of the group process, as group members are getting to know each other in the formative stage of group development (Toseland & Rivas, 2013). As the group progressed to a more cohesive state, the researcher observed with interest that the quieter group members were mostly males in both groups. Most had to be prompted to speak and seemed to have little to say, especially concerning their feelings and emotions. One of the sessions
required each participant to share (voluntarily) their experiences and exposure to domestic violence. In Group A only one of the four males spoke freely. In Group B only two out of five males shared their experiences. However, in both groups, the males participated in other group activities with eagerness; apparently, they were not keen on speaking out about their own feelings and experiences. The group facilitator asked whether they were uncomfortable or did not feel enough to share. The following response was received:

_Awa mam, indoda ikhalela esifubeni._ (Group B: participant ‘Themba’)  
This was loosely translated to mean that a man does not speak about his emotions and feelings and does not cry in public. This affirmed the gender stereotype and harmful norm that men don’t cry and should not speak about emotions for the fear of being seen as ‘weak’ (Way, Cressen, Bodian, Preston, Nelson & Hughes, 2014). Despite the fact that speaking about this would be helpful in the healing process and improve their psychosocial functioning, the male participants feared being seen as ‘weak’. Most viewed talking about emotions and feelings as reserved for women. This meant that they preferred bottling issues up, thereby negatively impacting on their psychosocial functioning. More themes were covered and these included relearning new ways which showed participants that speaking out/communicating their frustrations was important. This opened up more doors for more males to publicly share their experiences without fear of being shamed. Bottling up emotions often leads to frustration and poor conflict/problem resolution, which has been seen to be a cause of domestic violence (Wolfe _et al._, 2003; An _et al._, 2017). It was thus important that the intervention helped all participants to see the importance of being able to speak out about their feelings freely without fear of being judged. Through the provision of a safe space to speak about their experiences, the participants also became a support structure to each other as they understood each other’s experiences and could be open about it during the group meetings. It is often believed that most adolescents exposed to domestic violence have a limited support structure and no platform to address the emotional effects of the exposure (Ullman, 2003). The intervention was able to serve that purpose and provide information on dealing with the impacts in an effort to improve the psychosocial outcomes of the affected adolescents.

**Personal conduct and behaviour**  
The researcher observed each and every participant in both groups to pick up any concerning behaviours that would have been needed to be addressed in the intervention. It is believed that some adolescents who have been exposed to domestic violence could present with aggression, bullying tendencies, abusive and disruptive behaviours, and have no empathy for others (Kimball, 2016; Lundy & Grossman, 2005). This means that they have poor psychosocial outcomes and struggle to fare normally in life as a result; the intervention was therefore aimed at minimising this risk. The findings from the observations confirmed that there were group members who displayed such behaviours early on in the sessions. In Group A it was a particular female who seemed to bully other group members, especially the males. She would laugh at them when they speak, mock them and generally did not treat them well. At one of the sessions, she openly declared that she doesn’t like men and beats them at any given chance.

_Ngiyawazonda amadoda mina, yidoti zabantu_- loosely translated to mean - _I hate men, men are trash._ (Group A: participant ‘Monalisa’)

These kinds of statements and open hate speech were discouraged from the group as part of the group contract, but they clearly signified the hate and resentment the participant had for the opposite sex. This female’s resentment at men drove her to make life choices which did not include any man, as she indicated that she only dates women. The participant later revealed that she started hating men after she saw her stepfather beat her mother to a pulp, then chased them away from his house and they had to move back to her grandmother’s house, where they were crowded and socioeconomic circumstances were bad. The participant stated that her mother lost her job as a result of her injuries and since then has struggled to meet the family’s financial obligations. This exposure to domestic violence left the participant scarred emotionally and she developed a negative attitude towards men as a result. Her psychosocial functioning has thus been greatly impaired as her life choices, such as whom she dates, have also revolved around...
the traumatic events she experienced. These findings are in line with previous research, which confirms that adolescent exposure to domestic violence influences gender attitudes (An et al., 2017; Bloom, 2016).

The importance of interventions to address psychosocial effects and mediate the possible harm caused by domestic violence exposure is quite evident. This is seen in the positive responses and behavioural changes observed in participant ‘Monalisa’ from Group A. As the sessions progressed, the rowdiness and disrespect displayed to male participants shifted towards more cordial relationships. The group sessions addressed the issue of equality between boys and girls, and the importance of developing healthy relations between the two, and this assisted in improving behaviours to become more socially acceptable.

In Group B there were two male participants who were also observed to be unfriendly to group members and the facilitator. They also displayed aggressive tendencies and were quite disrespectful to some of the participants. The manner in which they communicated with the other participants signified a lack of sympathy for them. When their behaviour was challenged as being disruptive to the group, one of the responses was as follows:

*This is all useless, no point in being nice to people who are not nice to you.* (Group B: participant ‘Kgomotso’)

Kgomotso broke down in tears and sobbed like a baby in this session. He blurted out that his father made him an angry man; he reportedly beat his mother in front of them and beat the children as well. He stated that no matter how well his father was treated at home, he always found reasons to beat them and no one liked it at home when he was around. It appears as if the participant had externalised the trauma from the beating, hence his aggression and behavioural issues displayed in the group setting. This confirms what research has reported about children exposed to domestic violence who display aggression and behavioural challenges (Burton et al., 2015; Holt et al., 2008; Wolfe et al., 2003). A few changes were noted in the participant as the group sessions progressed – he began to be more cordial and respectful with everyone in the group.

**Life skills empowerment**

Research (Holt et al., 2008; Kågesten, Gibbs, Blum, Moreau, Chandra-Mouli, Herbert & Amin, 2016) has shown that some adolescents exposed to domestic violence fail to develop competency in skills to resolve issues such as conflict, managing their emotions and solving problems. This affects the personal conduct of the affected individual as they struggle with self-esteem, making choices, communication skills, etc. One of the expected outcomes of the programme was to improve/enhance positive decision making regarding social relationships by developing young people’s psychosocial skills and functioning through participatory learning (Holden et al., 2015). Adolescents are equipped with life skills to form healthy relationships free from violence and to develop coping skills to deal with issues such as anxiety. It was thus important to observe these skills in each participant and take note of any changes, if any, which might have been attributed to the group process. The researcher observed issues such as self-esteem/self-confidence, problem-solving skills, decision-making skills, conflict-resolution skills, anger management and communication skills. These skills were specifically addressed in the group work process.

Unsurprisingly, most of the participants were quite shy, reserved and struggled to communicate and seemed to lack self-confidence in the first few sessions. This was observed in both groups and served as a barrier to the group processes in the beginning, as there was limited participation and engagement. Some participants indicated that they struggled with confidence and found it difficult and intimidating to speak in groups, especially if it meant being the centre of attention.

*Hayo, kunzima kakhulu ukukhuluma in front of phambi kwabantu, angilaso isibindi and ngilamahloni - loosely translated - yeah, it’s very difficult to speak in front to people, I don’t have the confidence and I am quite shy.* (Group A: participant ‘Melody’)
In all honesty, I struggle speaking in front of people, angizithembi and I don’t want to be laughed at. (Group B: participant ‘Martin’)

These responses meant that the participants did not have self-confidence to speak in front of people. One participant indicated that he did not participate because he was afraid of being laughed at, given that he did not trust his communication abilities to speak in a group setting. This view was shared by most of the group members and they fell silent or would not speak when prompted. This lack of trust and confidence in themselves also spoke of low self-esteem issues which are sometimes attributed to exposure to domestic violence (Edleson, 1999; Lichter & McCloskey, 2004). Communication is viewed as a basic life skill and some group members did not appear to have developed that competency yet. This finding aligns with research which indicates that children exposed to domestic violence fail to develop good communication skills because they internalise issues (Wolfe et al., 2003). However, this does not mean that adolescents who have not been exposed to domestic violence generally have good communication skills, but studies have shown that those who have been exposed tend to struggle to communicate effectively. The intervention included empowerment on issues such as communication, decision making, conflict resolution, which were discussed broadly, along with role-play to ensure effective understanding of the skills. A positive difference was noted as almost all the participants from both groups were able to communicate freely, made good decisions and resolved conflict. Some participants even shared the results:

Mam, usizise kakhulu shame, awubheke sesikhuluma kamnandi kanjani. Umuntu naye useyazi themba emphakathini - This is translated to mean - Ma’am, you helped us a lot, look at how nicely we communicate now. I am even confident and trust myself enough to speak in front of a community. (Group B: participant ‘Jonas’)

Mina bengiligwala and hardly made any decisions or resolved any problems and conflicts kahle ngoba bengingazi ukuthi ngenzekanjani. I would just freeze every time when faced with a problem instead of addressing it, but now that has changed thanks to this group. (Group A: participant ‘Buhlebezulu’)

This statement by one of the participants can be loosely translated to mean that she had been a coward before and would fail to resolve any conflicts and address her problems. However, all that seems to have changed, and participants attribute the changes to the group work intervention. The enhancement of life skills such as communication, decision making and conflict resolution translated to improved psychosocial functioning for the participants, who seem to have benefited positively from the intervention. This meant that participants would be able to develop and negotiate healthy relationships, thus minimising the risk factors of becoming perpetrators or victims of domestic violence through rejection of violence and understanding their personal worth. Within a life skills approach to the intervention, the adolescents seem to have gained enhanced capacity for critical thinking, problem solving, conflict resolution, decision making and communication. They have improved self-esteem and learned to build competencies and skills that enable them to make choices about relationships that are self-affirming and respectful of others (Holden, 2003).

RECOMMENDATIONS

The findings above have implications for policy and practice with regards to working with children exposed to domestic violence. The results corroborate the findings of other studies on the importance of providing group work interventions for adolescents exposed to domestic violence. These interventions are known to minimise the risks associated with the exposure to domestic violence (An et al., 2017; Stein, Jaycox, Kataoka, Wong, Tu, Elliot & Fink, 2003) and are believed to be beneficial in improving psychosocial outcomes for the affected individuals. Providing a safe space for the adolescents to engage and talk to each other about their experiences meant that they received support from each other. The availability of someone for the child to turn to for emotional support is essential, since a social support system for exposed children and young people is considered crucial in determining the impact of the
violence (Kashani & Allan, 1998; Ullman, 2003). This suggests that the support structure provided by the group work intervention is beneficial as it reduces the risks of the psychosocial effects of the exposure. Group work is also preferred by most adolescents and evinces less resistance compared to individual counselling, which sometimes has a stigma attached. Resilience is associated with having positive peer and sibling relationships and friendships that can buffer the effects of stress, prevent and mediate stress, provide support and nurturance, as well as information on how to deal with stress (Guille, 2004; Mullender, Hague, Imam, Kelly, Malos & Regan, 2002; Holt et al., 2008). The findings above suggest that the group intervention also plays a positive role to that effect. In line with social learning theory, group members also get to learn from each other, as a socialisation platform is provided. A recommendation is therefore made that group work be considered a worthwhile intervention in dealing with adolescents exposed to domestic violence.

WHO (2010) stipulates that within the perspective of an individual’s life course, each life stage, including adolescence, has specific risks associated with the perpetration, exposures and experiences of violence, but also offers an opportunity to target these development-related risk factors through the provision of opportune interventions. The findings from this study support the above as evidenced by the recorded benefits of the group work intervention with an embedded life skills approach. CSE and Life Skills Education interventions that specifically seek to target the youth have led to improvements in gender relations, improved communication between peers and general life skills. Their aim is also to increase positive decision making regarding social relationships by developing and improving the adolescent’s psychosocial skills and functioning through participatory learning (Holden et al., 2015). The group work intervention serves as a socialisation vehicle, where positive and pro-social ways of resolving conflicts are learnt. Given the above, recommendations are made that group work interventions appropriate for adolescents exposed to domestic violence must have a life skills approach. Learning life skills with regards to negotiating relationships can minimise risk factors stemming from domestic violence, as well as teach adolescents to reject violence.

The study also confirms the importance of access to social work services in schools. This necessitates placing qualified social workers in school settings as the need is dire. Schools need to be more trauma sensitive and ensure that social services to its learners are a high priority in basic education (Reyneke, 2018), especially seeing that many are exposed to some form of violence in the South African context. Teachers do not necessarily have the time nor the expertise to provide psychosocial support to learners adversely affected by exposure to DV, and without interventions, the needs of these adolescents are neglected, with far-reaching consequences in the future. The school itself is often not trauma sensitive, given the lack of social services provided in the setting. The role of school social workers in schools is thus key and starts with the development of relevant policies by the relevant structures if a national roll-out is to occur to place these professionals in schools. This study confirms that the need for group work interventions to address the psychosocial impacts on adolescents exposed to domestic violence is crucial, and social workers can render such services in the schools.

The availability of interventions to adolescents in South Africa is a cause for concern as opportunities are limited. Given the fact that there are few interventions available in school settings, as well as the low rate of disclosure of exposure to domestic violence (such violence is viewed a private matter), policy and school social work practice implications mean that schools might need to make holistic assessments of their learners. In that way, adolescents in need of group work interventions to address the risk factors that come with exposure to domestic violence could be identified and assisted appropriately. This will have a beneficial effect, as it most likely reduces the risks of perpetration and victimisation of the affected adolescents, thereby eliminating intergenerational violence.

The timing of intervention responses is crucial, with research suggesting that when an adolescent needs help, intervention should follow quickly and intensively (Osofsky, 2004). Advocates also call for a holistic and child-centred approach to service delivery, and thus interventions should be designed to meet the needs of the participants for them to be effective in mediating risks associated with
childhood/adolescent exposure of domestic violence (Holt et al., 2008). Adopting a holistic treatment approach would be useful to gain a comprehensive understanding of adolescents’ exposure experiences and maximise the impact of support to enhance their psychological functioning (Sui et al., 2018). Interventions in South Africa therefore should focus on addressing the psychosocial effects of domestic violence on adolescents.

This study did have several limitations, given the fact that this was a small sample size, and hence generalisability of the findings is not possible. It is thus suggested that a bigger study be replicated with a larger sample size. A further limitation was the representation of the South African population, as there was no diversity amongst participants. All research participants were black and resided in the same area with similar socioeconomic statuses. Future studies should include a diverse range of participants to make a fair representation of the South African context. A future study recommendation is also that of longitudinal evaluations to check the effectiveness of the group work interventions in the long run. It will be important to know how these adolescents fare in future in comparison to those who have also been exposed to domestic violence and did not receive any intervention.

CONCLUSION
To conclude, despite several limitations, the group work interventions seem worthwhile as a solution to addressing the psychosocial impacts of domestic violence exposure on adolescents. There is great potential for such interventions to reduce domestic violence in the long run, making them a worthy investment to consider, given the possible positive outcomes for adolescents.

REFERENCES
ALLEN, J. P., MOORE, C., KUPERMINC, G. & BELL, K. 1998. Attachment and adolescent psychosocial functioning. Child Development, 69(5): 1406-1419.
AN, S., KIM, I., CHOI, Y. J., PLATT, M. & THOMSEN, D. 2017. The effectiveness of intervention for adolescents exposed to domestic violence. Children and Youth Services Review, 79: 132-138.
BABBIE, M. 2013. The practice of social research. Wadsworth: Thomson Learning Inc.
BANDURA, A. & WALTERS, R. H. 1977. Social learning theory (Vol. 1). Prentice Hall: Englewood Cliffs.
BARBOUR, R. & KITZINGER, J. (eds.). 1999. Developing focus group research: Politics, theory and practice. Thousand Oaks: Sage.
BOTTICELLO, A. L. 2009. A multilevel analysis of gender differences in psychological distress over time. Journal of Research on Adolescence, 19(2): 217-247.
BURTON, P., WARD, C. L., ARTZ, L. & LEOSCHUT, L. 2015. The Optimus study on child abuse, violence and neglect in South Africa. Cape Town: The Centre for Justice and Crime Prevention.
CHAFFIN, M., BONNER, B., WORLEY, K. & LAWSON, L. 1996. Treating abused adolescents. In: BRIERE, J., BERLINER, L., BULKLEY, J., JENNY, C., & REID, T. (eds.). The APSAC handbook on child maltreatment. Thousand Oaks: Sage Publications, Inc: 119-139.
CHITALE, S. 2021. Increase in femicide in South Africa. [Online] Available: https://www.irinsider.org/sub-Saharan-africa-1/2021/3/19/increase-in-femicide-in-south-africa [Accessed: 05/05/2021].
DAHLBERG, L. L, TOAL, S. B, SWAHN, M. & BEHRENS, C. B., 2005. Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools. National Centre for Injury Prevention and Control of the Centres for Disease Control and Prevention. Atlanta: Georgia.
DE MEYER, S., KAGESTEN, A. M. K., MCEACHRAN, J., CHILET-ROSELL, E., KABIRU, C. W., & MICHIelsen, K. 2017. “Boys should have the courage to ask a girl out”: Gender norms in early adolescent romantic relationships. Journal of Adolescent Health, 61(4): S42-S47.

DE VOS, A., STRYDOM, H., FOUCHE, C. & DELPORT, C. 2011. Research at grass roots: For social sciences and human services professions. Van Schaik Publishers: Pretoria.

DONENBERG, G., NAIDOO, P., KENDALL, A., EMERSON, E., WARD, C. L., KAGee, A., SIMBAYI, L., VERMAAK, R., NORTH, A., MTHEMBU, J. & MACKESY-AMITI, M. E. 2020. Pathways from witnessing community violence to mental health problems among South African adolescents. SAMJ: South African Medical Journal, 110(2): 145-153.

EDLESON, J. L. 1999. Children's witnessing of adult domestic violence. Journal of Interpersonal Violence, 14(8): 839-870.

EDLESON, J. L., SHIN, N. & ARMENDARIZ, K. K. J. 2008. Measuring children's exposure to domestic violence: The development and testing of the Child Exposure to Domestic Violence (CEDV) Scale. Children and Youth Services Review, 30(5): 502-521.

ELLEMERS, N. 2018. Gender stereotypes. Annual Review of Psychology, 69: 275-298.

EVANS, S. E., DAVIES, C. & DILILLO, D. 2008. Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. Aggression and Violent Behavior, 13(2): 131-140.

EZHUMALAI, S., MURALIDHAR, D., DHANASEKARAPANDIAN, R. & NIKKETHA, B. S. 2018. Group interventions. Indian Journal of Psychiatry, 60(4): 514-521.

FANTUZZO, J. W., DEPAOLO, L. M., LAMBERT, L., MARTINO, T., ANDERSON, G. & SUTTON, S. 1991. Effects of interparental violence on the psychological adjustment and competencies of young children. Journal of Consulting and Clinical Psychology, 59(2): 258.

FINE, G. A. (2003). Towards a peopled ethnography: Developing theory from group life. Ethnography, 4(1): 41-60.

FOSHEE, V. A., BAUMAN, K. E. & LINDER, G. F. 1999. Family violence and the perpetration of adolescent dating violence: Examining social learning and social control processes. Journal of Marriage and the Family, 331-342.

GLODICH, A. & ALLEN, J.G. 1998. Adolescents exposed to violence and abuse: A review of the group therapy literature with an emphasis on preventing trauma re-enactment. Journal of Child and Adolescent Group Therapy, 8:135-154.

GUILLE, L. 2004. Men who batter and their children: an integrated review. Aggression and Violent Behavior, 9(2): 129-163.

HEISE, L. & FULU, E. 2014. State of the field of violence against women and girls: What do we know and what are the knowledge gaps. What works to prevent violence against women and girls.

HERRERA, V. M. & MCCLOSKEY, L. A. 2001. Gender differences in the risk for delinquency among youth exposed to family violence. Child Abuse & Neglect, 25(8): 1037-1051.

HOLDEN, G. W. 2003. Children exposed to domestic violence and child abuse: Terminology and taxonomy. Clinical Child and Family Psychology Review, 6(3): 151-160.

HOLDEN, J., BELL, E. & SCHAUERHAMMER, V. 2015. We want to learn about good love: Findings from a qualitative study assessing the links between comprehensive sexuality education and violence against women and girls. London: Plan International UK and Social Development Direct.

HOLT, S., BUCKELY, H. & WHELAN, S. 2008. The impact of exposure to domestic violence on children and young people: A review of the literature. Child Abuse & Neglect, 32(8): 797-810.

Social Work/Maatskaplike Werk 2022:58(1)
HOLT, S., KIRWAN, G. & NGO, J. 2015. Groupwork interventions for women and children experiencing domestic abuse: do they work and do they last? Groupwork, 25(1).

JAFFE, P., WOLFE, D., WILSON, S. & ZAK, L. 1986. Similarities in behavioral and social maladjustment among child victims and witnesses to family violence. American Journal of Orthopsychiatry, 56(1): 142.

KÄGESTEN, A., GIBBS, S., BLUM, R. W., MOREAU, C., CHANDRA-MOULI, V., HERBERT, A. & AMIN, A. 2016. Understanding factors that shape gender attitudes in early adolescence globally: a mixed-methods systematic review. PLoS One, 11(6): e0157805.

KAMINER, D., DU PLESSIS, B., HARDY, A. & BENJAMIN, A. 2013. Exposure to violence across multiple sites among young South African adolescents. Peace and Conflict: Journal of Peace Psychology, 19(2): 112.

KASHANI, J. H. & ALLAN, W. D. (eds.). 1998. The impact of family violence on children and adolescents. Thousand Oaks: Sage Publications.

KAWULICH, B. B. 2005. Participant observation as a data collection method. Forum qualitative sozialforschung/forum: Qualitative Social Research, 6(2).

KIMBALL, E. 2016. Edleson revisited: reviewing children’s witnessing of domestic violence 15 years later. Journal of Family Violence, 31(5): 625-637.

KITZMANN, K.M., GAYLORD, N.K., HOLT, A.R. & KENNY, E.D. 2003. Child witnesses to domestic violence: a meta-analytic review. Journal of Consulting and Clinical Psychology, 71(2): 339.

KITZINGER, J. 1995. Qualitative research: Introducing focus groups. BMJ, 311(7000):299-302.

LEEDY, P.D. & ORMROD, J.E. 2013. Practical research and design. 10 th ed. Boston: Merril/Prentice Hall.

LICHTER, E. L. & MCCLOSKEY, L. A. 2004. The effects of childhood exposure to marital violence on adolescent gender-role beliefs and dating violence. Psychology of Women Quarterly, 28(4): 344-357.

LUND, C., BOYCE, G., FLISHER, A. J., KAFaar, Z. & DAWES, A. 2009. Scaling up child and adolescent mental health services in South Africa: Human resource requirements and costs. Journal of Child Psychology and Psychiatry, 50(9): 1121-1130.

LUNDY, M. & GROSSMAN, S. F. 2005. The mental health and service needs of young children exposed to domestic violence: Supportive data. Families in Society, 86(1): 17-29.

MAKHUBELA, M. S. 2012. Exposure to domestic violence and identity development among adolescent university students in South Africa. Psychological Reports, 110(3): 791-800.

MASINGA, P. 2019. A theory-based school violence prevention programme for high school learners in the Tshwane South District, Gauteng Province, South Africa. Social Work/Maatskaplike Werk, 55(4): 424-438.

MULLENDER, A., HAGUE, G., IMAM, U. F., KELLY, L., MALOS, E. & REGAN, L. 2002. Children’s perspectives on domestic violence. Thousand Oaks: Sage.

NORMAN, R., MATZOPOULOS, R., GROENWALD, P. & BRADSHAW, D. 2007. The high burden of injuries in South Africa. Bulletin of the World Health Organization, 85: 695-702.

OSOFSKY, J.D. 2004. Community outreach for children exposed to violence. Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 25(5): 478-487.

PERNEBO, K. 2018. Children in group interventions after exposure to violence toward a caregiver: Experiences, needs, and outcomes. Sweden: Linnaeus University. (Doctoral dissertation)
PERRY, D. G. & PAULETTI, R. E. 2011. Gender and adolescent development. *Journal of Research on Adolescence*, 21(1): 61-74.

PELTERSEN, I., SWARTZ, L., BHANA, A. & FLISHER, A. J. 2010. Mental health promotion initiatives for children and youth in contexts of poverty: The case of South Africa. *Health Promotion International*, 25(3): 331-341.

PINGLEY, T. 2017. The impact of witnessing domestic violence on children: A systematic review. *Social Work Master’s Clinical Research Papers*, 773. [Online] Available: https://ir.stthomas.edu/ssw_mstrp/773_9 [Accessed: 04/05/2021].

RASOOL, S. 2022. Adolescent exposure to domestic violence in a South African city: Implications for prevention and interventions. *Gender Issues Journal*, 39(2): 99-121. https://doi.org/10.1007/s12147-021-09279-2

REYNEKE, R. 2018. The role of school social workers in giving effect to children’s right to education: A legal perspective. *Journal for Juridical Science*, 43(2): 79-108.

RO, E. & CLARK, L. A. 2009. Psychosocial functioning in the context of diagnosis: Assessment and theoretical issues. *Psychological Assessment*, 21(3): 313.

RUBIN, K. H., DWYER, K. M., BOOTH-LAFORCE, C., KIM, A. H., BURGESS, K. B. & ROSEKRASNOR, L. 2004. Attachment, friendship, and psychosocial functioning in early adolescence. *The Journal of Early Adolescence*, 24(4): 326-356.

SANGASUBANA, N. 2011. How to conduct ethnographic research. *Qualitative Report*, 16(2): 567-573.

STEINBERG, L. 2005. Cognitive and effective development in adolescents. *Trends Cognitive Science*, 9(2): 69-74.

STEIN, B. D., JAYCOX, L. H., KATAOKA, S. H., WONG, M., TU, W., ELLIOTT, M. N. & FINK, A. 2003. A mental health intervention for schoolchildren exposed to violence: A randomized controlled trial. *JAMA*, 290(5): 603-611.

SUI, X., MASSAR, K., KESSELS, L. T., REDDY, P. S., RIITER, R. A. & SANDERS-PHILLIPS, K. 2018. Violence exposure in South African adolescents: Differential and cumulative effects on psychological functioning. *Journal of Interpersonal Violence*, 0886260518788363.

SWANSTON, J., BOWYER, L. & VETERE, A. 2014. Towards a richer understanding of school-age children’s experiences of domestic violence: The voices of children and their mothers. *Clinical Child Psychology and Psychiatry*, 19(2): 184-201.

TOSELAND, R. W. & RIVAS, R. F. 2013. *An introduction to group work practice: Pearson new international edition*. Pearson Higher Ed.

TRICKETT, P. K. & MCBRIDE-CHANG, C. 1995. The developmental impact of different forms of child abuse and neglect. *Developmental Review*, 15(3): 311-337.

ULLMAN, S. E. 2003. Social reactions to child sexual abuse disclosures: As critical review. *Journal of Child Sexual Abuse*, 12(1): 89-121.

VETTEN, L. 2005. Addressing domestic violence in South Africa: Reflections on strategy and practice. In: *Expert Group Meeting on Violence against women: Good practices in combating and eliminating violence against women. United Nations Division for the Advancement of Women*, pp. 17-20.

WAY, N., CRESSSEN, J., BODIAN, S., PRESTON, J., NELSON, J. & HUGHES, D. 2014. “It might be nice to be a girl... Then you wouldn’t have to be emotionless”: boys’ resistance to norms of masculinity during adolescence. *Psychology of Men & Masculinity*, 15(3): 241.
WHO REGIONAL OFFICE FOR EUROPE AND BZgA. 2010. *Standards for Sexuality Education in Europe: A Framework for Policy Makers, Education and Health Authorities and Specialists*. Köln: BZgA.

WOLFE, D. A., CROOKS, C. V., LEE, V., MCINTYRE-SMITH, A. & JAFFE, P. G. 2003. The effects of children's exposure to domestic violence: a meta-analysis and critique. *Clinical Child and Family Psychology Review*, 6(3): 171-187.

WOLFE, D. A., WEKERLE, C., SCOTT, K., STRAATMAN, A. L., GRASLEY, C. & REITZEL-JAFFE, D. 2003. Dating violence prevention with at-risk youth: a controlled outcome evaluation. *Journal of Consulting and Clinical Psychology*, 71(2): 279.

WOOLLETT, N. & THOMSON, K. 2016. Understanding the intergenerational transmission of violence. *SAMJ: South African Medical Journal*, 106(11): 1068-1070.