

## Original Research

Factors That Protect
Children From
Community Violence:
Applying the INSPIRE
Model to a Sample of
South African Children

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### **Abstract**

Community violence is a prevalent form of interpersonal violence in South Africa for children living in low-income areas. Trauma arising from violence exposure is of concern in contexts where access to treatment is often unattainable. As simultaneous multisectoral strategies show higher potential to counter interpersonal violence than single interventions, the World Health Organization with partners created INSPIRE. INSPIRE takes

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an integrated approach coordinated across formal and informal settings of civil and private society. Responding to research paucity on methods that counter community violence in LMIC settings, this study employed a cross-sectional correlational design consisting of a sample of 2,477 children aged 10 to 17 years from the Young Carers 2009-2010 study conducted in a low-income, HIV-endemic province of South Africa highly affected by community violence. Multiple logistic regressions assessed individual and dose associations between four INSPIRE-based violence prevention strategies—positive parenting, basic necessities, formal social support, and school structural support—and direct and indirect community violence outcomes. Three strategies had significant associations with community violence outcomes: necessities (direct p < .001; adjusted odds ratio [AOR] = .57; indirect p < .01; AOR = .62), formal support (direct p < .05; AOR = .83; indirect p < .05; AOR = .73), and school support (direct p < .001; AOR = .53; indirect p < .001; AOR = .49). Combined interventions in direct and indirect community violence analyses demonstrated that children reporting a higher number of strategies were less likely to have experienced community violence. This outcome extends the results of longitudinal studies in South Africa highlighting social protection with care as a means to overcome structural deprivation strains, thereby reducing the likelihood of children's exposure to community violence. Moreover, these findings uphold the INSPIRE model as an effective cross-sectoral approach to prevent and reduce the community violence that children experience.

## **Keywords**

community violence, violence exposure, youth violence, homicide, cultural contexts

# **Background**

## Community Violence and Its Consequences in South Africa

Many children in South Africa experience violence not as a singular event, but as a condition of life, with few safe spaces from exposure and threat (Finkelhor et al., 2007; Leoschut & Kafaar, 2017; Martin et al., 2013; Schwab-Stone et al., 1995). Whether children experience violence directly and indirectly as witnesses of violence (Hillis et al., 2017), any exposure to violence is an adverse childhood experience (ACE; Felitti et al., 1998) that can cause immediate and long-term harm to children (Bacchini et al., 2015). Community violence is a prevalent violence exposure in South Africa for

children living in low-income areas (Leoschut & Burton, 2006). Community violence refers to violent episodes experienced or seen outside the home; these exclude domestic violence and media portrayals viewed electronically or in theaters (Fowler et al., 2009; Richters & Martinez, 1993). In a multinational study of teen boys and girls (n = 2,041) from urban centers in Nairobi, Kenya, and Cape Town, more than 80% of participants reported at least one exposure to community violence in their lifetime. The most cited were witnessing violence in streets, neighborhood, or at school; being robbed or assaulted directly; or witnessing a family member being hurt or killed (Seedat et al., 2004). A Western Cape study of 617 South African students aged 12 to 15 years revealed a nearly universal phenomenon (98.9%) of witnessing weapons violence (Kaminer et al., 2013).

Besides immediate social and economic impacts, interpersonal violence has long-term consequences for public and mental health (Anda et al., 2010; Banyard et al., 2017; Mathews & Benvenuti, 2014). Studies conducted in sub-Saharan Africa show that children who experience violence report consistently poorer outcomes in physical and mental health than peers who have not experienced violence (Meinck et al., 2016). Poor outcomes include increased risk of posttraumatic stress disorder (PTSD; O'Donnell et al., 2011), depression (Nöthling et al., 2016), and teen suicidality (Cluver et al., 2015).

Fear of community violence can prevent adolescents from seeking needed health care services (Mmari et al., 2016). This finding is significant for those living with HIV/AIDS in South Africa—in 2016 cited as 20% of all those living with HIV/AIDS globally (The Joint United Nations Programme on HIV/AIDS [UNAIDS])—as a South African community violence study (Skeen et al., 2016) found that children living in households with HIV-positive adults and children were particularly at risk of violence exposure. In addition, research in South Africa shows that living in a high-violence community is associated with risk for adolescent HIV, along with poverty indicators such as food insecurity and informal housing (Cluver et al., 2016). As adolescents are sub-Saharan Africa's most vulnerable members as the only age group with increasing rates of HIV infection, and for whom AIDS is the leading cause of death (Davies et al., 2015), prevention and response to community violence exposure is crucial.

The potential long-term trauma from community violence exposure is augmented in contexts where access to secondary and tertiary treatment are frequently unattainable by those affected. Prevention is crucial, both to protect children from harm and to reduce the potential of ongoing perpetration from children who grow up experiencing the damaging cycle of abuse (Abramsky et al., 2011; Jennings et al., 2015). However, prevention can be

challenging as both the experience of and exposure to violence is not attached to a single societal risk factor. Rather, an interplay of cultural, biological, and individual risk factors escalates children's danger of violence exposure (Know Violence in Childhood, 2017).

A socioecological view (Bronfenbrenner, 1979) considers embedded violence factors whose influences and interactions within and between societal levels—from the micro level of individuals and families, to meso level connections of school and community at large, to the macro rings of cultural beliefs, norms, and values—make some children more vulnerable to violence (Krug, Mercy, Dahlberg, & Zwi, 2002; World Health Organization [WHO], 2016). Supporting this approach, simultaneous interventions across societal sectors have shown greater effectiveness than single sector interventions in countering violence in low-resource settings of high-income countries (WHO, 2016). In South Africa, cross-sectoral intervention efficacy has been supported by studies assessing social protection as a protective factor against child violence (Cluver et al., 2014, 2016, 2018). Social protection refers to the spectrum of public and private sector policies and programs targeted to prevent, reduce, and eliminate economic and social susceptibilities to structural deprivation (Cluver et al., 2015; UNICEF, 2012). Although most known for its conditional and unconditional cash transfers (Cluver et al., 2016), psychosocial support, or "care," also falls under the broad heading of social protection. Findings from studies conducted in South Africa confirm the benefit of psychosocial support from parents or other adults in protecting children from violence in and outside the home (Cluver et al., 2016, 2017, 2018). Combined interventions of "cash + care" are associated with reduced structural and psychosocial pathways to HIV risks in South Africa (Cluver et al., 2014), notably to those most severely disadvantaged (Cluver et al., 2016).1

# Development of the INSPIRE Model and Its Components

A global response to the elevated prevalence and consequences of violence generated the collaboration of organizations in the Global Partnership to End Violence Against Children (End Violence Against Children, n.d.). The potential effectiveness of cross-sectoral interventions motivated WHO, with nine partners (the Centers for Disease Control and Prevention, End Violence Against Children, Pan American Health Organization, the U.S. President's Emergency Plan for AIDS Relief, Together for Girls, UNICEF, United Nation's Office on Drugs and Crime, USAID, and the World Bank), to create INSPIRE. INSPIRE is a comprehensive plan of policies, programs, and

practices with an integrated approach to violence prevention and response coordinated across formal and informal settings of civil and private society. It encompasses seven strategies: (a) Implementation and enforcement of laws, (b) Norms and values, (c) Safe environments, (d) Parent and caregiver support, (e) Income and economic strengthening, (f) Response and support services, and (g) Education and life skills (WHO, 2016). INSPIRE's integrated strategy aims to address directly the causes of violence, activating collaboration to diminish violence exposure (WHO, 2016).

This study used data from an existing data set, the 2009–2010 Young Carers household health survey (YC; Casale et al., 2015). This data set contained indicators supporting four of INSPIRE's strategies: Parent and caregiver support, Income and economic strengthening, Response and support services, and Education and life skills. The YC study, conducted with 2,477 South African children aged 10 to 17 years and living in two low-income, HIV-endemic communities, investigated the impact of residing in an HIV/AIDS-affected family on the well-being of children to identify protective and risk factors that could effectively inform policy and practice. The potential impact of these four INSPIRE strategies on the prevention or elimination of violence are discussed below, with references to empirical studies from the South African context where available or from those in the broader sub-Saharan African region.

Parent and caregiver support. Parenting programs show promise for reducing violence exposure by improving family function in low-resource settings. A South African study revealed enhanced parent—child relationships with heightened communication through the replacement of punitive practices with nonviolent disciplinary methods (Cluver et al., 2018). In a related South African study, caregiver praise with parental monitoring of the child's activities was shown to be important in the reduction of sexually risky behaviors, which are often linked to increased probabilities of violence exposure (Cluver et al., 2016; Kuo et al., 2016; Meinck et al., 2015). Globally, positive parenting methods avert separation of children from their homes and reduce the risk of child maltreatment (WHO, 2016).

Income and economic strengthening. Household economic strengthening seeks to improve families' financial stability, thereby diminishing adult stress that may increase the likelihood of child maltreatment and domestic abuse. In this way, economic strengthening has the potential to indirectly protect children from direct and indirect violence (Butchart et al., 2016), thus decreasing the likelihood of their becoming perpetrators (WHO, 2016).

Response and support services. Formal social support is the only INSPIRE strategy comprising both prevention and response to violence. By providing psychosocial services and support distinct from the informal support of family and friends, it reaches both victims and perpetrators to break cycles of violence (WHO, 2016). For students, school staff and teachers can mitigate the effects of community violence on children. For children in low-resource areas, these adult connections may be the only social support outside the home (Errante, 1997). Moreover, enlarging and improving response and support services can reduce repeated violence (Richter et al., 2009).

Education and skills training. Schools that recognize and address psychosocial challenges such as trauma can support student learning while offering respite from chaos and violence in the home and community (Errante, 1997). As school attendance is linked to lower victimization and perpetration of certain kinds of violence (notably childhood sexual violence, early marriage, domestic violence, and youth violence), educational support interventions can shield children from violence and its consequences, such as unintended pregnancy, heightened HIV risk, and other sexually transmitted infections (WHO, 2016). Among orphaned Zimbabwean girls who received help in the form of fee payment, school supplies, uniforms, and health and hygiene articles, school dropout was reduced by 82%, with early marriage decreasing by 63% (Hallfors et al., 2011).

# Study Focus

The elevated prevalence of community violence in sub-Saharan African settings and the concurrent scarcity of trauma recovery resources underscore the need for contextually relevant child protection, which breaks the cycle of violence. Many studies have analyzed child vulnerabilities to physical, emotional, and sexual violence (Kaminer et al., 2013; Meinck et al., 2015, 2016, 2017; Peterman et al., 2017), yet few have investigated the connections between family and community support as protective factors (Hillis et al., 2010) against community violence. This secondary analysis responds to the gap in sub-Saharan African empirical research by investigating INSPIRE's cross-sectoral model, using a data set from South African communities highly affected by violence. It focuses on the protective effects against violence of four INSPIRE strategies for which indicators were available from the YC 2009–2010 health survey with 2,477 children aged 10 to 17 years living in the two low-income, HIV-endemic communities in South Africa (Casale et al., 2015): Parent and caregiver support, Income and economic strengthening, Response and support services, and Education and life skills. These four

INSPIRE strategies have proven effective in counteracting violence within low-resource communities of high-income countries (WHO, 2016). However, less is known regarding their efficacy in low- and middle-income countries (LMICs) where children bear a disproportionate burden of abuse (WHO, 2016).

The current article had two aims. The first was to assess the potential protective associations of the four individual violence prevention strategies for direct and indirect experiences of community violence among South African children living in HIV-affected resource-scarce communities. The second objective was to examine potential protective dose associations of these four strategies, determining whether a greater number of types of violence prevention strategies was associated with a lower risk of direct or indirect community violence. Overall, this analysis contributes to the evidence base by examining whether single or combined protective factors are associated with lower odds of violence for children living in HIV-affected resource-scarce settings within LMICs such as South Africa.

### Method

## Field Research Sampling and Method

This secondary analysis employed a correlational design with cross-sectional data from an original household health survey conducted in 2009–2010 with 2,477 children aged 10 to 17 years. This age span was guided by WHO's definition of adolescence (10-19 years of age; WHO, 2019), allowing participants to fall between these parameters at both baseline and follow-up. The participants resided in two low-income, HIV-endemic communities in South Africa's KwaZulu-Natal province. These sites, one rural and one urban, were selected due to their provincial health deprivation indices (Noble et al., 2006). The rural site in the uMhlabuyalingana municipality bordered Mozambique; the urban site was in the eThekwini municipality, 20 km south of Durban. Consecutive door-to-door household selection was conducted via stratified systematic random sampling of the geographical areas representing the smallest political units. One child in each chosen household was surveyed. Random selection (e.g., by coin toss or rolling dice) determined which child to interview in households with more than one eligible child. In a private setting, each child completed an anonymous, 60-min guided self-report questionnaire with the help of interviewers trained in working with vulnerable children. Strict confidentiality was maintained. All participants received refreshments and a certificate of participation. Ethics approval was obtained from the Universities of KwaZulu-Natal and Oxford for field research, and

Clemson University for its secondary analysis. Relevant national government, municipal, and community-level authorities also gave their approval for the survey research.

### Measures

Measures were chosen for their psychometric properties, whether they could be reliably administered via self-report through a nonclinician interview and whether they had been validated and/or utilized in South Africa or analogous contexts and population. The survey tools were translated into the local language (isiZulu), and then backtranslated into English. The questionnaire was prepiloted to ensure both age-appropriateness and cultural validity.

*Violence prevention strategies.* A binary variable was created and scored as 1 (*yes, the child experienced this*) or 0 (*no, the child did not*) for each violence prevention strategy. The indicators used to measure the four INSPIRE-based components are described below.

The strategy of parent and caregiver social support, represented by the measure "positive parenting," assessed authoritative nonviolent parenting. Positive parenting encompassed seven items, six of which comprise the Alabama Parenting Questionnaire (APQ; Frick, 1991), with one additional item measuring caregiver praise for home help ( $\alpha = .75$  in a South Africa orphan study; Cluver & Gardner, 2007; Cluver et al., 2007). The original items were both negatively and positively phrased with options of never, almost never, sometimes, often, and always. For this analysis, all seven items were phrased positively. Together, they assessed consistent discipline (e.g., "You talk your caregiver out of punishing you when you have done something wrong") and praise for the child's character or performance at home or school (e.g., "Your caregiver compliments you when you have done something well"). Response frequencies of often and always were coded as yes. Children who reported yes to all seven items, demonstrating the caregiver's habit of positive parenting, received the score of "1" (see Table 1).

The strategy of *income and economic strengthening*, represented by the measure "basic necessities," assessed the household's capacity to provide the child's everyday life requirements. Basic necessities is a measure of poverty, comprised of eight socially perceived necessities for children identified by the Center for South Africa Social Policy in the *Indicators of Poverty and Social Exclusion Project* (Wright, 2008), corroborated by over 80% of the South African population in a nationally representative survey (*South African Social Attitudes Survey 2006*; Pillay et al., 2006). Seven items assessed the household's ability to provide three meals, clothing to keep the child warm

 Table I. Indicators for Violence Prevention Strategies and Community Violence Outcomes.

Strategy	Measure	Frequency	Young Carer Scale
Parent and caregiver social support	Postive parenting Yes to all seven items scored as 1	n = 2,476 44.9% = 1	<ol> <li>Your caregiver says that you have done something well.</li> <li>Your caregiver threatens to punish you and then does not do it.<sup>a</sup></li> <li>You talk your caregiver out of punishing you when you have done something wrong.</li> <li>You caregiver compliments you when you have done something well.</li> <li>Your caregiver praises you for behaving well.</li> <li>Your caregiver lets you out of a punishment early.</li> <li>Your caregiver tells you that they like it when you help around the house.</li> </ol>
Income and economic strengthening	Basic necessities Yes to all seven items scored as 1	n = 2,476 67.9% = 1	<ol> <li>At home, we can afford three meals a day.</li> <li>At home, we can afford school fees.</li> <li>At home, we can afford a visit to the doctor and the medicines I need when I am ill.</li> <li>At home, we can afford enough clothes to keep me warm and dry.</li> <li>At home, we can afford toilerries to be able to wash every day.</li> <li>At home, we can afford school equipment.</li> <li>At home, we can afford more than one pair of shoes for me.</li> </ol>
Response and support services	Formal social support Yes to Items   to 2 scored as	n = 2,476 36.8% = 1	<ol> <li>A religious leader is a person in my life.</li> <li>A school principal or teacher is a person in my life.</li> </ol>
Education and life skills	School structural support Yes to Items   to 4 scored as	n = 2,411 86.9% = 1	<ol> <li>I received free school meals (I-5 times per week)</li> <li>I received free school uniform.</li> <li>I received free school transport.</li> <li>I received free school textbooks.</li> </ol>

(continued)

Table I. (continued)

Community Violence Outcomes	• Outcomes		
Outcome	Measure	Frequency	Young Carer Scale
Direct community violence	Community violence at large Yes to any item scored as 1.	Mixed time frame $n = 2,475$ 39.0% = 1	Direct community Community violence at large Mixed time frame 1. In this past year, have you had things stolen?  Yes to any item scored as 1. $n = 2.475$ 2. Have you ever in your life been hit or attacked outside?  39.0% = 1
	Community violence at school Yes to any item scored as 1.		<ol> <li>This past year other kids took something without permission or stole things from me.</li> <li>This past year other kids tried to break or damage something of mine.</li> </ol>
Indirect community violence	Witnessing violence Yes to any item scored as I.	Lifetime $n = 2,475$ $10.1\% = 1$	<ol> <li>Have you seen someone being shot?</li> <li>Have you seen someone being stabbed?</li> </ol>

<sup>a</sup>Recoded in the secondary analysis to reflect practices of positive parenting.

and dry, more than one pair of shoes, toiletries to wash daily, medical attention when ill, and school fees and equipment. An eighth item on the original survey—the ability to provide a school uniform—was removed as a school uniform was in the strategy of *education and life skills*. Children who reported *yes* to all seven items, demonstrating the household's capacity to meet their basic needs, received the score of "1" (see Table 1).

The strategy of *response and support services*, represented by the measure "formal social support," assessed children's connections to formal community services using two items from the *Social Support Scale* (Adolescent Pathways Project, 1992). The original scale of 24 items was used in a prior study of AIDS-orphaned children in Cape Town (Cluver & Gardner, 2007; Cluver et al., 2007). In this study, formal social support included two items—religious leader social support and teacher or school principal social support—assessing whether the child viewed a community religious leader, teacher, or administrator as a source of psychosocial support outside the informal realm of friends and family. Children who reported *yes* to either of these community psychosocial support resources received the score of "1" (see Table 1).

The strategy of *education and life skills*, represented by the measure "school structural support," assessed whether the child had structural support to sustain educational progress. Using four items developed by the YC team in collaboration with the South Africa Department of Education, school structural support examined whether the child received school meals, free uniforms, free transport, or free textbooks in the past school year. Children who reported *yes* to one or more items of educational support items received the score of "1" (see Table 1).

#### Violence outcomes

Direct community violence. Direct community violence, assessed by four items overall, measured a child's experience of community violence at large and at school (see Table 1). The community violence at large indicator was assessed by two items from the *Child Exposure to Community Violence Checklist* (CECV; Richters & Martinez, 1993) adapted by the YC study to reflect the most frequent types of community violence reported by South African Police Statistics (SAPS Strategic Management, 2005): whether the child ever experienced (lifetime) physical assault or robbery in the past year in the community at large. Children reporting either form of community violence at large received the score of "1." "Community violence at school" was assessed with two items from the standardized *Social and Health Assessment Peer Victimization Scale* (Ruchkin et al., 2004) for Cape Town AIDS-orphanhood studies

(Cluver & Gardner, 2007; Cluver et al., 2007): whether the child had experienced personal loss through theft or property damage by vandalism. Children experiencing either of these direct forms of community violence by a school peer in the past year received the score of "1." A score of "1" was assigned for the overall measure of direct community violence if a child scored "1" in one or both categories of this exposure (see Table 1).

Indirect community violence. Indirect community violence measured the firsthand witness of violence in an unspecified venue. Witnessing community violence was assessed with two items from the adapted YC 39-item Child Exposure to Community Violence (CECV) Scale (Richters & Martinez, 1993; SAPS Strategic Management, 2005): whether a child had witnessed either a shooting or a stabbing in a location outside of the home. Children reporting one of these indirect forms of community violence over their lifetime received the score of "1" (see Table 1).

Sociodemographic variables. Due to their potential associations with violence against children, all analyses controlled for covariates of age, gender, and location. The child's age, spanning 10 to 17 years, was dichotomized according to United Nations Educational, Scientific and Cultural Organization's (UNESCO, 2002) definitions of children (10–14 years of age) and youth (15–17 years of age). Gender was used in the binary categories of male or female. Similarly, the location was binary, either urban or rural, using survey categories from the 2001 *South African Census* (Statistics South Africa, 2003).

## **Analyses**

This study utilized multivariate regression analyses to examine whether four INSPIRE violence prevention strategies—parent and caregiver support, income and economic strengthening, response and support services, and education and life skills—were associated individually and collectively with lower odds of experiencing community violence directly as victims or indirectly as witnesses.

The analysis was conducted in three stages using SPSS 24.0 (IBM Corporation, 2016). First, descriptive statistics explored the demographics of age, gender, and location, the frequencies of individual and combined INSPIRE strategies, as well as violence outcome measures. Bivariate testing further assessed the prevalence of community violence reported within each INSPIRE intervention. Second, multiple logistic regressions assessed associations of the individual INSPIRE strategies with direct and indirect

Table 2. Socio-demographic character	eristics for the whole sample.
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	Total Sample
Variables	(n = 2,477)
Gender	
Female	1,334 (53.9%)
Male	1,143 (46.1%)
Age	13.6 [2.23]
Child (10–14)	1,548 (62.5%)
Youth (15–17)	929 (37.5%)
Location	
Rural resident	1,279 (51.7%)
Urban resident	1,198 (48.3%)
School enrollment	2,439 (98.5%)
Uninterrupted studies	2,326 (97.8%)
Positive parenting <sup>a</sup>	1,111 (44.9%)
Caregiver monitoring <sup>b</sup>	1,127 (45.5%)
Basic necessities <sup>a</sup>	1,679 (67.9%)
Formal social support <sup>a</sup>	909 (36.8%)
School structural support <sup>c</sup>	2,095 (86.5%)
Direct community violence <sup>a</sup>	964 (39.0%)
Indirect community violence <sup>d</sup>	249 (10.1%)

 $<sup>^{</sup>a}n = 2.473$ .  $^{b}n = 2.474$ .  $^{c}n = 2.423$ .  $^{d}n = 2.475$ .

community violence outcomes, controlling for the demographic covariates. Third, the dichotomous variables, representing the presence or absence of each strategy, were summed to produce a composite dose measure, with scores ranging from 0 to 4. Multiple logistic regression assessed whether a greater number of intervention doses was associated with lower odds of experiencing direct or indirect community violence, controlling for the demographic covariates. Adjusted odds ratios with 95% confidence intervals determined significant associations. Inverse adjusted odds ratios interpreted protective associations of cumulative interventions to community violence exposure.

## Results

# Sociodemographic Characteristics of the Sample

Table 2 describes the sample characteristics (n = 2,477). Participants had a mean age of 13.6 years (SD = 2.23); 62.5% were aged 10 to 14 years, with

37.5% aged 15 to 17 years. Over half were girls (54%) and most participants lived in rural locations (52%). Nearly all attended school (98.5%) with few major interruptions to their educational trajectory (98%). Below one half (45%) of the participants reported positive parenting, while two thirds reported (68%) having basic necessities for daily life. One third (37%) reported formal social support, with 86.5% affirming school structural support for their education. Overall, 40% reported direct violence at large or at school, whereas 10% reported witnessing community violence.

Table 3 displays the prevalence of those in each intervention category reporting direct and indirect community violence. Fewer than one half were coded "1" (45%) for positive parenting. Of these, 41% reported direct community violence and 11.0% witnessed community violence. More than two thirds (68%) were coded "1" for basic necessities. Of these, 35% reported direct community violence and 9.5% witnessed community violence. Formal social support was least reported, with just over one third coded "1" (36.8%). Of these, 36% reported direct community violence and 8% witnessed community violence. School structural support was most reported with more than five sixths coded "1" (86.5%). Over one third (37.5%) reported direct community violence and 8% witnessed community violence. All the responses of direct and indirect community violence were reported independent of each other, meaning that overlap between these exposures is possible.

# Associations Between Sociodemographic Variables and Community Violence Indicators

There was a parallel trend regarding the covariate associations of all four individual (see Tables 4 and 5) and cumulative INSPIRE strategies with both community violence exposures. Regarding direct exposure, age showed significant associations in each strategy such that younger children were less likely to experience direct community violence than their older counterparts. Regarding indirect exposure to community violence, all the covariates had significant associations, with older children, males, and urban dwellers being more likely to witness community violence than their younger, female, and rural counterparts.

# Associations Between Individual Strategies and Community Violence Indicators

Tables 4 and 5 highlight multiple logistic regression analyses testing associations between individual INSPIRE strategies and the two forms of community violence.

Table 3. Prevalence of Community Violence Exposure by Individual and Number of Violence Prevention Strategy Interventions.

			Community Violence Exposure	nce Exposure	
		Direct Community Violence (%)	olence (%)	Indirect Community Violence (%)	Violence (%)
Intervention		S <sub>o</sub>	Yes	°Z	Yes
Basic necessities	Yesª	1,090 (64.9%)***	589 (35.1%)***	1,520 (90.5%)	160 (9.5%)
	Ŷ	419 (52.8%)***	357 (47.2%)***	706 (88.8%)	89 (11.2%)
Formal social	Yes <sup>b</sup>	581 (63.9%)*	328 (36.1%)*	836 (91.9%)*	74 (8.1%*)*
support	Ŷ	928 (59.3%)*	636 (40.7%)*	1,390 (88.8%)*	175 (11.2%)*
School structural	Yes <sup>c</sup>	1,309 (62.5%)***	786 (37.5%)***	1,924 (91.8%)***	172 (8.2%)***
support	No	166 (50.6%)***	162 (49.4%)***	265 (80.5%)***	64 (19.5)***
Number of Interventions	ions	°Z	Yes	°Z	Yes
***1-0	n = 434	226 (52.3%)	206 (47.7%)	367 (84.8%)	66 (15.2%)
2***	n = 958	589 (61.5%)	368 (38.5%)	870 (90.8%)	88 (9.2%)
3***	n = 847	524 (61.9%)	323 (38.1%)	769 (90.8%)	78 (9.2%)
<b>4</b> ***	n = 237	170 (71.7%)	67 (28.3%)	220 (92.8%)	17 (7.2%)

Note. Overall reported totals (prevalence) of individual violence preventions strategy interventions are as follows: \*basic necessities 1,679 (67.9%). \*bformal social support 909 (36.8%). \*school structural support 2,095 (86.5%). \*p < .05. \*\*p < .01. \*\*\*p < .001 for chi-square analyses.

**Table 4.** Results of Multiple Regression Analysis Testing Associations Between Individual Prevention Strategies and Direct Community Violence Exposure, Controlling for Age, Gender, and Location.

	Violer	Violence Prevention Strategy Interventions AOR [95% CI]		
Direct Victimization <sup>a</sup>	Positive Parenting	Basic Necessities	Formal Social Support	School Structural Support
Violence prevention strategy	1.17 [1.00, 1.38]	0.57*** [0.48, 0.69]	0.83* [0.70, 0.98]	0.53*** [0.41, 0.68]
Age	0.82*	0.81*	0.81 *	0.80**
	[0.69, 0.97]	[0.68, 0.96]	[0.69, 0.96]	[0.67, 0.95]
Gender	1.12	1.09	1.10	1.13
	[0.95, 1.32]	[0.93, 1.29]	[0.93, 1.29]	[0.96, 1.33]
Location	0.98	1.18	0.98	0.82*
	[0.83, 1.15]	[0.99, 1.40]	[0.84, 1.16]	[0.68, 0.98]

Note. AORs = adjusted odds ratios controlling for age, gender, and location; <math>CI = confidence interval; bold cells indicate that the 95% CI does not include I.

Three of the four strategies were associated with both direct and indirect violence outcomes: Basic necessities and direct community violence (p < .001; n = 2,476, 67.9% = 1; AOR = .57; 95% CI = [.48, .69]) and indirect community violence (p < .01; AOR = .62; 95% CI = [.46, .84]), formal social support and direct community violence (p < .05; n = 2,476, 36.8% = 1; AOR = .83; 95% CI = [.70, .98]) and indirect community violence (p < .05; AOR = .73; 95% CI = [.55, .98]), and, finally, school structural support and community violence (p < .001; AOR = .53; 95% CI = [.41, .68]) and indirect community violence (p < .001; n = 2,411, n = 2,411,

# Associations Between Cumulative Strategies and Community Violence Indicators

Table 6 shows the results between the number of interventions and the odds of direct or indirect community violence exposure. Chi-square testing

<sup>&</sup>lt;sup>a</sup>Prevalence of direct victimization ranged from 35.3% to 39.0% with n=2,423 in school structural support and n=2,473 for all others.

p < .05. \*\*p < .01. \*\*\*p < .001.

**Table 5.** Results of Multiple Regression Analysis Testing Associations Between Individual Prevention Strategies and Indirect Community Violence Exposure, Controlling for Age, Gender, and Location.

	Vio	Violence Prevention Strategy Interventions AOR [95% CI]		
Indirect	Positive	Basic	Formal Social	School Structural
Witness <sup>a</sup>	Parenting	Necessities	Support	Support
Violence prevention strategy	1.17	0.62**	0.73*	0.49***
	[0.90, 1.53]	(0.46, 0.84]	[0.55, 0.98]	[0.34, 0.70]
Age	1.67***	1.66***	1.65***	1.46**
	[1.28, 2.18]	[1.27, 2.17]	[1.27, 2.16]	[1.11, 1.92]
Gender	1.38*	1.37**	1.35*	1.46**
	[1.06, 1.80]	[1.05, 1.78]	[1.04, 1.76]	[1.11, 1.92]
Location	1.88***	2.24***	1.89***	1.53**
	[1.43, 2.46]	[1.66, 2.98]	[1.44, 2.48]	[1.12, 2.09]

Note. AORs = adjusted odds ratios controlling for age, gender, and location; CI = confidence interval: bold cells indicate that the 95% CI does not include I.

affirmed that cell sizes were adequate for robust regression results (see Table 3). The summed strategies had scores ranging from 0 to 4. With low frequencies in the 0 to 1 range, these categories were collapsed into a single referent group (17.5%). The majority of participants reported two or three interventions (0 = 41, 1.7%; 1 = 393, 15.9%; 2 = 958, 38.7%; 3 = 847, 34.2%; and 4 = 237, 10.0%). Nearly half (48%) of the referent group reported direct victimization and 15% reported witnessing violence. Of those with two interventions, 38.5% experienced direct community violence and 9% reported witnessing violence; 38% of the three interventions group reported direct victimization and 9% reported witnessing violence; 28% of those with four interventions reported direct community violence and 7% reported witnessing violence.

Multiple logistic regression revealed significant associations at all levels between cumulative interventions and direct community violence, with diminishing AORs exhibiting a dose effect (2 vs. 0–1, p < .001, AOR = .68; 95% CI = [.54, .85]; 3 vs. 0–1, p < .001, AOR = .66; 95% CI = [.52, .84]; 4 vs. 0–1, p < .001, AOR = .43; 95% CI = [.30, .60]).

<sup>&</sup>lt;sup>a</sup>Prevalence of indirect victimization ranged from 9.7% to 10.1% with n=2,425 in school structural support and n=2,475 for all others.

p < .05. \*p < .01. \*\*p < .001.

**Table 6.** Results of Dose Variable Multiple Regressions, Testing Associations Between the Number of Violence Strategy Prevention Interventions and Community Violence Exposure.

	Community Viole	nce Outcome	
Dan auto d Niamakan	Direct Victimization <sup>a</sup>	Indirect Witness <sup>b</sup>	
Reported Number of Interventions $n = 2,476$	AOR [IAOR] [95% CI]	AOR [IAOR] [95% CI]	
0–1	Referent	Referent	
2	0.68*** [1.47] <b>[0.54, 0.85]</b>	<b>0.54</b> *** [1.85] <b>[0.38, 0.76]</b>	
3	0.66*** [1.52] [0.52, 0.84]	<b>0.54</b> *** [1.85] <b>[0.38, 0.78]</b>	
4	0.43*** [2.33] [.30, .60]	0.44** [2.27] [0.25, 0.77]	

Note. AORs = adjusted odds ratios controlling for age, gender, and location; IAOR = inverse adjusted odds ratio for significant negative associations; CI = confidence interval; bold cells indicate that the 95% CI does not include I.

Inverse adjusted odds ratios revealed that children with two factors had nearly 1.5 (1.47) times lower odds of victimization compared with their counterparts reporting zero to one factor; those with three factors showed more than 1.5 (1.52) times lower odds of victimization than their counterparts reporting zero to one factor. Participants with four factors had more than 2 (2.33) times lower odds of victimization than their peers with zero to one factor.

Multiple logistic regression analysis also revealed a significant association at all levels between cumulative interventions and indirect community violence, with an overall trend of diminishing AORs exhibiting a dose-like effect (2 vs. 0–1, p < .001, AOR = .54; 95% CI = [.38, .76]; 3 vs. 0–1, p < .001, AOR = .54; 95% CI = [.38, .78]; 4 vs. 0–1, p < .01, AOR = .44; 95% CI = [.25, .77]). Inverse adjusted odds ratios revealed that the odds of witnessing community violence were nearly 2 times (1.85) lower for children with two or three factors than their counterparts reporting zero to one protective factors. Participants with four protective factors had more than 2 (2.27) times lower odds of witnessing community violence than their peers with zero to one protective factors.

<sup>&</sup>lt;sup>a</sup>Prevalence of direct victimization for direct violence was 964 (39.0%) for n = 2,473.

<sup>&</sup>lt;sup>b</sup>Prevalence of indirect violence was 249 (10.1%) for n = 2,475.

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001.

### **Discussion**

Although studies have documented the negative consequences of children's exposure to physical, emotional, and sexual violence, few have investigated positive childhood experiences via family and community support as protective factors for direct and indirect community violence. This analysis responds to the need for contextualized research in LMICs as the first known study to investigate single and cumulative associations between INSPIRE-based violence prevention strategies and the likelihood of experiencing direct and indirect community violence in resource-scant and HIV-endemic communities within South Africa.

Nearly 40% of study participants reported at least one direct community violence episode, whether physical assault or robbery in an unspecified location or the theft or vandalism of their personal effects at school. Ten percent (10.1%) reported witnessing at least one shooting or stabbing event in their community (see Table 2). These results are in part consistent with findings of a 2013 Western Cape study (Kaminer et al.) with 617 students aged 12 to 15 years, where approximately 40% of youth also stated either receiving a threat to shoot, stab, or kill them, or experienced direct assault. School violence was highly correlated to at-large violence. Three quarters (75.8%) reported beatings or threats of being shot, stabbed, or killed at school, or viewing this violence. However, unlike the current study, the Western Cape youth reported nearly universal (98.9%) witness of weapons violence, with almost one third (31.9%) having witnessed a neighborhood homicide. Both of these studies underscore community violence's high prevalence for children in some South African communities.

### Individual Associations

Two key findings emerged from the investigation of individual associations between the violence prevention strategies and community violence. First, strong associations were seen between single interventions that provide material supplement for children at home and at school and a lower likelihood of experiencing either form of community violence. This result aligns with longitudinal study findings showing that conditional and unconditional grants ("cash") or other forms of social protection can reduce the violence children experience. Lessening poverty's strains on households and communities may ease the stress that potentially provokes violence toward children (Peterman et al., 2017), or which makes vulnerable youth prone to risky behaviors that increase their exposure to violence (Cluver et al., 2014).

Second, this study highlighted a negative association between formal social support and both direct and indirect community violence. This result suggests that meaningful connection between a community figure or social service provider and a child may play a role in shielding children from exposure to community violence. Together, these two results extend existing evidence of the effectiveness of the "cash plus care" approach in reducing violence that children experience (Cluver et al., 2014, 2016) to the domains of direct and indirect community violence. However, in LMIC settings, professional social services are limited. Therefore, the role of informal social support is a key resource to consider. For example, one South Africa study showed peer support as a general protective factor against contact sexual victimization, as well as moderating the relationship between baseline sexual assault and subsequent sexual abuse (Meinck et al., 2017). Another study in South Africa established that combinations of informal support from social networks and clinic-affiliated support groups had a protective effect for depression and suicidal ideation among HIV-positive adolescents (Casale et al., 2019), a population most susceptible to community violence exposure (Skeen et al., 2016). Informal community social support mechanisms warrant further research in the prevention and reduction of community violence that children experience.

### Cumulative Associations

Positive parenting interventions were not associated with reduced violence exposures. Caregiver warmth and nonpunitive discipline may not be adequate measures in this domain. However, parental monitoring studies have shown associations between parental monitoring and reduced sexually risky behaviors that diminish violence exposure among adolescents (Cluver et al., 2016; Kuo et al., 2016; Meinck et al., 2015). Future family-based intervention studies should investigate the protective effects of parental monitoring on all aspects of community violence.

Findings of this study suggest that combined interventions of caregiver social support, income and economic strengthening, response and support services, along with education and life skills, have the potential to reduce the risk of both the direct experience and the witnessing of community violence. Findings displayed robust graded dose-like associations for both direct and indirect community violence exposures, proposing greater protective effects with increasing numbers of interventions. Though positive parenting was not significantly associated with a lower likelihood of violence exposures as a single intervention, the cumulative strategies showed a negative association with both direct and indirect violence. These results suggest the potential of multisector strategies to shield susceptible children from the long-term negative effects of community violence by buffering their exposure to violence. As such,

this study supports the INSPIRE approach as potentially effective to prevent and reduce community violence in LMIC settings. These findings have important implications for future policy guidelines and field practice, and in particular for stakeholders seeking effective intervention combinations to reduce children's risk of community violence by addressing root causes that harm them, their families, and their communities.

### Limitations

Several study limitations must be acknowledged. First, as the direct violence exposure measure combined both lifetime and past year time scales and indirect violence measured lifetime violence, temporal precedence cannot be established for the INSPIRE strategies, limiting the conclusions that can be drawn. Second, though the INSPIRE model and study design posit causality based on existing theory and findings of sub-Saharan longitudinal research, as an observational and correlational study, this cannot be inferred. Addressing these two limitations, future randomized longitudinal studies should examine these pathways in prospective data sets, broadening their investigations to other known risk factors such as being a member of a household with someone living with HIV/AIDS (Skeen et al., 2016) or experiencing the abandonment or loss of a caregiver (Nyberg et al., 2012). Studies using marginal analysis may evidence effective combinations of interventions, as well as on how to tailor combined interventions for specific groups vulnerable to these violence exposures. Third, we used conservative coding of parental measures, requiring endorsement of all items as "always" or "often" to evidence the positive parenting strategy. Similarly, in income strengthening and economic strengthening, positive affirmation was required of all seven items to demonstrate family provision of basic child necessities. These constraints may have excluded portions of the population. In addition, we were restricted by the indicators available in the original YC data, neither conducting a comprehensive analysis of INSPIRE's individual strategies nor fully assessing the collective impact of its entire span. This narrow scope of the primary outcome measures limits study conclusions. Finally, there may be potential violence exposures missing in the analyses. However, the large representative sample gave depth to the analyses, highlighting robust individual and combined associations to both aspects of community violence exposures.

### Conclusion

Despite the limitations described above, to our knowledge this is the first study to investigate cross-sectional single and cumulative associations between four INSPIRE-based violence prevention strategies and the

likelihood of experiencing direct and indirect community violence in resource-scant, HIV-endemic communities in South Africa. This is an increasingly important question, particularly in this setting, of the ways in which community violence affects children and the strategies that may protect against its negative consequences. These findings extend evidence that concurrent family and community interventions buffering poverty's impact, while providing formal social support, may be effective in shielding children from exposure to community violence. Moreover, these findings uphold the INSPIRE model as an effective strategy in LMIC settings to prevent and reduce the community violence that children experience. As such, this study of a large representative sample of an understudied at-risk population significantly contributes to the growing body of literature on violence prevention, with its special focus on family, community, and societal factors rather than individual or relational characteristics. It is our hope that future research will probe the gaps that remain to better address the root causes of community violence in all its forms.

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#### Note

 Social protection in the form of direct cash subsidies to at-risk youth have helped to reduce child sexual abuse and exploitation as found in studies conducted in Kenya, Zambia, Zimbabwe, Malawi, and Tanzania. Cash transfers are able to address the underlying structural factors of poverty within the socioecological landscape (The Transfer Project Team, 2017). Social protection grants in South Africa have been effective in reducing household poverty while improving child outcomes, especially in reducing HIV risk behavior and infection (Cluver et al., 2016; Meinck et al., 2015). Other South African studies of social and emotional adolescent development found that support from families and other caring adults were critical for healthy behaviors and may be linked to reduced adolescent sexual risk (Cluver et al., 2014). The combination of unconditional government cash transfers and psychosocial care was associated to risk reduction by pathways directly mitigating adolescent HIV risk behavior onset. These "cash + care" findings reinforce studies showing the synergy of clustered versus single interventions (Cluver et al., 2016).

### References

- Abramsky, T., Watts, C. H., Garcia-Moreno, C., Devries, K., Kiss, L., Ellsberg, M., . . . Heise, L. (2011). What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health*, 11(1), Article 109.
- Adolescent Pathways Project. (1992). Social support scale: Psychometric development summary. New York University.
- Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 39, 93–98.
- Bacchini, D., Affuso, G., & Aquilar, S. (2015). Multiple forms and settings of exposure to violence and values: Unique and interactive relationships with antisocial behavior in adolescence. *Journal of Interpersonal Violence*, 30(17), 3065–3088.
- Banyard, V., Hamby, S., & Grych, J. (2017). Health effects of adverse childhood events: Identifying promising protective factors at the intersection of mental and physical well-being. *Child Abuse & Neglect*, 65, 88–98.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Butchart, A., Hillis, S., & Burton, A. (2016). *INSPIRE: Seven strategies for ending violence against children*. World Health Organization.
- Casale, M., Boyes, M., Pantelic, M., Toska, E., & Cluver, L. (2019). Suicidal thoughts and behaviour among South African adolescents living with HIV: Can social support buffer the impact of stigma? *Journal of Affective Disorders*, 245, 82–90.
- Casale, M., Wild, L., Cluver, L., & Kuo, C. (2015). Social support as a protective factor for depression among women caring for children in HIV-endemic South Africa. *Journal of Behavioral Medicine*, 38(1), 17–27.
- Cluver, L. D., & Gardner, F. (2007). Risk and protective factors for psychological well-being or orphaned children in Cape Town: A qualitative study of children's views. AIDS Care, 19(3), 318–325.

Cluver, L. D., Gardner, F., & Operario, D. (2007). Psychological distress amongst AIDS-orphaned children in urban South Africa. *Journal of Child Psychology and Psychiatry*, 48(8), 755–763.

- Cluver, L. D., Lachman, J., Ward, C., Gardner, F., Peterson, T., Hutchings, J., . . . Redfern, A. (2017). Development of a parenting support program to prevent abuse of adolescents in South Africa: Findings from a pilot pre-post study. *Research on Social Work Practice*, 27(7), 758–766.
- Cluver, L. D., Meinck, F., Steinert, J. I., Shenderovich, Y., Doubt, J., Romero, R. H., . . . Nzima, D. (2018). Parenting for lifelong health: A pragmatic cluster randomised controlled trial of a non-commercialised parenting programme for adolescents and their families in South Africa. *BMJ Global Health*, 3(1), Article e000539.
- Cluver, L. D., Orkin, F., Meinck, F., Boyes, M., & Sherr, L. (2016). Structural drivers and social protection: Mechanisms of HIV risk and HIV prevention for South African adolescents. *Journal of the International AIDS Society*, 19(1), Article 20646.
- Cluver, L. D., Orkin, F. M., Boyes, M. E., & Sherr, L. (2014). Cash plus care: Social protection cumulatively mitigates HIV-risk behaviour among adolescents in South Africa. Aids, 28, S389–S397.
- Cluver, L. D., Orkin, F. M., Boyes, M. E., & Sherr, L. (2015). Child and adolescent suicide attempts, suicidal behavior, and adverse childhood experiences in South Africa: A prospective study. *Journal of Adolescent Health*, *57*(1), 52–59.
- Davies, M., Pinto, J., & Bras, M. (2015). Getting to 90-90-90 in paediatric HIV: What is needed? *Journal of the International AIDS Society*, 18(Suppl 6), Article 20770. http://doi.org/10.7448/IAS.18.7.20770
- End Violence Against Children. (n.d.). http://www.end-violence.org
- Errante, A. (1997). Close to home: Comparative perspectives on childhood and community violence. *American Journal of Education*, 105(4), 355–400.
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14, 245–258.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect*, 31, 7–26.
- Fowler, P., Tompsett, C., Braciszewski, J., Jacques-Tiura, A., & Baltes, B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*, 21(1), 227–259.
- Frick, P. J. (1991). The Alabama parenting questionnaire. Unpublished rating scale, University of Alabama.
- Hallfors, D., Cho, H., Rusakaniko, S., Iritani, B., Mapfumo, J., & Halpern, C. (2011). Supporting adolescent orphan girls to stay in school as HIV risk prevention: Evidence from a randomized controlled trial in Zimbabwe. *American Journal of Public Health*, 101(6), 1082–1088.

- Hillis, S., Anda, R., Dube, S., Felitti, V., Marchbanks, P., Macalusa, M., & Marks, J. (2010). The protective effect of family strengths in childhood against adolescent pregnancy and its long-term psychosocial consequences. *The Permanent Journal*, 14(3), 18–27.
- Hillis, S., Mercy, J., & Saul, J. (2017). The enduring impact of violence against children. *Psychology, Health & Medicine*, 22(4), 393–405.
- IBM Corporation. (2016). IBM SPSS Statistics for Windows, Version 24.0. Author.
- The Joint United Nations Programme on HIV/AIDS. (2016). Fact sheet November 2016. http://www.unaids.org/en/resources/fact-sheet
- Jennings, W. G., Richards, T. N., Tomsich, E., & Gover, A. R. (2015). Investigating the role of child sexual abuse in intimate partner violence victimization and perpetration in young adulthood from a propensity score matching approach. *Journal of Child Sexual Abuse*, 24(6), 659–681.
- 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), 112–124.
- Know Violence in Childhood. (2017). Ending violence in childhood: Global report 2017.
- Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *The Lancet*, 360(9339), 1083–1088.
- Kuo, C., Atujuna, M., Mathews, C., Stein, D. J., Hoare, J., Beardslee, W. K., . . . Brown, L. (2016). Developing family interventions for adolescent HIV prevention in South Africa. AIDS Care, 28(Suppl 1), 106–110.
- Leoschut, L., & Burton, P. (2006). How rich the rewards? Results of the 2005 National Youth Victimization Survey (Vol. 1). The Centre for Justice and Crime Prevention
- Leoschut, L., & Kafaar, Z. (2017). The frequency and predictors of poly-victimisation of South African children and the role of schools in its prevention. *Psychology, Health & Medicine*, 22(Suppl 1), 81–93.
- Martin, L., Revington, N., & Seedat, S. (2013). The 39-item Child Exposure to Community Violence (CECV) Scale: Exploratory factor analysis and relationship to PTSD symptomatology in trauma-exposed children and adolescents. *International Journal of Behavioral Medicine*, 20(4), 599–608.
- Mathews, S., & Benvenuti, P. (2014). Violence against children in South Africa: Developing a prevention agenda. *South African Child Gauge*, *1*, 26–34.
- Meinck, F., Cluver, L., & Boyes, M. (2015). Household illness, poverty and physical and emotional child abuse victimisation: Findings from South Africa's first prospective cohort study. *BMC Public Health*, 15(1), Article 444. https://doi.org/10.1186/s12889-015-1792-4
- Meinck, F., Cluver, L., & Boyes, M. (2017). Longitudinal predictors of child sexual abuse in a large community sample of South African Youth. *Journal of Interpersonal Violence*, 32(18), 2804–2836.
- Meinck, F., Cluver, L., Boyes, M., & Loening-Voysey, H. (2016). Physical, emotional, and sexual adolescent abuse victimisation in South Africa: Prevalence,

incidence, perpetrators and locations. *Journal of Epidemiology and Community Health*, 70(9), 910–916.

- Mmari, K., Marshall, B., Hsu, T., Shon, J. W., & Eguavoen, A. (2016). A mixed methods study to examine the influence of the neighborhood social context on adolescent health service utilization. *BMC Health Services Research*, 16(1), Article 433.
- Noble, M., Babita, M., Barnes, H., Dibben, C., Magasela, W., Noble, S., . . . Wright, G. (2006). *The provincial indices of multiple deprivation for South Africa 2001*. Centre for the Analysis of South African Social Policy, University of Oxford.
- Nöthling, J., Suliman, S., Martin, L., Simmons, C., & Seedat, S. (2016). Differences in abuse, neglect, and exposure to community violence in adolescents with and without PTSD and depression. *Journal of Interpersonal Violence*, 34(21-22), 4357–4383.
- Nyberg, B. J., Yates, D. D., Lovich, R., Coulibaly-Traore, D., Sherr, L., Thurman, T. R., . . . Howard, B. (2012). Saving lives for a lifetime: Supporting orphans and vulnerable children impacted by HIV/AIDS. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 60, S127–S135.
- O'Donnell, D. A., Roberts, W. C., & Schwab-Stone, M. E. (2011). Community violence exposure and post-traumatic stress reactions among Gambian youth: The moderating role of positive school climate. Social Psychiatry and Psychiatric Epidemiology, 46(1), 59–67.
- Peterman, A., Neijhoft, A., Cook, S., & Palermo, T. M. (2017). Understanding the linkages between social safety nets and childhood violence: A review of the evidence from low-and middle-income countries. *Health Policy and Planning*, 32(7), 1049–1071.
- Pillay, U., Roberts, B., & Rule, S. (Eds.). (2006). South African social attitudes: Changing times, diverse voices. HSRC Press.
- Richter, L. M., Sherr, L., Adato, M., Belsey, M., Chandan, U., Desmond, C., . . . Madhavan, S. (2009). Strengthening families to support children affected by HIV and AIDS. *AIDS Care*, 28(Suppl 1), 3–12.
- Richters, J., & Martinez, P. (1993). The NIMH community violence project: 1. Children as victims of and witnesses to violence. *Psychiatry*, *56*(1), 7–21.
- Ruchkin, V., Schwab-Stone, M., & Vermeiren, R. (2004). Social and Health Assessment (SAHA) psychometric development summary. Yale University.
- SAPS Strategic Management. (2005). Annual report of the South African Police Service 2004/2005.
- Schwab-Stone, M. E., Ayers, T., Kasprow, W., Voyce, C., Barone, C., Shriver, T., & Weissberg, R. P. (1995). No safe haven: A study of violence exposure in an urban community. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34, 1343–1352.
- Seedat, S., Nyamai, C., Njenga, F., Vythilingum, B., & Stein, D. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools. *The British Journal of Psychiatry*, 184(2), 169–175.

- Skeen, S., Macedo, A., Tomlinson, M., Hensels, I. S., & Sherr, L. (2016). Exposure to violence and psychological well-being over time in children affected by HIV/AIDS in South Africa and Malawi. AIDS Care, 28(Suppl 1), 16–25.
- Statistics South Africa. (2003). Census 2001: Investigation into appropriate definitions of urban and rural areas for South Africa: Discussion document.
- The Transfer Project Team. (2017). *Innovative research on the impact of social cash transfers in Africa* (Transfer Project Research Brief 2017-01). Carolina Population Center, University of North Carolina at Chapel Hill.
- The United Nations Children's Fund. (2012). UNICEF social protection strategic framework.
- The United Nations Educational, Scientific and Cultural Organization. (2002). UNESCO-Mainstreaming the Needs of Youth.
- World Health Organization. (2016). INSPIRE: Seven strategies for ending violence against children.
- World Health Organization. (2019). *Adolescent health*. https://www.who.int/maternal child adolescent/adolescence/en/
- Wright, G. (2008). Findings from the indicators of poverty and social exclusion project: A profile of poverty using the socially perceived necessities approach (Key Report 7). Department of Social Development.

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