Published in final edited form as:

Glob Soc Welf. 2016 March ; 3(1): 1–10. doi:10.1007/s40609-016-0042-8.

Familial and Contextual Influences on Children's Prosocial Behavior: South African Caregivers as Adult Protective Shields in Enhancing Child Mental Health

Tyrone M. Parchment^{1,2}, Latoya Small^{1,2}, Hadiza Osuji¹, Mary McKay^{1,2}, and Arvin Bhana³

¹McSilver Institute for Poverty Policy and Research, Silver School of Social Work, New York University, 41 East 11th Street, 7th Floor, New York, NY 10003, USA

²New York University Silver School of Social Work, New York, USA

³University of KwaZulu-Natal, Durban, South Africa, Africa

Abstract

Background—The mental health of children is too frequently overlooked in resource scarce low and middle-income countries. South Africa represents one of many country contexts struggling to meet the mental health needs of large numbers of young people. Family caregivers have been identified as potential protective influences on child mental health, even for those children being reared with high exposure to poverty.

Methods—This paper explores contextual influences on South African caregiver's social-emotional health living in communities impacted by poverty and food insecurity as they attempt to support their children's prosocial skills and behavior. Structural Equation Modeling (SEM) was employed to explore the relationship between neighborhood social cohesion and caregiver report of child's prosocial behavior as mediated by the caregiver's mental health ($n=478$).

Results—Results indicated that the more caregivers experience their communities as socially cohesive, the better their social-emotional well-being, thus positively related to their reports of children's prosocial behavior. Furthermore, when there is a male head of household, caregivers reported better social-emotional well-being in comparison to female headed of household. The more food secure caregivers also were likely to report better general health.

Conclusion—South African community characteristics and caregivers, in particular male caregivers, are integral to child and caregiver mental health. Future research should examine the impact of interventions that mobilize community and caregiver supports for children's prosocial behavior and mental health.

Keywords

South Africa; Caregivers; Malecaregivers; Food security; Child mental health; Adult protective factor

Introduction

Almost 90 % of children and adolescents worldwide live in low- and middle-income countries. These youth constitute almost a third of the world's population (Kielsing et al.

2011). Mental health challenges have been identified as accounting for a large percentage of disease burdens among young people across the world (Patel et al. 2007). South Africa, with a population of approximately 50 million, has more than 30 % of children under the age of 15 (UNDES 2012). Youth in South Africa are exposed to multiple influences that can undermine their mental health. Specifically, stressors associated with poverty and food insecurity can increase engagement in risk behaviors and potentially reduce acquisition of prosocial behavioral skills (Petersen et al. 2013). Lacking optimal behavioral skills in childhood is related to negative mental health and poorer development outcomes as children grow.

Many families in South Africa continue to be plagued by poverty, unemployment, and steep food prices. Food insecurity can adversely impact caregiver health and mental health, which can have negative consequences for their children (Chitlga-Mabugu et al. 2013). However, adults can serve as a protective shield to mitigate the impact of toxic contextual influences on their children (Bell and McKay 2004; Patel et al. 2007). Having an additional parental figure, at times referred to as a member of the adult protective shield, in the household, has been linked to child mental health and behavior. Understanding the ecological influences on and within South African families is important in order to support the development of child prosocial skills and behaviors. Youth prosocial behavior plays an important role in their social competence and relationships throughout their lives (Soenens et al. 2007; Sallquist et al. 2009; Yoo et al. 2013).

This paper seeks to explore the relationship between neighborhood characteristics, caregiver well-being, and children's prosocial behavior. Utilization of the data collected from the Collaborative HIV Prevention and Adolescent Mental Health Program in South Africa (CHAMPSA, Bell et al. 2008; Bhana et al. 2010) allows for the exploration of individual and contextual factors associated with South African caregiver and child mental health. Since 30 % of children in the study lived with a caregiver other than their biological parent, the adults in the lives of children are referred to as caregivers (Bell et al. 2008).

Global Child Mental Health

Mental health problems and disorders often begin during childhood and continue into adulthood without proper treatment. This may result in emotional impairments and negative prosocial outcomes (White et al. 1990; APA 1994; WHO 2007). Globally, approximately 20 % of youth experience mental health challenges or behavioral difficulties (WHO, n.d.). Countries throughout the world with large populations of individuals under the age of 19 have the poorest level of mental health resources, with most low and middle income countries having only one mental health professional for every 1 to 4 million people (WHO, n.d.). Child and adolescent behavioral patterns are developed within community and familial contexts. Relationships with family members contribute to positive social and psychological development (Yoo et al. 2013). Caregivers are a crucial factor associated with child outcomes (Barber et al. 2005). Behaviors demonstrated by caregivers can impact child behavior outcomes (Barber 1996). Parental monitoring and supervision also contribute to rates of child risk behaviors (McGrath and Zook 2011; Wang et al. 2007). Early negative

behavioral patterns can serve as predictors for mental health risk throughout childhood and adolescence (Botha and Mels 1990; Valdez et al. 2011).

Child Mental Health in South Africa

According to Kleintjes et al. (2006), approximately one in five children, including adolescents, in South Africa suffers from some type of mental health challenge. The prevalence of mental illness among this group is estimated to be nearly the same as that in adults (WHO 2001; Patel et al. 2007). Studies have found that social stressors such as historical impact of apartheid, poverty, and food insecurity may have a negative impact on caregivers' mental health and parenting capacity that subsequently disrupt a young child's healthy development (Belsky 1984; Lachman et al. 2014). In addition, previous research suggests that chronically stressed caregivers are more likely to be socially isolated, experience worse mental health and greater relationship problems, and engage in authoritarian, harsh parenting practices (Belsky 1993; Conger et al. 2010; Lachman et al. 2014). Consequently, low parenting capacity implies a less warm and close parent-child relationship which negatively impacts children's opportunity to learn how to care for others, since they are not recipients of care themselves. Therefore, social support and family networks serve to lessen the psychological impact of negative contextual factors on caregiver's and children's mental health (Betancourt and Khan 2008). The optimal development of children's social and emotional functioning is largely connected to family care-givers' ability to provide a supportive environment that fosters psychosocial development (Walker et al. 2007, 2011). The ability for caregivers to provide a healthy home environment for their children given the context of communities experiencing the perils of poverty, food insecurity, and history of apartheid influences children's development of mental health and prosocial behavior (Bell and McKay 2004; McKay et al. 2004; Flisher et al. 2003).

Context of Apartheid on Caregiver and Child Mental Health

Apartheid, meaning "the state of being apart," aimed to establish a system of separate and racially homogenous states in South Africa, marginalizing the social and civil rights of the majority of black inhabitants (Shore 2009; Patel 2012). Given that approximately 80 % of South Africans are of black African ancestry, the country was marred with racial stratification and discrimination with White Europeans at the top, Indians from Asia and multi-racial coloreds, in the middle and black Africans at the bottom (Lever and James 2000; Census 2012). Compared to Whites, the black Africans, coloreds, and Indians experienced systematic discrimination (Lever and James 2000). In a divided society caused by political unrest and throes of major social transition, children in particular experience of trauma growing up. Therefore, their mental health problems are exacerbated by the discrimination and the effects of poverty and food insecurity faced by many of these children (Mkhize 1994; Straker et al. 1996; Tolfree 2003). As such, the nature of apartheid delinked children's attachment to their parents which brings about pervasive negative mental health consequences and behaviors (Dommissie 1986; Straker 1987; Mohutsioa-Makhudu 1989; Turton and Chalmers 1990).

Effects of Poverty on South African Children

Structures of social inequality are critical determinants of health (Kawachi et al. 1999; Denton and Walters 1999). Caregiver and child health and mental health are embedded in their social environment (Horton and Wallander 2001). South Africa is ranked 13th of the world's highest in terms of the proportion of population living under the poverty line (Burns 2011). Although the poverty level has dropped from almost 11 % in 2006 (57 %) to 2011(46 %), the percentage of the population that is poor is still relatively high (Statistics South Africa 2014). Children living in poverty experience higher incidences of adverse emotional health, physical health, and developmental and other outcomes than nonpoor children (Brooks-Gunn et al. 1996). Family poverty can further exacerbate children's externalizing and internalizing behaviors that potentially can lead to less prosocial behaviors.

Food Insecurity in South Africa

There are more than 814 million people living in developing countries who are undernourished with 204 million living in countries of sub-Saharan Africa, including South Africa (Labadarios et al. 2011). Food insecurity is commonly associated with poverty-impacted families (DAFF 2011). Most South Africans lack the essential land and resources to grow their own food and purchase their items (Shackleton et al. 2001). Increased costs of foods in the staple diet of poor South Africans can be problematic for the urban and rural poor who purchase most of their food products (Altman, Hart, Jacobs 2009). Nationally, South Africa is food secure, but many families still struggle with household food stability (Labadarios et al. 2011). There is approximately 23 % of children and caregivers in KwaZulu-Natal, a province in South Africa, who have inadequate access to food (Aliber 2009; DAFF 2011). The primary cause is often attributed to widespread poverty and unemployment (HSRC 2007; Labadarios et al. 2011). The ongoing struggle to access basic needs of food, shelter, clothing, and healthcare can compromise caregiver and child well-being (McLaughlin et al. 2012). Youth experiencing food insecurity in more developed countries may experience weight gain and deficiencies in essential vitamins; conversely, children in low-income countries also experience adverse comorbid physical and mental health disorders (McLaughlin et al. 2012).

Family Structure and the Role of Kinship in South African Families

The structures of families are often determinants for the health and well-being of children. Family structure and family functioning can moderate the negative effects families might experience in their community (Kuther and Fisher 1998; Pierce and Shields 1998). Aspects of the family structure are important to consider, including the nature of the affective and supportive relationship between caregiver and child (Whitbeck et al. 1993; Carson and Parke 1996). Kinship systems in South Africa include extended and fictive kin relationships (Madhavan and Roy 2012). The kin group does not simply adapt to crises but reflects cultural markers of family strength and resilience (Sudarska 1981; McDaniel 1990; Madhavan and Roy 2012). Various male kin members in many black communities in South Africa take on specific parenting roles ranging from social to spiritual guidance even when

the biological father is in residence with the child (Mkhize 1994; Madhavan and Roy 2012). The role of male caregivers in kinship does not absolve fathers of their responsibility but shifts the focus of fathering to a more communal approach to caregiving of children (Madhavan and Roy 2012). The social support from kinship male caregivers can help bolster family functioning and healthy outcomes in children. The role of family and the quality of relationship between caregiver and child as well as caregiver monitoring and support play an important role in promoting youth prosocial behavior (Wallander and Varni 1998; Dutra et al. 2000; Forehand et al. 2002; Barakat 2008; Mellins et al. 2008). Therefore, caregivers, in particular male caregivers, are necessary not only in family functioning and household support but also in children's mental health.

Male Caregiving Influences on Child Mental Health

In the last two decades, there has been increased interest in the roles of male caregivers in child development (LaRossa 1988; Lamb 1997; Marsiglio et al. 2000; Palkovitz 2002; Brotherson and White 2007; Jones and Mosher 2013). Even though care-giving for children has historically been regulated to women, research to date identify the added protective influence male caregivers can provide (Jones and Mosher 2013). Male care-giving can promote child development because involvement supports secure attachment to the caregiver that in turn promotes healthy child outcomes (Pleck 1997). Research has shown that male caregivers provide overall protective and positive effect on their children's behavioral, psychological, and social outcomes throughout their developmental phases (Panter-Brick et al. 2014). The historical context of migrant labor that resulted in delinking child-rearing from marriage led many South African men to be both social and biological caregivers of children (Richter et al. 2010). The portrayal of Black South African male caregivers who are uninvolved and unwilling to contribute to the well-being of their children and families is currently being debunked (Swartz and Bhana 2009; Madhavan and Roy 2012). South African male caregivers make unique contributions to their children through provisions of social capital, emotional support, and inherently important, love, and support (Nsamenang 2000; Morrell 2006; Madhavan et al. 2014). In many South African communities, kinship structures are integral especially where children are most affected by poverty (Richter and Morrell 2006; Roy 2008; Swartz and Bhana 2009; Madhavan and Roy 2012). Having a male head of household who is involved in the caregiving and caretaking of children reduces the likelihood of children engaging in risky behavior (Richter and Morrell 2006; Roy 2008; Swartz and Bhana 2009; Madhavan and Roy 2012) while improving their psychological and social well-being (Harris and Marmer 1996; Pleck 1997; Yeung et al. 2000). It is essential for caregivers, in particular male care-givers, to provide an adult protective shield through parental supervision and monitoring, as poor parental warmth, acceptance, and affection are associated with high levels of conflict, hostility, and risk of mental disorder in later life (Bell 2001, 2007).

Research Methods

The current study is a secondary analysis of baseline data from the Collaborative HIV Prevention and Adolescent Mental Health Program in South Africa (CHAMPSA, Bell et al. 2008; Bhana et al. 2010). CHAMPSA is a family-based HIV, developmentally timed

prevention intervention to reduce sexual risk behaviors among uninfected pre and early adolescents within township communities in South Africa. It is a manualized program that consists of 10 weeks of 10 to 90 minutes sessions with families (children and their caregivers). The program was tested and shows effectiveness in studies in the USA (Mckay et al. 2004; Madison et al. 2000) and in the Caribbean (Voisin et al. 2006).

Our analyses focused on baseline data collected from care-givers ($n = 478$) and their children. The adult and child measures collected information at baseline and post-test concerning various parenting behaviors and styles, knowledge about AIDS and sexual transmission, mental health, neighborhood characteristics, and child prosocial behaviors. This study focuses on caregiver self-report of their social-emotional well-being, level of neighborhood social cohesion, and their children prosocial behaviors.

The inclusion criteria consisted of children enrolled in school between the ages of 9 and 13 years old that are reared by an adult caregiver older than 18 years who provides parenting responsibilities. Agreement to participate in the study was through caregiver consent and child assent. Participants were recruited through 20 primary schools located within the four community areas of KwaDedangendalale located in the province of KwaZulu-Natal (Molweni, KwaNyusawa, KwaNgcolosi and Qadi, Bell et al. 2008) for 4 years (May 2003 to April 2006).

Measures

Neighborhood Social Cohesion

The Neighborhood Social Cohesion (NSCA) scale is based on 4-point Likert scale asking participants if their neighborhood is a safe place for children, “close knit,” if neighbors are willing to help each other, do neighbors get along, can neighbors can be trusted, and neighbors share the same values (Sampson et al. 1997). A total social cohesion score was calculated, and items were reversed scored with a higher score representing higher levels of neighborhood social cohesion (4 = *strongly agree*, 1 = *strongly disagree*). Reliability scores range from .90 (Echeverría et al. 2008) to .91 (Echeverria et al. 2004).

General Health Questionnaire

The General Health Questionnaire (GHQ) is a 12-item, short form self-administered instrument based on the respondent’s assessment of their current social-emotional well-being (Goldberg and Hillier 1979). A total score of the GHQ was obtained, and items were reversed scored with a higher score indicating higher GHQ scores (4 = *better than usual*, 1 = *much worse than usual*). Reliability scores from a comparable sample that consists of South African adults yielded an alpha coefficient of 0.85 (Pernice et al. 2000).

Child Risk Behavior Profile

The Child Risk Behavior Profile (CRBP) is a 37-item care-giver report on child’s prosocial behavior in the past 6 months. A total score for the scale was computed, and items were reversed scored with higher scores signifying more prosocial behavior in children (3 = *not true*, 1 = *very true*).

Food Insecurity

Respondents were asked a single question to indicate how long they gone without enough food in a given month (5 = *never*, 1 = *more than 6 times*).

Head of Household

Caregivers identified the gender along with additional information (age, education, employment status, and whether they receive a pension/disability grant) pertaining to the head of household (Table 1).

Data Analysis

Structural Equation Modeling (SEM) techniques using the Mplus Version 7.3, which accommodates continuous, count, ordinal, non-normal, and dichotomous exogenous and endogenous variables, were utilized (Muthén and Muthén 2008). Model fit was evaluated using standard global fit indices (e.g., RMSEA, CFI, and standardized RMR) and more focused fit indices (e.g., modification indices, standardized residuals). Model comparisons were enacted using chi square difference strategies with adjustments for robust estimation models (the Huber-White sandwich estimator) and also examining more traditional comparative fit indices (e.g., CFI). To explore model differences, equality constraints were imposed on targeted parameters and comparing the fit of such models with unconstrained models. Missing data was treated using maximum likelihood robust (MLR) methods.

Results

The fit of the model in Fig. 1 was evaluated using a maximum likelihood robust algorithm. The model is statistically just-identified. A set of five indices of model fit was evaluated. The chi square test of model fit was statistically significant ($\chi^2(0) = 0.00$, $p < 0.05$) thus indicating a just-identified or saturated model. Chi square is affected by the size of the correlations and models with more than 400 cases that leads to poor model fit (Kenny 2014). A problem with this fit index is that there is no universally agreed upon standard as to what is a good model fit; therefore, alternative fit indices were explored (Kenny 2014). The root mean square error of approximation (RMSEA) was 0.000. The standardized root mean square residual was 0.00 indicating that the absolute average disparity between predicted and observed correlations is close to zero. The comparative fit index was 1.000 signifying that the model fits 100 % better than the independence model. Table 2 presents the parameter estimates for the coefficients of interest. Unstandardized path coefficients and their associated 95 % confidence intervals appear for each parameter estimate of interest, with standardized coefficients in parentheses. To reduce clutter, the correlations between exogenous variables are omitted.

The model results were consistent with the level of cohesion in the caregiver's neighborhood impacting their social and emotional health that in turn accounts for how they report their children's prosocial behavior. All the paths in the mediated relationship were statistically significant ($p < 0.05$). For every one-unit increase in caregiver report on their health, the predicted number of prosocial child behavior increased, on average, by 0.17 ($p < .05$, 95 % CI [0.07, 0.26]). For every one-unit increase in neighborhood social cohesion, there is a

predicted 0.24 ($p < 0.05$, 95 % CI [0.15, 0.33]) unit increase in caregiver report of their social and emotional health. Food insecurity and gender of the head of household were identified as covariates. For every unit increase in the level of food security a caregiver reports, there is a predicted 0.25-unit increase ($p < 0.05$, 95 % CI [0.18, 0.33]) in their general health. When there is a female head of household, on average, there is an associated -0.10 ($p < 0.05$, 95 % CI [-0.11, -0.04]) unit decrease in caregiver general health.

Based on the joint significance test of MacKinnon et al. (2002), caregiver report of their Social-Emotional health was a significant mediator of the estimated effects of neighborhood social cohesion on caregiver's report of child prosocial behavior. There was no support for the independent direct relationship between neighborhood social cohesion and child prosocial behavior (0.02, $p > 0.05$, 95 % CI [0.07, 0.26]).

Coefficient estimates were derived in a way that permitted parameter estimation adjusted for measure unreliability. This involved creating a latent variable for each single indicator with a fixed factor loading of 1.0 and then constraining the random measurement error associated with the indicator to an a priori determined nonzero value reflecting the unreliability of the measure (Jöreskog and Sörbom 1996, p. 196). Reliability estimates were based on prior psychometric research (Achenbach and Edelbrock 1981; Sampson et al. 1997; Pevalin 2000). The standardized disturbance term for the number child prosocial behaviors was .90. Table 2 presents the estimated path coefficients.

Discussion

Few studies have examined the mechanisms that link neighborhood characteristics to specific caregiver social-emotional health and the effect on children prosocial behavior in the South African context. Using structural equation modeling, the study examined the relationships among neighborhood social cohesion, caregiver report of their well-being, and children's behavior. Significant pathways were found between the mediated relationship of neighborhood characteristics, care-giver mental health, and children prosocial behavior. Given that many studies have shown that community experiences of poverty are major environmental risk factors that increase the burden of mental illness in children (Brooks-Gunn and Duncan 1997; Caspi et al. 2000; Yeung et al. 2002; Leventhal and Brooks-Gunn 2003; Xue et al. 2005; Amato 2010), in this study, there was not a direct relationship between neighborhood and prosocial behavior for this sample. The data supports how the adult protective shield is integral in promoting caregiver report of child prosocial behavior. When a caregiver maintains a level of well-being, it is inversely related to their reports of child conduct problems. Additionally, when there is a male head of household, care-givers report higher well-being and this could be contributed to having an additional income in the home or having an additional level of support in raising children (Madhavan and Roy 2012). These male caregivers appear to be identified as an additional adult protective shield in not only the reporting of better prosocial behavior in children but also increasing caregiver's mental health. The level of food security a family experiences appears to also play a role in caregiver mental health that corroborates with what the literature states (Casey et al. 2004; Stuff et al. 2004). The more food secure families are, the better caregiver reports their social-emotional well-being. The threat of poverty, food insecurity, and lack of neighborhood

cohesion can be modifiable by a supportive family environment that provides a sense of cognitive reappraisal and safety (Chase-Lansdale et al. 1995).

Studies have shown that family caregivers who are poor are more likely to have higher rates of mental health challenges and impaired child interactions than caregivers who are not poor (Brooks-Gunn and Duncan 1996; Duncan and Brooks-Gunn 2000). Our study indicates that when caregivers feel that their community is socially cohesive and when they are food secure while there is a male head of household, they report better social and emotional well-being. Given the context of living in poverty impacted communities, caregivers report better mental health and in turn report better child prosocial behavior when they are food secure and when there is an additional caregiver in the home. Although Black male caregivers in South Africa have been stereotyped as uninvolved (Posel and Devey 2006) and abusive (Richter and Dawes 2008), there is increased recognition and a societal shift to promote constructive male involvement in children's lives (Richter et al. 2010). Children benefit and greatly appreciate having an additional parental figure in the household (Penner 2002; Richter and Morrell 2006; Barry et al. 2008; Richter et al. 2010).

Limitations

Although the findings from this study are reflective of the data, the results must be interpreted in the context of the study's methodological limitations. Reliance on caregiver and child self-reports is subjected to measurement error that can yield bias in the parameter estimates. We assessed but did not comprehensively address the nature of South African poverty and the complex familial relationships/kinship within these dyads. The reliability of the measures used in CHAMPSA study has not been tested on a South African population. There is also limited information on what role South African male caregivers play in the household and how it relates to the caregiver's mental health and reporting of child prosocial behavior. Our results appear to show that when there is a male who is head of the household, caregivers of children are reporting better mental health. There is limited information, from this data, on who exactly the male care-givers are and how and to what extent they provide support to children.

Implications

To further understand and improve the burden of mental illness of children in low- and middle-income countries, it is necessary to understand youth within their context. Children are embedded within families and communities who have responsibility for their care (Hoagwood et al. 2009). Mental health interventions need to continue to collaborate with care-givers in families to improve the well-being of children. Prosocial behavioral change in youth is unlikely to be sustained if one caregiver is the sole target of a parenting intervention (Panter-Brick et al. 2014). Parenting programs that help improve child mental health should be respectful of cultural values and kinship structures of South African families. Specifically, male caregivers should be included and engaged in parenting interventions because their presence greatly impacts children and family well-being. Future research should closely examine the ways in which male caregivers and heads of household are supporting child prosocial behavioral skills and improving caregiver mental health. This

research should examine the multiple factors that contribute to child and caregiver social-emotional health across ecological domains. Moreover, this research should also examine how male caregivers can provide an additional adult protective shield in reducing risk behavior while improving the mental health of children. Interventions targeted to bolster South African child well-being should comprehensively understand the kinship structures within families and be sensitive to the various caregiving contexts.

Conclusion

South Africa has a history of communities greatly impacted by racism, apartheid, poverty, food insecurity, and HIV. The prevalence of child mental health problems in sub-Saharan Africa ranges up to 71 % (Cortina et al. 2012). In light of this, child health and mental health has been identified by the South Africa's 4-year National Strategic plan as one of the key populations that are at heightened risk (SANAC 2012). Our results indicate that caregivers are agents in helping improving prosocial behavior in their children when they are supported at home and in the community. Research has consistently found that there is a direct relationship between neighborhood characteristics and children's behavior. The present study identified that caregivers are influenced by neighborhood characteristics that then influence their reporting on child mental health. It is the role of researchers, practitioners, and policy makers to continue calling for family caregivers in promoting child social-emotional health that will interrupt negative pathways leading to conduct disorder and delinquency. It is essential to support the provision of interventions that engages the entire family unit in improving mental health of children in low- and middle-income countries.

References

- Achenbach TM, Edelbrock CS. Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen. Monographs of the Society for Research in Child Development. 1981; 46:1–82.
- Aliber M. Exploring Statistics South Africa's National Household Surveys as sources of information about household-level food security. *Agrekon*. 2009; 48:4.
- Altman M, Hart TG, Jacobs PT. Household food security status in South Africa. *Agrekon*. 2009; 48(4): 345–361.
- Amato PR. Research on divorce: continuing trends and new developments. *Journal of Marriage and Family*. 2010; 72:650–666.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders: diagnostic criteria from DSM-IV. Washington (DC): American Psychiatric Association; 1994.
- Barakat LP. Editorial: Journal of Pediatric Psychology statement of purpose—section on family influences and adaptation. *Journal of Pediatric Psychology*. 2008; 33:26–30. [PubMed: 17956930]
- Barber BK. Parental psychological control: revisiting a neglected construct. *Child Development*. 1996; 67:3296–3319. [PubMed: 9071782]
- Barber BK, Stolz HE, Olsen JA. Parental support, psychological control, and behavioral control: assessing relevance across time, culture and method. Monographs of the Society for Research in Child Development. 2005; 70:1–147.
- Barry CM, Padilla-Walker LM, Madsen SD, Nelson LJ. The impact of maternal relationship quality on emerging adults' prosocial tendencies: indirect effects via regulation of prosocial values. *Journal of Youth and Adolescence*. 2008; 37:581–591.
- Bell CC. Cultivating resiliency in youth. *Journal of Adolescent Health*. 2001; 29:375–381. [PubMed: 11691598]

- Bell M. Community-based parenting programmes: an exploration of the interplay between environmental and organizational factors in a Webster Stratton project. *British Journal of Social Work*. 2007; 37(1):55–72.
- Bell CC, McKay MM. Constructing a children's mental health infrastructure using community psychiatry principles. *The Journal of Legal Medicine*. 2004; 25:5–22. [PubMed: 15204911]
- Bell CC, Bhana A, Petersen I, McKay MM, Gibbons R, Bannon W, Amatya A. Building protective factors to offset sexually risky behaviors among black youths: a randomized control trial. *Journal of the National Medical Association*. 2008; 100:936. [PubMed: 18717144]
- Belsky J. The determinants of parenting: a process model. *Child Development*. 1984; 55:83–96. [PubMed: 6705636]
- Belsky J. Etiology of child maltreatment: a developmental-ecological analysis. *Psychological Bulletin*. 1993; 114:413. [PubMed: 8272464]
- Betancourt TS, Khan KT. The mental health of children affected by armed conflict: protective processes and pathways to resilience. *International Review of Psychiatry*. 2008; 20:317–328. [PubMed: 18569183]
- Bhana A, McKay MM, Mellins C, Petersen I, Bell C. Family-based HIV prevention and intervention services for youth living in poverty-affected contexts: the CHAMP model of collaborative, evidence-informed programme development. *Journal of the International AIDS Society*. 2010; 13:S8. [PubMed: 20573290]
- Botha MP, Mels G. Stability of aggression among adolescents over time: a South African study. *Aggressive Behavior*. 1990; 16(6):361–380.
- Brooks-Gunn J, Duncan GJ. The effects of poverty on children. *Future Child*. 1996; 7:55–71.
- Brooks-Gunn J, Duncan GJ. The effects of poverty on children. *The Future of Children*. 1997; 7:55–71. [PubMed: 9299837]
- Brooks-Gunn J, Klebanov PK, Duncan GJ. Ethnic differences in children's intelligence test scores: role of economic deprivation, home environment, and maternal characteristics. *Child Development*. 1996; 67:396–408. [PubMed: 8625720]
- Brotherson, SE., White, JM., editors. *Why fathers count: the importance of fathers and their involvement with children*. Harriman, TN: Men's Studies Press; 2007.
- Burns JK. The mental health gap in South Africa – A human rights issue. *Equal Rights Review*. 2011; 6:99–113.
- Carson JL, Parke RD. Reciprocal Negative Affect in Parent-Child Interactions and Children's Peer Competency. *Child development*. 1996; 67(5):2217–2226. [PubMed: 9022239]
- Casey P, Goolsby S, Berkowitz C, Frank D, Cook J, Cutts D, Meyers A. Maternal depression, changing public assistance, food security, and child health status. *Pediatrics*. 2004; 113:298–304. [PubMed: 14754941]
- Caspi A, Taylor A, Moffitt TE, Plomin R. Neighborhood deprivation affects children's mental health: environmental risks identified in a genetic design. *Psychological Science*. 2000; 11:338–342. [PubMed: 11273396]
- Census. *Census in brief (2012)*. Pretoria: Statistics South Africa; 2012.
- Chase-Lansdale PL, Wakschlag LS, Brooks-Gunn J. A psychological perspective on the development of caring in children and youth: the role of the family. *Journal of Adolescence*. 1995; 18:515–556.
- Chitlga-Mabugu, M., Nhemachena, C., Karuaihe, S., Shirin, M., Tsoanamatsie, N., Mashile, L. [Accessed 2 February 2015] Civil society organisations participation in food security activities in South Africa. Human Sciences Research Council Website. 2013. Retrieved from : (www.hsrc.ac.za/en/research-data/ktree-doc/13815)
- Conger RD, Conger KJ, Martin MJ. Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family*. 2010; 72:685–704. [PubMed: 20676350]
- Cortina MA, Sodha A, Fazel M, Ramchandani P. The prevalence of child mental health problems in sub Saharan Africa: a systematic review. *Archives of Pediatrics & Adolescent Medicine*. 2012; 166:276–281. DOI: 10.1001/archpediatrics.2011.592 [PubMed: 22393184]
- Denton M, Walters V. Gender differences in structural and behavioral determinants of health: an analysis of the social production of health. *Social Science & Medicine*. 1999; 48:1221–1235. [PubMed: 10220021]

- Department of Agriculture Forestry and Fisheries. [Accessed 3 February 2015] Food Security. 2011. (www.daff.gov.za)
- Domisse J. The Psychological Effects of Apartheid Psychoanalysis Social, Moral and Political Influences. *International Journal of Social Psychiatry*. 1986; 32:51–63. [PubMed: 3733349]
- Duncan GJ, Brooks-Gunn J. Family poverty, welfare reform, and child development. *Child Development*. 2000; 71(1):188–196. [PubMed: 10836573]
- Dutra R, Forehand R, Armistead L, Brody G, Morse E, Morse PS, Clark L. Child resiliency in inner-city families affected by HIV: the role of family variables. *Behavior, Research and Therapy*. 2000; 38:471–486.
- Echeverria MSE, Diez-Roux AV, Link BG. Reliability of self-reported neighborhood characteristics. *Journal of Urban Health*. 2004; 81:682–701. [PubMed: 15466849]
- Echeverría S, Diez-Roux AV, Shea S, Borrell LN, Jackson S. Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors: the multi-ethnic study of atherosclerosis. *Health & Place*. 2008; 14:853–865. [PubMed: 18328772]
- Flisher AJ, Parry CD, Evans J, Muller M, Lombard C. Substance use by adolescents in Cape Town: prevalence and correlates. *The Journal of Adolescent Health*. 2003; 32:58. [PubMed: 12507802]
- Forehand R, Jones DJ, Kotchick BA, Armistead L, Morse E, Morse PS, Stock M. Noninfected children of HIV-infected mothers: a 4-year longitudinal study of child psychosocial adjustment and parenting. *Behavior Therapy*. 2002; 33:579–600.
- Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. *Psychological Medicine*. 1979; 9:139–145. [PubMed: 424481]
- Harris KM, Marmer JK. Poverty, paternal involvement, and adolescent well-being. *Journal of Family Issues*. 1996; 17:614–640.
- Hoagwood, KE, Jensen, PS, McKay, M., Olin, S., editors. *Children's mental health research: the power of partnerships*. Oxford: Oxford University Press; 2009.
- Horton TV, Wallander JL. Hope and social support as resilience factors against psychological distress of mothers who care for children with chronic physical conditions. *Rehabilitation Psychology*. 2001; 46:382.
- Human Services Research Council. *Achieving food security in South Africa: characteristics, stressors and recommendations to 2019*. Pretoria: Human Sciences Research Council; 2007. Report to the Office of the Presidency (June)
- Jones, J., Mosher, WD. *Fathers' involvement with their children: United States, 2006–2010*. National health statistics reports; no 71. Hyattsville, MD: National Center for Health Statistics; 2013.
- Jöreskog, KG., Sörbom, D. *LISREL 8 user's reference guide*. Chicago: Scientific Software International; 1996.
- Kawachi I, Kennedy BP, Glass R. Social capital and self-rated health: a contextual analysis. *American Journal of Public Health*. 1999; 89:1187–1193. [PubMed: 10432904]
- Kenny, DA. [Accessed 7 February 2015] Measuring model fit. 2014. (<http://davidakenny.net/cm/fit.htm>)
- Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, Rohde LA, Srinath S, Ulkuer N, Rahman A. Child and adolescent mental health worldwide: evidence for action. *Lancet*. 2011; 378(9801):1515–1525. [PubMed: 22008427]
- Kleintjes S, Flisher AJ, Fick M, Railoun A, Lund C, Molteno C, Robertson BA. The prevalence of mental disorders among children, adolescents and adults in the western Cape, South Africa. *South African Psychiatry Review*. 2006; 9:157.
- Kuther TL, Fisher CB. Victimization by community violence in young adolescents from a suburban city. *The Journal of Early Adolescence*. 1998; 18(1):53–76.
- Labadarios D, Mchiza ZJR, Steyn NP, Gericke G, Maunder EMW, Davids YD, Parker WA. Food security in South Africa: a review of national surveys. *Bulletin of the World Health Organization*. 2011; 89:891–899. [PubMed: 22271946]
- Lachman JM, Cluver LD, Boyes ME, Kuo C, Casale M. Positive parenting for positive parents: HIV/AIDS, poverty, caregiver depression, child behavior, and parenting in South Africa. *AIDS Care*. 2014; 26(3):304–313. [PubMed: 23930647]

- Lamb, ME. Fathers and child development: an introductory overview. In: Lamb, ME., editor. *The role of the father in child development*. New York: John Wiley & Sons; 1997. p. 1-18.
- LaRossa R. Fatherhood and Social Change. *Family Relations*. 1988; 37:451–57.
- Leventhal T, Brooks-Gunn J. Moving to opportunity: an experimental study of neighborhood effects on mental health. *American Journal of Public Health*. 2003; 93:1576–1582. [PubMed: 12948983]
- Lever, J., James, W. *The Second Republic*. In: James, W., Van de Vijvers, L., editors. *After the TRC: reflections on truth and reconciliation in South Africa*. Cape Town: David Philip; 2000.
- MacKinnon DP, Lockwood CM, Hoffman JM, West SG, Sheets V. A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*. 2002; 7:83. [PubMed: 11928892]
- Madhavan S, Roy K. Securing Fatherhood Through Kin Work A Comparison of Black Low-Income Fathers and Families in South Africa and the United States. *Journal of Family Issues*. 2012; 33:801–822.
- Madhavan S, Richter L, Norris S, Hosegood V. Fathers' financial support of children in a low income community in South Africa. *Journal of Family and Economic Issues*. 2014; 35:452–463. [PubMed: 25411533]
- Madison S, McKay MM, Paikoff R, Bell CC. Basic research and community collaboration: necessary ingredients for the development of a family-based HIV prevention program. *AIDS Education and Prevention*. 2000; 12:281–298. [PubMed: 10982119]
- Marsiglio W, Amato PR, Day RD, Lamb ME. Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and Family*. 2000; 62:1173–1191.
- McDaniel A. The power of culture: a review of the idea of Africa's influence on family structure in antebellum America. *Journal of Family History*. 1990; 15:225–238.
- McGrath MP, Zook JM. Maternal control of girls versus boys: relations to empathy and persuasive style with peers. *Journal of Child and Family Studies*. 2011; 20:57–65.
- McKay MM, Chasse KT, Paikoff R, McKinney LD, Baptiste D, Coleman D, Madison S, Bell CC. Family-level impact of the CHAMP Family Program: a community collaborative effort to support urban families and reduce youth HIV risk exposure. *Family Process*. 2004; 43:79–93. [PubMed: 15359716]
- McLaughlin KA, Green JG, Alegria M, Costello EJ, Gruber MJ, Sampson NA, Kessler RC. Food insecurity and mental disorders in a national sample of US adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2012; 51:1293–1303. [PubMed: 23200286]
- Mellins CA, Brackis-Cott E, Dolezal C, Leu CS, Valentin C, Meyer-Bahlburg HFL. Mental health of early adolescents from high-risk neighborhoods: the role of maternal HIV and other contextual, self-regulation, and family factors. *Journal of Pediatric Psychology*. 2008; 33:1065–1075. [PubMed: 18250092]
- Mkhize IB. South African domestic tourism beyond apartheid. *Development Southern Africa*. 1994; 11:249–252.
- Mohutsioa-Makhudu YNK. The psychological effects of apartheid on the mental health of Black South African women domestics. *Journal of Multicultural Counseling and Development*. 1989; 17:134–142.
- Morrell, R. *BABA: men and fatherhood in South Africa*. Cape Town: HSRC Press; 2006. Fathers, fatherhood and masculinity in South Africa; p. 13-25.
- Muthén, LK., Muthén, BO. *Mplus (Version 5.1)*. Los Angeles, CA: Muthén & Muthén; 2008.
- Nsamenang, AB. *Fathers, families, & child well-being in Cameroon: a review of literature*. Philadelphia, PA: National Center on Fathers and Families; 2000.
- Palkovitz, J. Involved fathering and child development: advancing our understanding of good fathering. In: Tamis-LeMonda, CS., Cabrera, N., editors. *Handbook of father involvement: multidisciplinary perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates; 2002. p. 119-140.
- Panter-Brick C, Burgess A, Eggerman M, McAllister F, Pruett K, Leckman JF. Practitioner review: engaging fathers—recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *Journal of Child Psychology and Psychiatry*. 2014; 55:1187–1212. [PubMed: 24980187]

- Patel L. Developmental Social Policy, Social Welfare Services and the Non-profit Sector in South Africa. *Social Policy & Administration*. 2012; 46:603–618.
- Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. *The Lancet*. 2007; 369:1302–1313.
- Penner LA. Dispositional and organizational influences on sustained volunteerism: an interactionist perspective. *Journal of Social Issues*. 2002; 58:447–467.
- Pernice R, Trlin A, Henderson A, North N. Employment and mental health of three groups of immigrants to New Zealand. *New Zealand Journal of Psychology*. 2000; 29:24–29.
- Petersen, I., Barry, M., Lund, C., Bhana, A. Global mental health: principles and practice. Vol. 135. Oxford: Oxford University Press; 2013. *Mental Health Promotion and the Prevention of Mental Disorders*.
- Pevalin DJ. Multiple applications of the GHQ-12 in a general population sample: an investigation of long-term retest effects. *Social Psychiatry and Psychiatric Epidemiology*. 2000; 35:508–512. [PubMed: 11197926]
- Pierce LH, Shields N. The Be A Star community-based after-school program: Developing resiliency factors in high-risk pre-adolescent youth. *Journal of Community Psychology*. 1998; 26(2):175–183.
- Pleck, JH. Paternal involvement: levels, sources, and consequences. In: Lamb, ME., editor. *The role of fathers in child development*. 3. New York, NY: John Wiley & Sons; 1997. p. 66-103.
- Posel, D., Devey, R. *Baba: men and fatherhood in South Africa*. Cape Town: HSRC Press; 2006. *The demographics of fathers in South Africa: an analysis of survey data, 1993–2002*; p. 38-52.
- Richter LM, Dawes AR. Child abuse in South Africa: rights and wrongs. *Child Abuse Review*. 2008; 17:79–93.
- Richter, LM., Morrell, R., editors. *Baba: men and fatherhood in South Africa*. Durban: Human Sciences Research Council; 2006.
- Richter L, Chikovore J, Makusha T. The status of fatherhood and fathering in South Africa. *Childhood Education*. 2010; 86:360–365. [PubMed: 23864733]
- Roy K. A life course perspective on fatherhood and family policies in the United States and South Africa. *Fathering: A Journal of Theory, Research, and Practice about Men as Fathers*. 2008; 6(2): 92–112.
- Sallquist JV, Eisenberg N, Spinrad TL, Reiser M, Hofer C, Zhou Q, Liew J, Eggum N. Positive and negative emotionality: trajectories across six years and relations with social competence. *Emotion*. 2009; 9:15. [PubMed: 19186913]
- Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science*. 1997; 277:918–924. [PubMed: 9252316]
- SANAC. [Accessed 9 February 2015] National strategic plan on HIV, STIs and TB 2012–2016. 2012. Retrieved 2016, from (http://www.sahivsoc.org/upload/documents/National_Strategic_Plan_2012.pdf)
- Shackleton CM, Shackleton SE, Cousins B. The role of land-based strategies in rural livelihoods: the contribution of arable production, animal husbandry and natural resource harvesting in communal areas in South Africa. *Development Southern Africa*. 2001; 18:581–604.
- Shore, M. *Religion and conflict resolution: Christianity and South Africa's Truth and Reconciliation Commission*. Farnham: Ashgate Publishing; 2009. p. 36
- Soenens B, Vansteenkiste M, Lens W, Luyckx K, Goossens L, Beyers W, Ryan RM. Conceptualizing parental autonomy support: adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*. 2007; 43(3):633. [PubMed: 17484576]
- Statistics South Africa. [Accessed 11 March 2015] Poverty trends in South Africa. 2014. Retrieved January 2015, from (<http://www.statssa.gov.za/publications/Report-03-10-06/Report-03-10-06March2014.pdf>)
- Straker G. The continuous traumatic stress syndrome: the single therapeutic interview. *Psychology in Society*. 1987; 8:48–79.
- Straker G, Mendelsohn M, Moosa F, Tudin P. Violent political contexts and the emotional concerns of township youth. *Child Development*. 1996; 67:46–54. [PubMed: 8605833]

- Stuff JE, Casey PH, Szeto KL, Gossett JM, Robbins JM, Simpson PM, Bogle ML. Household food insecurity is associated with adult health status. *The Journal of Nutrition*. 2004; 134:2330–2335. [PubMed: 15333724]
- Sudarska, N. Interpreting the African heritage in Afro-American family organization. In: MacAdoo, H., editor. *Black families*. SAGE; Beverly Hills, CA: 1981.
- Swartz, S., Bhana, A. *Teenage Tata: voices of young fathers in South Africa*. Cape Town; HSRC Press: 2009.
- Tolfree, D. *Community based care for separated children*. Stockholm, Sweden: Save the Children Sweden; 2003.
- Turton RW, Chalmers BE. Apartheid, stress and illness: the demographic context of distress reported by South African Africans. *Social Science & Medicine*. 1990; 31:1191–1200. [PubMed: 2291115]
- United Nations Department of Economic and Social Affairs. Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision*. 2012. <http://esa.un.org/unpd/wpp/index.htm>
- Valdez CR, Lambert SF, Ialongo NS. Identifying patterns of early risk for mental health and academic problems in adolescence: a longitudinal study of urban youth. *Child Psychiatry & Human Development*. 2011; 42:521–538. [PubMed: 21538121]
- Voisin DR, Baptiste DR, Martinez DDC, Henderson G. Exporting a US HIV/AIDS prevention program to a Caribbean island-nation lessons from the field. *International Social Work*. 2006; 49:75–86.
- Walker S, Wachs TD, Meeks GJ, Lozoff B, Wasserman GA, Pollitt E, Careter JA. and the International Child Development Steering Group. Child development: risk factors for adverse outcomes in developing countries. *Lancet*. 2007; 369:145–157. [PubMed: 17223478]
- Walker SP, Wachs TD, Grantham-McGregor S, Black MM, Nelson CA, Huffman SL, Baker-Henningham H, Richter L. Inequality in early childhood: risk and protective factors for early child development. *Lancet*. 2011; 378:1325. [PubMed: 21944375]
- Wallander JL, Varni JW. Effects of pediatric chronic physical disorders on child and family adjustment. *Journal of Child Psychology and Psychiatry*. 1998; 39:29–46. [PubMed: 9534085]
- Wang Q, Pomerantz EM, Chen H. The role of parents' control in early adolescents' psychological functioning: a longitudinal investigation in the United States and China. *Child Development*. 2007; 78:1592–1610. [PubMed: 17883450]
- Whitbeck LB, Conger RD, Kao MY. The influence of parental support, depressed affect, and peers on the sexual behaviors of adolescent girls. *Journal of family issues*. 1993; 14(2):261–278.
- White JL, Moffitt TE, Earls F, Robins L, Silva PA. How early can we tell?: predictors of childhood conduct disorder and adolescent delinquency. *Criminology*. 1990; 28:507–535.
- World Health Organization. *The World Health Report 2001. Mental health: new understanding, new hope*. Geneva: World Health Organization; 2001.
- World Health Organization. [Accessed 7 November 2007] Helping youth overcome mental health problems. 2007. (http://www.who.int/mental_health/policy/development/en/index.html)
- Xue Y, Leventhal T, Brooks-Gunn J, Earls FJ. Neighborhood residence and mental health problems of 5-to 11-year-olds. *Archives of General Psychiatry*. 2005; 62:554–563. [PubMed: 15867109]
- Yeung, WJ., Duncan, GJ., Hill, MS. Putting fathers back in the picture: parental activities and children's adult outcomes. In: Peters, HE, Peterson, GW, Steinmetz, SK., Day, RD., editors. *Fatherhood: research, interventions and policies*. New York, NY: Hayworth Press; Harris; 2000. p. 97-113.
- Yeung WJ, Linver MR, Brooks-Gunn J. How money matters for young children's development: parental investment and family processes. *Child Development*. 2002; 73:1861–79. [PubMed: 12487499]
- Yoo H, Feng X, Day RD. Adolescents' empathy and prosocial behavior in the family context: a longitudinal study. *Journal of Youth and Adolescence*. 2013; 42:1858–1872. [PubMed: 23283695]

Fig. 1. Structural Model for Child Prosocial Behavior. $*p < 0.05$, standard error (in parenthesis)
 Note: $*$ = $p < 0.05$, parentheses = standard error

Table 1

Descriptive statistic for the sample

Characteristics	(%)
Head of household ($n = 478$)	
Male	52.3
Female	47.5
Employment	
Yes	29
No	12.4
Recipient of pension/disability grant	
Yes	18
No	41
Children	
Gender	
Boy	41.1
Girl	58.9
Age	
9	1
10	36
11	35.1
12	27
13	.9
Live with most of the time	
Mother	67.4
Father	21.7
Grandfather/grandmother	33.3
Uncle/aunt	17.0

Table 2

Unstandardized, standardized, and significance levels for model in Fig. 1 (standard errors in parentheses; $N=478$)

Parameter estimate	Unstandardized	Standardized	<i>p</i> value
Structural model			
CRBP → GHQ	.25 (.09)	.15	.00 *
CRBP → NSCA	.04 (.09)	.02	.62
GHQ → NSCA	.22 (.05)	.20	.00 *
Total effect NSCA → GHQ → CRBP	.05 (.02)	.03	.02 *
Measurement model			
CRBP → GHQ	.28 (.01)	.17	.00 *
CRBP → NSCA	.05 (.11)	.02	.69
GHQ → NSCA	.28 (.06)	.24	.00 *
Total effect NSCA → GHQ → CRBP	.08 (.03)	.04	.02 *

CFI = 1.00, RMSEA = .00, SRMR = .00

*
 $p < 0.05$