



**THE ASSOCIATION
BETWEEN CHILDHOOD
POVERTY,
ADOLESCENT
EXPOSURE TO INTIMATE PARTNER
VIOLENCE, AND POSTTRAUMATIC
STRESS DISORDER IN A
NONCLINICAL SAMPLE OF
NIGERIAN AND SOUTH- AFRICAN
YOUTH**

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Abstract

The association between childhood poverty, adolescent exposure to intimate partner violence, and the presence of clinically significant levels of PTSD symptoms was examined among students registered for undergraduate social science classes in Nigeria (n = 426) and South Africa (n = 438). Multivariate analyses indicate that for each of the national samples: PTSD outcomes

were: (a)
independently
predicted by exposure
to childhood poverty
and by recent exposure
to intimate partner

KEYWORDS:

Poverty, intimate
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PTSD, developing
countries,
Nigeria, South
Africa

violence involving
psychological
aggression, but (b)
were not
independently
associated with
intimate partner
violence involving
physical assault or

sexual coercion. Study findings provide no evidence that the association between poverty and PTSD is mediated by an increased risk of exposure to traumatic events among impoverished individuals. These findings are discussed in terms of their implications for future research and with respect to the way in which poverty is conceptualized in trauma research.

INTRODUCTION

Although the deleterious effects of being raised in poverty are well known – including poorer health, lowered educational attainment, food insecurity, housing instability, and lack of access to social services (Collings, 2009; Partners for our Children, 2017; The Bergen Project, 2018) – there is a growing appreciation of the fact that poverty may also be associated with adverse mental health outcomes including Posttraumatic Stress Disorder (PTSD). Studies conducted in developed countries have consistently found that poverty is associated with PTSD and with other adverse mental health outcomes including depression, anxiety and personality disorders (Jenkins et al., 2008; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000; Kessler, & Neighbors, 1986; Nikulina, Widom, & Czaja, 2011; Widom, DuMont, & Csaja, 2007); with similar trends having been observed in the few studies that have been conducted in developing countries (Collings, 2012; Patel & Kleinman, 2003).

The dynamics of the association between poverty and PTSD outcomes are, however, far from clear, with some authors arguing that poverty exerts a direct effect on posttraumatic outcomes (Kira, Lewandowski, Chiodo, & Ibrahim, 2014; Rockers, Kruk, Saydee, Varpilah, & Galea, 2010), and other authors arguing that the association between poverty and PTSD is mediated by an increased risk of exposure to traumatic events among impoverished individuals (Collings, 2012; Townsend & Dawes, 2004).

In an attempt to obtain further clarity on the relative contribution of poverty and traumatic exposure to PTSD outcomes, a recent study conducted in the United States examined the direct and interaction effects of poverty in the family home and exposure to developmental trauma (childhood neglect) on PTSD outcomes in a sample of young adults (Nikulina et al., 2011). Study findings suggest that both poverty and traumatic exposure uniquely predict PTSD outcomes; with the analysis providing no evidence that the association between poverty and PTSD outcomes was mediated by exposure to traumatic events. This pattern of findings is, of course, consistent with contemporary understandings of how, and why, poverty may be associated with adverse mental health outcomes.

At a conceptual level, Kira and associates (2014) regard poverty as a chronic form of structural violence that may limit the individual's chance of survival and leave the individual "feeling helpless, lacking self-efficacy, with lower self-esteem" (p. 392), thus creating a potential for adverse mental outcomes including PTSD. Similarly, from a Conservation of Resources perspective (Hobfoll, 1998, 2001, 2011), it has been argued that an individual is likely to feel distress in situations where they experience loss, or threat of loss, to primary resources – including adequate shelter, food security, and access to necessary material resources – that are required for safety and survival; with chronic poverty being likely to be associated with a chronic lack of access to primary resources and an associated escalation in distress levels, thus creating a clear potential for adverse mental health outcomes.

In order to obtain further clarity on the dynamics of the association between poverty and PTSD outcomes, this study examined the association between poverty, traumatic exposure (intimate partner violence: IPV), and PTSD in convenience samples of youth drawn from two developing countries (Nigeria and South Africa), in order to assess

whether findings obtained for developing countries are similar to findings obtained for developed countries such as the United States (see. e.g., Nikulina et al., 2011).

Nigeria and South Africa are the countries with the largest economies in Africa, with 2017 data indicating that the Gross Domestic Product (in US\$ billions) was 395 for Nigeria and 344 for South Africa (Robertson, 2017). However, the two countries are also characterized by high levels of income inequality, with nearly one in two Nigerians (48.3%) and one in four South Africans (25.2%) living in absolute poverty, which is defined as less than US\$1.90/day (Adebayo, 2018; Wilkinson, 2018); with absolute poverty levels reported for Nigeria and South Africa being significantly higher than the 5.7% level reported for the United States (Nebhay, 2018).

The decision to focus on intimate partner violence (IPV) as a form of traumatic exposure was informed by the fact that the highest prevalence of IPV occurs in Africa (World Health Organization, 2013), with past 12 month prevalence rates for exposure to IPV in both Nigerian and South African samples having been found to be in excess of 40% (Ilika, Okonkwo, & Adogu, 2002; Spencer, Haffejee, Candy, & Kaseke, 2016); a percentage that is considerably higher than comparative rates reported for developed countries (cf., Smith, 2017).

Method

Participants

A total of 1,668 research questionnaire were distributed to students registered for undergraduate social science studies at the University of KwaZulu-Natal (Durban, South Africa, $n = 840$) and Benue State University (Makurdi, Nigeria, $n = 840$). From Figure 1, it is evident that completed questionnaires were returned by approximately 90% of students on each site. For both national samples, participants who did not return completed questionnaires did not differ significantly from

those who returned completed questionnaires in terms of age, gender, and self-declared ethnic identity. Given that the study was concerned to explore the prevalence and correlates of IPV in recent relationships, only participants who reported that they had been involved in an intimate relationship in the past 12 months were considered for further analysis (Nigeria: $n = 438$, 52.1%; South Africa: $n = 438$, 52.1%). Compared to their South African counterparts, Nigerian participants were more likely to be older, male, and Black African (see Table 1).

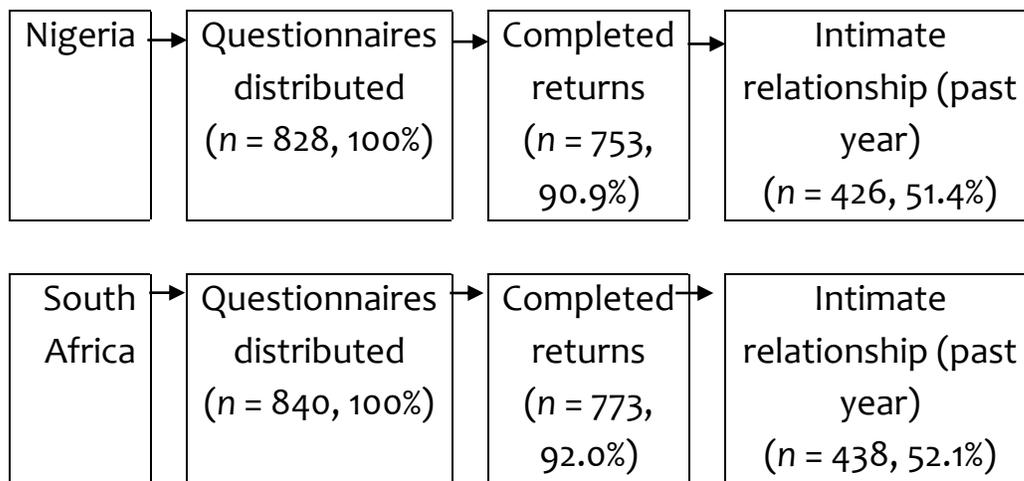


Figure 1: Sample recruitment plan

Table 1. Sample characteristic

	Nigerian sample (n = 426)		South African sample (n = 438)		Statistic	p
Variable	n	(%)	n	(%)		
Age					t(862) = 17.60	<.001
M	23.14		19.49			
SD	4.16		1.41			

Sex			$\chi^2(1) = 121.16$	<.001
Male	247 (58.0)	102 (23.3)		
Female	179 (42.0)	336 (76.7)		
Ethnicity			$\chi^2(1) = 7.37$.007
Black African	381 (89.4)	366 (83.6)		
Other	45 (10.6)	72 (16.4)		

Measures

Data were collected using a structured questionnaire which contained three sections. In the first section, standard demographic questions were used to assess participants age, gender, and ethnicity, with poverty in the family home being assessed using the Poverty subscale of the Developmental Trauma Inventory (DTI; Collings, Valjee, & Penning, 2013). The DTI contains three items (e.g., “My family was so poor that we sometimes did not have enough food to eat”) each of which is scored as being false (score = 0) or true (score = 1) providing a score range of 0-3. For purposes of the study, extreme poverty was deemed to be present if a participant answered ‘true’ to all three items on the poverty subscale. The poverty subscale has been validated in a South African sample, and has been found to be characterized by acceptable levels of convergent validity (Valjee & Collings, 2015) and adequate levels of internal consistency ($\alpha = .72$; Collings et al., 2013). In this study, Cronbach alphas for the poverty subscale were .74 (Nigeria) and .72 (South Africa).

In the second section of the questionnaire, adolescent exposure to IPV was assessed using the Psychological Aggression, Physical Assault, and Sexual Coercion subscales of the short form of the Revised Conflict Tactics Scale (CTS; Strauss & Douglas, 2004), which has been found to have sound psychometric properties in a number of studies

(Shore, Brasfield, Febres, Cornelius, & Stuart, 2012; Straus & Douglas, 2004). Each of these subscales contains two items designed to assess for different levels of severity. For example: (a) moderate exposure to psychological aggression is assessed using the item “My partner insulted or swore at or shouted or yelled at me”, with severe psychological aggression being assessed using the item “My partner destroyed something belonging to me or threatened to hit me”, (b) moderate exposure to physical assault is assessed using the item “My partner pushed, shoved, or slapped me”, with severe physical assault being assessed using the item “My partner punched, kicked, or beat me up”, and (c) moderate exposure to sexual coercion is assessed using the item “My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force)”, with severe sexual coercion being assessed using the item “My partner used force (like hitting, holding down, or using a weapon) to make me have sex”. In this study, a particular form of IPV was deemed to be present if participants endorsed either of the items (moderate or severe) relating to that form of IPV.

In the final section of the questionnaire, PTSD symptomatology was assessed using the Trauma Screening Questionnaire (TSQ; Brewin et al., 2002). Items on the 10-point scale are scored on a 3-point Likert scale ranging from 0 (*not present*) to 2 (*present at least twice a week*). The TSC has been found to be characterized by high levels of sensitivity and specificity, with performance on the TSC having been found to be equivalent to agreement achieved between two full clinical interviews (Brewin et al., 2002). The cut-off score used in this study to classify participants as having clinically significant levels of PTSD (a score of at least two on six scale items) has been found to be associated with a sensitivity of .86 and a specificity of .93 (Brewin et al., 2002). Cronbach alphas for the TSC in this study were .88 (Nigeria) and .82 (South Africa).

Procedure

Ethical clearance for the research was obtained from the Humanities and Social Science Research Ethics Committees at both the University of KwaZulu-Natal (South Africa) and Benue State University (Nigeria). The research was introduced to potential participants during normal lecture periods, with participants being provided with a copy of the study information sheet and requested to read it. Students who indicated an interest in participating were then provided with a folder that contained an informed consent documentation form (to be completed during the lecture) and a copy of the research questionnaire (to be completed away from lectures and posted in a sealed box that was placed outside the lecture theatre for a week).

Data Analyses

Preliminary analyses (Kolmogorov-Smirnov and Shapiro-Wilk) indicated that the distribution of scores for all variables considered in the study deviated significantly from what would be expected under the normal curve. Subsequent analyses were therefore conducted using non-parametric procedures. Descriptive statistics were used to examine frequencies of, and univariate associations between, study variables, with predictors of PTSD status being examined using binary logistic regression analyses.

Results

Poverty levels

South African participants ($n = 147, 33.6\%$) were significantly more likely than their Nigerian counterparts ($n = 122, 28.6\%$) to report extreme poverty in the family home, $\chi^2(1) = 14.37, p < .001$.

IPV exposure

Nigerian participants ($n = 264, 62.0\%$) were significantly more likely than South African participants ($n = 228; 52.1\%$) to report at least one incident of IPV; $\chi^2(1) = 12.36, p = .001$.

Table 2. Prevalence of exposure to intimate partner violence

Variable	Prevalence		Statistic	p
	Nigeria (n=426) n (%)	South Africa (n=438) n(%)		
Psychological	241(56.6)	195(44.5)	$\chi^2(1)= 10.11$.001
Sexual coercion	115(27.0)	81 (18.5)	$\chi^2(1)= 8.90$.003
Physical assault	57(13.4)	57 (13.0)	$\chi^2(1)= 0.03$.874

From Table 2 it is evident that Nigerian participants were more likely than their South African counterparts to report exposure to psychological abuse and sexual coercion in the past 12 months, with the two national groups not differing significantly in terms of prevalence rates for physical assault.

Prevalence of PTSD

Clinically significant levels of PTSD were reported by 39 participants (8.9%) in the South African sample and by 37 participants (8.7%) in the Nigerian sample, with there being no significant differences in prevalence rates reported by the two national samples, $\chi^2(1) = 0.01$, $p = .994$.

Univariate associations between study variables

Zero-order correlations between study variables (Table 3) indicated that for both the Nigerian and South African samples: (a) different forms of IPV were moderately correlated, (b) high levels of poverty in the family home were associated with a history of exposure to psychological aggression, and (c) the presence of clinically significant levels of PTSD symptoms was associated with: female gender, a history of past 12-month exposure to psychological aggression, and a history of exposure to poverty in the family home.

Table 3: Zero-order correlations between variables

Variable	1	2	3	4	5	6	7
Nigerian sample							
1. 1. Age	--						
1. 2. Female Gender	-.07	--					
2. 3. Black African	-.03	.06	--				
4. Psychological aggression	.19* *	-.01	.03	--			
5. Physical assault	.28* *	-.07	-.01	.26* *	--		
6. Sexual coercion	.18* *	-.01	.06	.29* *	.27* *	--	
7. Poverty	.13* *	-.12**	-.04	.15* *	.06	.07	--
8. PTSD present	-.01	.10* *	-.02	.18* *	.02	.05	.15* *
South African sample							
2. 1. Age	--						
3. 2. Female Gender	-.05	--					
4. 3. Black African	.11* *	-.02	--				
4. Psychological aggression	.02	.07	-.09	--			
5. Physical assault	.16* *	.12* *	.06	.27* *	--		

6. Sexual coercion	-.02	.18*				--	
			.16*	.28*	.29*		
			*	*	*		
7. Poverty	.03	-	.07	.10*	-.07	.03	--
		.21**					
8. PTSD present	-.01	.10*	-.03		.03	.01	
				.16*			.14*
				*			*

Table 4 Predictors of PTSD: Binary logistic regression analyses

Nigeria (n = 426)

South Africa (n = 438)

Variable	Wald (1)	OR	p	Wald (1)	OR	p
<i>Covariates</i>						
Older age	0.07	0.88	.698	0.10	0.97	.756
Being female	8.15	3.67	.004	9.91	4.32	.002
Ethnicity (Black African)	0.45	0.46	.513	0.01	0.97	.922
<i>Main effects</i>						
Psychological aggression (PSY)	7.62	7.45	.005	6.88	6.78	.009
Physical Assault (PHY)	.004	0.59	.591	0.32	0.51	.573
Sexual coercion (SEX)	.030	0.49	.607	0.09	0.73	.770
Poverty at home	12.11	14.78	<.001	14.27	17.04	<.001
<i>Interaction effects</i>						
PSY x Poverty	2.09	1.78	.075	2.56	1.63	.082
PHY x Poverty	0.54	0.57	.572	0.41	0.42	.109
SEX x Poverty	0.04	0.59	.673	0.01	0.91	.909

Note. OR = Odds Ratio.

Key: All tables are sourced from output of data of the survey study, 2016.

Discussion

The aim of this study was to explore the association between childhood poverty, adolescent exposure to IPV, and PTSD outcomes in samples of Nigerian and South African university students; with study findings providing qualified support for the view that PTSD outcomes are uniquely predicated by both childhood poverty and adolescent exposure to potentially traumatic events (Nikulina et al., 2011). Although study findings indicate that childhood poverty and exposure to adolescent IPV involving psychological aggression uniquely predicted PTSD outcomes in both national samples, no significant associations were observed, in either sample, between PTSD outcomes and other forms of IPV (i.e., physical aggression and sexual coercion).

This pattern of findings: (a) is consistent with findings obtained for developed countries (Basile, Aria, Desai, & Thompson, 2004; Pico-Alfonso et al., 2006; Street & Arias, 2001) which indicate that psychological aggression is the only form of IPV that is consistently associated with PTSD outcomes, and (b) suggests that psychological forms of violence should “no longer be considered a minor type of IPV when assessing and recognizing the impact of IPV on women’s [and men’s] mental health” (Pico-Alfonso et al., 2006, p. 608).

With respect to the dynamics of the association between poverty and PTSD outcomes, study findings do not provide support for the view that the association between poverty and PTSD is mediated by an increased risk of exposure to traumatic events among impoverished individuals (Collings, 2012; Townsend & Dawes, 2004), suggesting rather that poverty may exert a direct effect on posttraumatic outcomes (Kira et al., 2014; Nikulina et al., 2011; Rockers et al., 2010). As such, the present findings add to a growing body of literature (cf.,

Kira et al., 2014), which suggests that poverty constitutes a form of structural violence that has a clear traumagenic potential in its own right; with further research being indicated in order to more comprehensively explore the aetiological pathways linking poverty to PTSD outcomes.

Conclusion and Recommendations

At a broader level, study findings suggest the need for further research on the association between poverty and mental health in developing countries. Available studies on risk factors for PTSD in developing countries have tended to focus almost exclusively on exposure to armed conflict as an antecedent to PTSD outcomes (see e.g., Cardoza et al., 2004; de Jong et al., 2001; Kuterovac-Jagodić, 2003; Punamaki, Komproe, Qouta, Elmasri, & de Jong, 2002) with the role played by poverty and other ecological variables in mental health outcomes having been largely overlooked. As a result, current understandings of the mental health consequences of poverty in developing countries is limited, with further research on the issue appearing to be strongly indicated.

Finally, the limitations of the study need to be considered. First, study findings were derived from an ostensibly well-functioning student sample, which is unlikely to be representative of the population in general. Second, only one form of traumatic exposure (IPV) was examined in the study, which is likely to provide only a partial estimate of participant's full victimization profile, and consequently an overestimation of the traumagenic significance of the narrow range of traumatic experiences surveyed (Finkelhor, Ormrod, & Turner, 2007). And third, the assessment of mental health outcomes was restricted to only one mental health outcome, which is likely to provide only a partial estimate of the mental health implications of exposure to childhood poverty and/or IPV during adolescence. As such, further research, involving large and representative samples is indicated, with such research ideally relying on estimates of traumatic exposure that adequately capture participants' full victimization profile, and on

clinical measures that more comprehensively assess mental health outcomes.

References

- Adebayo, B. (2018). *Nigeria overtakes India in extreme poverty*. Available at: <https://edition.cnn.com/2018/06/26/africa/nigeria-overtakes-india-extreme-poverty-intl/index.html> (accessed 11 June 2018).
- Basile, K. C., Arias, I., Desai, S., & Thompson, M. P. (2004). The differential association of intimate partner physical, sexual, psychological, and stalking violence and posttraumatic stress symptoms in a nationally representative sample of women. *Journal of Traumatic Stress, 17*(5), 413-421. doi: 10.1023/B:JOTS.0000048954.50232.d8
- Brewin, C. R., Rose, S., Andrews, B., Green, J., Tata, P., McEvedy, C., & Foa, E. B. (2002). Brief screening instrument for post-traumatic stress disorder. *The British Journal of Psychiatry, 181*, 158–162. doi: 10.1017/S0007125000161896
- Collings, S. J. (2009). Where the streets have no names: Factors associated with the provision of counselling and social work services for child rape survivors in KwaZulu-Natal, South Africa. *Journal of Child and Adolescent Mental Health, 21*(2), 139-146. doi: 10.2989/JCAMH.2009.21.2.5.1013
- Collings, S. J. (2012). Child sexual abuse experiences mediate the relationship between poverty and Posttraumatic Stress Disorder, *Social Behavior and Personality, 40*(6), 983-984.
- Collings, S. J., Valjee, S. R., & Penning, S. L. (2013). Development and preliminary validation of a screen for interpersonal childhood trauma experiences among school-going youth in Durban, South Africa. *Journal of Child and Adolescent Mental Health, 25*, 23–34.
- Cardozo, B. L., Bilukha, O. O., Crawford, C. A. G., Shaikh, I., Wolfe, M. I., et al. (2004). Mental health, social functioning, and disability in postwar Afghanistan. *The Journal of the American Medical Association, 292*(5), 575-584.
- de Jong, J. T. V. M., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., van de Put, W., & Somasundaram, D. (2001). Lifetime events and posttraumatic stress disorder in 4 post conflict settings. *Journal of the American Medical Association, 286*(5), 555-562.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect, 31*(1), 7-26.
- Hobfoll, S. E. (1998). *Stress, culture, and community*. New York: Plenum Press. <http://dx.doi.org/10.1007/978-1-4899-0115-6>
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology, 50*(3), 337–421. <http://dx.doi.org/10.1111/1464-0597.00062>

- Hobfoll, S. E. (2011). Conservation of resources theory: Its implications for stress, health, and resilience. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 127–147). New York: Oxford University Press.
- Ilika, A. L., Okonkwo, P. I., & Adogu, P. (2002). Intimate partner violence among women of childbearing age in a primary health care centre in Nigeria. *African Journal of Reproductive Health*, 6(3), 53-58.
- Jenkins, R., Bhugra, D., Bebbington, T., Brugha, Farrell, J.Coid, J., ... Meltzer, H. (2008). Debt, income and mental disorder in the general population. *Psychological Medicine*, 38, 1485-1493.
- Johnson, J. G., Smailes, E. M., Cohen, P., Brown, J., & Bernstein, D. P. (2000). Associations between four types of childhood neglect and personality disorder symptoms during adolescence and early adulthood: Findings of a community-based longitudinal study. *Journal of Personality Disorders*, 14(2), 171-187.
- Kessler, R. C., & Neighbors, H. W. (1986). A new perspective on the relationships between among race, social class, and psychological distress. *Journal of Health and Social Behavior*, 27, 107-115.
- Kira, I. A., Lewandowski, L., Chiodo, L., & Ibrahim, A. (2014). Advances in systemic trauma theory: Traumatogenic dynamics and consequences of backlash as a multi-systemic trauma on Iraqi refugee Muslim adolescents. *Psychology*, 5, 389-412.
- Kuterovac-Jagodić, G. (2003). Posttraumatic stress symptoms in Croatian children exposed to war: A prospective study. *Journal of Clinical Psychology*, 59, 9-25
- Nebhay, S. (2018). *America's poor becoming destitute under Trump: U.N. Expert*. Available at: <https://www.reuters.com/article/us-usa-rights-un/americas-poor-becoming-more-destitute-under-trump-u-n-expert-idUSKCN1IYoC3> (accessed 11 June 2018).
- Nikulina, V., Widom, C. S., & Czaja, S. (2011). The role of childhood neglect and childhood poverty in predicting mental health, academic achievement and crime in adulthood. *American Journal of Community Psychology*, 48, 309-321.
- Partners for our Children. (2017). The impact of poverty on children and families. Available at: <https://partnersforourchildren.org/sites/default/files/Poverty%20brief%20FINAL.pdf> (accessed on 11 June 2018).
- Patel, V., & Kleinman, A. (2003). Poverty and common mental disorders in developing countries. *Bulletin of the World Health Organization*, 81, 609-615.
- Pico-Alfonso, M. A., Garcia-Linares, M. I., Celda-Navarro, N., Blasco-Ross, C., Echeburúa, E., & Martinez, M. (2006). The impact of physical, psychological, and sexual intimate partner violence on women's mental health: Depressive, posttraumatic stress disorder, state anxiety, and suicide. *Journal of Women's Health*, 15(5), 599-611.
- Punamaki, R. L., Komproe, I. H., Qouta, S., Elmasri, M., & de Jong, J. T. V. M. (2005). The role of peritraumatic dissociation and gender in the association between

- trauma and mental health in a Palestinian community sample. *American Journal of Psychiatry*, 162(3), 545-551.
- Robertson, C. (2017). *Who's got the biggest economy in Africa?* Available at: <https://www.howwemadeitinafrica.com/whos-got-biggest-economy-africa/59995/> (accessed on 11 June 2018).
- Rockers, P. C., Kruk, M. E., Saydee, G., Varpilah, S. T., & Galea, S. (2010). Village characteristics associated with posttraumatic stress symptoms in postconflict Liberia. *Epidemiology*, 21, 454-458. <http://doi.org/dxrw3p>
- Shore, R. C., Brasfield, H., Febres, J., Cornelius, T. L., & Stuart, G. L. (2012). A comparison of three different scoring methods for self-report measures of psychological aggression in a sample of college students. *Violence and Victims*, 27, 973-990.
- Smith, M. R. (2017). *The incidence and correlates of intimate partner violence in a sample of South African university students*. Unpublished Masters Dissertation, University of KwaZulu-Natal, Durban 4041, South Africa
- Spencer, K., Haffejee, M., Candy, G., & Kaseke, E. (2016). Intimate partner violence at a tertiary institution. *South African Medical Journal*, 106(11), 1129-1133.
- Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence and Victims*, 19, 507-520.
- Street, A. E., & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women. *Violence and Victims*, 2001, 16(1), 65-78.
- The Bergen Project. (2018). The effects of poverty. Available at: <https://borgenproject.org/5-effects-poverty/> (accessed 11 June 2018).
- Townsend, L., & Dawes, A. (2004). Individual and contextual factors associated with the sexual abuse of children under 12: A review of recent literature. In L. Richter, A. Dawes, & C. Higson-Smith (Eds.), *Sexual abuse of young children in South Africa* (pp. 55-94). Cape Town, Republic of South Africa: Human Sciences Research Council Press.
- Valjee, S. R., & Collings, S. J. (2015). Convergent validity assessment of a brief screen for poverty with South African adolescents. *Social Behavior and Personality*, 43, 875-880.
- Widom, C. S., DuMont, K., & Csaja, S. J. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Archives of General Psychiatry*, 64, 49-56.
- Wilkinson, K. (2018). *Factsheet: South Africa's official poverty numbers*. Retrieved 11 June 2018, from <https://africacheck.org/factsheets/factsheet-south-african-official-poverty-numbers/>
- World Health Organization. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva, Switzerland: WHO Press.