



State of the Science

Bridging risk and enactment: the role of psychology in leading psychosocial research to augment the public health approach to violence in South Africa

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Abstract

In the wake of apartheid, many in the South African health and social sciences shifted their orientation to understanding violence. Rather than approaching violence as a criminal problem, post-apartheid scholarship surfaced violence as a threat to national health. This re-orientation was well aligned with a global groundswell that culminated in the World Health Assembly's 1996 declaration of violence as a public health problem. In response, researchers and other stakeholders have committed to the public health approach to violence in South Africa. Despite some unquestionable successes in applying this approach, violence remains a critical social issue and its recalcitrantly high rates signal that there is still much work to be done. One avenue for more focussed research concerns understanding the mechanisms by which upstream risk factors for violence are translated into actual enactments. We argue that South African psychology is well placed to provide greater resolution to this focus. We begin by providing a brief overview of the public health approach to violence. We then point to three specific areas in which the limits to our understanding of the way that downstream psychological and upstream social risk factors converge in situations of violence, compromise the theoretical and prevention traction promised by this approach and chart several basic psychosocial research coordinates for South African psychology. Steering future studies of violence by these coordinates would go some way to addressing these limits and, in so doing, extend on the substantial gains already yielded by the public health approach to violence in South Africa.

Keywords

Psychology, psychosocial, public health, South Africa, violence

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Introduction

In their critical historical overview of the different forms and responses to violence in South Africa, Butchart, Hamber, Terre Blanche, and Seedat (1997) argue that the end of apartheid signalled a shift in the conceptualizations of and explanations for violence in the newly formed democratic country. The 1990s, they contend, marked the gradual end of widespread displays of political violence characteristic of life under apartheid. Instead of framing violence as a key manifestation of political turmoil and resistance by an oppressed majority, new approaches focussed on the social and psychological implications of the aftermath of violence. Rather than seeing violence as the inevitable outcome of the apartheid state's battle for sovereignty, South Africa's socio-medical sciences began to look away from sources of conflict, and towards prioritizing service provision for survivors. This traumatology orientation bound (mental) health to population well-being and surfaced violence as a health issue in many of the policy documents of the time (Butchart et al., 1997). Once the scale of the consequences of the violence of apartheid became apparent, it was clear that curative approaches would have limited effects and that violence was a population-level challenge. Echoing the findings of researchers from across the world, early epidemiological studies in South Africa consistently demonstrated that violence was indeed a threat to public health (Nell & Brown, 1991). These studies aligned the South African socio-medical sciences with a global groundswell culminating in the World Health Assembly's 1996 declaration of violence as a public health problem (Dahlberg & Butchart, 2005; Mercy, Krug, Dahlberg, & Zwi, 2003; Perry, 2009). In response, researchers, practitioners, civil movements, politicians, and a range of other stakeholders have committed to violence prevention by aligning themselves with the public health approach in South Africa. This approach to studying violence is robust in that it is evidence-driven, encourages interdisciplinarity, and is geared towards distilling effective interventions that can be replicated or generalized beyond the study site (Butchart, 2011).

The application of the public health approach to the problem of violence has generated an inventory of risk factors, several effective interventions, and a number of impressive success stories (Dahlberg & Butchart, 2005; Krug & Dahlberg, 2002; Villaveces et al., 2000) across the world and in South Africa (Matzopoulos, Thompson, & Myers, 2014). Proponents of the approach attribute such successes partly to the fact that while the model recognizes the ecological or systemic organization of human life, it is population – rather than individually – focussed. This means that by aggregating data to the population level, it is able to "see the wood from the trees" in recognizing those risks common across individuals. Others argue that while this aggregation is certainly useful, a population focus also runs the risk of collapsing important differences in manifestations of violence (Ruttenberg, 1994).

In the early 1990s, Ruttenberg (1994) argued that the promises of a public health approach to violence were limited because it could not sufficiently move beyond the mere identification of a range of social, political, or economic factors in explaining variations in rates of violence. A later appraisal drew attention to its as yet untested understandings of the relationships between complex variables such as racism and classism in shaping violent outcomes (Calhoun & Clark-Jones, 1998). These complex interactions are, according to Jewkes, Levin, and Penn-Kekana (2002), further complicated by the seemingly arbitrary allocations of risk or protective factors to discreet ecological levels when in fact such risks may span each, any, and all of them. More recently, Ratele, Suffla, Lazarus, and van Niekerk (2010) argue that current, mainstay public health approaches are not sufficiently sensitive to the social, economic, and ideological contexts that frame violence. These criticisms, while legitimate on the one hand, also seem somewhat premature given that there has been very limited uptake of the approach and that the nature of the model implies that a longer time frame is needed to realize its effects (Matzopoulos & Myers, 2014). Notwithstanding the limited

uptake and relatively short lifespan of public health—based interventions relative to alternative intervention models, violence remains a reality for many South Africans. We argue that the recalcitrantly high levels of continuing violence signal that there is much additional theoretical and empirical work to be done while the full effects of the public health approach surface and its implementation increasingly begins to bear fruit. One of these interim areas concerns the fact that public health researchers have yet to understand the mechanisms by which the now well-documented upstream risk factors for violence are translated in moments of enactment. This gap in understanding, we suggest, is itself symptomatic of the fact that much of the violence prevention work in South Africa over the last decade has been led by epidemiological thinking that has (perhaps justifiably) focussed on the influence of broad social and economic risk factors for violence. This focus, while perfectly in keeping with the logic of primary prevention, has underweighted our understanding of the importance of the agent or social subject in specific violent interactions and more importantly, the mechanisms that translate risk into violent enactments within particular circumstances or contexts. There is thus a need for targeted psychosocial research to address these kinds of gaps, and South African psychology is well placed to spearhead attempts to do so.

A recent call by Ward et al. (2012) for more visible contributions by the social sciences to violence research and prevention implies that psychology could do more to drive violence theorizing and prevention within an interdisciplinary frame that augments the vision of the public health approach. As a platform for addressing this call, Seedat, van Niekerk, Suffla, and Ratele (2014) have recently surveyed South African psychology's historical and current contributions to this field of study and action. While a useful overview, they do not provide any direct or specific coordinates for leveraging psychosocial work that could contribute to advancing our understandings of the ways that risk for violence translates into violence itself – a key gap in knowledge and an imperative research area for the discipline. The aim of this article is to begin to re-chart a clearer course for psychology's future role in addressing violence by providing such research coordinates.

We begin charting this course by providing a brief overview of the public health approach to violence, highlighting its major conceptual features and models. We then point to three specific areas in which we suggest that limitations in current understanding compromise the theoretical and prevention traction promised by this tradition of thinking. In each area, we sketch key psychosocial research coordinates that might enable South African psychology to address these limits and, in so doing, augment and extend on the substantial gains already yielded by the public health approach.

The public health approach to violence

Like any public health problem, the study of violence is underpinned by the well-known four-step logic. The first step is problem definition and magnitude measurement, the second is risk factor identification, the third step requires testing interventions, and the last step involves rolling-out effective interventions to other suitable settings (Mercy, Rosenberg, Powell, Broome, & Roper, 1993). Conceptually, this approach to violence and violence prevention is anchored by a definition, typology, and theory—based model. According to the *World Report on Violence and Health (WRVH)*, violence can be defined as

The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation. (Krug & Dahlberg, 2002, p. 5)

A typology of the different types of violence and the nature of its expressions, founded on this definition, is presented in Figure 1. The three types identified are self-directed, interpersonal, and

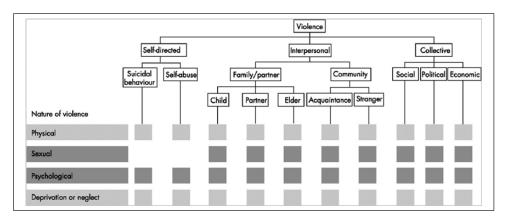


Figure 1. The World Health Organization (WHO) typology of violence. Source: Rutherford, Zwi, Grove and Butchart (2007a).

collective violence. Each category is then further divided into specific sub-types and or actors. Finally, four descriptors of the 'nature' of the violence complete the model. Self-directed violence refers to thought or actions directed towards suicide or self-harm; interpersonal violence is divided into two forms: family and community violence, the former defined by violence between people who usually know each other in the home, and the latter by perpetration by strangers where violence tends to happen in public places (Kobusingye, Bowman, Burrows, Matzopoulos, & Butchart, 2010). The third type is collective violence, which is typified by groups of people that perpetrate violence that is largely motivated by political, economic, and social factors.

This typology is frequently presented alongside the well-known social ecological model, commonly associated with most public health work. The model presented in Figure 2 below describes risk factors for violence and their implications for targeted intervention programmes. There is a vast literature upon which this model is based, and it has remarkable currency in synthesizing what we know about the risks for violence globally and in local contexts. We know, for example, that men are more likely to be the perpetrators and victims of homicide and women the victims of sexual violence in South Africa (Dartnall & Jewkes, 2013; Norman, Matzopoulos, Groenewald, & Bradshaw, 2007). We know that alcohol availability and distribution patterns are associated with violence rates (Matzopoulos, 2005). We also have ample evidence to suggest that fatal violence is strongly associated with levels of economic inequality (Butchart & Engstrom, 2002). These risk factors have in turn generated a host of intervention documentation and research, ranging from state-of-the-science reviews (Dahlberg & Butchart, 2005) to current listings of World Health Organization (WHO) collated violence prevention interventions online (http://www.preventviolence.info/).

The violence typology and the ecological frameworks, widely disseminated in the WRVH together direct the thinking of much of the mainstream public health violence prevention literature internationally and in South Africa (Perry, 2009; Ward et al., 2012). However, these literatures have not adequately grappled with two important disclaimers that accompanied this global dissemination and the possibilities for psychosocial research that they present.

The first of these disclaimers lies in the acknowledgement that while the typology is "imperfect and far from being universally accepted" it is nonetheless "a useful framework for understanding the complex patterns of violence taking place around the world, as well as violence in the everyday lives of individuals, families and communities" (Krug & Dahlberg, 2002, p. 7). The second is that "in both research and practice, the dividing lines between the different types of violence are not

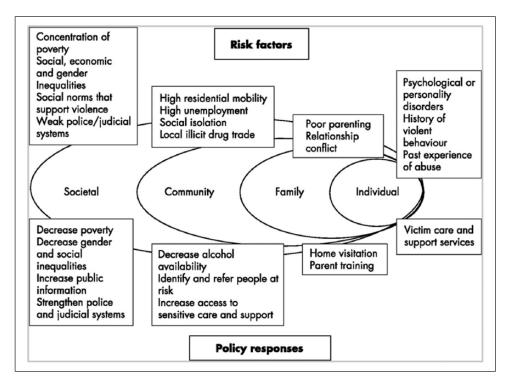


Figure 2. Ecological model for understanding violence. Source: Rutherford et al. (2007b).

always so clear" (Krug & Dahlberg, 2002, p. 7). Pre-empting the first acknowledgement, Calhoun and Clark-Jones (1998) argue that to enhance the explanatory power of public health typologies and models in the area of violence, the relationships between violence and a range of social asymmetries represented by social categories such as race and class need to be clarified. More recently, Hamby and Grych (2013) draw out some important challenges related to the latter problem of clearly differentiating one form of violence from another.

Rather than seeing these challenges as fundamentally limiting to the direct application of the violence typologies and conceptual models currently available to public health frameworks, such criticisms invite more precise diagnoses of the theoretical, practical, and epistemological logics underpinning these limits. Merely advocating for the role of psychosocial research and intervention within the public health approach to violence (Ratele et al., 2010) is no longer sufficient if we are to advance thinking about violence in South Africa and how psychology should contribute to this kind of elaboration. Rather, targeted identification of the challenges facing violence researchers is now required in order to move such research and the potential interventions it implies forward. We therefore attempt a more concrete diagnosis of these challenges and point to possibilities for advancing the study of violence in South Africa by psychologists in the following sections.

The importance of context in describing the problem

Describing, defining, and measuring a problem form the very foundation of the public health approach. There has of course been much debate on finding a suitable definition of violence by

public health researchers. The current WHO definition links intentionality with the outcomes injury, death, psychological harm, maldevelopment, and/or deprivation (Krug & Dahlberg, 2002). These outcomes are justifiably measurable and intentionality is crucial. However, the process that links intention to injury outcome is not currently included in formulations of violence, leaving both these essential parts of the definition in a contextual vacuum. In countries where criminal justice datasets are easily matched to fatal and non-fatal surveillance systems, the context of the injury may be retroactively fitted to provide much needed supplementary data for prevention. However, in countries such as South Africa where health information systems' development is in its infancy, even the fatal injury outcomes reported in surveillance systems such as the National Injury Mortality Surveillance System (NIMSS) (Butchart et al., 2001) are not accompanied by the kind of context-specific and process data that are required to better understand the context of the fatal injury. Despite the early intentions of its developers, delays in processing cases in the criminal justice system mean that the NIMSS still does not provide information on victim-perpetrator relationships, type of violence, and the broader context of the attack. This means that despite some very notable exceptions (Centre for the Study of Violence and Reconciliation [CSVR], 2008; Jewkes et al., 2006; Jewkes, Sikweyiya, Morrell, & Dunkle, 2014), the epidemiology of violent injury data in South Africa continues to routinely profile victims of fatal violence without these important data.

The causal pathways resulting in fatal injuries produced by violence are inordinately complex, and so linkages to data that provide richer contextual information are essential. At present, this form of cross-analysis is markedly absent in psychological violence research in South Africa. When ad hoc analyses of existing criminal justice datasets are themselves analysed, a more specific context for differentiating one form of violence from another is evident. For example, the most recent Victims of Crime Survey in South Africa showed that the respondents feared violent property crime more than murder and sexual assault (Statistics South Africa, 2012). While counterintuitive, further examination of the only available data suggests that the respondents' reasoning may be well justified because in South Africa these crimes are not always mutually exclusive. An 'in-house' analysis of the five police stations in Gauteng at which residential robberies are mostly reported showed that 2% of the sampled cases recorded an accompanying murder, 9% reported an attempted murder, and 4% documented a rape in the course of the robbery. The numbers and rates of these proportions of other forms of violence as what might be seen as a 'by-product' of house robbery dwarf overall violence rates in many countries (Newham, 2008). Details such as the nature of the crime and number of perpetrators (for example) are generally captured in police dockets that are often immediately inaccessible to public health researchers attempting to better understand fatal violence in South Africa. Without the matching of health and criminal justice datasets, the context framing the nature and magnitude of the problem cannot be accurately measured or conceptualized and the complex 'psychology of violence' cannot be more fully theorized. While motivations and intent can never really be fully known beyond self-report, such a 'psychology of violence' should at least attempt to understand the manner in which context and human subjectivity and agency converge in situ to enact violence giving rise to specific behavioural enactments. The lack of multidimensional data and the time lags implied in obtaining important elaborated data on the context and process of violent enactments thus pose a challenge to risk factor research and intervention development. Innovative forms of research are therefore required to address this challenge.

In addition to adding their voices to the demand that the criminal justice system acknowledges the importance of availing accurate and timely data to South Africa's violence research sector, psychology researchers invested in refining the psychosocial contributions to public health thinking must develop innovative ways to understand the 'process vacuum' implied by our current datasets. Lobbying for better data appears to be realizing returns with crime analysis and

dissemination being prioritized as a focus area in the strategic planning of Statistics South Africa (StatsSA), the organ of state responsible for the production of quality data (Statistics South Africa, 2010). However, the matching and aggregation of reliable violence data for process and context analysis will require years of testing before delivery. In the interim, attempts to connect risk to enactment should prioritize case-based methodologies that sample information-rich reports of violence with which psychologists are well acquainted. There have been attempts to undertake these kinds of case oriented analyses through matching crime statistics with perpetrator interviews to produce a more comprehensive picture of enactments of violence (see e.g., CSVR, 2008, 2009), but these have not managed to synthesize all the available data related to a single enactment. To advance such studies requires a multi-perspectival analysis of the same case of violence in order to appreciate the context and process in which it was enacted. This level of contextual analysis provides an important opportunity for psychology to mark its place in the interdisciplinary aspirations of the public health approach (Teutsch & Fielding, 2013), which continues to be dominated by epidemiological considerations (Wilkinson & Hamerschlag, 2005). Although epidemiology is an important if not defining discipline in the public health approach, psychology should augment epidemiological evidence in an attempt to understand the ways in which risks intersect in particular enactments of violence that often involve complex interactions between multiple, shifting, and potentially interchangeable vectors and hosts and psychological pathogens (Gilligan, 2000). These interactional contexts cannot be reduced to the sum of their epidemiological parts because human beings are meaning-making agents. While there have been long-standing calls to 'bring context back into epidemiology', generally (Diez-Roux, 1998) South African psychology has been less than forthcoming in recognizing this imperative. This is an important oversight that must be urgently addressed by foregrounding those parts of psychosocial theory that are able to wed agency to structure and outcome to context.

Far from novel in psychological theory, new instantiations of psychosocial thinking (see Frosh, 2003) provide important pointers in this regard. For example, Stevens, Duncan, and Hook (2013) are at pains to point out how important the undermining of the traditional divide between social structure and affect is to move an analysis of racism forward. This certainly holds true for studying violence, where paradoxically analyses have commonly evacuated the subject and subjectivity from actual enactments of violence. South African psychology must re-inscribe these crucial units of analysis while not losing sight of their intersections with the social and economic risks for violence so systematically uncovered by rigorous epidemiological work. This psychosocial approach requires new modes of mapping the causes, situational contexts for and consequences of violence as discussed further.

Rethinking typologies

Although cautioning against assuming that the lines between the types of violence presented by the *World Health Report* are always clear (Krug & Dahlberg, 2002), recent developments in violence studies have clearly shown that single instances of violence enacted between perpetrators and victims motivated by a distinguishable motive within a particular type of violence, are rare. Rather, such acts could be better conceptualized and incorporated into existing public health typologies as part of a *web of violence* (Hamby & Grych, 2013). This web criss-crosses types of violence and risk factors for them (Jewkes, 2002). Thus, all forms of violence could be considered part of a broad matrix of polymorphic violence that should be further disaggregated by a number of possibilities that relate the victim(s) to the perpetrator(s) and the nature of the injuries to the form of the attack. The foundations of such a model or co-occurrence framework developed by Hamby and Grych (2013) are presented as Table 1 below.

Table 1. A co-occurrence framework for violence that integrates previous terminologies.

Role: Involvement in violence		
Victim	Perpetrator	Both
Single episode or emphasis on	a single type	
Mono-victim		Mono-perpetrator-victim
Also studies under the name of		
Acute	Specialists	Bully victim
Isolated		Mutual IPV
Single form exposed		
Multiplicity: patterns across ty	pes of violence	
Poly-victim	Poly-perpetrator	Delinquent victim
Also studied under the name of		
Multiple type victim		
Multiple victim	Generalists	
Multiple crime-type victim	Violent polymorphism	
Multiple form exposed		
Complex trauma		
Repetitiveness: patterns acros	s time	
Repeat victim	Repeat perpetrator	Repeat-perpetrator-victim
Also studied under the name of		
Repeat victim	Recidivist	Cycle of violence
Chronic	Habitual offender	Intergenerational transmission
Complex trauma	Reconviction	
	Revolving doors	
	Career criminal	

Source: Hamby and Grych (2013). IPV: intimate partner violence.

In contrast to the neat categorical model presented in Figure 1, this framework provides additional levels for better understanding the contexts and interactional forms of expressions of violence. In supplementing the possibilities for a specialized episodic or 'mono' form of the violent encounter, Hamby and Grych offer the prefix 'poly' to describe potential patterns across types of violence, victims, and perpetrators and 're' to specify violent patterns across time for both persons or groups of persons (Hamby & Grych, 2013). The framework therefore introduces a number of new intersecting possibilities for making sense of increasing evidence showing that violence in South Africa is often polymorphic, frequently involving poly-perpetration and poly-victimization (Abrahams et al., 2008; Jewkes et al., 2014; Kaminer, du Plessis, Hardy, & Benjamin, 2013). This evidence obviously implies complex interactions between each level of the WHO typology anticipated by Table 1. It also points to the importance of understanding the situational determinants that dynamically shape enactments of violence and appreciating that these are integral to understanding the process of infliction rather than only harm-related outcomes (Wilkinson & Hamerschlag, 2005). Understanding these processes means that psychologists need to account for process factors and their important correlates to complement injury outcome data. One important correlate is the degree of violence exercised in incidents (Bruce, 2010), a seemingly measurable and obviously differentiable dimension of violence that at least chronologically is located between intention and injury in acts of violence. In public health terms, the degree of violence is associated with the nature and

severity of the injury outcome measured, for example, by an injury severity score (Sleet et al., 2011). However, these scores do little to shed light on the highly variable processes and motivations that shaped the interactions of which they represent an outcome. These are no doubt centrally important data, and differential motivations for violence should form a pivotal area for psychological study as clearly demonstrated by important focussed studies of perpetrators of violence in South Africa (Jewkes et al., 2014; Sikweyiya, Jewkes, & Dunkle, 2014). Both Jewkes et al.'s (2002) work on risk factors for violence and more recently, Hamby and Grych's (2013) call for understanding not merely risks for, but violence itself as produced in dynamic, often overlapping and co-occurring ways, provide an important starting point for advancing these types of psychological studies.

Together, the authors cited in the previous paragraph make a powerful case for understanding violence as a complex web demonstrating considerable variability rather than a particular type of health threat. The multidimensional scaffolding inherent to this kind of formulation of violence seems to provide a substantial theoretical platform for enriching and localizing the WHO model, which seems less reflective of the polymorphic presentations of violence in many contexts. These polymorphisms should of course cross both background and foreground studies of violence in order to do justice to contextually sensitive analyses of its specific forms. In South Africa, for example, extracting violent crimes from the political and economic motivations that are seen as underlying collective forms of violence only should be revisited (Swart, 2014). This is evident in cases where the types of torture and rape that are often carried out in the context of residential robberies resonate more with motivations and expressions associated with conditions of collective violence rather than just community-level crimes. These cases imply very important new insights for understanding violence as has been shown in studies of other polymorphic violence types. For example, a national South African study of rape-homicide by Abrahams et al. (2008) found that victims of rape who were subsequently killed were more likely to be attacked (1) by strangers and (2) in public places. These findings are particularly interesting in light of the fact that according to South African Police Services data (SAPS, 2011), most rapes in South Africa involve perpetrators and victims that are known to each other in private homes. This type of polymorphic understanding of a particular form of violence thus forces us to think theoretically about why stranger rape would be more likely to result in the death of the victim than other forms of rape. Another South African study criss-crosses interpersonal with self-directed violence in the form of homicide-suicides. An analysis of homicide-suicide cases in Durban in 2000 (Roberts, Wassenaar, Canetto, & Pillay, 2010) showed that alcohol was present in only 5% of perpetrators and was not detected in a single victim. Notwithstanding the small sample size, this finding stands in strong contrast to the fact that in South Africa in the same year some 56.8% of homicide and 42% of suicide victims tested positive for Blood Alcohol Content (BAC) (Burrows, Bowman, Matzopoulos, & Van Niekerk, 2001). These two sets of findings in juxtaposition attest to the merits of thinking about polymorphic violence in the South African context and the theoretical possibilities that adopting such a conceptual framework offers for advancing our psychological understandings of violence. Rather than segmenting and freezing risk, these studies imply that we should appreciate the importance of situational variability in enactments of violence in developing theoretical models of violence that reflect our local contexts. This kind of polymorphic appreciation of violence allows for the complexity of psychological theorization that is required for us to attempt to properly comprehend the levels and forms of violence in contemporary South Africa.

The importance of theory

Aside from some limited attempts at theory-building, the public health approach to violence arguably lacks any guiding theoretical orientation (Perry, 2009). While an ecological perspective

implies a systems-theory approach to violence, beyond the claim that the causes and consequences of violence are produced through the interactions of the social, community, family, and individual systems that are typical of human life, this orientation offers very little insight into the specificities that may discriminate violence from other health problems. If on the other hand, public health researchers are loathe to categorize violence as especially distinct from other general health outcomes, then a systems-based theory might fulfil the criteria for consideration as a general theory of violence (Karstedt & Eisner, 2009). There is, however, every indication that although many concede that systems theory meets the criteria of an attempt at developing "a parsimonious set of general mechanisms that operate across various manifestations of violence" (Eisner, 2009, p. 41), there have been multiple attempts to move beyond this level of theorization in disciplines such as sociology, psychology, and criminology (Collins, 1993; Merton, 1968; Sullivan, 1973). Notwithstanding Schinkel's (2004) exhaustive critique of ecological theories in accounting for violence as both a general phenomenon and in explaining particular enactments is the fact that very little engagement with these theories is evident in the global public health violence literature. This stands in strong contrast to the trans-theoretical or at least interdisciplinary aspirations of the approach (Weed, 1999). This shortcoming in engagement points perhaps to the difficulty in applying a disease metaphor to the problem of violence without acknowledging that while the physiological or biochemical pathways to disease and resilience are often easily defined, observable, and measurable, the complex networks of social factors that produce disease (and violence perhaps particularly) are frequently abstract social scientific concepts (Polizzi & Lanier, 2011). This challenge presents an important strategic entry-point for theory development by psychosocial researchers committed to dissecting the relationships between risks for and enactments of violence by taking up the challenge of nesting psychosocial theory within epidemiology, as part of ongoing attempts to augment the utility of risk factor research or black box epidemiology.²

When factors such as social and gender inequality, alcohol availability, poor parenting, and histories of abuse are routinely inputted into risk models for violent outcomes, more often than not these become 'black boxes' (Susser & Susser, 1996a, 1996b). These diagrammatically stand in for the risks associated with outcomes. However, the mechanisms by which these risks translate into violence are often not entirely clear. In recognition of the theoretical impasse produced when our violence models are peppered with black boxes, there have been attempts to open them, through, for example, the introduction of psychosocial epidemiology (Martikainen, Bartley, & Lahelma, 2002; Mutaner & Chung, 2005) into the lexicon of public health and the recent emergence of epidemiological criminology or EpiCrim (Lanier, 2010). There are numerous applications and benefits of this latter new sub- or trans-discipline, but one of the more visibly identified conditions for its emergence was the potential for bringing the benefits of criminological theory to bear on the empirical power of epidemiology. There are, however, other earlier developments that should be revisited by researchers focussed on understanding the relationship between the psychological and social dimensions of violence.

Just prior to the release of the WRVH in 2002, Gilligan (2000) offered a brave attempt at providing a general theory of violence that took the interactions of systems as a starting rather than endpoint of theory-making. He identifies the human experience of "overwhelming shame and emotion" (p. 1802) as a necessary but not sufficient pathogen for violence. This pathogen, he argues could be managed by preventing the inequalities that value one particular life or type of life over another. These are the kinds of values that underpin economic systems that produce relative wealth and poverty. Many of the 'black boxes' that in public health violence research may act as proxies of this pathogen. 'Gender' in gender-based violence (GBV), intimacy in intimate partner violence (IPV), and property in violent property crime may thus be directly implicated in the activation or production of "shame and humiliation" as pathogens between and within subjects for violent outcomes.

The fact that many of these proxies seem constrained to the role of risk in the ecological models of public health means that their 'real-time' influences on violent enactments could be better understood through considering violent events rather than risk correlates as the units of analysis for nested psychosocial studies using potentially powerful but underutilized interactionist or event theory (Wilkinson & Hamerschlag, 2005). For example, rather than seeing obtaining property as a purely instrumentalist explanation for a violent property crime, a psychosocial treatment of the category could appreciate that levels of property ownership are drivers of robberies and violence at the social and community levels of the ecological model. They also bring strangers into direct and real-time conflict over them in the immediate interaction of a robbery or violent property crime. In this way, property as a social, economic, and political influence that is a driver of violence in the socially unequal historical background of those involved is also perhaps a stimulant for the pathogen "shame and humiliation" in the enactment of the violence. This sort of thinking invites a strong focus on the psychosocial dimensions of violence within a public health logic that requires strong leadership from a South African psychology that should not reduce the problem of violence to its injury-related health outcomes and its risks and causes to stand-alone and stock responses in the form of overly generalized social determinants of health.

Inequality has become the most well rehearsed response in accounting for the degrees of violence in low-middle income countries. Economists have repeatedly correlated the gap between the rich and the poor with various crimes. What is not clear, however, is how these correlations help us understand, for example, the use of torture during robberies in South Africa or the apparently indifferent killing of a person for a cellular phone. Responses to this problem hinge on our abilities to integrate the epidemiological coordinates that describe violence with the critical power of incident or case analysis. Rich case material harvested from available datasets and overlaid with perspectives gleaned from perpetrator and victim interviews, although perhaps a more challenging endeavour for contemporary violence researchers, presents the type of methodological extensions required to more fully appreciate the psychological contingencies of violence (as suggested earlier). This approach requires that seemingly empty signifiers such as 'house', 'males', and 'property-crime' be understood meaningfully in any ecological approach. For example, a simple ecological logic joins life, gender, violence, property, and people in the enactment of robbery in South Africa. Having property and using violence are powerful nodes in hegemonic masculinity, and at least in the case of residential robbery, the home and its meanings surely activate the conditions for both to come into play - persons form targets for or agents of violence in the context of the acquisition or protection of property that itself underpins the aspiration to idealized masculinity. In this sense, violence and (acquisition and defence of) property are both correlates of manhood and the frame of the home provides a perfect theatre for their entanglements. These are theoretically driven speculations but imply at least the potential for new understandings of enactments of violence. Of course, operationalizing studies to better understand enactments of rather than risks for violence are fraught with both methodological and ethical problems. While it is very difficult to directly study enactments, overlaying police and health systems data with perpetrator and victims accounts of key violent events through particular forms of incident analysis will bring us closer to understanding more precisely how risks are translated into violence itself. This should be a key research area for South African psychologists going forward.

Conclusion

In an early introductory overview of the public health approach to violence, Mercy and O'Carroll (1988) argued that "the absence of a complete scientific understanding of the causes of interpersonal violence should not paralyze efforts to intervene and possibly prevent violent injury" (p. 297). For

interventionists, this remains as true today as it was just under three decades ago. However, scientific understanding is a moving target and this demands a consistent evolution of theorising about violence to enhance both our understandings of this complex phenomenon and our potential to prevent it. In this regard a key challenge is to understand the mechanisms of translation of risk factors into violence itself. We can no longer limit our understanding of violence to just identifying the importance of upstream social, political, and economic influences nor unproblematically ascribe it to autobiographical risk factors. In line with Hamby's (2011) call for a second wave of violence scholarship we should be aiming not only at describing but understanding the complex causal pathways of violence. Thus, an already robust public health approach to violence could be augmemented by a South African psychology that is committed to building theoretical and conceptual bridges that tie upstream risk factors for violence to its situational and subjective enactments in our local contexts.

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Notes

- This broad term refers to the internal world of the subject who enacts violence and may include her/his
 motivations, state of affect, perceptions, cognitions, and meaning making related to the violent event in
 real time, and their intersections with other subjects and the external social context.
- The history of epidemiology is complex. However, the debate on the utility of risk factor research (or black box epidemiology) is perhaps reducible to the problem of the value of disease prevention without understanding the mechanism by which risk factors and outcomes are (at least theoretically) related (Weed, 1998).

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