



Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Men's violence against women and men are inter-related: Recommendations for simultaneous intervention

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ARTICLE INFO

Article history:

Received 5 January 2015
Received in revised form
7 October 2015
Accepted 9 October 2015
Available online xxx

Keywords:

Domestic violence
Youth violence
Male gender norms
Interventions
Masculinity

ABSTRACT

Men are more likely than women to perpetrate nearly all types of interpersonal violence (e.g. intimate partner violence, murder, assault, rape). While public health programs target prevention efforts for each type of violence, there are rarely efforts that approach the prevention of violence holistically and attempt to tackle its common root causes. Drawing upon theories that explain the drivers of violence, we examine how gender norms, including norms and social constructions of masculinity, are at the root of most physical violence perpetration by men against women and against other men. We then argue that simply isolating each type of violence and constructing separate interventions for each type is inefficient and less effective. We call for recognition of the commonalities found across the drivers of different types of violence and make intervention recommendations with the goal of seeking more long-standing solutions to violence prevention.

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1. Introduction

In 2002, the World Health Organization published its first comprehensive global report focused on violence. The report helped solidify global recognition of violence as a major public health issue and highlighted that over one million individuals lose their lives each year due to violence (Krug et al., 2002). In the Forward to this landmark report, Nelson Mandela responded to the high global prevalence of violence by suggesting that “we must address the roots of violence” (p. 9). But, have the “roots of violence” – in particular those that operate across different types of interpersonal violence (e.g. intimate partner violence, youth violence) – been adequately identified and intervened upon? Are current interventions built around the common root causes identified in the literature? While much progress has been made over the past few decades in the area of violence prevention (WHO, 2010b), much

work remains to be done.

In this paper, we focus on *interpersonal* violence (i.e. “the intentional use of physical force or power, threatened or actual, against another person” (Krug et al., 2002, p. 5)) and public health responses to this type of violence. We begin by reviewing the history and current state of interpersonal violence research and prevention. In doing so, we demonstrate that the process of establishing violence as a public health problem has resulted in segmentation into typologies of violence for both epidemiological research and prevention efforts. We then examine the empirical evidence which shows that men are more likely than women to be perpetrators of violence. Next, in order to understand the commonalities across types of violence, we synthesize theories of gender and masculinity and underscore how different types of violence are largely rooted in prevailing male gender norms. Finally, we argue that targeting interventions towards different types of violence is insufficient, and that an integrated approach could be more efficient and effective. Ultimately, we call for recognition of the interrelatedness of different types of violence by providing a fuller understanding of the root causes of violence. We then make intervention recommendations with the goal of seeking more long-standing solutions to violence prevention.

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1.1. The emergence of violence as a public health problem

In many parts of the world, morbidity and mortality from infectious disease began to recede in the early and mid-20th century and violence (including homicide and suicide) emerged as a leading cause of death (CDC, 2009; Dahlberg and Mercy, 2009; Peden et al., 2000). Further, due to a variety of factors (Blumstein and Wallman, 2006; Wilson and Petersilia, 2010), suicide and homicide rates rose steadily throughout the 70s and 80s, necessitating a response from governments and community organizations (CDC, 1994; Murray et al., 2013; UNODC, 2011). At the same time, the rise of the second wave feminist movement and the 'battered women's movement' were gaining momentum and raised awareness of the hidden problem of violence against women (Fox, 2002; Schechter, 1982). National governments began responding to this increasing violence. For example, in the 1979 report by the United States Surgeon General, violence was highlighted as a public health priority (U.S. Department of Health, 1979) and recommended that reducing mortality "lies less with improved medical care than with better Federal, State, and local actions to foster more careful behavior, and provide safer environments" (p. 9). Governmental and non-governmental institutions began considering how to best address violence, and prevention strategies soon became the responsibility of public health organizations and agencies. As Dahlberg and Mercy argued in their article on the history of violence and public health, the United States' Centers for Disease Control and Prevention – which established one of the world's first violence epidemiology departments in 1983 – launched epidemiological investigations that:

"Contributed to the understanding of violence through the use of epidemiologic methods to characterize the problem and identify modifiable risk factors ... Efforts were made to document each problem, understand the risk and protective factors associated with each type of violence, and begin building the evidence-base for prevention" (p. 169)(Dahlberg and Mercy, 2009).

Global recognition of violence as a public health problem grew as similar efforts were occurring in countries around the world. Importantly, this resulted in a resolution passed in 1996 by the World Health Assembly establishing violence as a public health priority and requesting that resources be dedicated to "characterize different types of violence, define their magnitude and assess the causes and the public health consequences" (WHO, 1996). Epidemiologists defined violence and categorized it into types such as homicide, suicide, intimate partner violence, child abuse, youth violence, etc. Eventually, researchers, community organizations, and policy-makers in a range of countries began to use these and related findings to inform the development of interventions to target violence (WHO, 2010b). The funding, research, and prevention lines began to be drawn systematically along typologies of interpersonal violence, an approach that continues to present day.

These divisions – though pragmatic and practical – have resulted in multiple fields of violence research that have different foci, stakeholders, and approaches. In research and practice, the fields of 'intimate partner violence' and 'sexual violence' are typically grouped together within one field. Most frequently, these studies and interventions are focused on men's violence against women (Abramsky et al., 2014; WHO, 2010a), despite the fact that men and boys are also victims of intimate partner violence and sexual violence (Douglas and Hines, 2011; Straus, 2004). This research – and the attendant prevention strategies – often note that gender inequalities between men and women are a root cause (Abramsky et al., 2014; Garcia-Moreno et al., 2005; Jewkes, 2002).

'Youth violence' – another major type of interpersonal violence – typically refers to violence between young people such as bullying, assaults, or homicides (Krug et al., 2002). The majority of victims and perpetrators of this type of violence are male (Krug et al., 2002; UNODC, 2011). It should be noted that, in contrast to the field of intimate partner violence, the field of youth violence rarely explicitly acknowledges that much of this type of violence is perpetrated by and against men (WHO, 2014). Instead, youth violence research and interventions often focus on interpersonal violence perpetrated by 'at risk' individuals in race and class marginalized communities or in neighborhoods that live at or below the poverty line (Dahlberg, 1998; Matjasko et al., 2012).

Indeed, different interventions are often pursued for preventing different types of violence. For example, a 2010 WHO report highlights that the evidence base for interventions used to prevent to intimate partner and sexual violence (e.g. programs addressing gender norms, microfinance programs) are distinct from those that are used to prevent youth violence (e.g. parent-child programs, social development programs) (WHO, 2010b). The few rigorous randomized trials that have been funded with a focus on gender equality and economic empowerment – such as the Intervention with Microfinance for AIDS and Gender Equity (IMAGE) project (Pronyk et al., 2008) – measure their impact on intimate partner violence but do not measure impacts on other types of violence that might be occurring within the study population such as male-to-male peer violence. Similarly, interventions that are well-supported by evidence to prevent youth violence have not been evaluated for what relevance they might have for preventing intimate partner violence. For example, the WHO report shows that 'social development programmes' (those that teach children problem-solving, empathy, and conflict management) are the only type of intervention that is 'well supported by evidence' to prevent youth violence, but there is not yet any evidence base for the role these sorts of programs may play in reducing intimate partner violence (WHO, 2010b). While these divisions based on type of violence allow for targeted approaches, they simultaneously omit an examination of the risk factors and solutions that may exist across types of violence. Focusing on specific types of violence is important, but there may be a missed opportunity in violence prevention efforts to take lessons learned across the different areas of violence and work in synergistic ways to tackle what appears to be a key root cause of violence in most parts of the world. Below, we use epidemiological evidence and theoretical frameworks to argue that prevailing norms of masculinity undergird both intimate partner violence and youth violence (and possibly other types).

1.2. The epidemiology of violence perpetration and victimization

Men are overwhelmingly more likely than women to be both perpetrators and victims of interpersonal violence. In 2012, over half a million individuals worldwide died as a result of injuries from interpersonal violence (WHO, 2013b). Of these deaths, males were disproportionately impacted: 81% of interpersonal violence deaths were men (WHO, 2013b).

In addition to being more likely to die as a result of violence, men, as a group, perpetrate more physical violence than women and perpetrate more harmful types of physical violence than women. In 2012, there were approximately 437,000 intentional homicide deaths worldwide and 95% of persons convicted of homicide were males (UNODC, 2011). In a study of youth in 27 countries worldwide, males were both more likely than females to be in any fights and more likely to engage in 'frequent fighting' (12 or more times in a year) (Swahn et al., 2013). Additionally, sport – a central socializing institution for masculinity among young men throughout the world – has codified and rewarded violence

between men in sports ranging from boxing to football and rugby (Messner, 1990; Young, 2007).

Recent global estimates suggest that between 25 and 38% of women experience some sort of violence perpetrated by male partners (WHO, 2013a). In some regions of the world, as high as 66% of women report physical and/or sexual violence victimization perpetrated by male partners at some point in their lives (WHO, 2013a). Men can also be victims of violence from their intimate partners (including from both female and male partners) (Finneran and Stephenson, 2013; Randle and Graham, 2011). Some statistics show that men are just as likely to be victims of intimate partner physical violence as women (Archer, 2000; Black et al., 2011). But, research suggests that men are much less likely to be physically harmed by violence perpetrated by women and less likely to report fearing their partner (Archer, 2000; WHO, 2010a; Williams et al., 2008).

Institutions that tend to be dominated by males may also create social environments that facilitate violence against women. For example, in a recent meta-analysis of violence in the military, authors estimated that 26% of female active U.S. service members have been victims of physical intimate partner violence in the last 12 months (Gierisch et al., 2013) (compared to 4% of all U.S. women). Additionally, a meta-analysis of studies with college males showed that athletic participation and fraternity membership were both associated with perpetration of sexual assault and with rape-supportive attitudes (Murnen and Kohlman, 2007). The same has been found in the institution of sport, where both collegiate (Crosset et al., 1996; Koss and Gaines, 1993) and professional football players (Benedict, 1997) have been found to perpetrate violence against women at higher rates than men in the general population, although studies generally lack longitudinal analysis and rigorous designs and may suffer from self-selection bias.

Finally, there is substantial evidence that perpetrators of one type of physical violence are more likely to perpetrate other types of violence (O'Donnell et al., 2006; Ozer et al., 2004; Swahn et al., 2008). When considering the main risk factors for physical violence perpetration, we see that most risk factors are associated with more than one type of violence and those factors are typically more prevalent among males (Foshee et al., 2015; Wilkins et al., 2014). For example, the individual-level risk factors for both intimate partner violence and youth violence include: low educational achievement, non-violent problem-solving skills, impulsiveness, history of violent victimization, witnessing violence, mental health problems, and substance abuse (Wilkins et al., 2014). Though there is mixed evidence on male–female differences in related mental health problems (Rosenfield and Mouzon, 2013; Van de Velde et al., 2010), men are more likely than females to have each of these other risk factors (Black, 2000; Cotto et al., 2010; Cross et al., 2011; Vandervoort, 2000). As the data show, men are both more likely to perpetrate physical violence and be at-risk for perpetrating physical violence.

2. Understanding men and violence

Most health issues have many recognized drivers. However, given the fact that men are much more likely to be perpetrators of each type of violence and more likely to have risk factors for violence, this suggests that there may be underlying factors, or root causes, that may be contributing to greater violence in the lives of males. Courtenay's foundational article on the health of men notes: "The failure of medical and epidemiologic researchers to study and explain men's risk taking and violence perpetuates the false, yet widespread, cultural assumption that risk-taking and violent behaviors are natural to, or inherent in, men" (Courtenay, 2000, p. 1396). This tendency to believe that violence among men is

inherent has caused many to suggest that biology – especially testosterone – underlies this sex disparity in violent behavior (Batrinos, 2012; Terburg et al., 2009; Book et al., 2001; Nelson and Chiavegatto, 2001). This has, however, been challenged as a principle cause of aggression and violence (Duke et al., 2014; Fausto-Sterling, 1985; Lorber, 1994). Further, many argue that hormone production (including testosterone) interacts with social experiences and therefore is not a solely biological mechanism (Karkazis et al., 2012; Schulz et al., 1996). Importantly, ample evidence has shown that socially constructed gender norms that socialize men to value hierarchy, aggression, power, respect, and emotional suppression may be a primary root cause of violence-related disparities (Fleming et al., 2015; Fulu et al., 2013). Below we describe major theoretical frameworks (societal, interpersonal, and individual-level explanations) that help to explain how social constructions of masculinity and male gender norms are an important root cause underlying men's disproportionate violence perpetration.

2.1. Societal level (feminist and inequalities)

In this perspective, inequalities between men and women and among men create power hierarchies that facilitate violence. Social science scholars have long underscored the connection between gender inequalities, structural inequalities, interpersonal power relations, norms of masculinity, and men's perpetration of all types of violence (Connell, 1995; Courtenay, 2000; Jakobsen, 2014; Kaufman, 1987). In Connell's foundational theorizing on masculinities, he describes the role that gender inequalities play in men's violence perpetration. Connell writes:

"A structure of inequality on this scale, involving a massive dispossession of social resources, is hard to imagine without violence. It is, overwhelmingly, the dominant gender who hold and use the means of violence ... Two patterns of violence follow from this situation. First, many members of the privileged group use violence to sustain their dominance. Intimidation of women ranges across the spectrum from wolf-whistling in the street, to office harassment, to rape and domestic assault, to murder by a woman's patriarchal 'owner', such as a separated husband ... Second, violence becomes important in gender politics among men. Most episodes of major violence (counting military combat, homicide, and armed assault) are transactions among men." (p. 84) (Connell, 1995).

While not totalizing, a system of gender inequality is fairly pervasive in societies globally which prescribes that men need to prove themselves as powerful and strong. Men who do not portray – or even prove – themselves as such can be victimized, stigmatized, or otherwise relegated to lower social status (Canada, 2001; Kimmel and Mahler, 2003). This partially explains the victimization of gay men and transgender individuals who may not conform to traditional gender norms (Meyer, 2012). Often, this making of manhood occurs within male peer groups where aggression, force, and contempt for women and marginalized men may be markers of a 'real man' (Connell, 2000; Sherriff, 2007). Men in these social environments will perpetrate violence against other males and against women in an effort to gain, maintain, or avoid losing status and power. The key here is that men's violence is not simply about dominance over women but can also be viewed as establishing hierarchies among men. Along these lines, defending perceived or actual challenges or threats to male power, respect, or masculinity serve to maintain or improve a man's position in the social hierarchy.

Even within patriarchal societies, many men do not perpetrate physical violence. Connell (1995) argues that most men (and even

women) are 'complicit' with the gender order that privileges higher valuations of men over women. As such, even men who are not perpetrating violence but are 'complicit' may be contributing to the culture of violence that exists in our society by not challenging it. Men who are complicit do not often challenge the existing gender order perhaps because they receive the "patriarchal dividend" (Connell, 1995, p. 79) that offers men more resources, respect, authority, institutional power, status, opportunities, and control over one's life.

2.2. Individual and interpersonal explanations

Gender, according to numerous social scientists, can be understood as something that individuals *do*, rather than something they *are* (Thorne, 1993; West and Zimmerman, 1987). Being viewed as a 'real man' by their peers requires actions and behaviors that are judged as masculine by others. Sociologists Michael Kimmel and Michael Messner (2001) have written that "men are not born; they are made. And men make themselves, actively constructing their masculinities within a social and historical context" (p. XV) (Kimmel and Messner, 2001). Men (and women) learn how to *do* gender through a process of socialization – starting at birth and continuing throughout various social institutions in their lives – and this socialization process can result in men perpetrating violence.

Pleck (1995) developed the Masculine Gender Role Strain model to explain that cultural standards for masculinity exist and that socialization encourages men to attempt to live up to them. The existence of cultural standards of masculinity can result in individual men's perpetration of violence against others either through (1) *Reclamation* of masculinity for those who are not meeting expectations of masculinity, or (2) *Discharge* of emotions through violent means for men who feel pressure to meet the expectations of manhood. Below we describe the ways in which these masculinities-based root causes can result in men's perpetration of violence.

2.3. Reclamation model

According to Pleck's model (1995), men who attempt to meet gender role expectations but find that there is a gap between these ideals and their ability to attain them are experiencing 'gender role discrepancy.' Their inability to attain gender role expectations may be due to reasons ranging from personal characteristics to structural factors (e.g. race/ethnicity, class, or sexuality inequalities). Research shows that men may suffer from low self-esteem and other psychological consequences and may use violence perpetration as a way to attain or *reclaim* masculine status (Bosson et al., 2009; Vandello and Bosson, 2013).

Gender role discrepancy can be viewed as a 'stressor' for men and the Transactional Model of Stress and Coping suggests that men can either manage their emotions around a stressor (e.g. change their thinking) or use problem management (e.g. solving the problem) (Glanz and Schwartz, 2008). Research shows that men are more likely to use 'problem management' as a coping strategy because of how they are socialized into norms of masculinity (Matud, 2004; Tamres et al., 2002). If an individual believes that a gender-discrepant situation is stressful, then they may respond by try to 'solve' the problem of being perceived by others as non-masculine (Glanz and Schwartz, 2008). As a result, a man may perform behaviors that emphasize his masculinity (e.g. violence perpetration or aggression). Additionally, if a man perceives gender-discrepant situations as stressful, he may try to avoid gender-discrepant behaviors and have low tolerance for being perceived as non-masculine.

This concept of needing to avoid being perceived as 'gender-discrepant' and prove one's manhood has been called 'Precarious Manhood' by Vandello et al. (2008). Vandello et al. conducted a series of psychological experiments with U.S. college students that demonstrated that men who receive feedback from a confederate that they are gender-atypical are more likely to respond to subsequent tasks with physical aggression, harassment of women, and acceptance of sexual coercion (Bosson et al., 2009; Vandello and Bosson, 2013; Vandello et al., 2008). Other studies have found similar results (Maass et al., 2003; Munsch and Willer, 2012) and Vandello et al.'s (2008) experiments that include women demonstrate that these responses may be unique to men. The authors hypothesize that men use physically and sexually aggressive behaviors to reclaim their masculine status when it is challenged.

The above theory explains not only men who occupy dominant race and class status (e.g. white middle and upper class men), but also subordinated masculinities (men of color, working class and poor men). That is, race and class marginalized men who are structurally excluded from male power structures may feel undermined and 'under threat' more frequently and thus find numerous ways to enact physical signifiers of masculinity, including violence, more frequently (Courtenay, 2000). For example, Majors and Billson's influential book on African-American masculinity in the U.S. highlights the reluctance of men to "back down" when faced with a challenge in order to earn respect (1993). Bourgois has also highlighted the role of establishing respect in marginalized Puerto Rican men's perpetration of violence (Bourgois, 1996). Respect is not easily won for men who are excluded from traditional power hierarchies due to their race, ethnicity, class, sexual orientation or other identities and social locations (Whitehead, 2005). For some marginalized men, accessing opportunity structures such as the workplace where many men demonstrate masculinity and earn respect (e.g. providing for one's family or holding a job) may be out of reach. This lack of access to traditional means of occupational success has led some men to self-constitute as masculine through a variety of masculine signifiers, including aggression, force, and physicality. In addition, scholars argue that due to race and class inequalities among marginalized men, masculinity may be one of the few resources available in disenfranchised environments, and thus affected men may be particularly attuned to protecting this key resource (Courtenay, 2000).

2.4. Discharge model

In contrast to the reclamation model, the discharge model refers to the negative and inadvertent impacts of conforming to the expectations of manhood. Pleck's Masculine Gender Role Strain model also elucidates two additional masculinity-related root causes of violence and describes that men may perpetrate violence because (a) they have suffered emotional or physical violence as part of the gender socialization process (i.e. 'gender role trauma'), or (b) they adhere to gender norms that require them to adopt certain behaviors or attitudes – such as restricting ones emotions – that can lead to violence (i.e. 'gender role dysfunction') (Pleck, 1995).

Michael Kaufman (1987) underscores how social constructions of masculinity and experiences of trauma can interact to result in violence. He argues that the root cause of men's violence perpetration (against women and other men) are norms that require men to suppress their emotions and expression:

"The discharge of fear, hurt, and sadness, for example (through crying or trembling), is necessary because these painful emotions linger on even if they are not consciously felt. Men become

pressure cookers. The failure to find safe avenues of emotional expression and discharge means that a whole range of emotions are transformed into anger and hostility. Part of the anger is directed at oneself in the form of guilt, self-hate, and various physiological and psychological symptoms. Part is directed at other men. Part of it is directed at women" (Kaufman, 1987, p. 12).

Men who experience trauma or stressors – either from gender socialization or otherwise – may be more inclined than women to deal with these by suppressing them or engaging in alcohol or substance abuse. Masculine norms emphasize that men should be strong and willing to take risks and research shows that men are more likely than women to deal with stress and trauma through externalizing behaviors such as substance use and antisocial behavior (Grant et al., 2004; Rosenfield and Mouzon, 2013). The evidence is also clear that there is a strong link between depression/stress and physical violence perpetration (DuRant et al., 2000; Latzman and Swisher, 2005), and between the abuse of substances and alcohol on various types of violence (Foran and O'Leary, 2008). Restrictive norms of masculinity therefore play a key role in creating situations for men where one of their main options is to 'discharge' their emotions through aggression and perpetration of violence.

All of the above frameworks identify a masculinities-based root cause for men's disproportionate violence across many types of violence. Unfortunately, despite the large base of literature that points to the need to take social construction of masculinity seriously across different types of violence, there remains a lack of focus on this common root cause across violence research and prevention programs.

3. Considerations for violence research and prevention

As we noted at the outset of the paper, in order to effectively prevent any form of violence, researchers and practitioners must tackle root causes. As shown through both epidemiological evidence and the theoretical frameworks that explain the evidence, both men's perpetration of intimate partner violence and youth peer violence appear to have a common root cause – norms of masculinity. Thus, it may be more effective and more efficient to utilize a holistic response that seeks to transform norms of masculinity at the individual, interpersonal, institutional, and policy levels in order to stem violence perpetration.

While intimate partner violence (typically violence against women) is the type of violence that is commonly conflated in the literature with gender and gender inequalities, most violence perpetration by men has at its roots norms of masculinities. Currently, research and interventions targeting intimate partner violence against women regularly include conceptions of gender and masculinity (Abramsky et al., 2014; Fulu et al., 2013; Pronyk et al., 2008). However, research and interventions on youth violence – including boys' and men's violence against other men and boys – rarely address norms of masculinities and their role in violence perpetration (some notable exceptions for research articles include Barker (2005), Whitehead (2005), and Kimmel and Mahler (2003)). In fact, men's violence against men is often viewed as having other root cause(s)—e.g. poverty and/or race and class marginalization and fails to see masculinity as a key contributor (De Coster et al., 2006; Haynie et al., 2006). Within this frame, solutions are often viewed as rooted in community empowerment, understanding race and class marginalization, stay-in-school campaigns, or jobs training (Kellermann et al., 1998; WHO, 2010b), while addressing masculinities is not considered. For

example, the U.S. government's nationwide initiative, My Brother's Keeper, is, in part, aiming to prevent violence among young men of color in the U.S. but makes no reference to masculinity or male gender norms (Johnson and Shelton, 2014). While all current efforts are certainly important, notions of masculinity are also central to understanding the violence that men perpetrate against men whether this is in the streets, on football fields, in the military, within the police force, or to themselves at home – and could add an important perspective on violence prevention. Lastly, homophobic and transphobic violence is also predicated on hierarchies of masculinities and the assumption that dominant forms of masculinity are valued while femininity and subordinated masculinities are less valued (Kimmel and Mahler, 2003; Nagoshi et al., 2008). Thus, a gender perspective is not only critical to understanding some of the roots of violence but is urgently needed in terms of solutions and prevention.

Violence prevention interventions – and their funding streams – should consider the potential promise of addressing different types of violence simultaneously. Currently, public health funding streams tend to reinforce siloed and separate approaches to examine root causes of violence or find solutions. Though this paper focuses on science-based public health responses to prevent violence, other sectors (e.g. health insurance, law enforcement, and employers) also have a role to play in reducing violence. Efforts to resolve intimate partner violence against women have often led to women's shelters, efforts targeting women, and more recently structural interventions aimed at women, for example, to bolster women's economic empowerment (Pronyk et al., 2008; WHO, 2010b). Youth violence prevention (often targeting male-to-male peer violence) has focused primarily on parent-child relationships, life-skills and social development programmes, and restrictions on weapons (Kellermann et al., 1998; WHO, 2010b). Importantly, interventions designed for one type of violence are rarely evaluated for how they may contribute to prevention of other types of violence. Future interventions should be designed with attention to their potential applicability to multiple forms of violence, and evaluations designed to take this into account. One example of this is Foshee et al. (2014) who provides an example of a partner violence intervention that was additionally evaluated for its effect on peer violence and showed that it was effective in reducing both types of violence perpetration. Separate funding streams and disparate solutions coupled with the lack of recognition that masculinities are also centrally relevant for men's violence against other men has meant that each line of work has not sufficiently benefitted from the major insights of the other. This creates missed opportunities for understanding (a) how the social construction of masculinities undergirds men's violence against men in community and youth violence and (b) how race and class analyses could further the development of solutions for gender-based violence (against women, gay men, and transgender populations).

Globally, there are a few interventions that are effectively incorporating theories of masculinities into their interventions and are aiming to transform the harmful norms of masculinity that promote violence. These interventions – termed *gender-transformative*– work with men (and sometimes women) to democratize the relationships between men and women and challenge prevailing harmful masculine norms (Dworkin et al., 2013b; Dworkin et al., 2015). Prominent gender-transformative programming that has been scaled up for widespread use includes *Project H* (Barker et al., 2010), the *SASA! for violence prevention* (Abramsky et al., 2014), the *Men as Partners* program from Engender Health (Peacock and Levack, 2004), and the *One Man Can* campaign by Sonke Gender Justice (Dworkin et al., 2013a, b; Colvin, 2011). Three recent reviews have showed that gender-transformative interventions can be effective at addressing an array of health areas

including sexual and reproductive health, maternal, child, and newborn health, and HIV prevention (Dworkin et al., 2013b; Dworkin et al., 2015; Muralidharan et al., 2014).

It is important that the development of violence prevention interventions learn from efforts in other fields for specific strategies to change gender norms. Gender-transformative programs typically change gender norms at the individual and interpersonal level by providing men a safe space in which to critically reflect upon and challenge norms of masculinities, gender roles, health behaviors, the use of violence, and relationships with men, women and children. Most of the intervention research that has been conducted points to the fact that when men discuss gender norms in groups of other men, this helps to break down some of the harmful norms related to masculinity and can reduce violence perpetration (Dworkin et al., 2013b; Pulerwitz et al., 2010). Gender-transformative interventions at the institutional- and policy-level are less common, but have the potential to create broader societal-level change (Barker et al., 2010). For example, policies pertaining to police practices and enforcement of violence laws can help shift societal norms towards greater intolerance for violence (Barker et al., 2010). While these previous studies offer solid examples, future work on changing gender norms will need to consider which groups of men and women to prioritize for change, assess potential unintended consequences, and address any potential backlash to change (for more details on potential challenges, see Dworkin et al., 2015 and Fleming et al., 2014).

Thus far, such gender-transformative interventions with men are typically targeting men's perpetration of intimate partner violence against women and generally not inclusive of men's violence against other men. However, given that similar gender norms are influencing both types of perpetration, it is worth systematically exploring if these same strategies may also be of use in reducing street violence, violence against men by men, or youth peer violence.

We realize that the application of gender-related frameworks to violence prevention has some limitations. First, we recognize the limitations inherent in the theoretical literature cited which primarily comes from high-income countries (e.g. United States, Australia). Second, the frameworks we provide cannot fully explain why some men perpetrate violence against women and other men while others do not. There are other risk and protective factors – such as life skills, nurturing relationships, or substance use – that contribute to violence perpetration (WHO, 2010b; Wilkins et al., 2014). While we take the position that masculinity is an important root cause of violence perpetration, this does not mean these other factors should be ignored. To this end, future research could conduct meta-analyses that compare the effect sizes of masculinity-related variables on multiple forms of violence to other risk/protective factors (Though, we should note, there are challenges with this approach because masculinity is associated with other risk/protective factors. In addition, current validated measures do not characterize a fuller conceptual understanding of gender/masculinity). In addition, scholars have argued that some feminist interpretations of men's violence against women (such as Connell's described previously) are flawed because these inadvertently reinforce gender dichotomies that essentialize men as violent or view men as a problem to be solved (Dworkin et al., 2015; Barker et al., 2010). Further, researchers argue that dominant explanations of men's violence against women and other men are sorely missing intersectional analyses of race, class, and gender that have been found to provide explanatory power for many health outcomes (Bograd, 1999; Sokoloff and Dupont, 2005; Hankivsky, 2012). Thus, the masculinity framework proposed here to understand many different forms of violence may be subject to some of these same limitations. Additionally, several scholars have

underscored that a “discharge” model of understanding violence has serious limitations because it negates structural inequality and societal-level factors that create environments that produce the “need” to discharge individual-level heated emotions (Crosset, 1999; Young, 2011). However, as our paper has shown, ignoring the role of masculinity leaves public health researchers at odds with the evidence base which shows that men disproportionately perpetrate violence and leaves siloed approaches bereft of a much needed focus on the importance of root causes.

Over the past few decades, there have been great advances in addressing violence as a social and public health issue. However, there is yet to be widespread recognition of the need to address the norms of masculinity as a root cause of multiple forms of violence. To take this next step in violence prevention, we clearly need more interdisciplinary and multi-sectoral action to tackle all types of violence and their root causes.

Acknowledgments

P.J. Fleming was supported by the National Institute of Allergy and Infectious Diseases under grant number T32 AI007001 and subsequently by the National Institute on Drug Abuse under grant number T32 DA023356.

References

- Abramsky, T., Devries, K., Kiss, L., et al., 2014. Findings from the SASA! study: a cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Med.* 12, 122.
- Archer, J., 2000. Sex differences in aggression between heterosexual partners: a meta-analytic review. *Psychol. Bull.* 126, 651–680.
- Barker, G., 2005. *Dying to Be Men: Youth, Masculinity and Social Exclusion*. Routledge, London; New York.
- Barker, G., Ricardo, C., Nascimento, M., Olukoya, A., Santos, C., 2010. Questioning gender norms with men to improve health outcomes: evidence of impact. *Glob. Public Health* 5, 539–553.
- Batrinos, M.L., 2012. Testosterone and aggressive behavior in man. *Int. J. Endocrinol. Metab.* 10, 563–568.
- Benedict, J., 1997. *Public Heroes, Private Felons: Athletes and Crimes against Women*. Northeastern University Press, Boston, MA.
- Black, K.A., 2000. Gender differences in adolescents' behavior during conflict resolution tasks with best friends. *Adolescence* 35, 499–512.
- Black, M.C., Basile, K.C., Breiding, M.J., et al., 2011. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, GA.
- Blumstein, A., Wallman, J., 2006. *The Crime Drop in America*. Cambridge University Press.
- Bograd, M., 1999. Strengthening domestic violence theories: intersections of race, class, sexual orientation, and gender. *J. Marital Fam. Ther.* 25, 275–289.
- Book, A.S., Starzyk, K.B., Quinsey, V.L., 2001. The relationship between testosterone and aggression: a meta-analysis. *Aggress. Violent Behav.* 6, 579–599.
- Bosson, J.K., Vandello, J.A., Burnaford, R.M., Weaver, J.R., Wasti, S.A., 2009. Precarious manhood and displays of physical aggression. *Personal. Soc. Psychol. Bull.* 35, 623–634.
- Bourgeois, P., 1996. In search of masculinity: violence, respect and sexuality among puerto rican crack dealers in East Harlem. *Br. J. Criminol.* 36, 412–427.
- Canada, G., 2001. Learning to fight. In: Kimmel, M.S., Messner, M.A. (Eds.), *Men's Lives*, fifth ed. Allyn and Bacon, Needham Heights, MA.
- CDC, 1994. *MMWR Morbidity and Mortality Weekly Report. Homicides Among 15–19-year-old Males—United States, 1963–1991*, vol. 43, pp. 725–727.
- CDC, 2009. *Leading Causes of Death, 1900–1998*.
- Colvin, C., 2011. Executive Summary Report on the Impact of Sonke Gender Justice's One Man Can Campaign in Limpopo, Eastern Cape, and Kwa-Zulu Natal, South Africa.
- Connell, R.W., 1995. *Masculinities*. University of California Press, Berkeley.
- Connell, R.W., 2000. *The Men and the Boys*. John Wiley & Sons.
- Cotto, J.H., Davis, E., Dowling, G.J., Elcano, J.C., Staton, A.B., Weiss, S.R., 2010. Gender effects on drug use, abuse, and dependence: a special analysis of results from the National Survey on drug use and health. *Gen. Med.* 7, 402–413.
- Courtney, W.H., 2000. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc. Sci. Med.* 50, 1385–1401.
- Cross, C.P., Copping, L.T., Campbell, A., 2011. Sex differences in impulsivity: a meta-analysis. *Psychol. Bull.* 137, 97–130.
- Crosset, T.W., 1999. Male athletes' violence against women: a critical assessment of the athletic affiliation, violence against women debate. *Quest* 51, 244–257.

- Crosset, T.W., Ptacek, J., McDonald, M.A., Benedict, J.R., 1996. Male student-athletes and violence against women: a survey of campus judicial affairs offices. *Violence Against Women* 2, 163–179.
- Dahlberg, L.L., 1998. Youth violence in the United States: major trends, risk factors, and prevention approaches. *Am. J. Prev. Med.* 14, 259–272.
- Dahlberg, L.L., Mercy, J.A., 2009. History of violence as a public health problem. *Virtual Mentor* 11, 167–172.
- De Coster, S., Heimer, K., Wittrock, S.M., 2006. Neighborhood disadvantage, social capital, street context, and youth violence. *Sociol. Q.* 47, 723–753.
- Douglas, E.M., Hines, D.A., 2011. The helpseeking experiences of men who sustain intimate partner violence: an overlooked population and implications for practice. *J. Fam. Violence* 26, 473–485.
- Duke, S.A., Balzer, B.W., Steinbeck, K.S., 2014. Testosterone and its effects on human male adolescent mood and behavior: a systematic review. *J. Adolesc. Health* 55, 315–322.
- DuRant, R.H., Altman, D., Wolfson, M., Barkin, S., Kreiter, S., Krowchuk, D., 2000. Exposure to violence and victimization, depression, substance use, and the use of violence by young adolescents. *J. Pediatr.* 137, 707–713.
- Dworkin, S.L., Fleming, P.J., Colvin, C.J., 2015. The promises and limitations of gender-transformative health programming with men: critical reflection from the field. *Cult. Health & Sex.* <http://dx.doi.org/10.1080/13691058.2015.1035751>. Advance online publication.
- Dworkin, S.L., Hatcher, A.M., Colvin, C., Peacock, D., 2013a. Impact of a gender-transformative HIV and antivirolence program on gender ideologies and masculinities in two rural, South African communities. *Men Masc.* 16, 181–202.
- Dworkin, S.L., Treves-Kagan, S., Lippman, S.A., 2013b. Gender-transformative interventions to reduce HIV risks and violence with heterosexually-active men: a review of the global evidence. *AIDS Behav.* 17, 2845–2863.
- Fausto-Sterling, A., 1985. *Myths of Gender: Biological Theories about Women and Men*.
- Finneran, C., Stephenson, R., 2013. Intimate partner violence among men who have sex with men: a systematic review. *Trauma Violence Abuse* 14, 168–185.
- Fleming, P.J., Lee, J.G.L., Dworkin, S.L., 2014. 'Real men don't': constructions of masculinity and inadvertent harm in public health interventions. *Am. J. Public Health* 104, 1029–1035.
- Fleming, P.J., McCleary-Sills, J., Morton, M., Levitov, R., Heilman, B., Barker, G., 2015. Risk factors for men's lifetime perpetration of physical violence against intimate partners: results from the international men and gender equality survey (IMAGES) in eight countries. *PLoS One* 10, e0118639.
- Foran, H.M., O'Leary, K.D., 2008. Alcohol and intimate partner violence: a meta-analytic review. *Clin. Psychol. Rev.* 28, 1222–1234.
- Foshee, V.A., McNaughton Reyes, L., Tharp, A.T., Chang, L.Y., Ennett, S.T., Simon, T.R., et al., 2015. Shared longitudinal predictors of physical peer and dating violence. *J. Adolesc. Health* 56, 106–112.
- Foshee, V.A., Reyes, L.M., Agnew-Brune, C.B., et al., 2014. The effects of the evidence-based safe dates dating abuse prevention program on other youth violence outcomes. *Prev. Sci.* 15, 907–916.
- Fox, V.C., 2002. Historical perspectives on violence against women. *J. Int. Women's Stud.* 4.
- Fulu, E., Warner, X., Miedema, S., Jewkes, R., Roselli, T., Lang, J., 2013. Why Do Some Men Use Violence against Women and How Can We Prevent it? Quantitative Findings from the United Nations Multi-country Study on Men and Violence in Asia and the Pacific. UNDP, UNFPA, UN Women, and UNV, Bangkok.
- Garcia-Moreno, C., Jansen, H.A.F.M., Ellsberg, M., Heise, L., Watts, C., 2005. WHO Multi-country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses. World Health Organization, Geneva.
- Gierisch, J., Shapiro, A., Grant, N., King, H., McDuffie, J., Williams, J., 2013. Intimate Partner Violence: Prevalence Among US Military Veterans and Active Duty Service Members and a Review of Intervention Approaches. Department of Veteran Affairs, Washington, DC.
- Glanz, K., Schwartz, M.D., 2008. Stress, coping, and health behavior. In: Glanz, K., Rimer, B.K., Viswanath, K. (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice*. Jossey-Bass, San Francisco, CA.
- Grant, B.F., Dawson, D.A., Stinson, F.S., Chou, S.P., Dufour, M.C., Pickering, R.P., 2004. The 12-month prevalence and trends in DSM-IV alcohol abuse and dependence: United States, 1991–1992 and 2001–2002. *Drug Alcohol Depend.* 74, 223–234.
- Hankivsky, O., 2012. Women's health, men's health, and gender and health: implications of intersectionality. *Soc. Sci. & Med.* 74, 1712–1720.
- Haynie, D.L., Silver, E., Teasdale, B., 2006. Neighborhood characteristics, peer networks, and adolescent violence. *J. Quant. Criminol.* 22, 147–169.
- Jakobsen, H., 2014. What's gendered about gender-based violence? an empirically grounded theoretical exploration from Tanzania. *Gend. Soc.* 28, 537–561.
- Jewkes, R., 2002. Intimate partner violence: causes and prevention. *Lancet* 359, 1423–1429.
- Johnson, B., Shelton, J., 2014. *My Brother's Keeper Task Force Report to the President*. Washington, D.C.
- Karkazis, K., Jordan-Young, R., Davis, G., Camporesi, S., 2012. Out of bounds? a critique of the new policies on hyperandrogenism in elite female athletes. *Am. J. Bioeth.* 12, 3–16.
- Kaufman, M., 1987. *The Construction of Masculinity and the Triad of Men's Violence. Beyond Patriarchy: Essays by Men on Pleasure, Power, and Change*. Oxford University Press, Canada, pp. 1–29.
- Kellermann, A.L., Fuqua-Whitley, D.S., Rivara, F.P., Mercy, J., 1998. Preventing youth violence: what works? *Annu. Rev. Public Health* 19, 271–292.
- Kimmel, M.S., Mahler, M., 2003. Adolescent masculinity, homophobia, and violence – random school shootings, 1982–2001. *Am. Behav. Sci.* 46, 1439–1458.
- Kimmel, M.S., Messner, M.A., 2001. *Men's Lives*, fifth ed. Allyn and Bacon, Needham Heights, MA.
- Koss, M.P., Gaines, J.A., 1993. The prediction of sexual aggression by alcohol use, athletic participation, and fraternity affiliation. *J. Interpers. Violence* 8, 94–108.
- Krug, E.G., Dahlberg, L.L., Mercy, J.A., Zwi, A.B., Lozano, R., 2002. *World Report on Violence and Health*. World Health Organization, Geneva.
- Latzman, R.D., Swisher, R.R., 2005. The interactive relationship among adolescent violence, street violence, and depression. *J. Community Psychol.* 33, 355–371.
- Lorber, J., 1994. *Paradoxes of Gender*. Yale University Press, New Haven.
- Maass, A., Cadinu, M., Guarnieri, G., Grasselli, A., 2003. Sexual harassment under social identity threat: the computer harassment paradigm. *J. Personal. Soc. Psychol.* 85, 853.
- Majors, R., Billson, J.M., 1993. *Cool Pose: The Dilemma of Black Manhood in America*. Simon and Schuster, New York, New York.
- Matjasko, J.L., Vivolo-Kantor, A.M., Massetti, G.M., Holland, K.M., Holt, M.K., Dela Cruz, J., 2012. A systematic meta-review of evaluations of youth violence prevention programs: common and divergent findings from 25 years of meta-analyses and systematic reviews. *Aggress. Violent Behav.* 17, 540–552.
- Matud, M.P., 2004. Gender differences in stress and coping styles. *Personal. Individ. Differ.* 37.
- Messner, M.A., 1990. When bodies are weapons: masculinity and violence in sport. *Int. Rev. Sociol. Sport* 25, 203–220.
- Meyer, D., 2012. An intersectional analysis of lesbian, gay, bisexual, and transgender (LGBT) people's evaluations of anti-queer violence. *Gend. Soc.* 26, 849–873.
- Munsch, C.L., Willer, R., 2012. The role of gender identity threat in perceptions of date rape and sexual coercion. *Violence Against Women* 18, 1125–1146.
- Muralidharan, A., Fehringer, J., Pappa, S., Rottach, E., Das, M., Mandal, M., 2014. *Transforming Gender Norms, Roles, and Power Dynamics for Better Health: Evidence from a Systematic Review of Gender-integrated Health Programs in Low- and Middle-income Countries*. Futures Group, Health Policy Project; MEASURE Evaluation, Washington DC, Chapel Hill, NC.
- Murnen, S.K., Kohlman, M.H., 2007. Athletic participation, fraternity membership, and sexual aggression among college men: a meta-analytic review. *Sex Roles* 57, 145–157.
- Murray, J., Cerqueira, D.R., Kahn, T., 2013. Crime and violence in Brazil: systematic review of time trends, prevalence rates and risk factors. *Aggress. Violent Behav.* 18, 471–483.
- Nagoshi, J.L., Adams, K.A., Terrell, H.K., Hill, E.D., Brzuzy, S., Nagoshi, C.T., 2008. Gender differences in correlates of homophobia and transphobia. *Sex Roles* 59, 521–531.
- Nelson, R.J., Chiavegato, S., 2001. Molecular basis of aggression. *Trends Neurosci.* 24, 713–719.
- O'Donnell, L., Stueve, A., Myint-U, A., Duran, R., Agronick, G., Wilson-Simmons, R., 2006. Middle school aggression and subsequent intimate partner physical violence. *J. Youth Adolesc.* 35, 693–703.
- Ozer, E.J., Tschann, J.M., Pasch, L.A., Flores, E., 2004. Violence perpetration across peer and partner relationships: co-occurrence and longitudinal patterns among adolescents. *J. Adolesc. Health* 34, 64–71.
- Peacock, D., Levack, A., 2004. The men as partners program in South Africa: reaching men to end gender-based violence and promote sexual and reproductive health. *Int. J. Men's Health* 3, 173–188.
- Peden, M., McGee, K., Krug, E., 2000. *Injury: A Leading Cause of the Global Burden of Disease, 2000*. World Health Organization, Geneva.
- Pleck, J.H., 1995. The gender role strain paradigm: an update. In: Levant, R.F., Pollack, S. (Eds.), *A New Psychology of Men*. Basic Books, New York, pp. 11–32.
- Pronyk, P.M., Kim, J.C., Abramsky, T., Phetla, G., Hargreaves, J.R., Morison, L.A., et al., 2008. A combined microfinance and training intervention can reduce HIV risk behaviour in young female participants. *AIDS* 22, 1659–1665.
- Pulerwitz, J., Michaelis, A., Verma, R., Weiss, E., 2010. Addressing gender dynamics and engaging men in HIV programs: lessons learned from horizons research. *Public Health Rep.* 125, 282–292.
- Randle, A., Graham, C.A., 2011. A review of the evidence on the effects of intimate partner violence on men. *Psychol. Men Masc.* 12, 97–111.
- Rosenfield, S., Mouzon, D., 2013. Gender and mental health. In: Aneshensel, C.S., Phelan, J.C., Bierman, A. (Eds.), *Handbook of the Sociology of Mental Health*, Second Ed. Springer, New York, NY, pp. 277–296.
- Schechter, S., 1982. *Women and Male Violence: The Visions and Struggles of the Battered Women's Movement*. South End Press, Boston.
- Schulz, P., Walker, J.P., Peyrin, L., Soulier, V., Curtin, F., Steimer, T., 1996. Lower sex hormones in men during anticipatory stress. *Neuroreport* 7, 3101–3104.
- Sherriff, N., 2007. Peer group cultures and social identity: an integrated approach to understanding masculinities 1. *Br. Educ. Res. J.* 33, 349–370.
- Sokoloff, N.J., Dupont, I., 2005. Domestic violence at the intersections of race, class, and gender challenges and contributions to understanding violence against marginalized women in diverse communities. *Violence Against Women* 11, 38–64.
- Straus, M.A., 2004. Women's violence toward men is a serious social problem. In: Loseke, D.R., Gelles, R.J., Cavanaugh, M.M. (Eds.), *Current Controversies on Family Violence*, second ed. Sage, Thousand Oaks, CA, pp. 55–77.
- Swahn, M.H., Gressard, L., Palmier, J.B., Yao, H., Haberlen, M., 2013. The prevalence of very frequent physical fighting among boys and girls in 27 countries and cities: regional and gender differences. *J. Environ. Public Health* 2013, 215126.

- Swahn, M.H., Simon, T.R., Hertz, M.F., Arias, I., Bossarte, R.M., Ross, J.G., et al., 2008. Linking dating violence, peer violence, and suicidal behaviors among high-risk youth. *Am. J. Prev. Med.* 34, 30–38.
- Tamres, L.K., Janicki, D., Helgeson, V.S., 2002. Sex differences in coping behavior: a meta-analytic review and an examination of relative coping. *Personal. Soc. Psychol. Rev.* 6, 2–30.
- Terburg, D., Morgan, B., van Honk, J., 2009. The testosterone-cortisol ratio: a hormonal marker for proneness to social aggression. *Int. J. Law Psychiatry* 32, 216–223.
- Thorne, B., 1993. *Gender Play: Girls and Boys in School*. Rutgers University Press, New Brunswick.
- U.S. Department of Health, Education, and Welfare, 1979. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*. Public Health Service, U.S. Department of Health, Education, and Welfare, Washington, DC.
- UNODC, 2011. 2011 Global Study on Homicide: Trends, Contexts, Data. United Nations Office on Drugs and Crime, Vienna.
- Van de Velde, S., Bracke, P., Levecque, K., 2010. Gender differences in depression in 23 European countries. Cross-national variation in the gender gap in depression. *Soc. Sci. & Med.* 71, 305–313.
- Vandello, J.A., Bosson, J.K., 2013. Hard won and easily lost: a review and synthesis of theory and research on precarious manhood. *Psychol. Men Masc.* 14 (2), 101–113.
- Vandello, J.A., Bosson, J.K., Cohen, D., Burnaford, R.M., Weaver, J.R., 2008. Precarious manhood. *J. Personal. Soc. Psychol.* 95, 1325.
- Vandervoort, D., 2000. Social isolation and gender. *Curr. Psychol.* 19, 229–236.
- West, C., Zimmerman, D.H., 1987. Doing Gender. *Gender & Society*, vol. 1, pp. 125–151.
- Whitehead, T., 2005. Man to man violence: how masculinity may work as a dynamic risk factor. *Howard J.* 44, 411–422.
- WHO, 1996. *Prevention of Violence: a public health priority*, Resolution WHA49.25 at 49th World Health Assembly, Geneva, Switzerland.
- WHO, 2010a. *Preventing Intimate Partner and Sexual Violence against Women: Taking Action and Generating Evidence*. World Health Organization, Geneva.
- WHO, 2010b. *Violence Prevention: The Evidence*. World Health Organization, Geneva, Switzerland.
- WHO, 2013a. *Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-partner Sexual Violence*. World Health Organization.
- WHO, 2013b. *Mortality database*. In: *World Health Organization*. http://www.who.int/healthinfo/mortality_data/en/index.html.
- WHO, 2014. *Youth Violence*. World Health Organization, Geneva, Switzerland.
- Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J., 2014. Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Prevention Institute, Atlanta, GA.
- Williams, J.R., Ghandour, R.M., Kub, J.E., 2008. Female perpetration of violence in heterosexual intimate relationships: adolescence through adulthood. *Trauma Violence Abuse* 9, 227–249.
- Wilson, J.Q., Petersilia, J., 2010. *Crime and Public Policy*. Oxford University Press.
- Young, K., 2007. Violence among athletes. In: Ritzer, G. (Ed.), *The Blackwell Encyclopedia of Sociology*. Blackwell, New York, pp. 5199–5202.
- Young, K., 2011. *Sports, Violence, & Society*. Routledge, New York.