

THE RELATIONSHIP BETWEEN HOMICIDE AND ROAD TRAFFIC FATALITIES

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INTRODUCTION

Violent deaths and violent societies

In South Africa, road traffic fatalities and homicide account for a significant proportion of non-natural deaths (National Injury Mortality Surveillance System (NIMMS), 2005). South Africa's homicide rate of 72.5 per 100 000 population is about five times the world average of 14.0 per 100 000 population and the road traffic death rate of 43.0 per 100 000 population is twice the world average of 21.6 per 100 000 population (WHO, 2002). Recent South African Police (2007) statistics have further indicated an annual increase in violent crimes in the country (e.g. murder, carjacking and robbing). Although the overall crime rate is comparable to other developing countries, the exceptionally high levels of violent crime sets South Africa apart internationally (McCafferty, 2003). The United Nations survey of 69 countries, for instance, revealed South Africa to be second to Columbia in having one of the highest firearm-related homicide rates worldwide (Schonteich & Louw, 2001). Egger (1993) has argued that homicide, the most serious form of violent crime, is likely the most reliable index of violence in a society given its high report rate. Extending this view, Whitlock (1971) proposes that both homicide and road-traffic fatalities are manifestations of 'violent societies'. Defined as 'violent deaths', homicide and road traffic fatalities, are the leading categories of non-natural deaths in South Africa (NIMMS, 2005).

A Masculinities Perspective

As a theoretical framework, the study of masculinity(ies) has aimed to problematise the connection between violence and masculinities (Luyt, 2005). The history of South Africa reflects an intimate link between men and violence (Luyt, 2005). In contemporary society, the link between masculinity and violence is reflected in patterns of rape, murder, domestic violence, homophobic and xenophobic forms of violence to name a few (Morrell, 2005). Connell (1993, cited in Totten, 2003) notes that masculinity is produced and expressed variously in institutional, cultural, interpersonal and personal life. Whitehead and Barrett (2001) offer the following definition of masculinities: "those behaviours, languages and practices, existing in specific cultural and organisational locations, which are commonly associated with males and thus culturally defined as not feminine" (p. 15-16). Connell's (1998) notion of a 'hegemonic masculinity' however, advances on this notion to suggest that "though a number of masculinities coexist, a particular version of masculinity holds sway, bestowing power and privilege on men who espouse it and claim it as their own" (p. 608). Stated in somewhat different terms, Ratele (2007) proposes that the 'ruling masculinity',

defined as the "powerful site from which males, and to a different degree females, interpret their lives, behave and interact with others in their world" (p.1), underlies much risk-taking behaviours relating to sexuality, driving, use of weapons etc. Apart from violence, hegemonic masculinity is also reflected in its connections with subordination of women, stigmatisation of non-heterosexual men and expressions of 'macho' toughness and competition (Coleman, 1990 cited in Totten, 2003). Male aggression therefore is perpetuated in society given its intimate relationship with masculinity as a social construct (Luyt, 2005).

OBJECTIVE

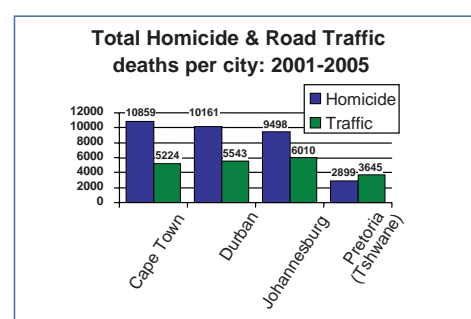
This study sought to examine whether a significant relationship exists between road traffic fatalities and homicide across four South African cities, namely Cape Town, Durban, Johannesburg and Pretoria/Tshwane over a five year period from 2001-2005.

MATERIAL AND METHODS

Data were extracted from the National Injury Mortality Surveillance System (NIMSS) for four cities (Johannesburg, Cape Town, Durban and Pretoria) for 2001-2005. For all cities, data at suburb level were categorised into wards. Population data, obtained from the 2001 Census, was projected for the different years and used to calculate age standardised mortality rates.

PRELIMINARY RESULTS

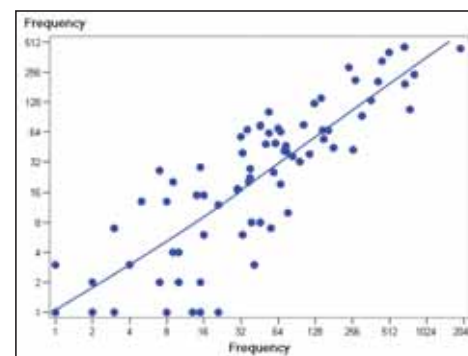
1. During the period 2001-2005, the total number of homicides recorded was 33,417 across the four cities. For the same period across the four cities, road-traffic deaths amounted to 20,422.



2. The relationship between the number of homicide and road-traffic fatalities, as extracted from the NIMMS, was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality and linearity.

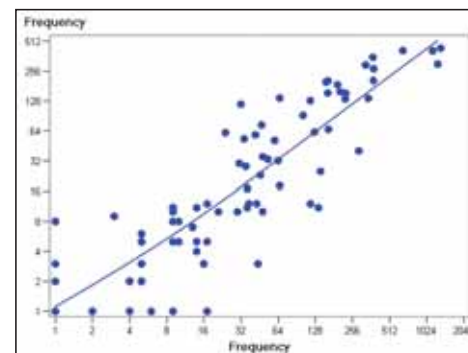
For Cape Town, there was a very strong, positive correlation between the two variables [$r = .80$, $n=80$, $p < .0005$], with high numbers of road

traffic fatalities associated with high numbers of homicide.



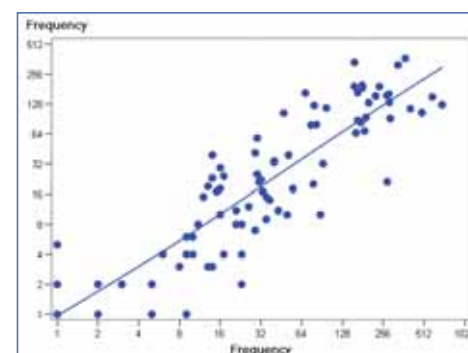
Cape Town: Traffic by Homicide deaths

For Durban, there was a very strong, positive correlation between the two variables [$r = .85$, $n=80$, $p < .0005$], with high numbers of road traffic fatalities associated with high numbers of homicide.



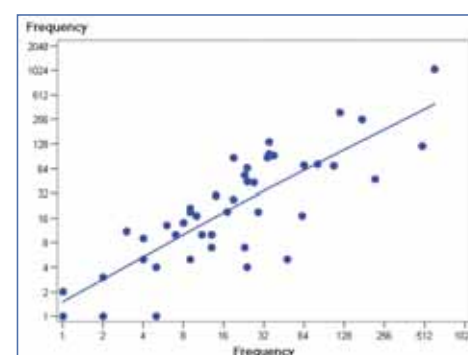
Durban: Traffic by Homicide deaths

For Johannesburg, there was a moderate, positive correlation between the two variables [$r = .65$, $n=84$, $p < .0005$], with high numbers of road traffic fatalities associated with high numbers of homicide.



Johannesburg: Traffic by Homicide deaths

For Pretoria (Tshwane), there was a very strong, positive correlation between the two variables [$r = .80$, $n=45$, $p < .0005$], with high numbers of road traffic fatalities associated with high numbers of homicide.



Pretoria : Traffic by Homicide deaths

LIMITATIONS AND CONSIDERATIONS FOR FURTHER ANALYSES

1. Whilst the results point to a positive correlation between homicide and road-traffic fatalities, the data from which this study is derived reflects the number of victim rather than perpetrator deaths. Studies have shown that perpetrators may present with a different set of characteristics than victims. This has implications for a masculinities perspective which underpins this study (Fong, 2003).
2. These preliminary results reflect the total number of homicide and road-traffic fatalities respectively that have been grouped for the five-year period. As such, the strength of the association between the two variables for each year is not indicated.
3. The correlational analyses were derived from data points organised on ward area level. No procedures were undertaken to ensure equal weighting of the size of ward areas.
4. Missing information in the dataset is further acknowledged as a limitation.

Using an appropriate model, these results will be subjected for further analyses in order to take into account possible confounders, such as demographic (sex, age, race and city) and situational variables (scene of injury, day and time of injury and blood-alcohol level).

CONCLUSION

Preliminary results indicate a very strong association between homicide and road-traffic fatalities in three cities, Cape Town, Durban and Pretoria (Tshwane). A moderate correlation between the two variables was noted in Johannesburg. Such a relationship between homicide and road-traffic fatalities has been indicated in previous studies (AA, 1994 cited in Fong, 2001; Holinger & Klemen, 1982; Porterfield, 1960).

Explicating the relationship between violence and its expressions in transitional societies like South Africa is a significant area for exploration. This has implications for the development of broad-based strategies to address the burden of violence and road traffic injuries simultaneously, a significant consideration for resource-strapped countries.