

Risk-taking behaviour of Cape Peninsula high-school students

Part VII. Violent behaviour

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Abstract The prevalence of a wide range of risk-taking behaviour among high-school students in the Cape Peninsula, South Africa, was investigated. In this article, the results for violent behaviour are presented. Cluster sampling techniques produced a sample of 7 340 students from 16 schools in three major education departments. A self-administered questionnaire was completed in a normal school period. Estimates for each education department were weighted to produce an overall estimate. Of the total sample, 12,7%, 9,6% and 13,8% reported that they had been physically injured by another person at school, at home and in other settings, respectively; 11,0% had injured another person during the previous year; 5% had committed an act of vandalism; and 9,8% of males and 1,3% of females had carried knives at school. Other trends according to gender, school standard, and home language were identified. Males were more likely to be the perpetrators and victims of violent behaviour; for both genders the extent of victimisation decreased with increasing

standard; and fewer Xhosa-speaking students than students in other language groups perpetrated incidents of violent behaviour. The potential for intervention programmes is assessed in a context where much violence is determined by sociopolitical factors.

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International and South African data suggest that violence is a problem of epidemic proportion among the youth. In the USA homicide is the second leading cause of death among 15 - 24-year-olds and the leading cause of death among 15 - 34-year-old black males.¹ A 1984 - 1986 review of South African mortality data² indicates that assault was the main cause of death among coloured and black adolescents aged 15 - 19 years, and was ranked second to motor vehicle accidents in the other population groups. Mortality data underestimate the full extent of the problem. For example, in 1991, 1 787 adolescents aged 14 - 19 years presented at Cape Town's Groote Schuur Hospital Trauma Unit for treatment of injuries arising from assault, whereas there were only 3 deaths in this age group at this hospital (J. Knottenbelt — personal communication).

South Africa has recently witnessed a dramatic escalation of violent conflict.^{3,4} The unprecedented rise in political, social and domestic violence⁴ is understood to reflect a society in the throes of dislocation and transition.³ Apartheid policies have left a legacy of political intolerance in which mass unemployment, economic

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recession and unrealistic expectations all contribute to perpetuating the use of violence.³ Many South Africans have come to regard violence as a legitimate solution to conflict.⁵

A number of researchers have investigated the psychological and social consequences of exposure to violence in South Africa.⁶ In the past the focus of this thrust has been black children exposed to direct political violence. This group was assumed to be most vulnerable given their developmental level, their involvement in the struggle for political liberation, and the State's brutality in quelling this dissent.⁷ Implicit in much of this research is the assumption that violence engenders further violence.^{6,8,9}

There is evidence to suggest a link between general sociopolitical violence and its indirect expression at the interpersonal level.⁷ The notion of a 'culture of violence' has frequently been used to describe this phenomenon in the South African context.³ The extent to which this 'culture of violence' manifests in individual behaviour has not received a great deal of attention. Violent behaviour was therefore included as part of a larger prevalence study in which risk-taking behaviour of Cape Peninsula high-school students was investigated.¹⁰

Methods

The methodology of the larger study of which this work forms a part has been described in detail elsewhere.¹⁰ The study population was defined as all Cape Peninsula high-school students. Cluster sampling yielded a sample of 7 340 students from 16 schools in the three major education departments. A self-administered questionnaire was completed by each student under conditions approximating those of examinations. Means were weighted to account for the fact that different proportions of students were selected from each education department.

The questionnaire items dealt with incidents of violent behaviour in the school, home, and other settings. These incidents included: (i) being the victim of an act of physical aggression; (ii) perpetrating an act of physical aggression; (iii) committing acts of vandalism; (iv) weapon carrying; and (v) behaviour exposing oneself to physical danger getting home at night.

Owing to a restriction preventing interdepartmental comparisons,¹⁰ it is not possible to report the results by racial classification. This limitation hampers a more precise identification of the subgroups most at risk.

Results

Victims of physical aggression (Table I)

Of the sample, 12,7% (95% confidence interval (CI) 11,4 - 14,0) reported that they had been physically injured by another student, 7,2% (95% CI 6,0 - 8,4) by a member of staff (excluding physical punishment), 9,6% (95% CI 8,4 - 10,8) by an adult at home and 13,8% (95% CI 12,5 - 15,1) by someone outside of home or school. With the exception of the home setting, males were more likely to be the victims of physical aggression.

This finding held for each standard and language group. There was a tendency for the incidence of injury to decline with standard in all settings. A smaller proportion of Xhosa-speaking students than students in other language groups indicated they had been physically injured at school.

TABLE I.
Percentage (with 95% CIs) of students who during the past 12 months have been physically injured, by standard and home language(s), and gender (N = 7 340)

	Males	Females
By another student*		
Standard		
6	22,3 (18,6 - 25,9)	9,1 (6,7 - 11,5)
7	24,2 (21,9 - 26,5)	10,0 (7,0 - 13,0)
8	14,8 (12,7 - 16,9)	6,7 (4,4 - 9,0)
9	17,4 (13,6 - 21,2)	6,7 (3,9 - 9,4)
10	9,5 (7,1 - 11,9)	4,7 (3,1 - 6,4)
Language(s)		
Afrikaans	16,1 (14,8 - 17,4)	8,4 (6,3 - 10,4)
Afrikaans and English	21,7 (18,6 - 24,9)	10,4 (7,7 - 13,1)
English	23,2 (21,8 - 24,5)	6,6 (4,9 - 8,4)
Xhosa	5,7 (2,4 - 9,0)	3,7 (2,3 - 5,1)
By school staff member†		
Standard		
6	13,9 (10,3 - 17,5)	4,4 (2,9 - 5,8)
7	15,6 (13,7 - 17,5)	4,9 (2,9 - 5,8)
8	11,7 (8,9 - 14,4)	3,3 (1,9 - 4,7)
9	7,9 (5,2 - 10,7)	3,0 (1,2 - 4,9)
10	4,8 (1,7 - 8,0)	1,0 (0,1 - 2,0)
Language(s)		
Afrikaans	12,0 (9,6 - 14,4)	4,1 (3,0 - 5,1)
Afrikaans and English	12,9 (11,0 - 14,7)	4,3 (1,7 - 6,9)
English	11,0 (9,6 - 12,5)	2,8 (0,6 - 5,1)
Xhosa	5,6 (4,0 - 7,2)	2,2 (1,3 - 3,1)
By adults at home‡		
Standard		
6	14,7 (11,8 - 17,7)	11,3 (8,1 - 14,4)
7	9,5 (7,5 - 11,5)	10,0 (7,4 - 12,6)
8	7,3 (5,5 - 9,2)	10,6 (7,6 - 13,5)
9	7,9 (6,0 - 9,8)	8,8 (6,7 - 10,9)
10	5,2 (3,1 - 7,3)	7,6 (5,2 - 9,9)
Language(s)		
Afrikaans	8,9 (7,1 - 10,8)	10,2 (8,5 - 11,8)
Afrikaans and English	10,7 (8,5 - 12,9)	12,9 (10,2 - 15,7)
English	8,8 (7,6 - 9,9)	7,4 (4,4 - 10,4)
Xhosa	9,7 (7,8 - 11,6)	8,6 (7,5 - 9,7)
By someone outside school/home§		
Standard		
6	22,5 (19,0 - 26,0)	10,4 (7,7 - 13,0)
7	22,1 (19,8 - 24,4)	10,1 (7,6 - 12,6)
8	17,4 (14,8 - 20,0)	8,8 (6,3 - 11,3)
9	19,5 (16,4 - 22,6)	7,4 (5,3 - 9,5)
10	13,8 (12,0 - 15,6)	7,5 (5,7 - 9,2)
Language(s)		
Afrikaans	18,8 (16,3 - 21,4)	9,7 (7,6 - 11,7)
Afrikaans and English	20,9 (17,8 - 23,9)	9,0 (7,6 - 10,4)
English	19,9 (17,0 - 22,8)	8,6 (6,8 - 10,5)
Xhosa	18,2 (15,5 - 20,8)	6,8 (6,3 - 7,4)

* 45 missing responses.
† 56 missing responses.
‡ 44 missing responses.
§ 43 missing responses.

Perpetrators of physical aggression (Table II)

Of the sample, 11,0% (95% CI 9,5 - 12,4) indicated that they had physically injured a student at school during the previous year, whereas 11,7% (95% CI 10,2 -

13,2) reported injuring someone outside of home or school. More males than females were involved for each standard and language group. The proportion of Xhosa-speakers who had physically injured someone either at school or elsewhere was lower than for any other language group.

TABLE II.
Percentage (with 95% CIs) of students who during the previous 12 months physically injured someone, by standard and home language(s), and gender (N = 7 340)

	Males	Females
Another student at school*		
Standard		
6	19,9 (16,1 - 23,6)	5,5 (3,1 - 7,8)
7	19,6 (16,8 - 22,5)	4,9 (3,8 - 6,1)
8	16,6 (12,1 - 21,1)	3,3 (2,2 - 4,4)
9	19,8 (15,7 - 23,9)	2,7 (1,0 - 4,5)
10	18,1 (12,7 - 23,5)	2,4 (0,0 - 3,6)
Language(s)		
Afrikaans	18,1 (16,8 - 19,4)	4,3 (3,5 - 5,2)
Afrikaans and English	22,1 (17,6 - 26,7)	5,0 (3,8 - 6,3)
English	22,8 (18,6 - 26,8)	4,0 (2,0 - 5,9)
Xhosa	4,3 (2,5 - 6,1)	1,5 (1,3 - 1,8)
Someone outside school/home†		
Standard		
6	18,9 (15,5 - 22,3)	5,0 (3,8 - 6,2)
7	22,0 (19,7 - 24,4)	4,9 (3,5 - 6,3)
8	19,6 (14,1 - 25,2)	3,7 (2,6 - 4,8)
9	23,1 (18,7 - 27,6)	3,5 (1,3 - 5,7)
10	18,2 (12,9 - 23,5)	4,0 (2,3 - 5,7)
Language(s)		
Afrikaans	19,0 (17,3 - 20,6)	4,2 (3,0 - 5,4)
Afrikaans and English	23,1 (18,8 - 27,4)	6,4 (5,0 - 7,7)
English	24,6 (19,0 - 30,2)	4,0 (2,9 - 5,1)
Xhosa	8,3 (6,7 - 9,8)	1,9 (1,5 - 2,4)

* 42 missing responses.

† 52 missing responses.

Vandalism (Table III)

Of the sample, 5,0% (95% CI 4,1 - 5,9) had caused serious damage to school property, and 5,4% (95% CI 4,0 - 6,7) reported damaging property outside of school or home. Across both settings more males than females in each standard and language group were involved. The incidence of vandalism was lowest among Xhosa-speaking students.

Weapon carrying (Table IV)

Of the sample, 5,2% (95% CI 4,5 - 5,8) reported carrying a knife as a weapon during the previous 4 weeks at school; 34,2% (95% CI 27,1 - 41,2) of this group indicated that they always carried a knife. More males than females carried knives. Among the language groups Xhosa-speaking students reported the highest incidence of knife carrying. Of the sample, 3,8% (95% CI 3,1 - 4,5) reported carrying a weapon other than a knife; guns comprised the second most frequently carried weapon. More boys than girls carried guns.

Exposure to physical danger (Table V)

Of the sample, 17,3% (95% CI 14,0 - 20,5) reported going out beyond their own neighbourhood at night in

TABLE III.
Percentage (with 95% CIs) of students who during the previous 12 months caused damage to property, by standard and home language(s), and gender (N = 7 340)

	Males	Females
At school*		
Standard		
6	8,4 (5,5 - 11,3)	2,7 (1,2 - 4,1)
7	8,3 (4,8 - 11,8)	2,2 (1,3 - 3,0)
8	10,3 (8,5 - 12,2)	2,3 (1,2 - 3,5)
9	6,1 (3,9 - 8,2)	1,2 (0,4 - 2,1)
10	8,5 (5,2 - 11,9)	1,2 (0,6 - 1,9)
Language(s)		
Afrikaans	6,2 (5,1 - 7,4)	1,8 (1,3 - 2,2)
Afrikaans and English	10,7 (8,1 - 13,2)	2,7 (1,6 - 3,8)
English	11,5 (7,5 - 15,5)	2,5 (1,7 - 3,2)
Xhosa	3,3 (2,7 - 4,0)	0,4 (0,3 - 0,6)
Outside school/home†		
Standard		
6	9,4 (6,7 - 12,1)	2,4 (1,4 - 3,5)
7	9,5 (5,7 - 13,4)	2,9 (1,7 - 4,0)
8	10,4 (8,1 - 12,8)	1,8 (0,7 - 2,9)
9	9,5 (6,0 - 13,0)	1,3 (0,5 - 2,2)
10	6,6 (3,9 - 9,4)	1,1 (0,4 - 1,8)
Language(s)		
Afrikaans	6,4 (4,6 - 8,1)	1,8 (1,1 - 2,6)
Afrikaans and English	11,6 (9,2 - 14,1)	1,9 (0,9 - 2,9)
English	14,4 (11,7 - 17,2)	2,7 (1,7 - 3,7)
Xhosa	0,8 (0,4 - 1,1)	0,8 (0,4 - 1,1)

* 44 missing responses.

† 47 missing responses.

TABLE IV.
Percentage (with 95% CIs) of students who during the previous 4 weeks at school carried a knife as a weapon, by standard and home language(s), and gender (N = 7 340)*

	Males	Females
Standard		
6	8,2 (6,5 - 9,9)	1,0 (0,4 - 1,7)
7	9,6 (7,5 - 11,7)	1,8 (0,6 - 3,0)
8	11,4 (8,8 - 14,1)	1,7 (0,9 - 2,6)
9	11,1 (7,8 - 14,4)	1,1 (0,5 - 1,7)
10	7,1 (5,1 - 9,1)	0,9 (0,2 - 1,6)
Language(s)		
Afrikaans	8,1 (7,0 - 9,0)	0,9 (0,3 - 1,6)
Afrikaans and English	12,0 (9,9 - 14,0)	1,4 (0,3 - 2,6)
English	9,0 (6,3 - 11,7)	1,2 (0,4 - 2,0)
Xhosa	15,0 (11,6 - 18,4)	2,6 (2,3 - 3,0)

* 42 missing responses.

the previous month without knowing how they were going to get home; 25,0% (95% CI 23,3 - 26,7) of the sample had walked home alone at night; and 7,1% (95% CI 5,5 - 8,6) had hitch-hiked at night. There were more males than females involved, and a rise in incidence with increased standard was noted for both genders. Among the language groups the proportion of English-speaking students who had not known how they were going to get home was highest. English-speaking students also reported the highest incidence of hitch-hiking, whereas Xhosa-speaking students reported the highest incidence of walking home alone.

TABLE V.
Percentage (with 95% CIs) of students who during the previous 4 weeks went out at night beyond their neighbourhood, by standard and home language(s), and gender (N = 7 340)

	Males	Females
Did not know how to get home*		
Standard		
6	12,5 (9,4 - 15,7)	10,1 (8,4 - 11,7)
7	17,2 (11,8 - 22,5)	10,4 (8,1 - 12,6)
8	23,1 (17,3 - 28,9)	13,2 (9,6 - 16,7)
9	28,5 (21,3 - 35,6)	17,7 (13,0 - 22,5)
10	30,8 (23,1 - 38,4)	19,1 (16,2 - 22,0)
Language(s)		
Afrikaans	14,8 (12,6 - 17,0)	11,6 (8,9 - 14,3)
Afrikaans and English	24,0 (21,0 - 27,0)	15,2 (12,6 - 17,8)
English	33,5 (31,0 - 35,9)	18,9 (17,2 - 20,6)
Xhosa	11,5 (10,1 - 12,9)	7,2 (5,3 - 9,1)
Walked home alone†		
Standard		
6	27,5 (23,4 - 31,7)	11,8 (9,0 - 14,7)
7	36,8 (33,1 - 40,6)	16,3 (12,7 - 19,9)
8	41,4 (37,7 - 45,2)	12,7 (10,5 - 14,8)
9	45,7 (42,7 - 49,0)	14,9 (12,1 - 17,7)
10	40,2 (35,7 - 44,9)	15,7 (12,4 - 19,0)
Language(s)		
Afrikaans	37,6 (34,6 - 40,5)	15,0 (12,4 - 17,6)
Afrikaans and English	37,7 (33,5 - 42,0)	11,6 (8,2 - 15,0)
English	35,9 (33,4 - 38,5)	10,3 (8,7 - 11,8)
Xhosa	42,0 (35,8 - 48,2)	22,5 (20,2 - 24,8)
Hitch-hiked home‡		
Standard		
6	5,2 (3,3 - 7,1)	2,1 (0,4 - 3,7)
7	9,8 (6,0 - 13,7)	2,4 (1,5 - 3,2)
8	11,3 (6,7 - 15,8)	3,3 (1,8 - 4,8)
9	14,8 (11,5 - 18,2)	5,3 (3,0 - 7,6)
10	15,0 (10,8 - 19,2)	5,3 (2,7 - 8,0)
Language(s)		
Afrikaans	9,4 (6,8 - 12,1)	3,3 (1,3 - 5,4)
Afrikaans and English	10,6 (7,1 - 14,2)	3,3 (2,0 - 4,6)
English	14,3 (9,5 - 19,1)	4,0 (2,7 - 5,3)
Xhosa	7,8 (6,9 - 8,6)	3,0 (1,6 - 4,3)

* 46 missing responses.
† 47 missing responses.
‡ 55 missing responses.

Discussion

Sociopolitical factors have been central in understanding violence in South Africa.⁵ The focus of this study is the contributory role of demographic and developmental factors in this regard. The main findings may be summarised as follows. Among a school-going population of Cape Peninsula adolescents, boys are at greatest risk for involvement in a variety of violent situations, both as victim and as perpetrator. Younger adolescents seem especially vulnerable to incidents of victimisation. Among the different language groups Xhosa-speaking students appear less likely to perpetrate interpersonal violence or acts of vandalism.

Some methodological shortcomings of the larger study of which this article forms a part have been mentioned elsewhere.¹⁰ These include: (i) the possibility of underreporting given the sensitive nature of the information elicited; and (ii) the fact that the sample does not include adolescents who have left school prematurely (who may be more inclined to engage in violent behaviour).¹⁰ An additional factor specific to violent

behaviour is that groups within the sample may be differentially habituated to experiences of violence. As a result, interpretation of what constitutes an act of violence may have varied considerably. The absence of clear definitions in this study limits precise comparison between the different groups. Conclusions should therefore be viewed tentatively.

There is international consensus that males are more violent than females.¹¹ Developmental factors that contribute to the heightened risk among males may include biological determinants,¹¹ a greater propensity for risk taking,¹² and a tendency to act out violent attitudes due to processes of socialisation.^{5,13} In South Africa gender disparities may be particularly marked because relatively rigid social definitions of maleness exist, which are likely to convey stereotyped images of power and dominance.^{5,13}

A complex interaction of factors is likely to shape different patterns of violent behaviour among adolescents from different language and cultural backgrounds. Those most pertinent to our findings include the following.

Family and community influences

Despite a background of general social disintegration in which levels of violence are high,¹⁴ the behaviour of Xhosa-speaking students appears to be *less* violent than that of their English- and Afrikaans-speaking counterparts. Methodological considerations notwithstanding, it may be speculated that the higher proportional mortality rate for black adolescents² is due to a relatively high prevalence of weapon carrying and violence perpetrated among a non-school-going population. Other studies among black communities in South Africa note a similar anomaly between expected and actual levels of violence.^{5,15} The effect of exposure to violence on the emotional state or behaviour of individuals may therefore be more complex than originally assumed.^{6,8,9,16} Reasons for the relatively low incidence of violent behaviour among Xhosa-speaking students may include the availability of supports in the family and community,⁶ an intact tradition of strong cultural codes of respect for seniority, and a tradition of extended family guardianship over the young.¹⁵

Social marginalisation

Higher levels of violent behaviour could be expected among adolescents from socially marginalised groups, in which families and entire communities have suffered dislocation (for example, through forced removals). Studies of gang formation in coloured townships around Cape Town have ascribed their pervasiveness to the breakdown of community structures and a deteriorating economy. Gang subculture is also noted to have had a powerful impact on shaping values among this community's youth. Gang notions of manhood, their images of women, their language, and their survival strategies have been particularly influential.¹⁵ Although population grouping was not treated as a separate variable in this study, these influences are likely to have contributed to some of the findings.

Physical discipline

The family and the school are crucial factors in the initial and ongoing socialisation of children.³ They play a prominent role in instilling and perpetuating ideologically determined attitudes towards discipline. A link has been demonstrated between physical aggression in the family and aggression and other crime outside the family context.^{17,18} Furthermore, physical punishment at school has been associated with aggression against teachers and

other students, and with vandalism against school property.¹⁹ By conveying the message that physical aggression is an appropriate means of resolving conflict, physical punishment may promote adolescent aggression and destructive behaviour. Studies of corporal punishment at school indicate that its incidence is consistently high for male students across all population groups, whereas black students report a far lower incidence of corporal punishment at home.²⁰ These findings are not entirely consistent with the present study, which found a lower incidence of teacher aggression among Xhosa-speakers than in the other groups, and a more or less equal incidence of adult aggression in the home setting. However, the findings are not entirely comparable owing to the fact that this study did not measure physical punishment *per se*, but rather physical injury by teachers and adults at home which may or may not have been construed as punishment. While it is difficult to assess whether socially legitimised attitudes toward physical punishment underpin the present findings, it is possible that the meaning of aggression or punishment which holds sway in different contexts plays a significant role in determining subsequent attitudes and behaviour.

Media influences

There appears to be consensus that exposure to television and film violence increases physical aggression among children.^{21,22} In South Africa the state-owned broadcasting media have had a monopoly on shaping public attitudes by determining programme content. It has been argued that levels of violence among whites in South Africa increased after television broadcasting was introduced in 1975.²³ Owing to sharp economic disparities between the white and black populations, access to television has been concentrated in the former group. As a result whites have been the prime target of media influences. The relatively high levels of violent behaviour observed among the non-Xhosa-speaking students in this study may therefore be partly accounted for by this trend.

Weapon carrying by adolescents is an area of increasing concern.²³ US data for 1986 indicate that 12% of all deaths among adolescents younger than 19 years were due to firearms.²⁴ Similarly, Groote Schuur Hospital Trauma Unit data for 1991 show that, of the 1 787 assault injuries treated, 1 080 and 123 were due to stab and gunshot wounds respectively (J. Knottenbelt — personal communication). The ownership and carrying of weapons, legal or illegal, has become normative in South Africa. Registered firearms, for example, total a staggering 2,8 million, the majority of which have been licensed in the last decade.⁵ In light of these trends, the present finding that 1 in 10 Peninsula boys carry knives to school and that guns rank second to knives, is possibly yet another example of the wider acceptance of violence in this country.

Victims of violence do not necessarily comprise a random sample of the population, because identifiable risk factors are often associated with a physical attack. Age, gender, race, social class, time of day, time of week, physical setting and alcohol have been consistently linked with physical assault by another person.^{13,25} Although a degree of developmentally associated risk taking is inevitable among adolescents,^{10,12} much of their behaviour may stem from ignorance of the risks. Overt risk-taking behaviour is indicated by adolescents exposing themselves to potentially dangerous situations at night, particularly females who hitch-hike alone. Incidents of physical victimisation in the school and home setting may also be characterised by identifiable antecedents. Where these factors can be discerned, educational programmes may prove useful in providing adolescents with relevant information in this regard.

Other intervention strategies that may reduce the prevalence of violent behaviour include school-based programmes encouraging non-violent coping strategies and tolerance; education on the relationship between sex-role stereotyping and violence; opposing the use of physical punishment in the school and home setting; reducing the exposure of children and adolescents to violence in the media; revising firearm legislation and discouraging the carrying of weapons as a means of self-defence; and improved psychological management and treatment of adolescent assault victims and perpetrators. It is, however, necessary to emphasise that preventive strategies are likely to be of limited efficacy in the absence of fundamental socio political structural changes.

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