

**Violent Behavior Among South African Adolescents:
A Study of the Risk and Protective Factors
Preliminary Report**

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Introduction

As a result of the recent national surge of violence among American adolescents, researchers have become increasingly interested in this phenomenon. They want to know what causes it and what can be done to prevent it. South Africa, being identified as one of the most violent countries in the world (Burnett1998), is also facing this

same phenomenon. In 1994, apartheid ended and violence became an important topic of research because of the country's recent economic, social, and political changes (Burnett 1998).

Unfortunately, few researchers have studied youth violence in South Africa. However, Sorenson and Berk (1999) found that adolescents in the United States younger than 18 years old were significantly more likely to use a firearm to commit a homicide than those 18 or older. Kingery (1996) investigated the risk factors for violent behavior among three major racial groups in the United States (African American, Caucasian, and Hispanic). Empirical analysis supports the notion that race and ethnicity are poor predictors of violent behavior among adolescents. He suggests that further research focus on the causation of violence among young people and should be directed at other background factors such as class, intellect, social capital and religiosity rather than race. Fitzpatrick (1997) looked at possible resiliency factors in non-aggressive and aggressive African America adolescents. The study was focused on the effect environment has on the adolescent's sociobehavioral outcomes. The study supports the sociological paradigm that suggests that demographics such as age and gender are significant predictors to one's level of aggression. Fitzpatrick (1997) found that aggressive adolescents had greater exposure to violence than their non-aggressive counterparts. Levy and Wall (2000) discussed major implications of the high levels of exposure that violence has on youth. They suggest that frequent witnessing of violence in one's community can lead to feelings of helplessness and inability to handle difficult situations. Generally data on exposure to violence for adolescents is limited in the United States as well as South Africa.

Having a supportive relationship with one's mother tends to protect against the negative effects of a violent friend, a violent adult and fighting as a predictor of violent behavior among females. Among males, the support of the mother diminishes the negative effects of violent friends and the tendency towards violent behavior (Zimmerman 1998). Zimmerman also found that Black adolescent males who had a strong relationship with their fathers tended to have a higher level of self-esteem and lower levels of depression.

This paper presents the results of a study on youth violence in Durban, South Africa to identify the predictors of violence and the factors that may protect adolescents from those risks. We hypothesized that adolescents who have low parent & school support, maladaptive attitudes toward violence along with other risk factors, such as drug abuse, violent attitudes, and high occurrence of witnessing violence will be more likely to exhibit violent behavior. Furthermore we believe religious beliefs, positive adult support and constructive

educational environments, measured by school efficacy, may be protective factors that prevent learners from becoming aggressive. School efficacy is defined as students' belief that they can change happenings in their school.

Research on this topic is necessary due to the disturbing mortality trends in South Africa. According to a 1984-86 collection of death rates, Black males were more likely to die due to external cause (shooting, fighting and car accidents) than their white, Indian and Coloureds counterparts. More specifically, 56.8% of all death reports of blacks were due to external causes. Flisher (1992) focuses on external causes, defined as assault and use of weapons. He found that assault was the leading external cause of death for Blacks and Coloureds between the ages of 15 and 19-years old. Therefore we define violent behavior as carry and using weapons, fighting that leads to hospitalization and a lost of temper which leads to hurting another individual.

Methods

Sample

The participants of this study included learners from two high schools in the Durban area: Phambili and Rossburgh High Schools. The two schools were a part of the Crime Reduction in Schools Project (CRISP), which was sponsored by the University of Natal-Durban. The sample included 503 learners; 310 were from Phambili high school and 193 were from Rossburgh high school. The majority of the respondents were Zulu speaking Blacks (82.6%). The learners ranged from ages thirteen to nineteen ($x=16.0$, $sd= \pm 1.7$) and were in grades nine through twelve. Approximately sixty percent (60.7%) of the sample was female and thirty-nine (39.3%) was male.

We began by getting permission from the principals to conduct research in the schools. CRISP had a formal agreement with the Durban board of education, which covered parental consent requirements, to conduct research within the schools. We also received Institutional Review Board (IRB) approval from the University of Michigan-Ann Arbor to conduct research involving human subjects. Students also were required to give their own consent before completing the questionnaire.

The questionnaire included 160 questions. Most of the questions were closed-ended to be answered on a three-point Likert scale. The remaining questions were dichotomous responses. The questionnaire also included open ended questions such as "Friend influence was measures by using such questions as " and my friends "*get into fights*"

assessed by asking questions such as “*My religious beliefs*” and “*I pray to God for help*.” These questions were converted to scale form so as to make the analysis more efficient. A list of possible job options was compiled. The list was then broken down into categories and assigned a numeric code. The responses were then included in the data empirically.

questionnaire. Each questionnaire required about 30 60 minutes to complete. Tables 1 and 2 give means and standard deviations risk and protective factors used in the correlation analysis.

Table 1

Descriptive Statistics of Possible Risk Factors

	Mean(on scale of 1 to 3)	Standard Deviation
Violent Behavior	1.23	0.3481
Violent Attitude	1.3	0.2504
Victimized	1.45	0.4802
Witnessed	1.81	0.6918

Table 2

Descriptive Statistics for Protective Factors

	Mean(on scale of 1 to 3)	Standard Deviation	
Mother Support	x=1.23	0.3481	
Father Support	x=2.51	0.5325	<i>Data</i>
Friend Support	x=2.02	0.6929	<i>collection</i>
Religion	x=2.29	0.3797	<i>procedur</i>
School Efficacy	x= 2.65	0.4144	<i>e</i>

administered the questionnaire to classrooms of twenty to forty students each. Following introductions, consent forms were passed out to each student then read aloud by the researcher in order to establish informed consent. After consent forms were collected questionnaires were handed out. Students were instructed to complete the questionnaires. Rules of conduct during research were also provided to the students. They included, no sharing answers with fellow students and raising one's hand if there was a concern about a question.

Shortly before we were scheduled to begin administering the questionnaire, it became known that many learners in our targeted sample did not have a working knowledge of the English language. Therefore, the questionnaire was translated into Zulu by a member the CRISP staff. Each questionnaire was in English and Zulu

Results

About the respondents

During this study we looked at the learners' emotional, educational and financial well-being in an attempt get a clear respondents pictures backgrounds. This allowed us to further understand the risk and protective factors that are most common among the respondents. Thereby collecting information to pass on to educational administrators that they may employ intervention/prevention programs more useful for the students. Fifty one percent (51.4%) of respondents had feelings of hopelessness about their future. Likewise sixty eight percent (68.6%) respondents reported feeling lonely, while thirty eight percent (38.3 %) of the learners reported having thought of ending their life. In addition to poor emotional well being among some students, there is poor academic

performance. Seventy one percent (71.3%) of the respondents reported average marks of 60-69% or below. A significant number of respondents reported being physically hurt ($r=.122$ $p<.01$).

Low educational levels are compounded upon by a lack of economic options. Seventy eight percent (78.2%) of the learners reported that their families' had only enough (or less) money for basic necessities. Moreover sixty four percent (64%) indicated their families' have problems paying bills. Then as we looked at violence we saw that of the learners who had been physically hurt, a high proportion reported they were involved in fights inside ($r=.120$ $p<.01$) and outside ($r=.180$ $p<.01$) school.

Twenty-two percent of the students reported being physically hurt by someone at least once in the past year. Over 20% had been in a school fight at least once in the past year. Even more interesting, nearly thirty percent had been in a fight outside of school at least once in the past year. Nearly half of the respondents reported witnessing a violent crime at least once in the past year and about sixty-five percent had seen someone get shot or stabbed at least once in the past year.

Risk Factors

Gender

Gender, in this sample, is not as significant a predictor of violent behavior as we expected. On a scale of one to three, the mean for violent behavior for females is $x=1.13$, $sd= \pm.1996$ whereas the mean for males is $x=1.38$, $sd= \pm.4436$. An analysis of violent attitudes also showed no significant difference between males and females. Yet when looking at single variables such as “gotten into fight in school,” 80.2% of the females reported that they had never gotten into a fight in school whereas 69.8% of the males had never gotten into a fight in school. When asked about more serious acts of violence such as “carried gun...” 96.7% of the females versus 75.7% of the males reported that they had ever carried a gun. Of the females, 2.5% reported that they had carried a gun one to two times versus 13.8% for the males.

Drug and Alcohol Use

In our sample, 43.5% had ever had beer. Thirty-one percent reported having beer one to two times in the past thirty days. Seventeen percent reported having five or more drinks in a row, one to two times, in the past thirty days. About thirteen percent had ever smoked dagga (marijuana) and 12.6% had smoked dagga one to two times in the past thirty days.

When examining alcohol use as a risk factor to violence, we found that those learners who had ever used drugs or alcohol were more likely than those who had not to be involved in acts of violence. There was not a significant correlation between violent behavior and the variable ever had beer but, for those who had five or more drinks in a row in the past thirty days there was a significant correlation of $r=.417$ ($p<.05$). Of those who ever had beer, 28.3% had been in a fight in school at least one to two times in the past year. Nearly twenty-one percent (20.6%) of those who had never had beer were involved in a fight in school at least one to two times in the past year.

Learners who had ever had beer were also more likely to carry weapons. Nearly thirty-three percent (32.7%) who ever had beer had also carried a knife or razor in the past twelve months as compared to 6.8% of those who had never had beer. Those who had ever had beer, in the past year, were more likely than those who had not to carry a gun (94.0% v 78.9%). Also, about three times more who had used a knife or gun reported that they ever had beer versus those who reported never having had beer (9.6% v 3.0%).

Table 3

Violent Behavior and Alcohol Use

	Had Beer(in past 30 days)	Never Had Beer(in past 30 days)
Gotten into fight in school*	28.30%	20.60%
Gotten into fight outside of school*	40.30%	18.20%
Used a knife or gun*	14.90%	5.30%
Carried and knife or razor*	32.70%	6.80%
Caried a gun*	21.10%	6.00%

*answers are for the past 12 months

We also looked at the relationship between dagga (marijuana) use and violent behavior. Those who were involved in one to two fights in school in the past year were about two times more likely to have ever smoked dagga (30.2% v 15.6%). They were also about 3.5 times more likely to carry a knife or razor one to two times in the past twelve months (31.7% v 9.0%). When asked if they had ever used a knife or gun, 11.1% of those who reported carrying the knife or gun one to two times in the past year had ever smoked dagga.

Table 4

Violent Behavior and Dagga Use

	Smoked dagga(in past 30 days)	Never smoked dagga(in past 30 days)
Gotten into fight in school*	38.70%	22.10%
Gotten into fight outside of school*	54.80%	23.20%
Used a knife or gun*	22.20%	7.20%
Carried a knife or razor*	53.90%	12.50%
Carried a gun*	38.00%	7.90%

*answers are for the past twelve months

Behaviors

In the survey, there were several questions that directly assessed the respondents' participation in acts of violence in the past twelve months. The figures for these variables are included in Table 1- Percentages for Violent Behavior.

Table 5

Percentages of Violent Behaviors

In past 12 months	% Never	%1-2 times	%3 or more times
Hurt someone badly	85.9	8.7	5.2
Gotten into fight school	75.3	17.9	6.6
Taken part in group fight	74.5	14.1	11.1
Used a knife or gun	89.5	6.7	3.6
Carried a knife or razor	81.5	12.6	5.9
Carried a gun	87.5	7.7	4.8
Gotten into fight outside of school	72.1	19.2	8.7

We created a measure, violent behavior, which includes *gotten into a fight in school, gotten into fight outside of school, taken part in group fight, hurt someone badly, used a knife or gun, carried a knife or razor, hurt someone on purpose not the same race as you, and fought with someone not the same race as you*, to assess levels of violence and also to investigate the correlation between this variable and other such as violent attitudes. Respondents answered these single item questions on a three point Likert scale. The mean for this variable is $x = 1.23$, $sd = \pm .3481$.

Attitudes

To examine the relationship between violent behavior and attitudes, we created the variable, violent attitude, which includes the single items *fighting is the best way to solve problems, it is okay to hit someone who makes fun of you, and you have to fight so other students don't think you are weak*.

Respondents were required to answer *disagree(1)* or *agree(2)* to these questions. The mean score for the

variable violent attitude is $x=1.31$ $sd= \pm.2508$. There is a significant correlation between the variables violent attitude and violent behavior, ($r=.161$, $p<.01$).

Of those who believe “fighting is the best way,” 33.4% have been in at least one fight in school in the past twelve months. When looking at weapon carrying, 21.6% of the respondents who reported that fighting is the best way also reported using a knife or gun in the past twelve months. Nearly thirty percent (29.4%) of those who believed that fighting is the best way had carried a knife or razor in the past twelve months.

To assess the learners’ attitudes surrounding their school environment, we asked questions such as the learners’ perceptions of violence in school, behavior in school surrounding violence, and whether or not they liked school and their teachers. The majority (92.2%) reported that they liked school. About 85% agreed that they liked their teachers. Eighty-eight percent reported that they looked forward to going to school. Yet 65% reported being afraid of the violence in his/her school.

We also examined the relationship between the learners’ attitudes toward violence in their schools and their actual behaviors as far as fighting and weapon carrying. There was a significant correlation between violent attitude and violent behavior, $r= .161$ ($p< .01$). There was also a significant correlation between violent attitude and weapon carrying, which is a variable we created that includes the single items *carried a knife or razor and carried a gun*, $r= .094$ ($p< .05$).

Those who reported that they did not like school were more likely to be involved in acts of violence than those who reported that they liked school. Of those who did not like school, 18.4% had been involved in one to two fights in school in the past twelve months and 13.2% had been involved in 3 or more fights in the past twelve months. For those who did like school, 17.7% were involved in one or two fights and 6.1% had been involved in three or more fights.

Looking at knife and gun use, we found that 10.8% who did not like school used a gun or knife one or two times and 5.4% used it three or more times in the past twelve months. Of those who reported liking school, 6.4% and 3.3% used a knife or gun one to two times and three or more times, respectively, in the past twelve months.

The relationship between fear of violence in school and actual violent behavior is also interesting. Of those who are afraid of the violence in their school, 21.7% have been in a fight in school at least once in the past twelve months. About thirty-one percent (30.5%) who were not afraid of the violence in their school had been in a fight at least once.

More students who are not afraid of the violence in their school have carried a knife or razor at least once than those who are afraid (26.5% v 14.5%). Also, more of the students who reported not being afraid of the violence in their school had actually used a knife or razor in the past twelve months, 14.1% versus 8.4%.

Witnessing Violence

Additionally, we analyzed the levels of violence the learners witnessed. The variable *witnessed*, includes the single items, *seen someone commit a violent crime where a person was hurt and seen someone get shot, stabbed, or beaten up*. There was a significant correlation between witnessing violence and violent behavior, $r = .423$, ($p < .01$). The mean for the variable *witnessed*, on a scale of one to three, is $\bar{x} = 1.82$, $sd = \pm .6918$.

About 35% had seen someone get shot, stabbed, or beaten up one to two times in the past twelve months and nearly 30% witnessed a person get shot, stabbed, or beaten up three or more times in the past year. Nearly half (47.3%) of the learners witnessed someone commit a violent crime at least once in the past year.

A large percentage of learners in this sample witnessed violent crimes in their lives. Nearly fifty percent had seen someone commit a violent crime at least once in the past year. Approximately 26% had seen a crime committed one to two times and 22% had seen a crime committed three or more times. Thirty-five percent had seen someone get shot one to two times and thirty percent had witnessed a shooting three or more times.

Learners who had witnessed violent crimes or shootings tended to have higher levels of violent tendencies than those who had not. Learners who had seen someone get shot were three times more likely (41.4% v 12.6%) to get into fights in school than those who had never seen someone get shot, in the past

year. These students were also five times more likely (22% v. 4%) to hurt someone badly and seventeen times more likely (19.6% v 1.1%) to use a knife or gun in the past year if they had seen someone get shot.

Victims of Violence

Respondents who are victims of violence are more likely to be involved in acts of violence themselves, [$r=.339$ ($p<.01$)]. The variable victimized was created to assess this relationship. It included the single items, *had someone threaten to hurt you*, *had someone physically hurt assault or hurt you*, and *had someone take something from you using force*. The mean for the variable *victimized*, on a scale of one to three, is $x= 1.46$, $sd= \pm .4802$. About forty-eight percent of the respondents had someone threaten to hurt them at least once in the past twelve months. Thirty-eight percent had had something taken from them and about twenty-two percent had someone physically hurt them at least once in the past twelve months.

Protective Factors

Parental and Peer Influence

The influence and support of parents and other important adult figures are factors that we believed might protect learners from acts of violence. To assess this relationship we looked at questions such as *mom helps solve problems* and *rely on dad for emotional support*. Learners reported significantly lower amount of violent behavior, as shown in Table 3, when they considered their mothers' supportive ($r= -.142$ $p<.01$). Similar there was a decrease in violent behavior when there was positive father support reported ($r= -.107$ $p<.05$). In the same way high levels father support increase the likelihood that school efficacy ($r=.129$ $p<.01$) would exist within students. The finding as indicated in Table 4 showed that increased mother support was correlated highly with school efficacy ($r= .246$ $p<.01$).

Furthermore parental support has been shown to decrease negative affect among respondents. As father and mother support increased the respondents were less likely to be uninterested in their environment ($r= -.137$ $p<.01$; $r= -.097$ $p<.05$). That is, the more social capital respondents reported the more they were concerned with their surrounding. This is interesting because students who reported increased levels of non interest also indicated increases feeling of hopelessness ($r= .450$ $p<.01$), worthlessness ($r= .447$ $p<.01$) and sadness ($r=.365$ $p<.01$). The

expression of depressive affect among learners is important for schools and parents to be aware of due to its possible indirect impact on students' aggressive behavior. However as mother support rose the less likely it became for learners to report feeling sad

($r = -.095$ $p < .05$)

Social interactions such as positive peer friendship also have appeared as a potential protective factor. Peers seem to have a considerable impact on the respondents' behavior. Respondents reported less violent behaviors as friends were thought to be positive influences ($r = -.091$ $p < .05$). At the same time when the learner reported friends were negative influences, their level of violent behavior increased ($r = .316$ $p < .01$). However as shown in Table 3, when peer support increased the likelihood of violent behavior from the respondents decreased ($r = -.146$ $p < .01$).

Table 6

Parental and Peer Capacity of Influence on Respondents Violent Behavior

	Violent Behavior
Mother Support	$r = -.142^*$
Father Support	$r = -.107^*$
Friend Support	$r = -.146^*$
Religion	$r = -.069$
Mentor	$r = .101^{**}$
Friend Positive Influence	$r = -.091^{**}$
School Efficacy	$r = -.159^*$
<i>Note * $p < .01$ and ** $p < .05$</i>	

Religiosity

Religion has also been suggested as a possible protective factor. Religion did not seem to have a direct impact on respondents' violent behavior. However there may be an indirect affect given the significant correlation between religiosity and school efficacy ($r=.192$ $p<.01$) along with school leadership ($r= .151$ $p< .01$). Furthermore there was a statistically significant relation between parent support and religiosity in respondents. As mother ($r= .239$ $p<.01$) and father ($r=.141$ $p< .01$) support increase so did student level of religiosity. Similarly religiosity in respondents increased as they indicted peer as positive influences in their lives ($r= .165$ $p< .01$). There was also a positive impact on school efficacy when student reported friend support ($r=.163$ $p< .01$) as note in Table 4.

Table 7

Extent of Social Support on School Efficacy

School Efficacy	
Mother Support	$r = .246^*$
Father Support	$r = .129^*$
Friend Support	$r = .163^*$
Religion	$r = .192^*$
Mentor	$r = .076$
Friend Positive Influence	$r = .234^*$
Note * $p<.01$ and * * $p<.05$	
As we turn to violent attitude as it relates to protective factors there are a number of	

fascinating finding. Violent attitude is significantly correlated to mother support ($r = -.158$, $p < .01$). yet father support is not highly related to violent attitude ($r = -.034$). This leads us to believe mother support, has a more profound effect on way and frequency respondents express violent notions, than father support. Violent attitude was also negatively correlated to peer support ($r = -.118$, $p < .01$) and school efficacy ($r = -.151$, $p < .01$). These findings suggest that the manner in which respondent thinks about their surrounding impact the manner in which they interact within that setting. That is, when they have peer support, for coping with daily stressors the learners were less likely to have violent attitude toward that environment.

Discussion

The results of this cross-sectional study are disquieting. These data suggest that the majority of the violence takes place in the learners' lives, takes place outside of the school. In informal conversations with School faculty, they reported that learners often experience acts of violence on their way to and from school. One school actually implemented a program where faculty and staff would accompany learners to a nearby train station, which many of them use to get home. This brings to light the seriousness of the problem of aggressive behavior in this area.

We found high levels of witnessing among students as well as low levels of academic performance. Our results support Levy and Wall (2000) who suggests the students' inability to cope with environmental stressors may inhibit their development and subsequently their educational achievement. This finding is extremely important when attempting to implement intervention/prevention programs in the school. Researchers along with school faculty can use this knowledge to put together program that act as buffer between the students and violence happening in their surrounding. The respondents supported our hypothesis by indicating less violent behavior when there was parental involvement, this can prompt school administration to encourage more parent involvement in school-based activities. The combination of both protective factors may have greater positive affect on the student and either would have separately.

Limitations

As in all research there were limitations in the manner in which information could be gathered. The problem of confounding variables such as non-normative life events, kidnapping and rape, limits the generalizability of this cross sectional studies. The generalizability is further diminished due to a small percentage of respondents who reported violent behavior, thirty three percent (33.4 %) reported violent behavior and thirteen percent (13.5%) reported delinquent behavior. The research is unable to report any causal relationship due to the cross sectional nature of the research design. Furthermore, students may have had problems on how to response to questions. For example when asked about fathers' parental involvement students were unsure how to response because many of their father had died. In addition when asked to response on their level of comfort with a particular emotion some learners were perplexed by the English as well as the Zulu phrasing of the response options. There was also the use of a double negative question that may have caused confusion in response options. The low educational level of the students' was an obstacle we were not able to overcome completely even with language translation. Given these limitations we believe the information gathered is helpful in understanding the prevalence of violent and facilitating factors that contribute to the increasing incidents of aggressive behavior in adolescents. Future research in this field may focus on how adolescents cope with non-normative stressors while living in violent communities using the framework of resiliency theory as it base. Researchers may want to look at how witnessing impacts the emotional well-being of youth. Continuing research on aggression in adolescents is vital to understanding why some fall prey to risks and other persevere in an effort to end the global epidemic of violence.

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