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Preventing Violence in Seven Countries: Global Convergence in Policies

Marianne Junger · Lynette Feder · Joy Clay · Sylvana M. Côté · David P. Farrington · Kate Freiberg · Vicente Garrido Genovés · Ross Homel · Friedrich Lösel · Matthew Manning · Paul Mazerolle · Rob Santos · Martin Schmucker · Christopher Sullivan · Carole Sutton · Tom van Yperen · Richard E. Tremblay

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Abstract Do governments take the measures that are supported by the best scientific evidence available? We present a brief review of the situation in: Australia, Canada, Germany, the Netherlands, Spain, the United Kingdom, and the United States. Our findings show surprisingly similar developments across countries. While all seven countries are moving towards evidence-based decision making regarding policies and programs to prevent violence, there remain a number of difficulties before this end can be achieved. For

M. Junger and L. Feder are listed as the first and second authors, Richard Tremblay is the instigator of the project and is placed at the end; the remaining authors are placed in alphabetic order.
A list with authors per country and addresses for correspondence can be found in the Appendix.
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M. Junger (✉)
Department of Developmental Psychology, Faculty of Social Sciences, Utrecht University,
PO Box 80.140, 3508 TC Utrecht, The Netherlands
e-mail: M.Junger@fss.uu.nl

L. Feder
College of Liberal Arts and Sciences, Portland State University, Portland, OR, USA

J. Clay
School of Urban Affairs and Public Policy, University of Memphis, Memphis, TN, USA

S. M. Côté · R. E. Tremblay
Groupe de recherche sur l'inadaptation psychosociale chez l'enfant, Université de Montreal,
Montreal, QC, Canada

D. P. Farrington · F. Lösel
Institute of Criminology, Cambridge University, Cambridge, UK

K. Freiberg · R. Homel · M. Manning · P. Mazerolle
Key Centre for Ethics, Law, Justice and Governance, Griffith University, Brisbane, Australia

V. G. Genovés
Department of Philosophy and Education, University of Valencia, Valencia, Spain

example, there continue to be few randomized controlled trials or rigorous quasi-experimental studies on aggression and violence. Results from experimental research are essential to both policy makers and researchers to determine the effectiveness of programs as well as increase our knowledge of the problem. Additionally, all noted that media attention for violence is high in their country, often leading to management by crisis with the result that policies are not based on evidence, but instead seek to appease public outrage. And perhaps because of attendant organizational problems (i.e., in many countries violence prevention was not under the guise of one particular agency or ministry), most have not developed a coordinated policy focusing on the prevention of violence and physical aggression. It is hypothesized that leaders in democratic countries, who must run for election every 4 to 6 years, may feel a need to focus on short-term planning rather than long-term preventive policies since the costs, but not the benefits for the latter would be incurred while they still served in office. We also noted a general absence of expertise beyond those within scientific circles. The need for these ideas to be more widely accepted will be an essential ingredient to real and sustaining change. This means that there must be better communication and increased understanding between researchers and policy makers. Toward those ends, the recent establishment of the Campbell Collaboration, formed to provide international systematic reviews of program effectiveness, will make these results more available and accessible to politicians, administrators and those charged with making key policy decisions.

Keywords Social policy · Prevention · Aggression · Physical aggression · Crime

The Problem of Violence

In many ways violence represents a heavy burden to society. Interpersonal violence causes about 73,000 deaths per year, and 20 to 40 hospital visits for every death for the whole of Europe, including the Eastern European countries (WHO European Region 2005, p. 28). Additionally, being a victim of interpersonal violence can have long-lasting medical, behavioral and psychological consequences (WHO European Region 2005).

R. Santos
Healthy Child Manitoba Office, Healthy Child Committee of Cabinet, Government of Manitoba, Winnipeg, Canada

R. Santos
Department of Community Health Sciences, Faculty of Medicine, University of Manitoba, Winnipeg, Canada

M. Schmucker
Institute of Psychology, University of Erlangen-Nuremberg, Erlangen, Germany

C. Sullivan
Department of Criminology, University of South Florida, Tampa, FL, USA

C. Sutton
Unit for Parenting Studies, De Montfort University, Leicester, UK

T. van Yperen
Utrecht University/Dutch Youth Institute, Utrecht, The Netherlands

The costs of crime extend beyond the victim to include the perpetrators as well as the larger society. Being a violent person has early and long-lasting negative and costly consequences. For example, it is estimated that children with conduct disorders are ten times more costly to society than children without conduct disorders (Scott et al. 2001a). These increased costs extend to: (1) the educational system in terms of remedial teaching, which typically results from the truancy that is associated with children with behavioral problems; (2) the criminal justice system following their increased likelihood of committing a crime; (3) the welfare system; (4) the health system (Foster et al. 2005; Scott et al. 2001a,b).

A review of the research indicates that few of our criminal justice responses to violent crime prevent or even reduce recidivism. Investing in more criminal justice, therefore, seems a waste of time and money. Recidivism rates among those convicted to a prison sentence in the Netherlands are usually around 75% (Wartna et al. 2005). A recent meta-analysis exploring the association between type of sanction and recidivism included 111 studies with a total sample of over 442,000 offenders (Smith et al. 2002). The researchers found an overall effect size of type of sanction and recidivism of zero leading them to conclude that harsher sanctions have no deterrent effect on recidivism overall as well as within subgroups of offenders. Smith, Goggin, and Gendreau (Smith et al. 2002) conclude that 'get tough' on crime by increasing punishment will not reduce recidivism, and that this holds for all categories of offenders. These findings are in line with previous research (Lipsey 1992).

The fear of violence in itself is also a source of concern for society. A sample of EU citizens found 24% to 30% saying they are afraid of becoming a victim of crime within the next year (European Commission-Directorate-General Press and Communication 2003), with 29% estimating that they will become a victim of a property crime and 24% that they will become a victim of a robbery or personal assault. Although it seems counter-intuitive, research consistently finds only a weak relationship between the probability of becoming a victim of crime and fear of crime (European Commission-Directorate-General Press and Communication 2003).

Increasingly, the feelings of insecurity and estimations of the likelihood of being victimized are being interpreted by politicians as signs that citizens have a strong desire to "get tough on crime." Some support is present for this interpretation: 62% of the EU citizens agree with the statement that 'tougher sentences' would deter crime. However, EU citizens appear to have more differentiation in their judgment than politicians give them credit for. Overall, many Europeans believe that young people can be deterred from committing crimes more by means of crime prevention programs (85%) than by means of tougher sentencing policy (62%) (European Commission-Directorate-General Press and Communication 2003). More specifically, EU citizens believe that young people are led into crime by poverty or unemployment (81%) and that they would commit less crime if they were taught better discipline (78%) or if they were better educated (67%), (European Commission-Directorate-General Press and Communication 2003). Interestingly, although opinions on prevention and reactions to crime vary widely by country, support for prevention is universally high, usually more than 80%.

Given the importance of the problem of violence and the absence of an adequate cure, a major issue becomes: could more be done in terms of prevention? Elsewhere in this issue (Junger, Côté and Tremblay) we discuss what might constitute a sensible policy to prevent physical aggression and its epiphenomena. Seven types of interventions to prevent physical aggression are explored: (1) promote physical health of mother and child, (2) increase income, (3) increase access to existing services, (4) improve home visiting, in particular the Nurse-Family partnership, (5) childcare, (6) preschool and (7) improve parenting. It is

concluded that several policies should be developed further: promote the physical health of mother and child, introduce home visiting through the nurse-family partnership, increase the use of childcare, introduce quality preschool programs (such as the High/Scope Perry curriculum), and improve parenting skills (e.g., parent-child interaction therapy). Some present policies probably do not have an impact on physical aggression. So, for instance, increasing family income has not, by itself, been found to help prevent the occurrence of physical aggression. Experiments in the US found that employment-based welfare programs combined with income supplements had only a small impact on children's social development. Nor has increasing access to existing services helped, probably due in part to the variable quality of most of these services. What the research indicates most consistently, though, is the need for more experimental evidence to guide policy decisions.

The question in the present article is: Are our governments taking the measures that are supported by the best scientific evidence available? Below we present a brief review of the situation in seven different countries.

Australia

What are We Doing?

Australia is a federation of six states and two territories, with responsibility being located at the state or territory level for major services such as criminal justice and health. Federal government initiatives with respect to violence prevention include the statistics, reports, and crime prevention toolkits published by the Australian Institute of Criminology, which are a major national resource. In addition, the federal government supports enquiries and reports examining emerging national priority areas such as violence in indigenous communities (Memmott et al. 2001), as well as research and demonstration projects. The National Community Crime Prevention Program is a new "flagship program" launched in 2004 focusing on how to increase the ability of Australian communities to recognize local crime problems and to pursue effective, locally organized, crime prevention initiatives.

Given Australia's federal structure, it is not possible to speak with any authority about "Australian violence prevention policies." The situation across the country is highly variable, changes frequently, and is rather difficult to summarize. It is possible to state with some confidence that although there are moves toward evidence-based policies at the state and federal levels, at present even the most impressive examples reflect an "evidence-informed" approach, with ideology, fiscal realities, and political priorities being the dominant influences.

There are many areas of focus within violence prevention strategies in Australia, including violence in and around licensed venues (Stockwell 1994) and bullying in schools (Rigby 2003). However, the current discussion is limited to the following key priority areas:

1. preventing violence in remote indigenous communities,
2. preventing family violence including domestic violence and child abuse and neglect, and
3. promoting pro-social developmental pathways.

1. Preventing violence in remote indigenous communities remains a key policy priority. Among the many aspects of violence and victimization in this context, intimate partner violence and sexual violence including child sexual abuse are especially important. Numerous reports, anti-violence campaigns, and government inquiries have highlighted alarming levels of violence in many indigenous communities (Blagg et al. 2000;

Memmott et al. 2001). The only prevention strategies that have so far showed any promise involve genuine local community empowerment (Homel 2001).

2. Australian research has begun to clarify the links between domestic violence and child neglect and abuse (Tomison 1995). The National Forum on Domestic Violence Programs (Attorney General's Department 1999) highlighted the need to align domestic violence policy across Australia to provide a more effective response to domestic violence. A number of developments in this area have occurred, including state-wide policy coordination, the development of regional and local area committees, as well as alternative regional structures. Further policy responses have stemmed from a consultant's report (Keys Young 1998), which identified the need for the systematic delivery of domestic violence perpetrator programs, and from a Queensland Crime and Misconduct Commission (Crime and Misconduct Commission Queensland 2005) report that promoted a series of improved practices for police responses to domestic violence. Related policy developments include a move toward specialist police teams responding to domestic violence as part of integrated, cross-agency responses.

Child protection has become a major policy priority in the past 20 years. Stemming from an article published by Kempe et al. (1962) recognizing societies' denial of child physical abuse and neglect, focus has shifted from child sexual assault in the 1980s to more recent issues regarding system abuse (harm done in the context of policies or programs designed to provide care and protection (Cashmore et al. 1994). Recent policies have also begun to recognize issues regarding the abuse of children in institutional settings, abuse by those in a position of trust, emotional abuse, pedophilia, child pornography, child prostitution and ritual and satanic abuse of children (James 2000). Responses vary greatly across states, but mandatory reporting of abuse, which is not based on any evidence of effectiveness, is a common feature (Bromfield and Higgins 2005). There is currently no strategy for developing evidence-based primary prevention programs at the population level (Tomison 2002).

3. Promoting pro-social developmental pathways that minimize violent offending and physical aggression is an important policy focus. The federal government's new Families and Community Strategy (Australian Government 2004) has invested considerable resources into family and community services aimed at prevention and early intervention in disadvantaged areas. Strategies involve empowering communities to "develop local solutions to local problems," including early childhood, parenting skills, relationship skills, mentoring and leadership, community building and volunteering programs. These initiatives are based partly on extensive research carried out for the federal government by the Developmental Crime Prevention Consortium (1999).

How Did We Get There?

As a broad generalization, violence prevention policies and programs in Australia arise from public enquiries and reports occasioned by public concern about specific problems, such as gun massacres, the abuse of children, alcohol-related violence around nightclubs or hotels, or the appalling conditions in many indigenous communities.

The National Committee on Violence set up by the federal government in 1987 is a good example. Its establishment followed the deaths of 16 people and the wounding of 22 more

in two massacres by lone gunmen in the streets of Melbourne earlier that year. The Committee's report (National Committee on Violence 1987) was wide-ranging, identifying the need for a focus on the problem areas discussed in "What are we doing?" and many others. Their emphasis on the central role of family processes in facilitating aggression and violence both within families and in other contexts has been maintained in Australia, particularly through programs addressing the needs of disadvantaged families and communities (Australian Government 2004; Homel et al. 2006). The Committee's identification of the pervasive role of alcohol as a factor in violence, whether in domestic or public settings, has also influenced subsequent initiatives in many states, most notably the Alcohol Summit in New South Wales (New South Wales Government 2004).

Does it Work?

Specific prevention programs developed in university settings have been carefully evaluated and shown to be effective. For example, Triple-P is effective in reducing child behavior problems (Zubrick et al. 2005), while the Community Safety Action Model developed by Homel and his colleagues (Homel et al. 2001) has been demonstrated to reduce alcohol-related aggression and violence in city entertainment areas. Most government programs have not, however, been rigorously evaluated.

At a national level violence in the 1990s was either stable or increasing, depending on which measure one uses (Indermaur 1996). Both hospital and police data on assaults show that overall levels of alcohol-related violence did not decline in the 1990s, despite community concern, the proliferation of Alcohol Accords, and the introduction of harm reduction strategies into legislation (Matthews et al. 2002). Self-reports of victimization for assault remain stubbornly high in Australia by international standards, although rates declined between 2000 and 2004 (Johnson 2005).

What Could We Do?

One clear theme involves the increasing expectations from both the media and the wider community for government policies and programs to be both effective and accountable. Unfortunately, most programs are reactive rather than preventive, only lip service is paid to evidence, and there is very little investment in rigorous evaluation. There is an urgent need for well-designed randomized and quasi-experimental evaluations that combine in-depth qualitative data with comprehensive, longitudinal quantitative outcome measures.

Coordinated service delivery represents an additional challenge. While there are some positive examples, especially in relation to multi-disciplinary case planning for child protection, in the main, effective coordination does not occur between levels of government and across portfolios.

Why Don't We Do It?

A range of factors account for the difficulties in institutionalizing an evidence-based approach to violence prevention in Australia. As in other countries the pull of ideologically or crisis-driven policy development is still strong, despite pressure to implement long term, evidence-led approaches. At best there is a commitment to evidence-informed approaches in some governmental sectors.

Specific challenges include the scepticism that many government policy advisors have toward non-Australian research evidence. The consequences of such attitudes are magnified

by the lack of a real commitment to program evaluation in any systematic or comprehensive sense and the general lack of funding for sophisticated experimental and quasi-experimental research in the social sciences and human services.

Canada

Public policies in Canada relevant for preventing physical aggression range across the life course (prenatal through adulthood), policy sectors (health, education, social services, justice), and government jurisdictions (federal, provincial/territorial, local). Below is a brief overview with selected examples.

What are We Currently Doing Across Canada?

Policy Since the 1990s, Canada has been developing a National Children's Agenda (prenatal-18 years), beginning with early childhood development (ECD, i.e., under age 6 years). In 2000, an historic agreement of First Ministers representing federal, provincial, and territorial governments prioritized ECD, and included $500 million in annual federal transfers for the ten provincial and three territorial governments to enhance their own multimillion dollar investments in four policy areas: pregnancy, birth, and infancy (e.g., home visiting, prevention of fetal alcohol spectrum disorder); parenting and family supports (e.g., parent training, family resource centers); early childhood development, learning and care (e.g., child care, early language and literacy programs); and community supports (e.g., community coalitions) delivered through systems under provincial/territorial jurisdiction (health, education, and social services).

Preventing school-age bullying and preventing youth crime remain policy priorities. For example, several provincial governments have recently begun implementing Roots of Empathy (Gordon 2005), a new school-based program (developed in Canada) for promoting prosocial behavior and preventing physical aggression. The 2006 federal budget committed $20 million to Canada's longstanding National Crime Prevention Center (NCPC) for youth crime prevention focusing on guns, gangs, and drugs. It is unclear whether these funds will focus on the developmental origins of youth crime in early childhood. Canada's 2006 election of a Conservative federal government, after over a decade of Liberal government, augured more "get tough on crime" policies and abandoned plans for a national early childhood education system, despite evidence that "safe streets could ... start with quality early education" (Tremblay 2000, p. 19).

Research In 1994, Canada's first-ever National Longitudinal Survey of Children and Youth (NLSCY) (Human Resources Development Canada and Statistics Canada 1996) began collecting nationwide data on children's development, including their physical aggression. In 1998, Health Canada launched the Canadian Incidence Study of Reported Child Abuse and Neglect (Trocmé et al. 2005), providing the first nationwide data on physical aggression against children. In 2006, Statistics Canada launched the Aboriginal Children's Survey, which will provide the first nationwide data on physical aggression in First Nations, Métis, and Inuit children under age 6 years (all three groups are underrepresented in the NLSCY).

Research-Policy Integration From 1999–2001, new national initiatives began to synthesize and link research to policy, including Health Canada's Centre of Excellence for Early

Childhood Development and Centre of Excellence for Child Welfare, Human Resources and Social Development Canada's Understanding the Early Years initiative, and Industry Canada and the Tri-Council's first social science Networks of Centres of Excellence (NCE) program, the Canadian Language and Literacy Research Network. In 2006, a new NCE was established, the Promoting Relationships and Eliminating Violence Network, and a new Institute for the Prevention of Crime, funded by the NCPC, was established at the University of Ottawa.

How Did We Get There?

The foregoing built on several milestones in the 1970s and 1980s, including (1) paradigm-shifting federal policy papers on the determinants of health (Epp 1986; Lalonde 1974), (2) pathbreaking longitudinal studies in Québec (Tremblay et al. 2003), and (3) a pioneering epidemiological study of children's mental health in Ontario (Offord et al. 1987). Current policies followed a convergence of several forces in the 1990s, including (1) skyrocketing public expenditures in tertiary health care, special education, child welfare, and criminal justice; (2) evidence-based movements in human services; (3) public attention to the importance of ECD, led by Dr. Fraser Mustard, including the landmark *Early Years Study* in Ontario (McCain and Mustard 1999); and (4) leading-edge science focusing on human development and population health, e.g., Canadian Institute of Advanced Research (Keating and Hertzman 1999). It became clear that Canada needed a "best policy mix" of universal, targeted, and clinical interventions (Offord et al. 1999) with an emphasis on prevention, given that no major public health problem has ever been reversed through clinical services alone (Offord and Bennett 2002) and greater public investments in ECD from "neurons to neighborhoods" (Shonkoff and Phillips 2000).

Does It Work?

Most early childhood (Shonkoff and Phillips 2000) and school-based (Wilson et al. 2003) programs for preventing aggression with systematic evaluation have been model or demonstration programs; their real-world effectiveness is largely unknown, and those in Canada are no exception. Some examples of evidence-based programs implemented in Canadian provinces include the Incredible Years (Webster-Stratton and Reid 2003) in British Columbia and Ontario; the Triple P-Positive Parenting Program (Sanders et al. 2002) in Manitoba (province-wide) and in selected British Columbia, Alberta, and Ontario communities; and Multisystemic Therapy (MST) (Henggeler et al. 1998) in Ontario. Further, some include rigorous evaluation designs (e.g., a randomized controlled trial of MST in Ontario, funded by the NCPC). Randomized effectiveness trials of the popular, but largely unevaluated, Roots of Empathy program are currently underway in Manitoba and British Columbia.

Across the provinces, NLSCY data indicate that the prevalence of high physical aggression in children under age 6 years remained steady (around 10%) from 1998 to 2002, and subsequent data can help measure proximal impacts of ECD policy efforts since 2000. However, more rigorous evaluation, much less a minimal evidence base, is frequently absent. Thus, many remain critical of Canada's record at integrating research and practice for children (McLennan et al. 2004).

In 2005, the national crime rate continued to decline, primarily due to decreased non-violent offences. In contrast, attempted murders, aggravated assault, and assaults with a

weapon all increased, with homicide rising to a level unseen in almost a decade (Statistics Canada 2006, July 20). Canada's youth crime rate (ages 12–17 years) declined through the 1990s, increased from 1999–2003, and declined again in recent years. However, in 2005, the rate of youth accused of homicide was at its highest in over a decade (Statistics Canada 2006, July 20).

What Should We Do?

No single sector alone can effectively prevent physical aggression. Cross-sectoral government structures such as Manitoba's Healthy Child Committee of Cabinet, the only standing Cabinet committee in Canada dedicated to the well-being of children and youth (Health Council of Canada 2006; Sale and Santos 2002), working with cross-sectoral scientific, service, and community structures, appear to be essential. After early childhood, another worthy prevention focus is the gap between the increasing need for sensation and rewards during early adolescence and the more gradually developing self-regulatory abilities that continue to grow until late adolescence (Spear 2000; Steinberg 2004).

Governments should use more rigorous standards of evidence (Flay et al. 2005) when selecting programs, conduct longitudinal studies to evaluate their effectiveness, and embed experiments therein to test policy innovations (and underlying theories) (Shadish 2002) to bridge four research-policy gaps (McLennan et al. 2006): (1) failing to implement effective programs and implementing programs that are (2) demonstrably harmful (Rhule 2005), (3) demonstrably ineffective, or (4) unevaluated.

Other recent evidence can help Canadian policymakers better address sex differences and intergenerational transmission, including aggressive girls, particularly those who become mothers (Serbin et al. 2004). More rigorous evidence is needed to improve policies serving the many cultures of Canada, particularly its Aboriginal peoples, and those living in rural, northern, and remote communities.

Why Don't We Do It?

Governments are continually beset by urgent crises and constrained by financial shortfalls. Incentives for short-term, crisis-driven, remediation-focused policies abound. Uncommon is the government that effectively manages the foregoing without losing sight of longer-term, evidence-driven, prevention-focused policies across the life course and across generations. Failures to implement evidence-based policies reflect cultural differences between science, policy, and practice (Shonkoff and Phillips 2000), and are arguably attributable to the dearth or absence of four essential ingredients: Political will for culture change in government and community, a public that demands evidence-based policies from its governments, an inside engine for change within government, and sufficient financial, human, and knowledge resources. These are prerequisites for preventing physical aggression at a population level in Canada.

Germany

What are We Doing in Germany?

Violence occurs in many different contexts and various government bodies are involved in its prevention, e.g., ministries for family and youth, social welfare, education, health, the

interior, and justice. Because of Germany's federal structure the situation is particularly complex. On the one hand, there are nationwide legal regulations such as the Act against Violence in Child Education enacted in 2000. On the other hand, the 16 federal states are relatively autonomous in deciding which kinds of programs to implement and how much to invest in them. In addition, many violence prevention activities are carried out by local social services and by the Christian churches. As a consequence, no integrated system of violence prevention exists in Germany. However, various institutions aim to provide at least some coordination. On the national level, there is the German Forum on Crime Prevention ("Deutsches Forum für Kriminalprävention"; see http://www.kriminalpraevention.de), several states have founded Councils for Crime Prevention, and many communities have established so-called round tables against violence. More specifically, the Federal Ministry for Family Affairs has initiated a nationwide program of local alliances for families (see http://www.lokale-buendnisse-fuer-familie.de). A federal program on early risk detection is also currently being planned.

In the field of developmental prevention, Germany provides a wide range of activities. At the family level numerous implementations of positive parenting programs exist, such as "Starke Eltern-Starke Kinder" (Strong Parents-Strong Children), Triple-P, "EFFEKT" (Development Promotion in Families), the Gordon Family Training, or the Opstapje home visit program. Loosely structured mother-child groups, pre-birth and other courses on child development are more frequently found. These programs are offered universally to all parents or targeted to specific risk groups. Although most programs are not specifically geared towards violence prevention, they often will have an indirect impact upon it. According to a survey for the German Federal Ministry for Family Affairs, up to 2 million parents participate annually in some form of family education (Lösel et al. 2006). In addition, there are numerous offers of case-oriented family counseling and therapy from about 4,500 counseling centers and thousands of private practices of psychologists and psychiatrists.

In the pre-school and school contexts German researchers have adapted child social skills training programs such as Second Step (Cierpka 2001) or "I can problem solve" (Lösel et al. 2006). Mediator programs with trained fellow students as conflict moderators are particularly common. Other measures address teachers' behavior or contain more complex, multi-level approaches (Lösel and Bliesener 1999).

In cases where serious antisocial child behavior and/or care deficits in the family have already developed, there are numerous measures to prevent their escalation (Bender and Lösel 2006). Social services offer ambulatory measures including counseling, supervision, and therapy.

In the field of juvenile justice, as in other countries, there is a current debate on "getting tough" on juvenile crime. However, in practice the system seems quite stable and frequently applies social training courses, measures of retribution and community work with a preventive aim.

How Did We Get There?

In the late 1980s the Federal Government appointed an independent commission to work on the origins, prevention, and control of violence. Their report addressed violence in the family, at school, in sports (e.g., football hooliganism), in public places, and politically motivated violence (Schwind et al. 1990). The commission made numerous recommendations for prevention and control of violence as well as for research on evidence-based policies to prevent violence. A number of recommendations were realized in the longer term. During the 1990s there was also a substantial increase in research on domestic

violence, violence at school, xenophobic violence, sexual offending, and related topics. As proposed in 1990, the Federal Government started to publish periodical reports on inner security (Federal Ministry of the Interior and Federal Ministry of Justice 2001). The first report focused on juvenile violence because police statistics showed that it was increasing during the 1990s.

Scientific arguments have had only limited impact on policy development. Policy and research funding has clearly been triggered by sensational events that have been widely publicized by the media. These were very serious acts of violence against foreigners, incidents of sexual abuse and murder of children, and shootings of school students (with 17 deaths in the most extreme case including the suicidal offender).

Does It Work?

Because political action is often short-term oriented, there is a lack of systematic, coordinated and long-term policy and research. For example, in the 1990s the Federal Government funded an Action Plan against Aggression and Violence that included approximately 140 projects for young people. Not one of these projects included a controlled outcome evaluation. The same holds true for other fields of violence prevention. There are a few evaluations of programs against school bullying (Hanewinkel and Knaack 1999). Some effects are encouraging, but based on relatively weak designs. In a systematic review of 84 randomized experiments on child social skills trainings (Lösel and Beelmann 2003), only one study was conducted in Germany. Recently, the situation seems to be slowly improving. At least a few newer studies use randomized or other sound designs (Lösel et al. 2006). In a universal prevention project, Heinrichs et al. (2006) evaluated TRIPLE-P for parents of pre-school children. They found significant positive effects on parenting and child behavior immediately after the training and 1 year following program completion. However, in spite of group-wise randomization, the experimental and control groups were not equivalent. Lösel et al. (2006) evaluated a multi-component program (EFFEKT) that includes a parent training of positive parenting and a child training on social problem solving. There were significant positive effects on child behavior 2–3 months after program completion. The combination of parent and child programs revealed the greatest effects, with highly problematic families appearing to have benefited the most. An analysis of school report cards 2 years later showed a reduction in the number of children with multiple problems in the experimental versus the control children.

In a systematic review of parent- and family-oriented prevention programs, Lösel et al. (2006) found 27 German studies with control group designs. The majority of these evaluations addressed manual-based parent training programs aimed at high-risk groups. Only four studies used a random or matched group design. In six studies with incidental assignment it could be demonstrated that treatment and control groups were largely comparable on a number of variables. No controlled evaluations addressed the loosely structured universal parent-child groups that are most popular in practice. Overall, the outcomes of the meta-analysis were positive. Effects were greater in parent measures (e.g., parenting behavior or attitudes) than in child-oriented measures (e.g., ratings of problem behavior). The design quality of the studies was mostly poor (non-equivalent control groups) and methodological factors had a strong impact on outcomes: Studies with larger samples, stronger research designs, longer follow-up times and behavioral measures as an outcome showed lesser effects. However, program characteristics were also important: Well-structured, relatively intensive and risk-focused programs containing practical exercises demonstrated particular promise.

What Could We or Should We Do?

Many recommendations for improving prevention have already been formulated by the anti-violence commission (Schwind et al. 1990) and in the first report on crime and crime control (Federal Ministry of the Interior and Federal Ministry of Justice 2001). More specific proposals have addressed school- and family-oriented programs (Lösel 2004; Lösel et al. 2006).

In general, Germany needs to develop an evidence-based, long-term, multi-level, and integrated policy of violence prevention. This requires an increase in using methodologically rigorous and practically relevant evaluations of the process, effectiveness, and cost-benefit of specific programs. Evaluations should no longer be limited to model projects, but should address routine delivery. To promote such research, a proportion of program funding needs to be reserved for evaluation. The empirical findings should be transferred to quality management and systematic procedures of program accreditation.

To form a coherent policy, the many programs provided by different institutions must be coordinated and integrated. Programs need to reach the target groups who are most in need, to achieve cumulative effects, and to make the best use of resources. Although the risk of running into counterproductive bureaucracy is always present, violence prevention requires the coordination of institutions at national, state, and community levels. As mentioned, Germany has already established a national forum on crime prevention, state councils on prevention, so-called round tables against violence and alliances for the family in communities. However, these initiatives have minimal resources, and they are not sufficiently dedicated to an evidence-based approach. The development of concrete guidelines for quality assurance by such coordinating bodies (Landespräventionsrat Nordrhein-Westfalen 2004) has only recently begun and remains the exception.

Why Don't We Do It?

Many factors work against an integrated and evidence-based prevention policy in Germany. First, each federal state is able to form its own policy. Second, violence prevention relates to different governmental departments both at the national and federal level. Third, in comparison to North America, Germany is generally less advanced in the use of a(n) (quasi-) experimental approach to policy making. Fourth, many institutions and practitioners show resistance towards controlled quantitative evaluations (e.g., because of preferences for qualitative methods, underestimation of positive outcomes, or fear of negative consequences for their own program). A fifth obstacle is financial. The development of an evidence-based prevention policy requires substantial investments in both practice and research but economic problems in Germany have led to serious budgetary cuts in various areas of prevention (Lösel et al. 2006). However, successful programs have demonstrated long-term financial benefits (Welsh et al. 2001). Therefore, a differentiated, evidence-based investment seems more rational than such short-sighted reductions.

The Netherlands

What are We Doing in The Netherlands?

Physical aggression is not in itself subject to a specific policy in the Netherlands. At least five ministries deal with matters that are closely or remotely related to the field of the

prevention of violent behavior: Health, Justice, Education, Internal Affairs and Social Affairs. The public health, with its preventive role, functions within each of the Netherlands' 483 municipalities. But indicated youth care is presently the responsibility of 12 provincial authorities. Below a number of trends are described in these fields.

The Netherlands have become more punitive in recent years. Many different indicators of sentencing draw a similar picture: over the last decade more persons are being punished with many receiving longer or heavier punishments (Wang et al. 2005). This is remarkable because the periodic victim surveys show that the crime rate has been stable during this same time period (Wittebrood and Nieuwbeerta 2006).

Only recently, problem behaviors, parenting problems and problems in education have been viewed as possible precursors of adult criminal and violent behavior and thus the responsibility of the Ministry of Health and the Ministry of Education. The government intends to execute various policy lines in order to develop a preventive policy to deal with behavioral problems in children (Ministerie van Volksgezondheid Welzijn en Sport 2006). The Ministry of Health intends to develop one central organization per community, a Center for Youth and Family, which will coordinate every (mental) health aspect of children and families within the community. To improve coordination, the Ministry will set up an electronic file for every child. Additionally, a financial impulse has been allocated to alleviate waiting lists for indicated help in the childcare and youth-care systems. Finally, the Ministry asked a committee to propose evidence-based interventions that could be implemented in the Netherlands in order to prevent behavior problems (Inventgroep 2005).

The Ministry of Education has launched a number of comprehensive programs that support the prevention and treatment of behavioral and psychosocial problems of children. The most relevant examples are the programs to stimulate the development of children in deprived homes (Ministerie van OCW 2006), to prevent school drop-out (Ministerie van OCW 2005a, 2006), and to improve facilities for children with behavioral and psychosocial problems (Ministerie van OCW 2005b).

Finally, the Dutch government has started programs that are aimed at integrating youth policy making. Examples are the 'Veiligheidsprogramma' (National Safety Program, see http://www.veiligheidsprogramma.nl), 'Operatie Jong' (Operation Young, see http://www.operatiejong.nl), and programs fighting school drop out, see http://www.voortijdigschoolverlaten.nl). Integrated policy making clearly is on the agenda.

How Did We Get There?

Increasingly, evidence-based intervention is becoming the norm. The Justice Department has installed a committee for the accreditation of promising evidence-based programs for the prevention and treatment of juvenile delinquency. The Ministries of Health and Education are planning to install similar committees for the accreditation of mental health and educational programs. In addition, new financial resources are becoming available for research on the efficacy of interventions (Ministerie van Volksgezondheid Welzijn en Sport 2005). In the future, ministries will probably support only evidence-based interventions, which may have a strong impact on which programs will be selected by local government (Minister van Volksgezondheid Welzijn en Sport Clemence Ross-van Dorp 15 march 2006).

Does It Work?

Will we succeed in implementing evidence-based interventions? It is too soon to be able to answer this question for the Netherlands. Four dangers emerge which might hamper the

process. (1) An organizational trend. The central government has been decentralizing and transferring a number of tasks (but not all) towards local government. The question is whether local authorities will be able to set up an organizational structure that effectively supports the implementation of evidence-based interventions. (2) Integration of services. There are no operationalized targets and performance indicators that show whether or not evidence-based programs are truly leading to integrated policy making. The success of these programs is only defined in terms of outcome of the activities (e.g., the number of children that do not drop out of school), and not in terms of, for example, a simplified process of decision making or the reduction of involved civil servants. (3) Financial issues. Many policies seem to be guided by a sense of urgency often in combination with periodic crises leading to media attention. Prevention is usually not 'urgent.' The result is that money tends to go to the end of the health system: institutions and indicated help, instead of universal or selective prevention. (4) The weakening of the 'evidence-based' concept. In the field of prevention and treatment of violent behavior, there are few randomized controlled trials (RCTs) available. In view of this situation, accredited interventions that are theoretically sound but have yet an insufficient empirical basis for the 'evidence-based' status have been labeled 'promising' (Ministerie van Justitie 2006) (see also http://www.jeugdinterventies.nl). Even under this condition, only a handful of programs pass the selection. The danger is that, as a result of the lack of RCTs, the term 'evidence-based intervention' is at risk of losing its meaning.

What Could We Do?

A few issues should receive more attention.

- The financial input for prevention is relatively modest. Stronger financial inputs might help.
- It is clear that the label 'evidence-based' means different things to different people. Strict criteria for evidence-based work should be formulated.
- The organizational structure of all the institutions with responsibility for children remains rather complicated with its accompanying problems of coordination of child and family support. Some efforts have been aimed at restructuring the bureaucracy. The integration of services into a single, coordinating institution for child development should receive more attention. For example, the age for compulsory education could be lowered in order to include preschool and/or childcare. However, this is a politically sensitive issue.

Why Don't We Do It?

There are several problems that affect rational decision-making.

- Cultural and political issues. Intervening before 'anything happens' in the life of families is something that all governments in the Netherlands have been very reluctant to do. Our religious tradition believes strongly in the value of blood-bonds between parents and children and the assumption that children are-by definition-always better off with their biological parents. This religious basis has created a strong societal movement that typically allows only minimal intervention in family life.
- The 'sense of urgency' to many politicians: The urgency of problems and crises getting media attention often guide the allocation of resources. Expectations about

the mental health outcomes of toddlers in 20 years do not seem to be paramount in the minds of decision makers.
- Financial issues. Although one might argue that the key to prevention is moving money from the back of the system (care for older children) to the front of the system (care for pregnant women), most of us will argue that more prevention needs more money.
- Diffusion of responsibilities. Problems affecting the competencies of different ministries and central versus local authorities are present everywhere. A policy maker usually does not close down his/her department for the sake of integrating services. This creates problems of coordination over and above those usually occurring for just cooperating with different services.

Spain

What are We Doing Currently in Spain?

In the field of juvenile violence, several areas are the main focus of concern of Spanish politicians: school violence and bullying, juvenile delinquency and violence committed by children towards their parents. The statistics show that these forms of violence have increased during recent years (Garrido 2005a; Rechea and Fernández Molina 2006). These figures show an increased seriousness in juvenile violence for several type of offences (violent robbery and homicide) and the rise of gang-related delinquency, due to the Latin *maras* (*migration*) coming from South America.

Most of the measures taken by the central and regional governments in relation to juvenile delinquency have been legal responses. For example, the current Juvenile Crime Act of 2000 increased on two separate occasions the severity of the penal measures in a period of 5 years, in response to feelings that the law was being "soft" on juveniles when compared to the punishments provided in the Penal Code for adult criminals. In spite of the fact that the Juvenile Crime Act stresses an approach based in community intervention, most of the efforts have taken the form of building new residential facilities to deal with habitual and serious recidivists.

In relation to school violence an overall preventive approach is clearly visible, but efforts are limited to classroom experiments funded by regional governments without a strong economic and political commitment. In addition, these experiments are poorly evaluated (Rechea and Fernández Molina 2006).

There is no initiative taken by the health system in Spain in order to deal with the precursors of juvenile aggression, in spite of diverse requests made by medical specialists for preventing attention deficit disorder and hyperactivity, a clear marker of future juvenile violence (Raine 2002).

How Did We Get There?

Crime and delinquency rates in Spain used to be low, compared with other countries in Europe and, of course, the United States (Garrido et al. 2001). However, some recent and dramatic changes have transformed the Spanish reality during recent years. Perhaps as a consequence, most of the measures taken have not looked for long-term preventive results, but short-term ones. Several factors have contributed to this change. (1) The rapid rise in the numbers of prisoners in the last 5 years; (2) the immigration laws that have opened the

Spanish frontiers to many workers coming from Africa, South America and East European countries, which have caused alarm among citizens regarding increased petty and street offences, as well as non-traditional crimes in Spain such as violent burglaries and hold-ups, and gun homicides related to drug trafficking and control of the drug market; (3) and-as previously mentioned-the rapid expansion of juvenile gangs, which implies a fight culture with very structured rules (e.g., the Latin Kings and the 'Ñetas'). Other broad cultural factors cannot be forgotten, such as the deficiencies shown by the socialization process of the family and the school, unanimously considered as very permissive, a development supported by the increasing number of broken homes and single mothers. Some outcomes from these processes are a high rate of school failure and the increasing participation of 'middle class' youths in juvenile offending and violent acts at home and school (Garrido 2005a,b).

The result of these developments is that Spain does not have a preventive structured policy regarding juvenile violence. There is not a central facility with the aim to study and support the implementation of programs oriented to prevent juvenile delinquency, nor a global policy, nor a public health perspective as a way to conceptualize and coordinate the various efforts that should be taken from several branches (justice, education, social services, health).

Does it Work?

As mentioned, we do not have appreciable literature of an evidence-based perspective on crime prevention as an alternative to the usual criminal policy, which often disregards conclusions based on scientific evidence. This state of the art, which is probably similar to many countries, is especially true with respect to Spain (Garrido et al. 2006).

What Could We or Should We Do?

Three actions are urgent. In the first place it is necessary to create a central facility that originates, coordinates, supports and expands (if effective) a few important lines of research oriented to prevention. For example, some programs designed to prevent school violence and bullying have been established in a few Spanish regions (Andalusia, Catalonia), but it will be difficult for their results to influence and to spread to other regions. Second, both universities and politicians have to agree to support the evidence-based perspective on crime prevention and to establish clear principles in order to exhort practitioners and researchers to work under these premises. Third, it is urgent that an independent financial resource be created to support these tasks, which are, according to the law, the responsibility of the regional governments.

Why Don't We Do It?

The current focus of preventive actions in Spain is based on a general and rather diffuse idea of primary prevention, which can be described in the following way: the most important goal of policymakers is to develop the necessary social conditions to achieve more equality in order to make the committing crimes 'unnecessary' (Rechea and Fernández Molina 2006). Although this political goal is a valuable one, more than 100 years of scientific criminology show that we need policies that are more focused and more specific. In short, there remains a lot to be done in terms of program development and evaluation. But more is needed: we need to understand that crime prevention should be

based on evidence-based violence and delinquency prevention, which is, itself, sustained by a whole coordinated education/justice/health/community primary prevention network.

The United Kingdom

In general, UK government prevention policies have not specifically targeted physical aggression, but have targeted related types of acts such as delinquency or antisocial behavior. Most recently (September 2006), the government has announced an action plan for "social exclusion," which is a general concept including antisocial behavior, teenage pregnancy, educational failure, and mental health problems (Cabinet Office 2006). Since physical aggression tends to be associated with all these other types of social problems (Farrington 2006), any interventions that reduce these other types of problems are also likely to reduce physical aggression.

What Are We Currently Doing?

The action plan for social exclusion emphasizes early intervention, better coordination of agencies, and evidence-based practice [systematically identifying what works and rating evaluations according to methodological quality: see Farrington (2003)]. It proposes home visiting programs targeting at-risk children from birth to age 2, implemented by midwives and health visitors, inspired by the work of David Olds (Olds et al. 1998). It proposes that teenage pregnancy "hot spots" will be targeted with enhanced social and relationship education and better access to contraceptives. It proposes multi-agency and family-based approaches to tackle behavioral and mental health problems in childhood, including treatment foster care (Chamberlain and Reid 1998) and multisystemic therapy (Henggeler et al. 1998). It also proposes interventions for adults with chaotic lives, mental health problems and multiple needs to try to get more of them into employment.

How Did We Get There?

Since the mid-1990s, there has been increasing emphasis on early intervention and evidence-based practice (Sutton et al. 2004, 2006). In 1995 Child and Adolescent Mental Health (CAMHS) teams were established in every part of the country to provide support for children and young people who were experiencing a range of emotional and behavioral difficulties. The services fall within the remit of the Department of Health, and practitioners typically employ a wide range of theoretical approaches.

The major government initiative for preschool children is called Sure Start (http://www.surestart.gov.uk). The first Sure Start centers were established in 1999 in disadvantaged areas, and there are now over 800 Sure Start programs in the UK. These centers provide early education and parenting programs, integrated with extended childcare, health and family support services. The services are supposed to be evidence-based. Widely used parenting programs include The Incredible Years (Webster-Stratton 2000), Triple-P (Sanders et al. 2000), and Strengthening Families, Strengthening Communities (Steele et al. 1999). A National Academy for Parenting Professionals has been established.

Sure Start programs are currently being developed into Children's Centers to cover every part of the UK. Typically, these will be service hubs, offering and coordinating information to support children and their parents. One of their implicit objectives is to reduce conduct disorder and aggressiveness among young children through the provision of parenting

programs. The centers also contribute to the strategic objectives of Every Child Matters, the major government policy document (Chief Secretary to the Treasury 2003; http://www.everychildmatters.gov.uk). This applies to all children from birth to age 19 and aims to improve educational achievement and reduce the levels of ill health, teenage pregnancy, abuse and neglect, crime and antisocial behavior.

In 1999 the Home Office supported a national initiative intended to prevent children's future antisocial or criminal behavior by working with children aged 8–13, together with their families. Projects entitled On Track were set up in 24 local authorities, and practitioners were required to employ a limited number of approaches to supporting families, including behavior management, promoting home-school liaison, play therapy and parenting packages. The Department for Education and Skills has now assumed responsibility for taking forward all work with children aged from 0–19. It has recently invited bids from 15 local authorities to provide parenting support focusing on children aged 8–13, requiring that those bidding for funding shall use one of the three parenting packages mentioned above.

Parenting orders can be given by courts to the parents or carers of young people who offend or are truant, or who have received a Child Safety Order, Antisocial Behavior Order or Sex Offender Order. The parenting order can be extended to 12 months. Parents or caregivers who receive Parenting Orders are required to attend counseling or guidance sessions to enable them to communicate better with their children and to manage their behavior more effectively. The approaches taught to parents are typically based on social learning theory, but there does not yet seem to be any wholesale adoption of specific evidence-based parenting programs.

Does It Work?

Many of the programs that are currently being used have been shown to be effective in reducing delinquent or antisocial behavior in high-quality American evaluations (Farrington and Welsh 2003). There have been few high-quality evaluations of early prevention programs in the UK (for examples, Gardner et al. (2006), Scott et al. (2001b)).

It is very difficult to evaluate large-scale national programs such as Sure Start. The main evaluation so far compared outcomes for 150 Sure Start areas and 50 non-Sure Start areas (Sure Start-to-be) by assessing a random sample of families with a 9-month-old or with a 3-year-old child in each locality (Melhuish et al. 2005). The results showed that, for 3-year-old children, among non-teenage mothers or families (86% of the total), the children showed greater social competence and had fewer behavior problems, and there was less bad parenting in the Sure Start areas than in the control group areas. However, among teenage mothers or families (14% of the sample), in the Sure Start areas the children showed less social competence, had lower verbal ability and had more behavior problems than in the control areas.

What Could or Should We Do?

Risk-focused prevention strategies should be implemented to reduce physical aggression, antisocial behavior, delinquency and associated social problems (Farrington 2007; Farrington and Welsh 2007). The aim should be to reduce risk factors and strengthen protective factors. Prospective longitudinal studies have identified key early risk factors such as impulsiveness, low school attainment, poor parental supervision and harsh or erratic parental discipline. Experimental studies (mostly conducted in the USA rather than the UK) show that these risk factors can be tackled successfully using effective prevention programs

such as cognitive-behavioral skills training, preschool intellectual enrichment programs, home visiting and parent training.

Existing agencies that have been set up to prevent crime in the UK lack knowledge and expertise. This is true, for example, of the Crime and Disorder Reduction Partnerships that have been established in every local authority. There is no national agency with the primary mandate of fostering and funding the early prevention of antisocial behavior. We recommend that the Swedish model for crime prevention with national and local crime prevention councils (Andersson 2005) should be established in the UK.

A national early prevention agency could provide technical assistance, skills and knowledge to local agencies in implementing prevention programs, could provide funding for such programs, and could ensure continuity, co-ordination and monitoring of local programs. It could provide training in prevention science for people in local agencies and could maintain high standards for evaluation research. It could act as a center for the discussion of how policy initiatives of different government agencies influence crime and associated social problems. It could set a national and local agenda for research and practice in the prevention of delinquency, physical aggression, drug and alcohol abuse, mental health problems and associated social problems. It could also maintain a computerized register of evaluation research and, like the National Institute of Health and Clinical Excellence, advise the government about effective and cost-effective crime prevention programs. Systematic reviews of the evaluation literature on the effectiveness of criminological interventions, possibly organized by the Campbell Collaboration (Farrington and Petrosino 2001), should be commissioned and funded by government agencies.

Why Don't We Do It?

In the UK, we need more prospective longitudinal surveys to establish key risk and protective factors and more randomized experiments to evaluate the effectiveness of prevention programs. We also need a new national agency to take charge of early prevention. All these things could happen if we could secure commitment and resources from our government!

The United States

What are We Currently Doing in The US?

The United States presently has no national policy on violence prevention due to several factors that are specific to its political system. Despite this, there is promise of change in the near future. For instance, there is a growing awareness among administrators, agency personnel, and researchers about the wisdom of an evidence-based approach to decision-making. But good evidence is dependent upon rigorous research. What is now emerging from these discussions are the procedures required to generate the level of evidence necessary to more definitively answer policy questions while simultaneously expanding the knowledge base (Feder and Boruch 2000).

One product of this has been the resurgence of experimental research within the social sciences (Oakley 1989). With this increased focus on experiments, a limited number of violence prevention strategies have been identified and tested, with some specific programs found to effectively intervene in lessening or halting a child's trajectory into violence. Much of this research has grown out of the awareness that certain variables, collectively known as

risk factors, lead to a higher likelihood of negative life outcomes. Some of the more popular and well-tested strategies, attempting to answer to these risk factors, are discussed below.

For instance, parent skills training programs have been implemented and are based on research indicating that problematic parenting is related to a child's antisocial behavior (Dumas 1997; Kazdin 1987). Teaching proper parenting skills should then lead to desirable behavioral changes in the child. Early education and pre-school programs, referred to as "educare" (Office of Juvenile Justice and Delinquency Prevention 1995), are widely used in the US. Educare seeks to deliver skill building and training (language development, cognitive training, behavioral control and academic or social development) to children who are at-risk to the extent that they may not be receiving adequate instruction in these skills at home (Loeber and Dishion 1983).

Another popular prevention strategy is the Home Visitation Program presently implemented in thousands of sites across the US (Gomby et al. 1999). Nurses, professionals or trained paraprofessionals deliver services to mothers-to-be or mothers of young children with the goal of improving the child's well being by positively affecting pregnancy outcomes and/or mother's child-rearing techniques (Byrd 1997). Finally, child skills training programs are based on research indicating that antisocial children perceive and respond to their world in a more hostile manner (Kazdin 1987). These skills training programs target the child's cognitive processes that are thought to underlie this maladaptive behavior as a way to counter this risk factor.

All of these strategies have had programs associated with them that have demonstrated successful outcomes when tested experimentally. However, all these strategies also have programs that have failed to show positive outcomes.

How Did We Get There?

Over the last decade, public attention has focussed on the issue of youth violence as a result of increases in recorded juvenile crime rates along with several high profile cases of school violence (U.S. Department of Health and Human Services 2001). Referred to by some as an "epidemic" (Cook and Laub 1998), it seems to have provided the necessary catalyst for policy-makers, administrators and researchers to look at ways of determining what works in violence prevention.

At the same time, several trends in research have coalesced leading to a new emphasis on evidence-based decision-making. Much of this has centered on the example provided by medical studies that have utilized rigorous scientific research (specifically using the randomized controlled trials) to establish rational and effective policies ("evidence-based medicine"). This approach has proved successful as medicine, during this time, has greatly expanded its control over life (Oakley 1989). Concurrently, some researchers have begun to view violence as a public health problem (Moore 1995; Welsh 2005; Zimring and Hawkins 1997). With this has come an influx of individuals who have a different perspective and training on the issue of violence. First, they tend to be more focused on prevention rather than having an almost exclusive focus on intervention. Additionally, their background in medical research means that they are more comfortable with clinical trials.

Aiding this transition has been the recent establishment of the Campbell Collaboration, formed to provide international systematic reviews of programs' effectiveness in the areas of criminal justice, education and social welfare and modeled after medicine's Cochrane Collaboration (Boruch et al. 2000). At the same time, other social scientists have taken steps towards providing systematic reviews of rigorous research for evidence-based decision-making (Mihalic et al. 2001; Sherman 2003). Finally, another impetus has come

from researchers sounding the alarm that even well-intentioned social science programs, like their medical counterparts, may have harmful effects (Dishion et al. 1999; Riecken and Boruch 1978). The result has been a growing awareness of the need to ensure that proposed programs do more good than harm.

All of these trends have led to the resurgence of experimental research and, with that, systematic reviews, so that policy-makers and administrators can access and understand what the best research indicates in terms of effective policies and programs.

Does It Work?

As evidence-based medicine has gained wide acceptance and strong government and professional support, it has become better able to solve the most pressing health problems of the day (Oakley 1989). It is this success which, in part, has motivated researchers in the social sciences to argue for rooting policies and programs firmly in the results from scientific research. At present, this argument seems to be gaining traction as more governmental agencies discuss "evidence-based" decision-making. However, even as some strides have been made towards increasing the utilization of proactive preventive approaches for dealing with violence, it is far from certain that the will of policymakers and the public will fully support this approach to this problem. The continuance of any momentum for this approach will be tied to evidence of its effectiveness (Sherman 2003).

What Could We or Should We Do?

There are a number of points to recommend a preventive approach to violence. Clearly, prevention programs must be put into practice more frequently. This can be facilitated through the clear identification of localized problems. Next there must be consideration of what the best practices are for dealing with these problems, which can be facilitated by accessing databases like the Campbell Collaboration. It is then important to ensure appropriate "technology transfer" of these programs. It is unlikely, even with programs that are found to be "blueprints" or "best practices," that a particular approach is going to be effective in every context in which it is implemented (Pawson and Tilley 1997). As a result, while core principles of effective programs must be maintained, some reasonable adaptations should be considered in implementing these best practices. Of course, this process is predicated on the availability of sound research, careful planning, and the necessary political and public will.

Why Don't We Do It?

Focusing on research, difficulties remain in identifying sturdy predictors/risk factors to facilitate secondary prevention efforts (i.e., appropriately targeting at-risk youth). The paradox identified by Robins (Robins 1978) in predicting long-term antisocial behavior from childhood behavior is salient [see Laub and Sampson (2003) as well].

In terms of planning, prevention efforts often stagnate because there are different notions of how best to deal with the problem of violence. For instance, justice officials are reluctant to get involved unless there is probable cause that an individual transgressed the law. This leads to a criminal justice system that is reactive, whereas the health system is typically proactive in its approach to violence (Moore 1995).

Additionally, in adopting a prevention-based orientation to violence, politicians and the public must overcome the disjunction between the outlay of funds and realization of the product

of that initial investment (Nagin 2001). This can be problematic in a nation with 4-year election cycles and a public that demands thorny problems to be solved quickly.

Finally, in order to get a program or policy supported, politicians and administrators must justify its need by promising that it will be effective (Campbell 1988). This then intensifies their later fears of evaluation.

While all of this provides obstacles to the formulation of effective violence prevention programs, some important changes have taken place. In a short period of time a consensus is emerging among leading behavioral scientists on the need to use rigorous research methods (i.e., experimental research) to provide more definitive answers to policy questions while simultaneously building the knowledge base. And importantly, there is now an infrastructure (through the Campbell Collaboration[1]) to deliver these results to decision-makers in an easily accessible and understandable manner. In this way, many of the necessary networks are now in place for policy-makers to work with researchers towards the goal of developing and implementing effective violence prevention policies.

Discussion and Conclusion: Towards an Evidence-Based Policy to Prevent Violence

This article briefly reviewed the violence prevention policies of seven countries-Australia, Canada, Germany, the Netherlands, Spain, the United Kingdom and the United States. Because of limitations of space, the discussions in this paper are necessarily abbreviated. Nevertheless, we think it is useful to have comparable information about all seven countries in one article so that policies can be easily contrasted and trends observed. Indeed, this exercise established the many similarities among countries as they proceed towards an evidence-based decision-making orientation. We review them below.

No Single, Coordinated Policy to Fight Crime or Violence In the face of high concerns about violent victimization among the public, it is interesting to note that none of these countries has established a unified or coordinated policy to prevent violence.

Increase Punitiveness Some of these countries have been experiencing an increase in registered crime, while others have had stable crime rates. These trends did not seem to make a difference, while all seven countries have witnessed a harsher judicial climate resulting in longer sentences. This once again indicates that trends in crime are only weakly related to trends in punishment.

Evidence-based Science and Policy In the countries included in this review, behavioral scientists are attempting to convince policy makers of the necessity of evidence-based decision-making as the basis for sound policies. Furthermore, these scientists have also been advocating for randomized controlled trials (RCTs) to serve as the foundation for this evidence. This emphasizes that there is a developing movement within the international scientific community that is working towards a consensus on basic methodological principles.

In each country reviewed, the scientific tradition in the fields of justice and law differ from the tradition in the field of health. In the health system, RCTs are widely accepted as the gold standard for scientific evidence and are therefore commonly used in the medical

[1]See http://www.campbellcollaboration.org.

field. McDonald (McDonald et al. 2002) found a total of 5,503 RCTs in a selection of 18 general health care journals in the period of 1948 to 1997. In 1948 almost no RCts were performed, while in 1986 was a 'top year' with 242 RCTs. In contrast, in the behavioral sciences and in law, RCTs are much less common, and even more so outside the US and Canada (Farrington and Welsh 2005). The present article suggests that these differences in scientific traditions between health and justice occur in each country and may be more important than differences between countries.

This paper clearly indicates the importance of incorporating a public health model into our field. An additional step that has been suggested is the inclusion of cost-effectiveness calculations in studies. This method has been borrowed from our colleagues in economics. A fine example is the study by Aos et al. (2004).

Common Programs It also became apparent that different countries are adopting similar programs such as Incredible Years, MST and Triple-P. This might result from the fact that scientists are now reading the same journals. Another aspect that may play a role is that some programs have good web-sites and through them are better able to promote themselves. The latter method for choosing programs leads to questions regarding whether the more effective programs are the ones being implemented by those in policy positions. Specifically, the efficacy of at least one of these widely adopted programs (e.g., MST) is now being questioned with the dissemination of Little's meta-analysis (Littel 2005 #2649), which fails to find this treatment effective in preventing further violence.

More Experimental Studies are Needed There is widespread agreement in this article that much more experimental research in each of these countries is needed. Even in the US, Canada and the UK, the three countries presently generating the vast majority of experimental studies, their behavioral scientists repeatedly wrote of the need for more experimental studies. In the remaining countries it is even more problematic in that scientists there who give advice to their national policymakers are forced to base their recommendations on information coming from elsewhere. Specifically, since RCTs are rarely conducted outside of the US, many countries are relying on programs shown to be effective in America. This leads to questions of the program's generalizability. So, for instance, the hypothesis that the High/Scope Perry Preschool Program will lead to less violence in countries outside of the US may be plausible, but it has yet to be rigorously tested.

Criteria of Success As previously noted, these social scientists are also unanimous in their call for evidence-based decision-making regarding which violence prevention policies and programs to implement. But what constitutes good evidence? Although there is agreement on general principles, no specific rules have yet surfaced on a number of issues related to this (like the type and number of studies that should be performed, the magnitude of the required effect size, etc.). Criteria, therefore, need to be established before a program can be labeled effective according to the evidence. Certainly, more work needs to be done on this so that the term "evidence-based" does not come to be merely the phrase "du jour" in a field where fads in programs, policies and research come and go all the time.

The Influence of Crises We work in a field that tends to catch media attention. Several of the authors noted the tendency for crises to guide political choices. Often, the result is that money goes to the back end of the health or the judicial system, namely, to institutions that seek to help or punish, instead of going to agencies that could implement prevention programs. In sum, media attention often distracts political choices away from long-term prevention programs.

Organizational Problems: Centralized Versus Local Responsibility Almost all countries indicated that there are issues surrounding the division of responsibilities between central and local governments. Furthermore, everywhere we find coordination problems among agencies. Finally, we notice that in several countries, local agencies do not have access to the knowledge necessary to select and implement evidence-based policies and programs. This is an important issue that must be addressed if we are to move towards greater rationality when choosing policies and programs. We therefore suggest that, in concert with the implementation of evidence-based interventions, there is an emphasis on including the academic/research community when agencies seek to develop protocols to better meet the needs of these highly problematic families.

The Impact of Elected Politicians A final point is the short time line that politicians in each of these countries labor under. In democratic countries, citizens regularly vote for their leaders. This means that politicians are always running for election, which, in turn, means that they tend not to engage in long-term planning because they may not be around to see the results of these plans, but rather only incur their costs. While this may be the price we pay for democracy, we really have not sufficiently explored ways to surmount this difficulty. Sherman (Sherman 2003) argues for a more informed citizenry regarding the importance of evaluation research to serve as the catalyst for change. While this might lead to positive and long-lasting change, it does not seem that this solution could occur anytime in the near future.

Perhaps a more feasible approach would be to concentrate on educating our politicians on the need for rigorous research (most especially experimental studies) to find out what truly works and what does not. While changing opinions is not easy, a strong case could be made that in these times of fiscal constraint, finding out which programs are ineffective or even harmful is the economically prudent course to take. Ineffective or harmful programs could then be discontinued, saving money to expand those programs that deliver their promised benefits. Additionally, holding programs accountable would seem to fit with the conservative direction that many of these countries' leaders are taking.

One would think that it is relatively easy to get our political leaders to recognize that everyone wins when bad programs are discontinued and effective programs are implemented and expanded. But to do this, researchers must be able to speak in a language that politicians understand. It is also important for politicians to have quick and easy access to summaries of what works and what does not, written, as previously noted, in a language that they can understand. This article highlights that there is increasing awareness among behavioral scientists worldwide of the need for more rigorous research and a vehicle for distributing these findings. The good news is the recent development of the Campbell Collaboration, an international and growing group of dedicated social scientists from around the world representing many different disciplines that seek to promote evidence-based programs to policy makers around the world.

Perhaps the best of all possible worlds would be the widespread acceptance of what Donald Campbell proposed more than 35 years ago. In 1969, this prominent social scientist argued that modern democratic nations should use an experimental approach to social reform. That is, they should implement policies and programs to cure specific social ills in a cautious manner by rigorously testing it in a few sites to learn whether or not it is effective (Campbell 1969, 1988). In this way, social experimentation would provide the best evidence of the effectiveness of the policy while simultaneously building the knowledge base in the discipline.

Today, with the increased concern about violence, it is imperative that we begin to think of ways in which we can get systematic and rational decision-making accepted among our policy makers and citizenry.

Appendix

Table 1 List of authors per country and e-mail address for correspondence

	Authors	Affiliation	Correspondence to following e-mail address
1. Australia	Ross Homel*, Paul Mazerolle, Matthew Manning, Kate Freiberg	Key Centre for Ethics, Law, Justice and Governance, Griffith University.	R.Homel@griffith.edu.au
2. Canada	Rob Santos*	Healthy Child Manitoba Office, Healthy Child Committee of Cabinet, Government of Manitoba & Department of Community Health Sciences, Faculty of Medicine, University of Manitoba	rsantos@gov.mb.ca
3. Germany	Friedrich Lösel*	Institute of Criminology, Cambridge University	fal23@cam.ac.uk
	Martin Schmucker	Institute of Psychology, University of Erlangen-Nuremberg	
4. The Netherlands	Marianne Junger*	Department of Developmental Psychology, Utrecht University	M.Junger@fss.uu.nl
	Tom van Yperen	Utrecht University/Dutch Youth Institute	
5. Spain	Vicente Garrido Genovés*	University of Valencia	garrido@uv.es
6. United Kingdom	David P. Farrington*	Institute of Criminology, University of Cambridge	dpf1@cam.ac.uk
	Carole Sutton	Unit for Parenting Studies, De Montfort University	
7. United Sates	Lynette Feder*	College of Liberal Arts and Sciences, Portland State University	lfeder@pdx.edu
	Christopher Sullivan	Department of Criminology, University of South Florida	
	Joy Clay	School of Urban Affairs and Public Policy, Division of Public and Nonprofit Administration, University of Memphis	

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