Prison Violence: A Scottish Perspective[1]

Traditionally, psychologists have attempted to explain and predict violent behaviour by focusing on intrinsic characteristics of potentially violent individuals: their personality characteristics, their developmental and criminal histories, their cognitive processes.[2]

Unfortunately, the prediction of future violence appears to be bedevilled by a high false-positive rate, that is, the tendency to predict that individuals will be violent when in fact they will not.[3] While, as Porporino[4] clearly argues, there is a need for considerable improvement in the classification of prisoners, this can only be a partial solution to the problem of prison violence.

Clements eloquently sums up the problem: "There is no pot of gold at the end of the classification rainbow. Good classification procedures will help us make better decisions about individual inmates and about the future needs of the system. But with all our attention to the individual, we tend to underestimate the prison setting as a powerful influence on day-to-day inmate behaviour. We cannot hope to predict and manage offender behaviour on the basis of a few tests and an interview.[5] Rising Prison Violence The last decade saw a substantial increase in the level of violence in Scottish prisons. The prison system was wracked by a series of lengthy and highly visible hostage-taking incidents, the rate of assaults doubled and the level of aggressive and hostile behaviour by prisoners was high.[6] The prison system was under stress.

This disturbance in the Scottish system was paralleled by incidents in the prison system of England and Wales. The rate of hostage takings increased fivefold during the 1980s, and the month-long riot at Strange-ways Prison, in Manchester, sparked a series of riots in other prisons. Explanations for the Violent Incidents in Scottish Prisons When institutions are under stress, explanations tend to be polarized. The primary objective in many accounts appears to be to attribute blame. This can be illustrated by explanations given for the lengthy rooftop hostage taking in Scotland's high-security prison at Peterhead. Three critical criminologists firmly eschewed any notion that the psychological characteristics of the prisoners might have influenced the violent behaviour: "Violence is an inevitable and rational reaction to a violent and repressive regime."[7]

In sharp contrast, the official explanation for this riot, and other riots in the country, was focused on the presumed pathology of individual prisoners. In a document entitled "Assessment and Control," produced by the Scottish Home and Health Department, it was argued:

> It [the riot] suggests that rather than looking to changes in the way in which the Prison Service as a whole goes about its task.a more productive approach may be to concentrate attention on the individual personality and "repertoire" of particularly disruptive and violent inmates.[8]

Clements's contention, stated above, that we must consider not only the prisoner's characteristics but also the setting in which he or she is placed, has greater congruence with contemporary psychological

accounts of violent behaviour. Difficult prisoners are only difficult in certain settings. By understanding these settings, we can reduce prison violence.

In the rest of this article, it is argued that major benefits can be derived by identifying those characteristics of a regime that influence the level of prison violence. First, a case study is presented to demonstrate the potential power of changing regime factors. Second, the literature on violence in prisons and secure hospitals is explored for clues concerning which regime factors may be important. The Barlinnie Special Unit: A Case Study In the Scottish context, powerful evidence supporting the view that changing regime characteristics can influence the level of prisoner violence comes from the Barlinnie Special Unit. This Unit was established in 1972 because of concerns about the increasing level of violence in Scottish prisons. A radical approach was adopted. The regime plan was based on three underlying principles: first, the need to reduce the traditional hostility between staff and prisoners; second, the need to increase the autonomy of prisoners; and third, the need to provide a forum in which feelings of anger, hostility and frustration could be expressed and conflicts resolved.[9]

The majority of prisoners who have been through the Unit have one or more convictions for homicide and many convictions for assault - both in and out of prison. They are generally serving life sentences and have significant levels of psychopathy. Prisoners are referred to this Unit because they are management problems" in other prisons. Yet when they are transferred to this unusual regime, their behaviour undergoes a dramatic change.

An evaluation of prison records demonstrated that if the behaviour of a group of 25 prisoners had remained the same in the Special Unit as it had been in the referring prison, then the number of assaults in the Special Unit would have been 105. Only two assaults have occurred.

Similarly, when serious incidents are considered - i.e., attempted escapes, hunger strikes, "smash-ups," hostage takings, dirty campaigns, barricading and self-mutilation - the expected frequency was 154, but only 9 such incidents have occurred. The fact that the inmates' behaviour changed so quickly after they were transferred to the Unit suggests that changes in the regime, rather than changes in the psychological characteristics of the individual prisoners, were responsible.[10] The Advantages of Considering Regime Factors In any attempt to understand and limit institutional violence, there are certain advantages to giving greater emphasis to regime factors. First, changing the way in which we run institutions may be easier than changing the psychological characteristics of the people we contain in those institutions. Rice and colleagues[11] argued that explaining the violence of psychiatric patients merely in terms of their psychopathology severely limits what staff can do to reduce violent behaviour. Others have argued - and evidence from the Barlinnie Special Unit supports this argument - that antisocial behaviour can be reduced more effectively by making environmental changes rather than attempting to make psychological changes.[12]

Second, changing situational factors may be the only method avail-able for reducing violent behaviour. Many aggressive individuals in prisons have an aversion to psychologists and psychiatrists and will not co-operate with them during treatment.

Third, increasing our understanding of the determinants of prison violence, and thereby our control over

its level (we hope), should make prison environments safer not only for those who have to live there, but also for all those who work there. Which Regime Factors Are Important? To determine which situational factors are important in the escalation or defusing of violent incidents, it may be helpful to consider other institutional settings where violence is a problem. The literature on psychiatric facilities has relevance not only because many of the problems are similar,[13] but also because there is an overlap - perhaps an increasing overlap - in the populations of these different types of institutions.[14]

Any endeavour to identify situational factors is not without difficulties. In sharp contrast to the multitude of studies on psychological characteristics, there is little systematic research on the significance of situational factors. Porporino, referring to the literature on prison crowding and violence (perhaps the most extensive and systematic literature in this field) indicated that "it is difficult to derive any clear policy or program implications from this set of contradictory findings."[15]

With our current state of knowledge, it seems impossible to answer the question posed above: which regime factors are important? Rather, all that we can do is identify the areas that merit further study.

A common theme in this diverse literature is that the characteristics of the staff, who deliver the regime or the treatment to inmates, have central importance in determining the level of violence in an institution. The evidence available implicates four elements, namely staff-inmate communication, staff training, staff experience and staff morale. Staff-Inmate Communication Not surprisingly, the behaviour of staff appears to have a substantial influence on the behaviour of prisoners. This is not a new idea. In 1844, the Inspector of Prisons for Scotland stated:

> in some prisons an unusual degree of good conduct is induced, and the number of punishments kept low, by the personal influence of the officers, and by their care in reasoning with prisoners before resorting to punishment.[16]

The British literature provides some empirical support for this contention. Zeeman and colleagues[17] demonstrated that prisoners' alienation - the absence of staff-inmate communication - had a powerful influence on inmates' behaviour.

Davies and Burgess[18] examined the rates of violence in one prison under the management of four different governors (wardens). They attributed the reduced rate of violence under one governor to the fact that he had introduced staff-inmate committees and meetings. These meetings not only increased contact between staff and prisoners, providing both groups with, at times, mutual goals, but also reduced the level of tension by providing an appropriate channel for dealing with grievances.

The apparent success of the Barlinnie Special Unit has in part been attributed to the quality of the staff-inmate relationships.[19] Perhaps the most convincing view comes from the best-known ex-inmate of the Special Unit - Boyle:

> What made the Unit unlike any other place was the way staff and prisoners were allowed and encouraged to sit down and talk together. This was the single most important factor of

the Unit.[20]

In North America, Love and Ingram argued that the comparatively low rate of prisoner-on-prisoner violence at Federal Correctional Institution Butner could be attributed to the manner in which staff related to prisoners:

> Without some of the traditional mechanisms of coercion to exercise control over prisoners, staff at Butner FCI are disposed to a more objective and equal treatment of prisoners, i.e., towards a more "professional" orientation.[21]

Thus, the notion that staff-inmate relationships are central to reducing institutional violence is an old principle which seems to have some empirical support. How can good relationships be achieved? Staff Experience and Staff Training Hodgkinson and colleagues[22] demonstrated that nurses in the training grades are assaulted more often than expected, while nursing assistants are assaulted less often than expected.

Davies and Burgess[23] found parallel results with prison officers. Officers with less experience were more likely to be assaulted than officers with more experience, regardless of their age. It has been argued that older prisoners are more likely to assault younger officers because they do not like taking orders from them, but the contention was not substantiated by this study. Length of experience was the critical factor.

Why is experience important? In both studies, it was argued that the experienced staff adopted a different approach to prisoners as compared with the inexperienced staff. It appeared that those in the training grades, or those with less experience, were assaulted more often because they were less circumspect and more confronting. In addition, lack of experience may make prison officers and nurses less competent at observing and judging the mood of a prisoner or patient.

All is not lost. Further evidence from the literature on institutional violence indicates that if front-line staff are trained to be more subtle and flexible, or to use more appropriate behaviours in their approach to inmates, there is a subsequent reduction in the rate of assault.[24] Lerner and colleagues expressed this point eloquently:

> Officers need to understand offenders in order to know when to confront and when to support, when to be directive and when not to, when to trust and when not to, when to recommend psychotherapy and when not to, when not to set rules (and which rules).[25]

Staff Morale The concept of staff morale is difficult to operationalize, yet there are clues in the literature which suggest that poor staff morale may influence the aggressive behaviour of inmates. In the psychiatric literature, Lion and colleagues[26] have contended that lowered staff morale and heightened inter-staff conflicts are conspicuous features of epidemics of violence.

Qualitative research suggests that violence among prisoners may occur when staff members feel

alienated from management and when they are riven with internal dissension and splitting.[27] A study of Bathurst Jail in Australia - a jail noted for its attempts to improve the quality of relationships between staff and prisoners - found that when prison staff demonstrated their dissatisfaction by holding a 31-day strike, the prisoners became increasingly antagonistic and aggressive.[28]

Others[29] have insisted that high staff morale is "fundamentally important" in ensuring that the level of assaults in psychiatric units is minimized. Kingdon and colleagues[30] argued that staff morale can be maintained and enhanced if junior staff feel properly supported by senior staff.

One practical step toward enhancing staff morale has been suggested by Maier. [31] He suggests that staff who deal with violent inmates must have "me-time," a time during which they have the opportunity, either privately or in groups, to disclose and discuss their feelings of fear and anger toward those in their charge. Visitors One consequence of the recent troubles in British prisons has been a demand for more contact between prisoners and outside visitors.[32] This could be facilitated by the development of "community prisons" - multipurpose prisons near the main population centres. To North American readers, it may come as a surprise that, in Scotland, there is concern that one prison is 200 miles from the main population centres. In the Scottish setting, this prison is perceived as being isolated. As well, though there is little empirical evidence, many have argued that the poor quality of visiting facilities has had a negative impact on prison violence:

> Say that you wish to encourage family ties through visits and telephone - but make sure that visits take place in circumstances where no meaningful contact is possible, don't provide facilities for children, and don't provide 'phones or time for prisoners to make even booked calls.[33] Glaser[34] contended that maximizing contact between prisoners and non-criminal persons from outside the prison could have a significant effect on recidivism rates. Access to visitors may have other positive benefits. Units such as Bathurst and the Barlinnie Special Unit allow prisoners to have visits seven days a week with no limit on the duration or frequency of these visits. Whatmore,[35] the forensic psychiatrist who helped establish and run the Barlinnie Special Unit, has argued that personal visitors can act as both a significant control over violent behaviours and a stimulus for change and maturation.

Crowding and Transiency As mentioned above, the one feature of prison regimes that has been extensively examined - a feature that is comparatively easy to measure - is overcrowding. Overcrowding may influence aggression in a variety of ways: through the inability to control or avoid unwanted interaction or stimulation, through fear and through the lack of any means of maintaining personal identity. In overcrowded conditions, staff are often unable to protect individual prisoners from a major difficulty of confinement -being with other prisoners.

Unfortunately, the literature gives no clear answers. Some authors find that violence in prisons is inversely related to the amount of living space available to each prisoner.[36] In a psychiatric hospital, Dooley[37] attributed the elevated rate of violence on a Sunday to the increased number of patients in the

recreational areas on that day. In his comprehensive review of this literature, Ditchfield[38] concluded that a relationship probably exists between acts of violence and overcrowding, but that the relationship is frequently difficult to detect because it is influenced by the characteristics of the prisoners and those of the regime.

The mix of prisoners can be critical. Quay[39] developed a behavioural classification of prisoners designed to distinguish between predators and victims, or "heavies" and "lights." He advocated that these different types of prisoners should be separated and held in different types of regime. Quay reported that the rate of inmate-staff and inmate-inmate assaults dropped significantly in a large maximum-security penitentiary during the four years after inmates were separated on the basis of this classification system. This study provides suggestive evidence that there are certain "toxic mixes" of prisoners and that concentration rather than dispersal of "difficult" prisoners may reduce the level of prison violence.

Quay's work may explain an apparent contradiction in the literature. Authors such as Glaser,[40] Whatmore[41] and Robson[42] suggest that prisoners who are living in smaller groups are less likely to engage in offences against prison discipline. In contrast, Farrington and Nuttall,[43] after reviewing the literature, concluded that there was no empirical evidence to support the view that prisoners in large prisons were more likely than those in smaller prisons to engage in violent behaviour. Their findings may apply to the generality of prisoners but not to "difficult" prisoners: Whatmore and Robson argued that the most difficult prisoners should be held in small groups.

Ellis[44] and Porporino[45] have cogently argued that it is not crowding per se that is critical, but rather the rate of turnover or transiency of the prison population. In a swiftly changing population, normal social structures are not developed; challenges in the prisoner hierarchy are more frequent; natural wariness of new and potentially dangerous prisoners is exaggerated; normal prison trading relationships in drugs, money, tobacco and gambling are more risky; and prison officers behave in a more disciplinarian manner. Change is threatening. Porporino[46] emphasized the difficulty in making simple generalizations in this field: he demonstrated empirically that transiency appeared to be the critical variable producing the apparently paradoxical result that the most crowded prisons were the least violence-prone because they had the lowest transiency rate.

It should be noted that transiency and overcrowding, although undesirable, need not necessarily lead to an increase in assault rates. Pelissier[47] monitored the rapid doubling of a prison population and found no increase in the rate of offences against prison discipline. What appears to have been of critical importance in this case is the care and attention taken in the management of change, in particular the care taken in ensuring that the regime and programs did not suffer adversely. Quality of the Regime: Stimulation and Frustration The Woolf report[48] recognized that the physical conditions in which prisoners are held - deteriorating Victorian buildings, three to a cell, no in-cell sanitation - can contribute to the frustration of prison life which can lead to violence. Megargee[49] argues that the general frustrations of prison life - as exemplified by closed visits, letters going missing, lack of work, limited access to education and poor food - act as a significant situational determinant of violence.

King,[50] in an attempt to explain the lower rates of assault in an American maximum-security prison as

compared with an English one, indicated that one critical factor was the quality of the American regime - more out-of-cell activities, greater disposable income, more frequent visits and in-cell televisions. Behaviour may be improved not only because the quality of prison life is enhanced, but also because prisoners have more to lose.

Ideally, daily activities should be purposeful and not imposed merely to fill time. In the Barlinnie Special Unit, no formal routine of activities is imposed because the subcultural norms that the prisoners bring to the Unit are antiwork. However, prisoners are provided with resources and encouraged to pursue their own interests and set their own level of stimulation. Most engage in constructive activity.

Robson,[51] describing the regime at Bathurst Jail, emphasized the importance of meaningful activities - most notably trade training and education -to improve the morale and behaviour of prisoners. Level of Security and Control Prison systems under stress frequently resort to high levels of control. The Scottish system responded in this manner following the spate of riots in the late 1980s. Whether, in the long term, this is the most effective strategy is open to doubt.[52]

Paradoxically, high levels of overt security and control may increase the probability of violence. Ward,[53] describing the effects of strict security in an American prison, found that the greater the security measures imposed, the greater the violence that occurred. Bidna[54] found that the implementation of strict security in Californian prisons - called "lock-down" - resulted in an increased rate of stabbings in high-security institutions. Unfortunately, once again we are dealing with conflicting results, for Bidna also found that the lock-down produced a reduction in stabbings in a general prison. King[55] contended that the lower rates of assaults in an American prison compared with an English prison could be attributed, in part, to higher levels of control and observation; American prisoners felt safer. The optimum level of control will depend on the population.

Why is the level of control important? Because much violent behaviour is predicated on the desire to "save face." Felson and Steadman[56] argued that when the "saving of face" is a critical concern, the behaviour of one antagonist is a powerful determinant of the behaviour of the other. Aggression escalates in a trial of strength. Thus, if prison management provides an overly rigid, inflexible and authoritarian style of management, prisoners may resort to violence as a means of saving face, to show that they can resist the regime.

Evidence from regimes where control is diffuse supports this view.[57] In the Barlinnie Special Unit, prisoners are responsible for their daily routine, they can influence the day-today running of the regime and they can be involved in making decisions about their own progress and that of their peers. It is important to emphasize that authority is still maintained by the prison staff. However, the control is less overt and less likely to stimulate resistance. Prison Management and Administrative Uncertainty One response to the recent problems in Scottish prisons has been an emphasis on improved management. Proactive strategic planning has replaced reactive management.[58] DiLulio,[59] in his classic comparative study of American prison systems, argues that low rates of disturbance flow from good quality prison management. Good management should reduce the uncertainty that surrounds the life of prisoners: uncertainty produced by inconsistencies in the ways in which rules are applied, uncertainty

about how to achieve parole, uncertainty in the many things that have significance for those in prison.[60]

Empirical evidence supports this view. Schnell and Lee[61] found that the introduction of a clear unambiguous time-out procedure for disruptive inmates led to a significant decrease in behavioural offences including violence. Ward[62] reported that the 120 stabbings within a six-month period in Folsom Prison could, in part, be attributed to the chaotic administration of that prison. Gentry and Ostapiuk[63] emphasized the importance of clear, unambiguous boundaries for staff and patients, showing that the consistent application of clear and fair rules reduced the tension caused by uncertainty. James and colleagues[64] found that 39% of the variance in violent incidents in a psychiatric ward could be attributed to a change in management practice which resulted in the use of temporary, rather than permanent, staff; staff transiency can be as disruptive as prisoner transiency.

An impressive demonstration of the effectiveness of good prison management is reported by Pelissier:[65] even the rapid doubling of an institution's population can be achieved with proper proactive planning. Conclusion The costs of prison violence are high. If we continue to focus on the intrinsic psychological characteristics of "difficult" prisoners, we have little hope of damming the rising tide of prison violence. We must focus on regime factors. Yet, as this brief review illustrates, there are no easy answers. Easy remedies are always suspect. Menkin noted: "There is always an easy solution to every human problem - neat, plausible and wrong."

Nonetheless, there are some clues. Regimes that are properly managed, which reduce uncertainty and population change; regimes that are not repressive but ensure the safety of prisoners; regimes that contain prisoners in clean and sanitary conditions, where meaningful contact with the outside world is facilitated; regimes that are administered by well-trained prison officers who have pride in their occupation; regimes with these qualities are likely to have a positive effect on prison violence.

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[1]*The views expressed in this article are those of the author and do not necessarily represent the views of the Scottish Home and Health Department.*

[2]*See, for example, R.D. Hare and L.M. McPherson, "Violent and Aggressive Behaviour by Criminal Psychopaths,"* International Journal of Law and Psychiatry, *7(1984): 35-50. See also S.D. Hart, P.R. Kropp and R.D. Hare, "The Performance of Male Psychopaths Following Conditional Release from Prison,"* Journal of Consulting in Clinical Psychology, *57 (1988): 227-232. And see R.W. Novaco, "Anger and Coping with Stress," in J.P. Foreyt and D.P. Rathjen(eds.),* Cognitive Behaviour Therapy *(New York: Plenum, 1978), p.135-173. And see L.W. Shields and D.J. Simourd, "Predicting Predatory Behaviour in a Population of Incarcerated Young Offenders,"* Criminal Justice and Behavior, *18 (1991): 180-194. And see D.J. Cooke, "Predicting Offending in Prison: The Predictive Validity of the Prison Behaviour Rating Scale," submitted to* Criminal Justice and Behavior.

[3]*See, for example, Shields and Simourd, "Predicting Predatory Behaviour in a Population of Incarcerated Young Offenders." See also Cooke, "Predicting Offending in Prison: The Predictive Validity of the Prison Behaviour Rating Scale."*

[4]*F.J. Porporino, "Managing Violent Individuals in Correctional Settings,"* Journal of Interpersonal Violence, *1 (1986): 213-237.*

(5)*C.B. Clements, "The Relationship of Offender Classification to the Problems of Prison Overcrowding,"* Crime and Delinquency, *28 (1982): 72-81, p.81.*

(6)*D.J. Cooke, A. Walker and W. Gardiner, "Behavioural Disturbance in Barlinnie Prison,"* The Prison Service Journal, *80 (1990): 2-8. See also D.J. Cooke, "Violence in Prisons: The Influence of Regime Factors,"* The Howard Journal of Criminal Justice, *30 (1991): 95-109.*

(7)*P. Scratton, J. Sim and P. Skidmore,* Prisons Under Protest *(Milton Keynes: Open University Press, 1991), p.17.*

(8)*Scottish Home and Health Department,* Assessment and Control: The Management of Violent and Disruptive Prisoners. *(A Scottish Prison Service Discussion Paper) (Scotland: Scottish Home and Health Department, 1988), para. 2, 11.*

(9)*P.B. Whatmore, "Barlinnie Special Unit: An Insider's View," in A.E. Bottoms and R. Light (eds.),* Problems of Long-Term Imprisonment *(Aldershot: Gower, 1987). See also J. Boyle,* A Sense of Freedom *(London: Handbooks, 1977). And see D.J. Cooke, "Containing Violent Prisoners: An Analysis of the Barlinnie Special Unit,"* British Journal of Criminology, *29 (1989): 129-143.*

(10)*For a fuller discussion, see Cooke, "Containing Violent Prisoners: An Analysis of the Barlinnie Special Unit."*

(11)*M.E. Rice, G.T. Harris and V.L. Quinsey,* Controlling Violence in Adult Psychiatric Settings *(Penetanguishene, Ont.: Penetanguishene Research Reports, 1991).*

(12)*R.B.G. Clarke, "Delinquency Environment as a Dimension, "* Journal of Child Psychology and Psychiatry, *262 (1985): 515-523.*

(13)*See, for example, G.A. Chaimowitz and A. Moscovitch, "Patient Assaults on Psychiatric Residents: The Canadian Experience,"* Canadian Journal of Psychiatry, *36(1991): 107-111. See also A.D. Armond, "Violence in the Semi-secure Ward of a Psychiatric Hospital,"* Medicine, Science and the Law, *22 (1982): 203-209.*

(14)*M.L. Durham, "The Impact of Deinstitutionalization on the Current Treatment of the Mentally Ill,"* International Journal of Law and Psychiatry, *12 (1989): 117-131. See also L. Teplin, "The Criminalization of the Mentally ill: Speculation in Search of Data,"* Psychological Bulletin, *94 (1983): 54-67. Also see R.F. Menzies and C.D. Webster, "Where They Go and What They Do: The Longitudinal Careers of Forensic Patients in the Medical-Legal Complex,"* Canadian Journal of Criminology, *29(1987): 275-293.*

(15)*Porporino, "Managing Violent Individuals in Correctional Settings," p. 228.*

(16)*Inspector of Prisons for Scotland,* 1844 Annual Report *(Her Majesty's Stationery Office, n.d.) p.5.*

(17)*E.C. Zeeman, C.S. Hall, P.J. Harrison, G.H. Marriage and P.H. Shapland, "A Model for Prison Disturbances,"* British Journal of Criminology, *17 (1977): 251-263.*

(18)*W. Davies and P.W. Burgess, "The Effects of Management Regime on Disruptive Behaviour: An Analysis within the British Prison System,"* Medicine, Science and the Law, *28 (1988): 243-247.*

(19)*Whatmore, "Barlinnie Special Unit: An Insider's View." See also D.J. West, "The Clinical Approach to Criminology,"* Psychological Medicine, *10(1980): 619-691. And see M. Fitzgerald, "The Telephone Rings: Long-Term Imprisonment," in A.E. Bottoms and R. Light (eds.),* Problems of Long-Term Imprisonment *(Aldershot Gower, 1987).*

(20)*Boyle,* A Sense of Freedom, *p.11.*

(21)*C. T. Love and G.L. Ingram, "Prison Disturbances: Suggestions for Future Solutions,"* New England

Journal on Prison Law, 8, 2 (1982): 393-426, p. 409.

(22)*P. Hodgkinson, L. McIvor and M. Phillips, "Patients' Assaults on Staff in a Psychiatric Hospital: A 2-Year Retrospective Study,"* Medicine, Science and the Law, *25(1985): 288-294.*

(23)*W. Davies and P. W Burgess, "Prison Officers' Experience as a Predictor of Risk of Attack: An Analysis within the British Prison System,"* Medicine, Science and the Law, *28 (1988): 135-138.*

(24)*J.A. Infantino and S.Y. Musingo, "Assaults and Injuries Amongst Staff With and Without Training in Aggression Control Techniques,"* Hospital and Community Psychiatry, *36(1985): 1312-1314. See also M.E. Rice, G.T. Harris, G.W. Varney and V.L. Quinsey,* Violence in Institutions: Understanding, Prevention and Control *(Toronto: Hans Huber, 1989). And see Rice, Harris and Quinsey, Controlling Violence in Adult Psychiatric Settings. See also P.C. Kratcoski, "The Implications of Research Explaining Prison Violence and Disruption,"* Federal Probation, *52 (1988): 27-32. And see M.L. Lanza, H.L. Kayne, C. Hicks and J. Milner, "Nursing Staff Characteristics Related to Patient Assault,"* Issues in Mental Health and Nursing, *12 (1991): 253-265. And see D.J. Cooke, P.J. Baldwin and J. Howison,* Psychology in Prisons *(London: Routledge, 1990).*

(25)*K. Lerner, G. Arling and S.C. Baird, "Client Management Classification Strategies for Case Supervision,"* Crime and Delinquency, *32 (1986): 254-271, p.255.*

(26)*J.R. Lion, D. Madden and R.L. Christopher, "A Violence Clinic: Three Years' Experience,"* American Journal of Psychiatry, *133 (1976): 432-435.*

(27)Ibid. *See also Cooke, "Violence in Prison: The Influence of Regime Factors."*

(28) *K. Mahony, "Effects of the February 1984 Prison Officer Strike. Bathurst Gaol Evaluation Study." Unpublished report.*

(29)*D.G. Kingdon and E.W Bakewell, "Aggressive Behaviour: Evaluation of a Non-Seclusion Policy of a District Psychiatric Service,"* British Journal of Psychiatry, *153 (1988): 631-634.*

(30)Ibid.

(31)*G.J. Maier, "Relationship Security: The Dynamics of Keepers and Kept,"* Journal of Forensic Sciences, *31(1986): 603-608. See also G.J. Maier, L.J. Stava, B.R. Morrow, G.J. Van Rybroeck and K.G. Bauman, "A Model for Understanding and Managing Cycles of Aggression Among Psychiatric Inpatients,"* Hospital and Community Psychiatry, *38 (1987): 520-524.*

(32)*Lord Justice Woolf Prison Disturbances April 1990: Report of an Inquiry (London: Her Majesty's Stationery Office, 1991). See also Scottish Prison Service,* Opportunity and Responsibility: Developing New Approaches to the Management of the Long Term Prison System in Scotland *(Edinburgh: Her Majesty's Stationery Office, 1990).*

(33)*R.D. King and K. McDermott, "'My Geranium Is Subversive': Some Notes on the Management of Trouble in Prison,"* British Journal of Sociology, *41 (1990): 445-471, p.447.*

(34)*D. Glaser, "Six Principles and One Precaution for Efficient Sentencing and Correction,"* Federal Probation, *48(1984): 22-28*

(35)*Whatmore, "Barlinnie Special Unit: An Insider's View."*

(36)*E.I. Megargee, "Population Density and Disruptive Behaviour in a Prison Setting," in A.K. Cohen, A.F. Cole and R.G. Bailey (eds.),* Prison Violence *(Lexington, D.C.: Heath, 1976). See also P.H. Nacci, H. Teitelbaum and J. Prather, "Population Density and Inmate Misconduct Rates in the Federal Prison System,"* Federal Probation, *41(1977): 27-38.*

(37)*E. Dooley, "Aggressive Incidents in a Secure Ward,"* Medicine, Science and the Law, *26(1986): 125-*

130.

(38)*J. Ditchfield,* Control in Prison: A Review of the Literature *(London: Her Majesty's Stationery Office, 1991).*

(39)*H.O. Quay,* Standards for Adult Correctional Institutions *(Washington, D.C.: Federal Bureau of Prisons, 1983).*

(40)*Glaser, "Six Principles and One Precaution for Efficient Sentencing and Correction."*

(41)*Whatmore, "Barlinnie Special Unit: An Insider's View."*

(42)*R. Robson, "Managing the Long Term Prisoner: A Report on an Australian Innovation in Unit Management,"* Howard Journal, *28(1989): 187-203.*

(43)*D.P. Farrington and C.P. Nuttall, "Prison Size, Overcrowding, Prison Violence and Recidivism,"* Journal of Criminal Justice, *8 (1980): 221-231.*

(44)*D. Ellis, "Crowding and Prison Violence: Integration of Research and Theory,"* Criminal Justice and Behavior, *11(1984): 277-308.*

(45)*Porporino, "Managing Violent Individuals in Correctional Settings."*

(46)Ibid.

(47)*B. Pelissier, "The Effects of a Rapid Increase in a Prison Population: A Pre- and Post-Test Study,"* Criminal Justice and Behavior, *18 (1991): 427-447.*

(48)*Woolf* Prison Disturbances April 1990: Report of an Inquiry.

(49)*E.L Megargee, "Psychological Determinants and Correlates of Criminal Violence," in M.E. Wolfgang and N.A. Weiner (eds.),* Criminal Violence *(Beverly Hills, Calif: Sage, 1982).*

(50)*R.D. King, "Maximum-Security Custody in Britain and the USA: A Study of Gartree and Oak Park Heights,"* British Journal of Criminology, *31(1991): 126- 152.*

(51)*Robson, "Managing the Long Term Prisoner: A Report on an Australian Innovation in Unit Management."*

(52)*Porporino, "Managing Violent Individuals in Correctional Settings."*

(53)*D.A. Ward, "Control Strategies for Problem Prisoners in American Penal Systems," in A.E. Bottoms and R. Light (eds.),* Problems of Long-Term Imprisonment *(Aldershot Gower; 1987).*

(54)*H. Bidna, "Effect of Increased Security on Prison Violence,"* Journal of Criminal Justice, *3 (1975): 33-46.*

(55)*King, "Maximum-Security Custody in Britain and the USA: A Study of Gartree and Oak Park Heights."*

(56)*R.B. Felson and H.]. Steadman, "Situational Factors in Disputes Leading to Criminal Violence,"* Criminology, *21(1983): 59-74.*

(57)*Robson, "Managing the Long Term Prisoner: A Report on an Australian Innovation in Unit Management" See also Cooke, "Containing Violent Prisoners: An Analysis of the Barlinnie Special Unit."*

(58)*Scottish Prison Service,* Organising for Excellence: Review of the Organisation of the Scottish Prison Service *(Edinburgh: Scottish Prison Service, 1990).*

(59)*J.J. DiLulio,* Governing Prisons: A Comparative Study of Correctional Management *(London: Collier Macmillan, 1987).*

(60)*King and McDermott, "'My Geranium Is Subversive': Some Notes on the Management of Trouble in*

Prison."

(61)*J.F. Schnell and J.F. Lee, "A Quasi-experimental Retrospective Evaluation of a Prison Policy Change,"* Journal of Applied Behavioural Analysis, *7 (1974): 483- 496.*

(62)*Ward, "Control Strategies for Problem Prisoners in American Penal Systems."*

(63)*M. Gentry and E.G. Ostapiuk, "The Management of Violence in a Youth Treatment Centre,"* Clinical Approaches to Aggression and Violence: Issues in Criminological and Legal Psychology No.12 *(Leicester: British Psychological Society, 1988).*

(64)*D.V. James, N.A. Fineberg, A.J. Shah and R.G. Priest, "An Increase in Violence on an Acute Psychiatric Ward: A Study of Associated Factors,"* British Journal of Psychiatry, *156(1990): 846-852.*

(65)*Pelissier, "The Effects of a Rapid Increase in a Prison Population: A Pre- and Post-Test Study."*