



Testing the Conceptual Path to Correctional Staff Safety: A Study of the Implementation of Unit Management in Two Medium Security State Institutions in the USA

J. Forbes Farmer¹

Franklin Pierce University, USA

Abstract

Unit management is the preferred management model in Federal, state and private correctional institutions in the United States and is a model used in Australia, New Zealand and South Africa. It has also been seriously considered in Slovenia. The opportunity for staff participation in decision-making that this model specifies has been so lauded that unit management has become almost synonymous in practice and in the corrections literature with decentralization and direct supervision. The model has been credited for reducing inmate violence, maintaining/regaining staff control, and improving safety for inmates and staff. The uniqueness of the research here is that it presents a comparative case study of staff perceptions of their safety and the structural differences at two prisons that both have decentralized unit management staff and centralized hierarchal staff. It was predicted that unit management staff, compared to non-unit management staff, would feel safer and would perceive more delegation of authority and more opportunities to participate in decision-making. This study reports how the path to staff safety, as theorized by the unit management model, is not always as predicted. Staff perceptions were compared on a safety index that was created by factor analysis of responses to organizational climate surveys and to indices of decentralization and communication. Multiple regression analyses were then run on the staff safety index. The results indicate that the delegation of authority for decision-making can have inverse effects on the perception of staff safety; it depends on the way unit management is implemented.

Keywords: Correctional personnel, Unit management, Direct supervision, Staff safety, Delegation of authority, Decentralized management.

Introduction

Those researching correctional management (see Antonio & Young, 2011; Blevens, Cullen & Sundt, 2007; Brookes, Smith & Bennett, 2008; Lambert, Hogan & Allen, 2006) have argued that the prison environment, including structure and policy, leads to staff attitudes and behaviors, both positive and negative. Investigators (i.e., Blevins, Cullen & Sundt, 2007; Lambert & Paoline, 2008; Maahs & Pratt, 2001) refer to this conceptual flow

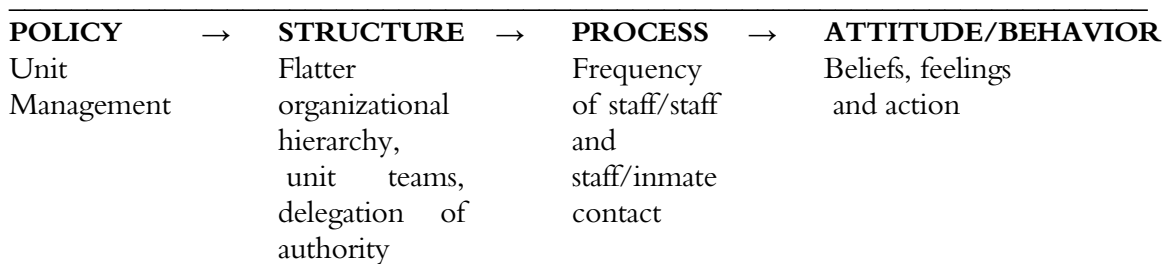
¹ Professor, Criminal Justice Department, Franklin Pierce University, 40 University Drive Rindge, New Hampshire, USA. E-mail: farmerjf@franklinpierce.edu

as the “deprivation” or “prisonization” penal model. This study of the implementation and effects of unit management on staff perceptions of their safety and security follows this respected tradition.

Unit management was introduced into correctional facilities around 1973 (Wener, 2005) and is conceptually based on the prison literature and the array of penal policies. In comparison to the authoritative penal policy and organizational structure of the 1950s that Sykes (1958) saw as causing prison unrest, unit management has been argued to be a policy that increases staff commitment, lessens staff alienation, and results in control over inmates without the need to overpower them (Fihla, 2001; Wener, 2005). Unit management also addresses the problem of poor communication among staff, and between staff and inmates (Yocum, Anderson, DaVigo & Lee, 2006; Gerard, 1991; Levinson, 1999), that Cressey (1961) attributed to the separate hierarchies for the custody and treatment branches of the prison organization. Hobbs & Dear (2000), however, raise some questions about the validity of the effectiveness of unit management in improving communication between staff and inmates to the level that inmates are comfortable discussing personal problems, like depression and self-harm, with the staff.

Unit management is a correctional policy that specifies a specific structure. For example, multi-disciplinary unit teams, housing small numbers of inmates together permanently, placing officers in the inmate housing units, and decentralized organizational hierarchy (Hobbs & Dear, 2000; Wener, 2005). The implementation of unit management has been reported to positively change various processes such as the opportunities for individual members of the team to participate in decision-making, and the proactive intervention that heightens security and prevents incidents (Wener, 2005; Yocum et al., 2006). These processes, in turn, affect the attitudes and behaviors of both staff and inmates. This structural model, as depicted in Figure 1, serves as a guide for the present study.

Figure 1: Conceptual Diagram of Unit Management Effects



Unit management is thought to be one way of separating the inmate population into smaller groups to bring about the fairness and safety specified by the retribution policy of the 1970s and carried through to the present. Unit management today also seems to be compatible with both the "punishment as retribution" and “re-entry” sides of the current debate over penal policy. With authority decentralized and staff located in inmate living quarters for direct supervision, unit management teams are in a position to be immediate reinforcers of positive inmate behavior and observers of potentially dangerous issues that jeopardize staff and inmates. Since these unit management teams are multi-disciplinary, more choices (i.e., classes, counseling, and recreation) should be visible and available to inmates. Inmates should have the option, then, of making more positive use of their

incarceration period, a hope expressed by Fihla (2004) in South Africa, Hobbs and Dear (2000) in Australia, Houston and Stefanoviae (1996) in Slovenia and many researchers in the United States.

The basic hypothesis for this present study was based on the presumed and documented success of the unit management structure and process (Figure 1) as it relates to staff beliefs about their work environment, specifically their own safety. It was hypothesized that unit management staff, compared to non-unit management staff, would feel safer and would perceive more delegation of authority and more opportunities to participate in decisions regarding their work environment and issues relating to the inmates.

Literature Review

Unit Management

Most of the research has shown that the implementation of unit management is inextricably connected to and frequently referred to as direct supervision (Edwards, 2007; Wener, 2005) and results in improved staff attitudes towards their work and their department of corrections (Lambert, Hogan, Moore, Tucker, Jenkins, Stevenson & Jiang, 2009). It also leads to improved safety for staff and inmates (Edwards, 2007; Edwards, 2011; Nelson & Davis, 1995). This change is attributed to the increase in daily collaborations between staff and increased familiarity with inmate concerns (Cooksey & Carlson, 1997; Fihla, 2004, Wener, 2005).

Staff at prisons and jails that are decentralized (more delegation of authority and opportunities to participate in decision-making) have reported more favorable attitudes toward either the prison or their jobs (Guay, Senecal, Gauthier, & Fernet, 2003; Wener, 2005). Conversely, staff become more stressed when they perceive a poor communication, a lack of information input (Dowden & Tellier, 2004; Hogan, Lambert, Jenkins & Wambold, 2006; Lambert, Hogan & Allen, 2006) and little control over their environment (Yocum et al., 2006).

Support of the prison system and/or departments of corrections has also resulted from unit management. Edwards (2007) found that while the direct supervision afforded by unit management was criticized and viewed with trepidation 30 years ago, it is held in the highest regard now and is seen as the catalyst for more staff control and a safer, more secure, correctional environment that has less violence. Wener (2005) also reported this history. Citing early penitentiary studies, he recalls how the increased commitment by staff to the system was a function of the continuous communication effort administrators undertook during the transition to unit management and after initial implementation.

In general, the decreased tension and increased safety resulting from unit management has led American staff and inmates to report more favorable attitudes towards prison work and prison living (Edwards, 2011; Freeman, 1997; Levinson, 1999; Wener, 2005). The same has been reported in Australia (Robson, 1989) and South Africa (Fihla, 2004). On the other hand, studies of prisons and jails without unit management or some form of staff participation in decision-making have consistently shown negative staff attitudes towards their jobs and low commitment toward either the prison administration or the department of corrections (Lambert, et al., 2006; Tewksbury & Higgins, 2006).

In South Africa, Fihla (2004) reported that a new Constitution called for prisons previously designed and managed for punishment should be converted to the humanitarian unit management model. He cited all the advantages and successes of unit

management in the United States, Australia and New Zealand. Among the advantages were increased staff safety, more positive relations between staff and inmates, better control and more direct supervision of inmates and the reduction of incidents related to overcrowding. The Robson (1989) study referenced by Fihla (2004) was Robson's inquiry into an Australian prison, where the improvements in prison conditions were attributed to the increased frequency of contact and communication among staff and between inmate and staff. This was positively related to the degree of authority delegated to the staff under the unit management model.

Applegate and Paoline (2007), however, found something different when they studied the perceptions of staff in a traditionally centralized facility and the perceptions of staff working in a newer and decentralized unit facility. They had hypothesized that the staff in direct-supervision inmate units would report more job satisfaction, more autonomy and control over inmates, fewer inmate attacks on staff and a safer environment. They discovered the opposite of what they had predicted. The jail officers in the direct-supervision units perceived being less safe and thought they had less decision-making authority over the inmates. The speculation was that the staff felt their jobs were more dangerous because they were required to walk around in the inmate units and were not protected by physical barriers. The direct-supervision staff also did not believe their communication with inmates had improved.

Organizational Theory

Decentralized organizations, like prisons utilizing unit management, tend to be characterized by greater communication between upper and lower management and an increased capacity to respond to the environment (Abu-Jarad, Yusof & Nikbin, 2010; Hennestad, 2000). The authority that is delegated often goes to a team, or work group, rather than to an individual. The delegation of authority implies the delegation of decision-making (Ismail, Mohamed, Sulaiman, Mohamad & Yusuf, 2011), but the amount of delegated authority and the opportunities to participate in decision-making can vary. There can be, for example, little delegated authority, but widespread participation in decision-making. Lower level involvement can range from consultation to the manager, to limited input in the decision, to full responsibility for the choice of action to be taken.

It has been recognized that decentralized prisons and corporations can better meet the social and psychological needs of their members than can a larger, more impersonal bureaucratic systems (Boone & Hendricks, 2009). It has also been found that empowerment, because of the opportunities it offers for participation in decision-making, can lead to improved group member satisfaction (Boone & Hendricks, 2009; Hatvany & Gladstein, 1982; Hennestad, 2000; Lambert et al., 2006; Wright, Saylor, Gilman & Camp, 1997). Some researchers (Dowden & Tellier, 2004; Slate, Vogel & Johnson, 2001) have reported that prison staff are less stressed when empowered to make decisions. In addition, empowerment has produced a more positive social climate in foreign countries and companies (Galle & Leahy, 2009; Gill, Mathur, Sharma, & Bhutani, 2011; McLaurin, 2008; Vasugi, Kaviatha, Fabiyola & Prema, 2011). Mutual trust has been increased between the management and the worker (Akbar, Yousaf, Haq, & Hunjra, 2011; Arnetz & Blomkvist, 2007).

There is considerable agreement in the behavioral science literature that staff empowerment can benefit the participants as well as the organization that adopts this policy. Being a valued group member not only results in a sense of power, but job

satisfaction (Stanley, 2011; Vasugi et al., 2011; Yao & Cui, 2010), security and friendship (Raquib, Lama, Anantharaman, Eze, & Murad, 2010). The organization benefits from the resultant increase in group member motivation and individual and group productivity, as well as from increased problem-solving ability and commitment to the organization (Tjosvold & Sun, 2006).

Staff empowerment, however, is by no means a panacea for all management problems. In fact, empowerment can create new problems. It has been found that failures with staff empowerment frequently occur because of the way it is implemented. If employees are pressured into participating when they have not interest in doing so, officers can become resentful towards their supervisor (Galle & Leahy, 2009). In addition, participants in the joint decision-making process often flounder when there is no clear direction (Chacar & Suryekar, 2009), or become discouraged if the group leader dominates the decision-making process (Siddique, Khan & Fatima, 2011).

Staff adjustment to empowerment can also be fraught with problems. Siddique et al. (2011) found the tension between new participative systems and traditional organizational hierarchies if extra funds did not follow the new empowerment model. Researchers (Chacar & Suryekar, 2009; Stevenson & Gumpert, 1985) have cited the difficulty of accommodating staff empowerment within an organization used to stability and control. Another study (Muczyk & Reimann, 1987) suggests that the model has been oversold at the expense of the follow-up. It was found that employees in small organizations, who were given increased opportunities to participate in decision-making, often lacked the initiative and experience necessary to execute the decisions. Managers who supervised the decision-making group often had to step in and follow up to ensure that decisions were carried out.

The idea that staff empowerment is effective only under certain conditions has support in traditional organizational research (Chacar & Suryekar, 2009). In addressing psychological contingencies, Vroom & Yetton (1973) found that efforts to generate participative involvement failed if the organization members resisted participation. Chacar & Suryekar (2009) show clearly that production and morale can benefit from “less close” supervision, but that efforts to increase participative involvement will not likely succeed if employees have low trust in managers who are seen as autocratic. Nor is success likely if supervisors resist employee involvement (Klein, 1984).

Staff empowerment can also fail if the people in control of the organization have an insincere commitment to the philosophy (Siddique et al., 2011). McGregor (1960) noted, ‘The not infrequent failure of such ideas as these to work as well as expected is often attributable to the fact that a management has ‘bought the idea’ but applied it within the framework of Theory X and its assumptions’ (p. 277).

Methodology

Prior to the collection of data for this study of staff safety, it was reasonable to expect that the staff designated as “unit management” would perceive more delegation of authority and more opportunities to participate in decision-making than would “non-unit management” staff. It was also predicted that “unit management” staff, compared to “non-unit management” staff, would evaluate more highly the security of their environment (i.e., being safe, control over inmates, controlling for contraband, likelihood of being assaulted, and access to the inmate pipeline).

Research Sites

Both correctional institutions are medium security and overcrowded. Both have a formal decentralized management organization and written policies that resemble Federal Bureau of Prisons standard specifications. These two facilities were chosen to minimize the confounding effects of such factors as security level and type of inmate on measures of social climate. There are three unit management teams at Glenway. Each of these teams included a group manager, a sergeant, a correctional counselor, at least two correctional officers, and several relief personnel. There was an average of 10 unit management staff and 246 male inmates assigned to each unit management team. The ratio of unit management staff to inmates under their supervision is 1 to 25. At the time of this study, Glenway housed about 737 inmates and employed about 310 staff.

At Senoia, the single unit management team consisted of 20 staff, including a team manager, one sergeant, five correctional officers, four correctional counselors, and several relief personnel. They were all assigned to the east side of the facility, which included four separate housing units with a total of 150 male inmates. The Senoia unit management staff to inmate ratio was 1 to 7.5, one third the average Glenway unit management staff to inmate ratio. Senoia housed about 644 inmates and employed about 350 staff.

Participants

The participants were 57 staff (26 unit management and 31 non-unit management) from Glenway and 92 (16 unit management and 76 non-unit management) from Senoia correctional institutions (pseudonyms are used). Respondent's participation was completely voluntary and was determined by saturation sampling. Different days and times during all work shifts were arranged for the volunteers to be released from work to complete the survey. The median respondent age was 34.2. There were 112 (75 percent) males and 37 (25 percent) females. The staff had worked at their respective prisons for an average of almost six years. Their median education was two years of college, 24 percent had a bachelor's degree, and only two percent of them had not completed high school. Almost 60 percent of the staff respondents were security personnel, and 40 percent were treatment personnel. Staff from all shifts participated.

Survey Instrument

To analyze the effects of the unit management specified structural changes on the correctional institutions, a questionnaire was adapted with permission from the Saylor, Gaes and Vanyur (1987) "Prison Social Climate Survey - Staff Version." This questionnaire has been used by the Federal Bureau of Prisons to track climate changes in the Federal system. The survey used for this study is retrospective and is limited to issues related to staff safety items. One addition made to the questionnaire instructions was to limit the respondents to a six month time reference. This limitation of the period of reflection was to maximize reference to the "same" climate while providing a time span large enough to collect sufficient data for comparison.

Analytical Sequence

Several indices of the delegation of authority and the staff safety/security environment were created by factor analysis of responses of Glenway and Senoia staff to the survey adapted from Saylor et al. (1987). With unit management (staff status was determined by upper management) as the independent variable and these indices as the

dependent variables, several hypotheses were tested by bivariate analysis to determine if the unit management staff fared better than the non-unit management staff on the delegation of authority and safety issues. Then several of these indices were regressed on the major safety/security index to test the conceptualized path to staff safety.

Methods of Index Development

Unit management calls for the delegation of authority and opportunities to participate in decision-making. These two concepts were measured separately to distinguish authority from participation. The items comprising the two indices (Table 1) were chosen on face validity to determine the extent to which these two elements existed. In addition to these indices, three more were created to measure the communication level between staff and inmates. The first of these was frequency of staff/inmate contact that consisted of only one question, "How often do you interact with inmates?" The second index, access to inmate pipeline, asked, "How much access do you have to the inmate information network." And the third, knowing inmates, asked "How well do you personally know the inmates you are responsible for?"

A factor analysis was then employed on the staff responses to all questions in the Saylor et al. (1987) survey relating to the staff safety and security. Principal components analysis (to explain the observed variables' variance) with orthogonal varimax rotation produced six factor indices that accounted for 72.6 percent of the total variance among the 21 items entered. The factor loadings of the index items, a measure of reliability (Cronbach's alpha) and percents of factor variance are provided in Table 2. In keeping with the justifications of Nunnally (1967, p. 24-26), multiple regression was used for this purpose, despite the fact that the scales used are all ordinal and do not meet the necessary interval assumptions. Moreover, in keeping with acceptable standards (Johnson & Wichern, 1982; Nunnally, 1967), only factor items with loadings of .40 or higher were used to create factor scores.

Six indices were constructed by simply summing the standardized scores on each item. Following Kachigan (1982, p. 254), it was decided to retain the high negatively loaded items because, despite the loading, the variables contributed to the interpretation of the factors. This means that a staff member scoring high on the negatively loaded item will score lower on this factor. To construct factor scores for those items with negatively loaded items, the researcher followed Johnson and Wichern's (1982, p. 436) advice and added the standardized scores in the factor according to the sign of the loading. In other words, negatively loaded items were summed as negative.

The first factor, safety in numbers, was used to measure an interesting combination of attitudes towards the degree of inmate freedom to move and whether there are enough staff to keep staff safe. It is apparent from the high negative loadings that there is an inverse correlation between the staff perception of inmate freedom to move and staff perception of staff safety. In other words, if staff scored lower on the freedom to move the item, they would feel safer.

The second index, control over inmates, is a combination of questions that measure staff perception of their control over the inmates during all three work shifts, including the shifts the respondents do not work. The third index, safe from injury, measures the extent to which there is danger of physical injury to male and female staff. There was a .70 correlation between the first two items relating to injury. The item regarding weapons correlated from .39 to .43 with those.

The fourth index, likelihood of assault, combines several items measuring the possibility of inmate assaults on staff, but differs from the previous index in that there is no notion of injury. Also, this index includes the degree to which staff is bothered by potential assaults. The fifth index, elimination of contraband, is composed of items that address the frequency in which different methods are used to eliminate drugs, weapons and other contraband which are common causes of arguments and assaults. A high negative loading showed up on the third item that factored here: whether or not a staff member had been assaulted by an inmate. Yet, neither of the shakedown questions correlate with the assault question (.07 and .05). As one might expect, however, the shakedown items correlate .56 with each other. It could well be that the commonality that caused these three items to factor together is the association between shakedowns and assaults. Shakedowns are viewed as a way of preventing assaults, yet there is always a danger of being assaulted while shaking down. In any event, only 10 (6.7 percent) out of the 149 staff respondents reported having been assaulted, so this item was eliminated from the index and treated separately.

The sixth index, contact with AIDS inmates (contact with inmates known to have, or suspected of having, AIDS), measures a major safety concern for staff. The only AIDS questions in the questionnaire loaded together.

Table 1: Indices of Decentralization

Index	Items
Delegation of Authority	In this prison, authority is clearly delegated. In this prison, it is often unclear who has formal authority to make a decision. I have the authority I need to accomplish my work objectives.
Opportunities to Participate	My supervisor encourages me to develop work methods and procedures for my job. My supervisor asks my opinion when a work related problem arises. I have a great deal of say over what has to be done on my job.

Note: The non-standardized scores for the three items in each index are moderately correlated. The scores were reversed for all items of opposite logic in this study (i.e., the first two items in Delegation of Authority). The score for all indices was determined by summing the standardized scores on all the items in the index.

Testing of Decentralization and Safety Indices

After creating the appropriate indices, and in final preparation for the regression testing of the conceptual path for staff safety, a number of tests were run to determine if there was a statistical difference between how unit management and non-unit management compared at Glenway and Senoia. The results of these tests are in Table 3.

Table 2: Loadings of Staff Safety and Security Items on Varimax Rotated Factors with Kaiser Normalization

Factor	Items	Loadings	% Total Variance
Safety in Numbers (Alpha = .62)			
	Enough staff to protect staff 11-7 AM?	-.898	
	Enough staff to protect staff 7-3 PM?	-.883	
	Enough staff to protect staff 3-11 PM?	-.740	
	Degree of inmate freedom to move 7-3 PM?	.667	
	Degree of inmate freedom to move 11-7 AM?	.402	25.5
Control over Inmates (Alpha = .78)			
	Degree staff control inmates 3-11 PM?	.864	
	Degree staff control inmates 7-3 PM?	.809	
	Degree staff control inmates 11-7 AM?	.725	14.3
Safe from Injury (Alpha = .68)			
	How safe from injury for male staffers?	.909	
	How safe from injury for female staffers?	.787	
	How often have inmates had weapons?	.494	11.6
Likelihood of Assault (Alpha = .80)			
	Likelihood of staffer being assaulted?	.903	
	Frequency inmates use physical force on staff?	.865	
	Bothered by inmate physical force on staff?	.570	
	Does danger to male staff bother you?	.468	
	Does frequency inmates have weapons bother you?	.444	9.2
Eliminating Contraband (Alpha = .51)			
	Frequency of living area shakedowns?	.834	
	Frequency of inmate strip and pat searches?	.791	
	Have you been assaulted by an inmate?	-.559	6.6
Contact with AIDS Inmates (Alpha = .34)			
	How often are you around inmates with AIDS?	.761	
	How much does the # of inmates with AIDS bother you?	.677	5.5

Note: Factor loadings < .40 not in table.

Table 3: Mean (rounded) Standardized Scores for Delegation of Authority and Staff Safety and Security Environment

Indices	Glenway Staff			Senoia Staff		
	Unit management/ Non-unit management t***	Unit management/ Non-unit management t***	Unit management/ Non-unit management t***	Unit management/ Non-unit management t***	Unit management/ Non-unit management t***	Unit management/ Non-unit management t***
Decentralization						
Delegation of Authority	-1.2	1.0	-	0.9*	-0.2	+
Opp. to Part. in Decision-Making	-1.1	1.1	-	1.0*	-0.2	NS
Chances to Influence Environment	0.7	0.4	-	0.1	0.0	NS
Staff Safety and Security						
Safety in Numbers	2.3	0.9	+	-1.6**	-0.7**	NS
Control over Inmates	0.2	-1.0	NS	-1.2	0.4	NS
Safe from Injury	0.7	-0.7	NS	-0.3	0.1	NS
Likelihood of Assault	2.5	1.5	NS	-1.1	1.7	NS
Eliminating Contraband	0.8	0.1	+	0.0	-0.2	-
Contact with AIDS Inmates	0.5	-0.1	NS	-1.2	0.2	-
Communication						
Frequency of Staff/Inmate Contact	0.3	-0.5	+	-0.3	0.0	NS
Access to Inmate Pipeline	0.1	-0.1	NS	0.2	-0.1	NS
Knowing Inmates	0.6	-0.2	NS	0.4	-0.2	NS

Notes: Larger scores are better.

*** All were two-tailed. If $p < .05$ and supports hypothesis, then +. If $p < .05$ and fails to support hypothesis, then -.

** Glenway non-unit management staff reported a significantly higher score on this index than Senoia non-unit management staff. $P < .05$ using one-way ANOVA with harmonic mean and Scheffe test.

* Senoia unit management staff reported significantly higher score on this index than Glenway unit management staff. $P < .05$ using one-way ANOVA with harmonic mean and Scheffe test.

As can be seen, Glenway unit management staff reported significantly less delegation of authority and fewer opportunities to participate in decision-making than did the non-unit management staff there. This was particularly odd and cast doubt as to whether the unit management model at Glenway was being practiced as the standard model specifies. Although Glenway had a flatter organizational structure, as did Senoia, the Glenway non-unit management staff reported more decentralization than the unit management staff reported. At Senoia, the unit management staff reported significantly more delegation of authority, but their decision-making opportunities, while in the right direction, was not significantly different than the non-unit management staff.

Although the primary purpose of this study is not to focus on these bivariate results, it is worth noting that for Glenway the unit management staff, compared to the non-unit

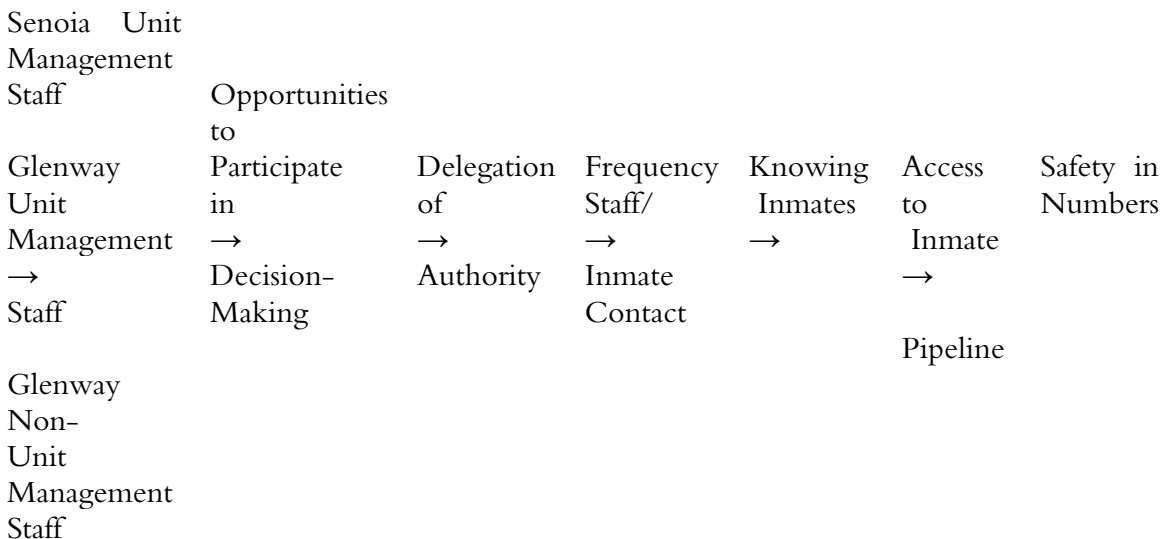
management staff, reported significantly more favorable perceptions of safety in numbers, eliminating contraband and the frequency of staff/inmate contact. At Senoia, the unit management staff, compared to the non-unit management staff, reported significantly less favorable perceptions of eliminating contraband and contact with AIDS inmates.

What was unexpected in these tests at Glenway was that the unit management staff (compared to the non-unit management staff), reported being safe and having more contact with inmates, but at the same time perceiving having less authority and fewer chances to influence their environment. Also unpredicted were the non-significant results when the perceptions of the unit management and non-unit management staff at Glenway and Senoia were compared on such indices as control over inmates, feeling safe from injury, likelihood of assault, access to the inmate pipeline and knowing inmates.

Conceptual Path to Staff Safety

The next step in the research process was to conceptualize the path to staff safety. As shown in Figure 2, it was conceptualized that unit management would first lead to more opportunities to participate in decision-making. This index, which measured the respondent's actual experience, would lead to the reporting of more delegation of authority, which was the respondent's perception of the more general practice. The delegation of authority would lead to greater frequency of staff/inmate contact because unit management staff would have direct responsibility for the supervision of inmates. Greater frequency of staff/inmate contact would result in the staff better knowing the inmates. Conceptually, higher scores on knowing inmates would result in the staff having greater access to the inmate pipeline.

Figure 2: Conceptual Model of Staff Safety



With greater access to this inmate communication network, the staff should have more information about inmate plans for riots, fights and other behavior that threatens staff safety and security. Staff, knowing they can take action to prevent this threatening behavior, should feel safer. The index used to measure staff safety and security was safety

in numbers. This index accounted for 25.5 percent of the total variance of all items entered in the safety and the security factor analysis.

Findings of Multiple Regressions on Staff Safety

Several categories of staff and inmates (independent variables) were used in the regression equations as dummy variables. In each of the equations for staff, there were four categories that designated unit management status (Glenway unit management, Glenway non-unit management, Senoia unit management and Senoia non-unit management, and two categories that designated security status (security and treatment). The Senoia non-unit management staff and the treatment staff were left out of the staff equations. These variables that were left out were the control groups, against which the other variables in those categories were measured.

Controlling for the effects of unit management status and security jobs (versus treatment jobs), safety in numbers was regressed on access to inmate pipeline, knowing inmates, frequency of staff/inmate contact, delegation of authority, and opportunities to participate in decision-making. In general, it was found that most of the relationships between the indices were in the predicted direction, but only part of the conceptualized path was significant. Table 4 shows the results of the multiple regressions.

The first regression equation (adjusted R square = .31) (Table 4) revealed that both the unit management and non-unit management staff at Glenway, compared to the non-unit management staff at Senoia, reported being safer and more secure, as measured by the safety in numbers index. The beta coefficients for the unit management staff at Glenway and Senoia were .31 and .34, respectively, and they were both significant at $p < .001$. The security staff, compared to the treatment staff, was also significantly safer and more secure. The delegation of authority, however, had a significant negative direct effect on safety and security.

A possible explanation for this is that the perceived delegation of authority is over security issues, and the more one perceives a loss of authority through delegation, the more one perceives a loss of control over those issues, and the less secure one feels. Knowing inmates and having opportunities to participate in decision-making also had a negative direct effect on safety and security, although the strength of the effect was not significant.

Knowing inmates had a significant positive direct effect (with a beta coefficient of .32) on access to inmate pipeline in the second equation (adjusted R square = .14), as conceptualized. Opportunities to participate in decision-making had a negative direct effect on access to inmate pipeline. This relationship was weak ($p < .10$) and not as predicted. The Senoia unit management, compared to the Senoia non-unit management staff reported significantly more access to inmate pipeline. The other variables contributed very little in this equation.

In the third equation (adjusted R square = .12), the best predictor of knowing inmates was the frequency of staff/inmate contact, with a beta coefficient of .35. This was significant at the .001 level. The other variables contributed very little to the explanation. The fourth equation (adjusted R square = .08) failed to support the predicted positive direct effect of the delegation of authority on the frequency of staff/inmate contact. Instead, it was revealed that the delegation of authority had a slight, although not significant, negative effect. In the fifth equation (adjusted R square = .35), opportunities to participate in decision-making was the best, and only, a significant predictor of the

delegation of authority. The beta coefficient was .56 and was significant at the .001 level. The direction of this relationship was as predicted.

Table 4: Regression (standardized regression coefficients) Results for Staff Safety in Numbers

Independent Variables	Dependent Variables					
	SAFE	ACCESS	KNOW	FREQ	DELA	OPPO R
Access to Inmate Pipeline	.05	-	-	-	-	-
Knowing Inmates	-.13	.32***	-	-	-	-
Frequency Staff/Inmate Contact	.13	-.04	.35***	-	-	-
Delegation of Authority	-.26**	-.08	-.03	-.13	-	-
Opport. to Part. In Decision- Making	-.13	-.17****	.12	.10	.56***	-
UN Staff (Senoia)	.03	.17*	.07	.11	.06	.14****
UM Staff (Glenway)	.31***	.03	.14	.13	-.09	-.09
N-UM Staff (Glenway)	.34***	-.05	.07	-.23**	.10	.17*
Security Staff	.25**	-.12	.02	-.14	.04	-.21**
Adjusted R ²	.31	.14	.12	.08	.35	.10
N	98	142	145	146	146	147

Note: SAFE stands for Safety in Numbers

* p<.05 ** p<.01 *** p<.001 **** p<.10

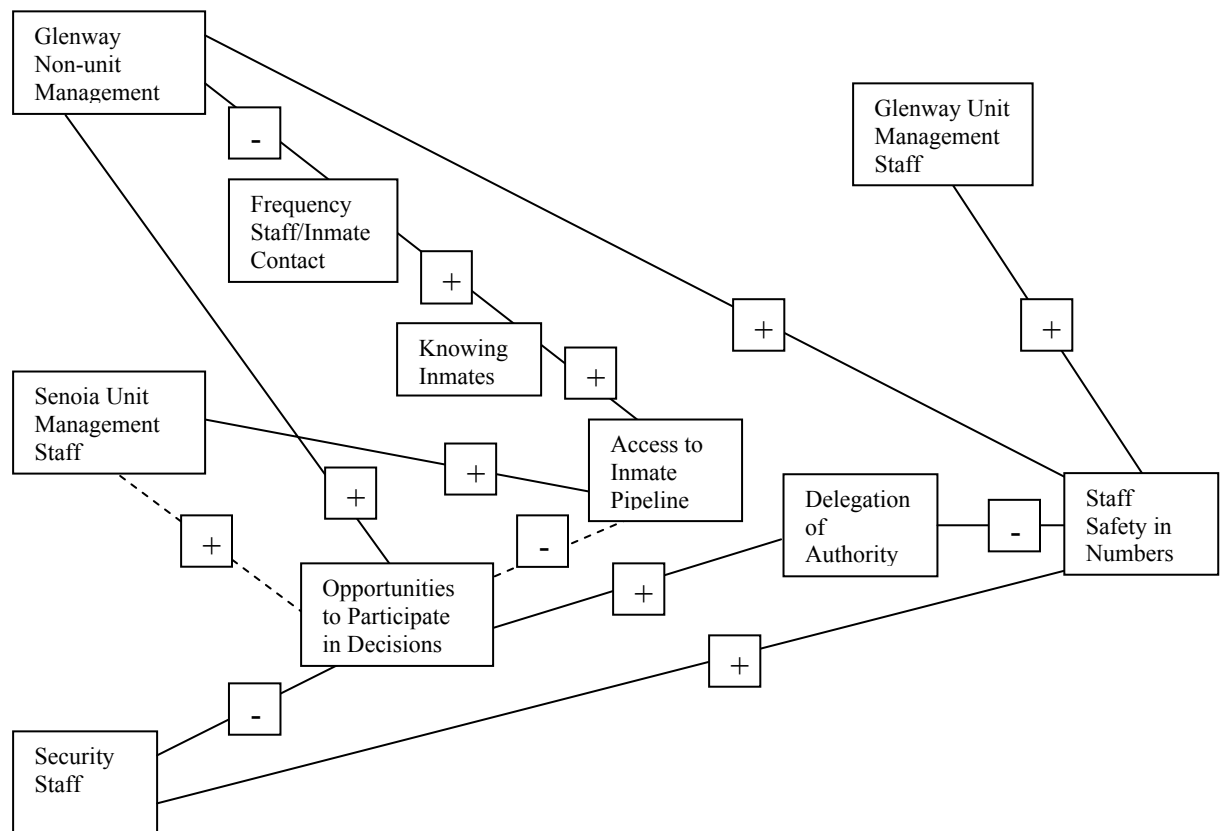
In the sixth equation (adjusted R square = .10), the best predictor of opportunities to participate in decision-making was the security staff, compared to the treatment staff (control group). The beta weight was -.21, which was significant at p<.01. The security staff was reporting significantly fewer opportunities to participate in decision-making. Another good predictor of opportunities to participate in decision-making was the non-unit management staff at Glenway, compared to the Senoia non-unit management staff (control group). The beta coefficient was .17, which was significant at p<.05. The unit management staff at Senoia came close to being a significant predictor (p<.10) of opportunities to participate in decision-making.

Figure 3 shows the path model based on these results. It had been conceptualized that the unit management staff at both Senoia and Glenway, compared to the non-unit management staff at their respective prisons, would report more opportunities to participate in decision-making. In this regression, only the Senoia unit management staff, compared to the Senoia non-unit management staff, reported significantly more opportunities to participate in decision-making (at p<.10). As shown in Figure 3, opportunities to participate in decision-making, as conceptualized, had a direct positive effect on the delegation of authority.

A portion of the conceptualized path to staff safety was significant, however. The frequency of staff/inmate contact had the conceptualized direct positive effect on knowing

inmates, and knowing inmates had the predicted direct positive effect on access to inmate pipeline. Access to inmate pipeline, however, was not significantly related to safety in numbers. Despite this, the unit management and non-unit management staff at Glenway, as compared to the unit management and the non-unit management (control group) staff at Senoia, and the security staff, as compared to the treatment staff, felt safer and more secure. It could be that the Glenway staff reported being safer than the Senoia staff because 63 percent of the Glenway sample was security, compared to 54 percent of the Senoia sample, and security staff felt safer than treatment staff.

Figure 3: Path Model of Staff Safety in Numbers



Note: Based only on the standardized regression coefficients reported in Table 4 that are significant at $p < .10$ or better. Those relationships that are only significant at $p < .10$ are indicated with a broken line.

It is interesting to look at the indirect effects of the variables (Figure 3) on staff safety. As previously mentioned, the security staff reported fewer opportunities to participate in decision-making, which was a significant predictor of the delegation of authority, and the delegation of authority had a significant direct negative effect on safety. But because there are two significant negative relationships in the indirect path from security to safety, what is found is that security staff really has a positive indirect effect on safety.

It is also interesting to note that the Senoia unit management staff, through opportunities to participate in decision-making and delegation of authority, report being less safe than the Senoia non-unit management staff. This is probably due to the fact that the unit management staff sample at Senoia has more treatment personnel in it than the non-unit management staff sample there, and treatment staff, compared to security staff, report being less safe.

Discussion

The unit management staff respondents at Senoia reported significantly more delegation of authority than the Senoia non-unit management staff. While not significantly different, the Senoia unit management staff also reported more opportunities to participate in decision-making. Thus, the first expected outcome was, in fact, found at Senoia.

The expected results were not found at Glenway, however. The staff at Glenway who were said to have been “unit management” reported significantly less delegation of authority and fewer opportunities to participate in decision-making than did the non-unit management staff, although Glenway unit management staff had a flatter organizational structure than did the Glenway non-unit management staff. Follow-up interviews at Glenway revealed that the managers of unit management teams held few team-decision meetings and often made the decisions themselves. Although their subordinate staff acknowledged being empowered by top management, they did not feel they were members of a team and they felt they had no actual power.

Possible explanations for the Glenway non-unit management staff reporting more decentralization of authority are both structural and procedural. All of the inmates at Glenway (which was operating at 401 percent of bed capacity) were under the supervision of one of three unit management teams. The unit management staff to unit management inmate ratio was 1 to 25 (compared to 1 to 7.5 at Senoia), and the Glenway unit management staff were responsible for the supervision of so many inmates (in overcrowded living quarters) that there was little time for team consultations and decisions. Glenway unit management staff, in follow-up interviews, claimed that the three unit managers often made decisions by themselves, without consulting the other team members, with whom they meet formally only once a week. The non-unit management staff under the traditional centralized organizational structure, on the other hand, has decisions and authority delegated to them more frequently, because they have less direct responsibility for inmates.

At Senoia, unlike at Glenway, it was the unit management staff, compared to the non-unit management staff, who reported better scores on the decentralization of authority indices, the delegation of authority and opportunities to participate in decision making. Senoia, as compared to Glenway, had both unit management and non-unit management inmates and was operating at 323 percent of bed capacity. Glenway was operating at 401 percent capacity. There was only one unit management team at Senoia, and the unit management staff to unit management inmate ratio was 1 to 7.5, as compared to three unit management teams and a unit management staff to unit management inmate ratio of 1 to 25 at Glenway. Half of the unit management sample at Senoia were correctional counselors. Some of these correctional counselors claimed, in follow-up interviews, that there was so much delegation of authority and so many decisions to be made about inmates that they had difficulty in getting the paperwork done when needed.

Conclusion

In tough economic times, politicians and correctional administrators are compelled to consider deep budget cuts. Some state correctional institutions have already abandoned unit management because maintaining the model-specified unit manager positions could not be fiscally justified. Future research into the unit management/direct supervision model should focus on facilities that have cut this humanistic decentralized management technique. Have there been increased incidents of inmate/inmate and inmate /staff assaults? Do staff report feeling less safe? Has there been increased staff negativity towards their prison or their department of correction?

What was found in this case study of two medium security state institutions was that unit management staff compared to non-unit management staff reported feeling safer and having more access to the inmate pipeline. Security staff, in particular, perceived themselves safer than did treatment staff. The lower scores on decentralization by the Glenway unit management staff, as compared to Glenway non-unit management staff and the Senoia unit management staff, provides evidence that unit management was not properly managed at Glenway. The “unit management” staff was under a shortened bureaucratic hierarchy, but the staff-to-inmate ratio (1:25) was way too large and the staff were not reporting the decision-making opportunities and delegated authority that was to accompany the structural change. This might follow from some of the research that has reported too little direction and follow through by management to be a major factor in failed unit management efforts.

It is evident that for more of the lauded and desired results of unit management to be obtained, the staff-to-inmate ratio must be kept low and the unit management staff should have good relations with, and support from, upper management. Researchers have predicted the failure of unit management if this were not the case. Unit teams should be given the delegation of authority, and the necessary resources, time and training. The training should be in the areas of staff management, team communication, commitment to a shared correctional mission, and methods of modern data collection to evaluate the effectiveness of this model. The continued use of unit management should be supported, but great care should be taken in its implementation.

The direct supervision of inmates through the delegation of authority to unit teams operating in the inmate housing areas, although often more stressful for correctional staff, can potentially improve staff/inmate and staff/staff communication, heighten vigilance over safety and security issues and, thus, maintain the humane working and living environment called for by government constitutions, bureaus of prisons, state departments of correction and municipal jails.

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