



Understanding the links between perceived prison conditions and prison staff[☆]

T. Molleman^{*}, T.C. van der Broek

Ministry of Security and Justice, Research and Documentation Centre (WODC), P.O. Box 20301, 2500 EH The Hague, The Netherlands

Abstract

In the Dutch prison system, motivational treatment is seen as one of the key contributors to a dignified and humane prison climate, stimulating inmates to assume personal responsibility and to change their lives. Staff are seen as the crucial factor to attaining this goal. The assumption is that the staff's work situation has an impact on how inmates are treated. How inmates are treated in turn influences how they perceive prison conditions. In this study, we will examine the correlations between work situation, treatment styles and perceived prison conditions by means of a multilevel linear regression. The results show that a good work situation for prison staff is a precondition for practicing an active approach to inmates. In addition, inmates are more satisfied with the prison conditions if the various treatment styles are thoroughly applied. A balance between providing support and structure for inmates appears to be very important. Motivational treatment proves to be significantly correlated to the inmates' satisfaction regarding prison conditions.

© 2014 Elsevier Ltd. All rights reserved.

Keywords: Treatment; Prison conditions; Inmates; Work situation; Leadership; Prison staff

[☆]**Authors' note:** The views expressed in this article are those of the authors and do not necessarily reflect the policy or opinions of the Dutch Ministry of Security and Justice. The authors appreciate the continuous support the Dutch Prison Agency. We benefitted from the useful comments by anonymous reviewers of IJLCJ.

^{*} Corresponding author. Tel.: +31 (0) 6 528 77 102.

E-mail addresses: t.molleman@minvenj.nl (T. Molleman), t.c.van.der.broek@minvenj.nl (T.C. van der Broek).

1. Introduction

When studying prison conditions, researchers often choose to look at it from the perspective of the inmates. The behaviour and experiences of inmates are explained, for instance, from a psychological, (neuro-)biological or sociological perspective. Here we choose a different approach: that of the organisational sciences and human resource management. The rationale for this choice lies in the need to find factors that not only influence inmates' perception of their prison conditions, but that *can be influenced* by the prison organisation as well. We assume that prison staff exert an influence on the perception of being imprisoned. A recent study has shown, for instance, that treatment styles used by staff are directly related to inmates' perceived prison conditions (Molleman and Leeuw, 2012). However, it also emerged that the work situation of staff is *not* directly related to the perceived prison conditions. This study therefore recommended to examine more closely the correlations between the work situation, treatment styles and perceived prison conditions, through separate analyses. The present study follows this recommendation.

The Dutch prison system strives to provide for a safe and dignified prison service, and cooperates with various organisations (e.g. municipalities and probation service) and the inmate to achieve a successful reintegration in society (DJI, 2009). In many other western countries, prison systems have similar mission statements. Several publications have indicated that issues like safe, humane and reintegrating prison conditions are important with a view to (preventing) violent disturbances in prison. According to Specter (2006), prison conditions and violence in prison are closely related. Although violence in prison can be attributed in part to inmate-related factors such as mental illnesses and gang affiliations, these factors are only a part of the explanation. Outdated and unhygienic facilities, a lack of proper healthcare or purposeful activities may create circumstances that feed deviant behaviour within the walls.

Boin and Rattray (2004) state that two conditions are necessary for a riot to occur. First, prison managers and staff must hold divergent views, which may undermine their ability to anticipate and prevent violence. Second, the development of dysfunctional interaction patterns between prisoners and staff may incite inmates to engage in (collective) violence. Even a small event, like changing the menu, unexpected lock-ups or a last minute cancellation of the programmes, can easily disrupt the balance between staff and inmates and create the chance of conflict (Boin and Rattray, 2004). Moreover, another study states that prisoners who perceive the prison environment as violent, intimidating and frightening are more likely to reoffend (Listwan et al., 2013).

Several countries offer striking examples of how inmate's negative perceptions of prison conditions can lead to disorderly situations within the prison walls. In January 2012, prisoners in the Fulham Correctional Centre in Australia armed themselves with gym equipment and gardening tools and refused to return to their cells. They set fire to an office and stormed to the rooftop. The riot started when prisoners were forced to use flexible toothbrushes for safety reasons. There was also discussion concerning a pay-TV deal and dress standards that inmates objected to (The Age, 2012). About 300 prisoners at Mississippi's Adams County Correctional Facility rioted in May 2012 because they were upset over mistreatment by prison staff. One guard was killed, 20 people were injured and the damage to the prison was estimated at more than 1.3 million dollars. An FBI agent declared that the riot was started by a group of Mexican inmates who felt they were treated disrespectfully by guards and who were angry about the poor food and medical care (Huffington Post, 2012). In the prison of Andenne in Belgium, a religious issue sparked a major riot in November 2011. After the prison director prohibited prayer during the evening activities, about 150 prisoners occupied half of the prison units, caused fires and sabotaged fire equipment (Het Laatste Nieuws, 2011; Belgische Kamer van Volksvertegenwoordigers, 2012).

2. Theoretical framework

The effort made by prison staff plays a key role in how prison conditions are perceived. Garland (1990) has argued, for example, that staff members on the work floor are the main carriers of the prison climate. One way to improve that climate is to look for staff factors that are changeable (by the management) and that are related to the perception of prison conditions, such as the treatment of inmates. But does this mean that staff members should concentrate on liveability, or controllability? Should they aim for security or for treatment; should they restrict inmates or let them practice with privileges (rehabilitation)? In the literature, the above dilemma is placed within the framework of two opposite value systems: *harmony* and *security values* (Liebling assisted by Arnold, 2004). Harmony values include respect and trust and relate to support, to constructive relations between inmates and staff, to the importance of inmates' personal development and to their contact with loved ones. Security values pertain to the enforcement of rules and regulations, the use of authoritative action and coercion, risk management, control, routine and predictability.

When there is a strong emphasis on order and security, harmony values may come under pressure. In a strictly regulated prison, for example, there is little room to practice with privileges. These are barely granted under a strict regimen. It is therefore necessary to look for a balance that guarantees security on the one hand, but permits inmates enough room to demonstrate they can handle responsibilities, on the other. A study by Sparks et al. (1996) has shown that inmates accept a strict regimen if the staff treats them fairly and respectfully. There is a limit to this, however, as an exclusively tolerant attitude of staff will result in deviant behaviour (Liebling assisted by Arnold, 2004). It is crucial that the rules are enforced, and are not applied selectively¹ (Roth, 1985). Roth has demonstrated that inmates' familiarity with the rules lies more in their consistent enforcement than in the communication of house rules.

The staff's involved attitude but also their clear, structuring treatment are thus important factors. The value systems are not mutually exclusive. However, in the literature finding a balance between the two systems is seen as complex, and it is a recurrent topic of conversation on the work floor as well. This balance is crucial if the prison system wishes to both maintain security and to foster dignity and rehabilitation.

Besides the respectful and helpful attitude and the provision of structure, motivational treatment is an approach that may contribute to the prison climate. Motivational treatment is based on the technique of *motivational interviewing* (Miller and Rollnick, 2002). Staff members who use this method encourage inmates to participate in activities, help them make plans for when they have served their sentence, and try to hold up a mirror to them. All three styles are considered important. Which ratio or mix of styles is most effective has not been theoretically established. All Dutch prison staff members, regardless of the regime or institution where they work, follow a basic educational training and additional training in motivational interviewing.

The style used by the managers in charge of prison staff constitutes a further important factor in the daily routine of a prison. The managerial style influences the work- and prison climate within the institution (DiIulio, 1987; Camp et al., 2003; Craig, 2004). Two managerial styles are distinguished. A manager with a *directive style* steers staff members on the basis of a social exchange system of punishments and rewards (Burns, 1978). The starting point of the

¹For that matter, selective application is not the same as the strictness or rigidity of rule enforcement. The situation in a particular ward may allow a less strict enforcement (Roth, 1985). It does not seem advisable, however, to apply the rules differently to inmates staying in the same ward.

entrusting management style is to put one's trust in staff members and to give them responsibility (Northouse, 1997; Bass and Steidlmeier, 1999). Limited research material shows that leadership has an effect on how inmates experience the circumstances of their imprisonment. If a manager focuses too strongly on order and control, then it is assumed to encourage staff members to enforce the rules too rigidly. This leaves less room for informal contact with prison staff and restricts the opportunity for inmates to practice with privileges and autonomy. Solely directive leadership thus has a negative effect on the objectives of prisons mentioned earlier, in particular on rehabilitation (Craig, 2004).

In addition to styles of leadership and treatment, other staff factors may affect prison conditions. Staff members who are dissatisfied with their tasks and work situation generally fail to contribute to the prison system's objectives (Cheeseman et al., 2011), for example to provide security, dignity and rehabilitation. Several studies have mentioned staff factors such as work pressure and a lack of clarity about the tasks to be performed (Craig, 2004; Farkas, 1999; Liebling, 2000; Reisig and Lovrich, 1998; Tewksbury and Mustaine, 2008). Staff members need to feel covered and supported by colleagues at all times, in case they find themselves in unsafe situations. Socially and psychologically difficult situations need to be discussible in order to make a sound comparative assessment and to arrive at the right choice of action during the work with inmates. For this reason, intercollegiate contact is considered the crucial factor in the pursuit of these goals.

Background variables of staff members such as age, education, work experience and sex may also have an influence on the circumstances in prison (Camp et al., 2003; Farkas, 1999; Reisig and Lovrich, 1998; Steiner, 2009; Tewksbury and Mustaine, 2008). A further important factor is the exercised regimen. The regimen of a remand facility requires other accents in practice than a penitentiary facility (Lindquist and Lindquist, 1997; Molleman and Leeuw, 2012). In the Netherlands, beside the *remand facilities* and *prisons*, there are also open institutions, extra care wards, institutions for repeat offenders, high security prisons, psychiatric penitentiaries and *women's prisons*. The architectural structure of a penitentiary is also considered important for the (perception of) prison conditions (Johnston, 2000), with a distinction made between wing, cross, panopticon, high-rise, patio and pavilion institutions. Finally, it is an established fact that using cells to accommodate more than one person (double bunking) has an impact on, for instance, health, sense of autonomy, and the contact between staff and inmates (Paulus et al., 1985; Gaes, 1994).

A large amount of research has been done on the various factors pertaining to treatment and prison conditions. However, to date there is no research that analyses and incorporates all of these factors into a single model. In this study, we will test a hypothetical model that combines all aforementioned factors. We will first outline the research questions, to then describe the data collection, population and sample characteristics, and the analysis plan. Next, we will examine the links between the work situation and treatment styles on the one hand, and treatment styles and the perception of prison conditions on the other.

3. Method

3.1. Research questions

Above we articulated assumptions about factors that play a role in the establishment of preferable working conditions for staff to promote desirable treatment styles. Furthermore, it is

expected that treatment styles by staff affect inmates' perception of prison conditions. This leads to two central questions:

1. Which factors of human resource management are related to supportive, structuring and motivational treatment styles of staff?
2. Which (combination of) treatment styles of staff are related to positive perceptions of prison conditions by inmates?

While answering these questions, we controlled statistically for relevant context factors like regimen, architectural design and the use of double bunking.

3.2. Data collection

Our theoretical constructs mainly consisted of factors that can be classified into two groups, namely staff and inmates. We assessed the factors with a staff questionnaire and an inmate questionnaire. The surveys took place simultaneously in May and June 2011. This means that the inmates and staff involved in the surveys actually worked and lived with each other during this time, so that any correspondence between their answers may give meaningful results.

Firstly, we used the Internet Mirror (in Dutch: *Internetspiegel*) to survey prison staff. The Internet Mirror is a validated instrument used by many Dutch governmental organisations to measure staff's working conditions. The propositions in the questionnaire offer response categories on a five-point scale, ranging from 'I completely disagree' to 'I completely agree'. Several combinations of propositions form separate measurement scales, bringing one specific aspect into view. We tested the validity of the measurement scales by means of factor analyses that prove the unidimensionality of the scales. The reliability of the scales can be read from the Cronbach's alpha, which is (very) reliable with values above 0.8. All scales have an Alpha around or above that value (see [Appendix 1](#)). We reversed the polarity of negatively formulated scales. This means that a high score always represents a high degree of satisfaction with regard to a particular theme.²

Secondly, we used an inmates' survey (based on the work of Hans Toch) to measure how inmates perceive prison conditions. Similar to the Internet Mirror, this instrument makes use of propositions that have been combined into Likert scales with a satisfactory reliability (see [Appendix 2](#)). The survey used similar response categories as in the staff survey.

3.3. Operationalization

We operationalized the work situation of staff in terms of several subjects, in line with the theoretical framework presented above: content of the work, amount of work, information and communication, collegiality, directive and entrusting leadership, fairness, morally conscious behaviour and *security*. These factors represent the staff's work situation (see also [Fig. 1](#)). Further, we measured three styles of treatment: harmony values (measured using the scale *providing support to inmates*), security values (measured using the scale *providing structure to inmates*) and *motivational treatment* (see [Appendix 1](#) for the scale constructions). These three

²For example, the scale of 'work pressure': a high score means that staff members are satisfied with the number of tasks they have to carry out.

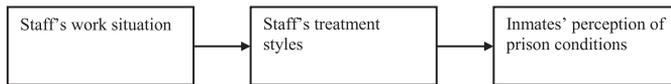


Fig. 1. The hypothetical relation between staff's work situation, staff's treatment styles and inmates' perception of prison conditions.

factors represent staff treatment styles as referred to in Fig. 1. In earlier studies, prison conditions were operationalized in terms of a diverse range of subjects (Molleman and Leeuw, 2012; Irwin and Owen, 2005; Toch, 2006): security, rights and rules, enforcement, contact with the outside world, day programme, autonomy, reintegration and *expectations for the future*. We used this operationalization in this study as well (see Appendix 2 for the scale constructions). These factors form inmates' perceptions of prison conditions, as referred to in Fig. 1.

3.4. Population and sample

To ensure a stable analysis, we chose to include only prison wards with a minimum of three responding penitentiary institution workers (PIWs) in our analysis. On account of this criterion, thirty respondents were removed from the data set. The analyses involved 2247 of all 3740 PIWs who were invited to participate in the study (i.e. the complete population of PIWs in The Netherlands), which means a response rate of 61%. We compared the response group and the population on the basis of age, sex and years of service, and concluded that the response group represents the population and was not selective.

Of the 10,718 inmates staying in Dutch prisons at the measuring moment, 4064 completed the questionnaire, bringing the response to 38%. We examined the representativeness of the factors of country of birth, regimen, length of stay in the present institution, length of stay during the present detention, age and legal residency status. The response group represented the population for most of the background variables. Only inmates with a foreign background were underrepresented, which means that a slight caution must be exercised with regard to the generalizability of the results. We have concluded that there was no serious selective non-response.

3.5. Analytical strategy

So far, we have identified various factors that are assumed to be related to inmates' perception of prison conditions. To bring order to these factors, we have placed them in a model (Fig. 1) that can be tested empirically. This model is based on recent research, which showed that treatment styles of staff members are directly related to how inmates perceive the prison conditions (Molleman and Leeuw, 2012). The study also showed that the work situation of staff members is not directly related to inmates' perceptions. First, we separately tested the relation between the work situation and staff members' treatment styles (step 1). Next, in step 2, we examined the connection between staff members' treatment styles and the perception of prison conditions by inmates (also see Fig. 1).

Two groups are represented in the model: prison staff and inmates. For this reason, we combined two sources to examine the relation between treatment and work situation (measured by means of the Dutch staff survey *Internet Mirror*) and the perceived prison conditions

(measured by the Dutch inmate survey).³ The inmate and staff survey data were coupled to each other, so as to integrate two independent perceptions regarding the same workplace, and within the same ward. In order to couple the surveys, all respondents (both inmates and staff members) were assigned a unique code for the ward and the prison they lived or worked in. All staff measures were then averaged on the ward level and coupled to the individual inmates. As a result, each individual inmate within the same ward was coupled with the same (averaged) staff variables. For the analyses we used linear multivariate multilevel regression in Stata 12. Since we expected general relations, though groups may differ with regard to the level of scores on the dependent variable, the models applied fixed slopes and random intercepts.

It is possible that respondents on the same wards gave similar answers more often than respondents staying on different wards. Within wards, inmates live in the same social and physical context (surroundings, staff, regimen, fellow inmates), which may cause the inmates' observations to not be independent of observations made by others (a requirement of regression analysis). In this way, in a regular regression analysis, statistical relations may be wrongfully established. We have reduced this risk by using a multilevel analysis. Such analyses correct for the coherence in the answering of respondents within the same groups (Snijders and Bosker, 1999). Appendix 3 shows the univariate statistics of the staff survey pertaining to the independent variables and measurement scales. We have looked at the correlation between the variables in a correlation analysis. The coefficient nowhere exceeds $r = 0.6$, which means that the risk of collinearity is limited.

4. Results

The results are presented in two separate steps, as announced in the method section. First the relationship between work situation and styles of treatment is tested (step 1), after which the relationship between treatment styles and prison conditions is analysed (step 2).

4.1. Step 1: the relationship between work situation and styles of treatment

Table 1 shows the regression comparisons to analyse the treatment styles in relation to staff's personality traits and work situation. For this first step, we only needed the data of staff and therefore they are the individuals at the first level in this analysis. Coefficients are in bold type if they reached the significance threshold.

First we examine the control variables in Table 1. Female staff say they treat inmates more often motivationally than their male colleagues. There is also a small significant correlation between age and treatment styles. Older PIWs provide more structure and motivate inmates more. There are no significant correlations for the control variables education and working experience.

The aspects of the work correlate with styles of treatment. There is a positive correlation between the treatment styles and the content of the work. This points to the possibility that

³With regard to survey research among prison staff and inmates, one criticism is that it does not provide a reliable idea of the circumstances in prisons. The assumption is that respondents do not answer questions entirely accurately (Camp, 1999; Mills et al., 2003; Kroner and Loza, 2001). Yet respondents do systematically assess the situation in prisons in the same way (Camp et al., 2002; Molleman and Leeuw, 2012). This convergence supports the reliability of the measuring method. Moreover, staff and inmates stay in the prison for long continuous periods, which should enable them to make a sound assessment of the situation within the prison walls (Molleman and Leeuw, 2012).

Table 1

Multilevel linear regression: correlations between staff's styles of treatment, personality traits and work situation, $p < 0.05$.

	Providing support	Providing structure	Motivational treatment
Demographic characteristics			
Sex (0 = male, 1 = female)	−0.02	−0.03	0.10
Age (ascending, 10 categories)	0.01	0.02	0.03
Education (ascending, 7 categories)	0.01	0.00	0.02
Work experience (years)	0.00	0.00	0.00
Aspects of the work			
Content of the work	0.16	0.05	0.19
Information and communication	−0.01	0.05	−0.03
Amount of work	0	0.06	− 0.05
Leadership and collegiality			
Collegiality	0.08	0.11	0
Directive leadership	−0.01	0.07	0.03
Entrusting leadership	0.13	0.05	0.09
Integrity and safety			
Morally conscious behaviour	0.17	0.17	0.14
Fairness	−0.06	0.02	−0.01
Safety	0.05	0.05	0.04
Constant	1.76	1.59	1.91
N at level I	2016	2017	2016
N at level II	280	280	280
R2 (in a regression model without levels)	20%	24%	18%

Control variables omitted from the table but not from the analysis, b-coefficients reported.

PIWs consider their work more challenging and meaningful in proportion to the extent that they (reported to) provide more support and structure to inmates and to more often treat them motivationally. An alternative explanation is that PIWs who see their job as challenging and meaningful apply the three styles of treatment more often. PIWs who claimed to provide relatively much structure to inmates were more positive about the communication among staff and experienced less work pressure. On the other hand, PIWs who claimed to make more use of the motivational treatment method in their work reported experiencing more work pressure.

Collegiality, directive leadership and entrusting leadership also correlate with the treatment styles. If PIWs reported that they were supported by their colleagues and their manager, they also claimed to work with the different treatment styles more often. The analyses confirm the assumption that PIWs who experience relatively more involvement from their colleagues put a stronger emphasis on providing support and structure to inmates (Camp et al., 2003). The relation between leadership and treatment shows a clear pattern. PIWs who indicated to experience more directive leadership from their direct manager also said they often provided structure. PIWs who stated they experienced more entrusting leadership, on the other hand, indicated that they provided more support and that they more often applied the motivational treatment style.

Finally, the treatment styles also correlate with the integrity and safety theme. Thus, the moral behaviour of PIWs (such as the extent to which staff members are able to take stock of the consequences of their actions and can talk about moral issues) proves to correlate positively with all three treatment styles. This means that PIWs who stated to feel morally responsible and

who felt supported by colleagues provide more support and structure to inmates and more often treat them motivationally. In these models, this variable correlates most strongly with the treatment styles. These results match the study by [Camp et al. \(2003\)](#).

The more secure PIWs feel, the more they said to work according to the motivational treatment style. This correlation can also be explained the other way round: motivational treatment boosts PIWs' sense of safety. Due to the intensive contact maintained with inmates, PIWs are more knowledgeable of what goes on among the prison population and are better able to anticipate what might happen. In addition, providing support as well as providing structure to inmates contributes to the feeling of safety among members of staff. Again, the direction of this correlation can be interpreted conversely: PIWs who feel more secure provide more structure and support to inmates.

Taken together, the different personality traits and the work situation explain a considerable part of the variance (18–24%). This thus gives us insight into the question of which factors correlate with which styles of treatment are used in the Dutch prison system.

4.1.1. *A balance between styles of treatment*

Besides motivational treatment, we made a distinction between two value systems (harmony and security values), as introduced in the introduction. Since these value systems tend to be seen as each other's opposites, it is generally assumed in the literature that a balance must be sought between these styles in order to accomplish the prison system's mission ([Sparks et al., 1996](#); [Liebling assisted by Arnold, 2004](#); [Roth, 1985](#)). Staff can use the styles to a greater or lesser extent. It is also possible to put more emphasis on one style while the other is placed on the background. To determine in more detail which balance between the styles contributes to a higher appreciation of the prison conditions, we defined nine treatment concepts. Within each concept, the staff were classified regarding both styles into a 'weak', 'moderate' and 'strong' category, based on one standard deviation (s) around the mean (\bar{x}). A weak style represents values of $< \bar{x} - 1s$, while the moderate category stands for $-1s < \bar{x} < 1s$ and the strong category represents values of $> \bar{x} + 1s$.

The data set with the inmates constitutes the basis for the analyses. We coupled the mean figures of the staff survey at ward level to the data. Earlier research has shown that the sources do not contradict one another and are even coherent ([Camp et al., 2003](#); [Molleman and Leeuw, 2012](#)). In 2011, the Dutch staff survey and the inmates' survey did not contain exactly the same scales or propositions, which makes it impossible to generate *agreement scores*. When we correlate the scales from both sources, this leads to positive relations only. This is a clear indication that positive perceptions by staff go together with positive perceptions by inmates and vice versa. This suggests that it is worth examining the coherence between the sources.

[Table 2](#) shows how many (and which percentage of) inmates who completed the inmates' survey were confronted with a particular mix of treatment styles (the source being the staff survey linked to the inmates' data; thus the style of treatment involved here is the one indicated by the PIWs). For example, in total 145 inmates (3.6% of the response) were staying on wards where staff claimed to provide much structure to the inmates and also to respect them very much and to give them support whenever needed.

As [Table 2](#) shows, two concepts barely appear. There were hardly any wards for which the staff claimed to use one particular style very frequently, while rarely using another style. Only 14 and 18 inmates fall in these categories. For a stable analysis, these categories were merged with the group of 353 respondents and that of 315 respondents, respectively. This means that the categories designated as *a* and those designated as *b* in the table were combined. This

Table 2
Distribution of inmates among ‘treatment concepts’.

	Providing support to inmates		
	Weak	Moderate	Strong
Providing structure to inmates			
Weak	117/2.9%	305/7.5%	14/0.3% (b)
Moderate	315/7.8% (a)	2183/53.7%	353/8.7% (b)
Strong	18/0.4% (a)	249/6.1%	145/3.6%

resulted in 7 concepts that typify the style of treatment used by the staff on a ward. Each concept applies to at least one hundred inmates.

4.2. Results of step 2: the relationship between treatment styles and prison conditions

Central to this article are the relations between the well-being of staff and the well-being of inmates. Step 1 proved the link between the well-being of staff members with regard to the work situation and their treatment style. In this section we take the second step: what is the relation between the treatment style of staff members and inmates’ perception of the prison conditions? In this step, we will distinguish the seven concepts that constitute the balance between providing structure to inmates on the one hand and providing support on the other. We will also include the scale construct of motivational treatment and the factor of double bunking in the regression comparisons as an explanatory variable. We prepared dummies for the treatment styles in the data set, making it possible to examine the separate effects of the styles. [Appendix 4](#) presents the univariate statistics of the independent variables and measuring scales from the inmates’ survey. In total, 4060 inmates and 2247 PIWs could be linked on 239 wards. [Table 3](#) includes the regression comparisons in which the treatment styles and institutional characteristics are analysed for their coherence with the inmates’ prison conditions. Coefficients in [Table 3](#) are in bold type if they reached the significance threshold. The control variables of ethnicity, length of stay, regimen, and building type are not represented in the table.

The results in [Table 3](#) show that inmates who are placed in double bunked cells (reported because of the striking results) assess all subjects relating to prison conditions more negatively. Furthermore, the results regarding the treatment styles are reported. We chose ‘support weak, structure weak’ as the reference category for the analysis of the treatment concepts. Therefore we interpret the correlations of the other concepts in comparison to the situation staff let things run (i.e. *laissez faire*).

In comparison to a *laissez faire* situation, we find that in case the supportive *or* structuring treatment style is weak, inmates’ perceive their conditions (i.e. safety, activities and reintegration) more negative. Furthermore, in case supportive *and* structuring treatment styles are strong, inmates are more satisfied with their autonomy, their reintegration and the clarity of rules and rights.

In order to promote positive perceptions of prison conditions, it is desirable that neither style is weak since this is correlated to more negative perceptions of the prison conditions by inmates. This finding matches results found earlier in studies by [Sparks et al. \(1996\)](#), [Liebling assisted by Arnold \(2004\)](#), and [Roth \(1985\)](#), who established that the involvement of staff but also a clear and structuring treatment have an important impact on prison conditions.

Motivational treatment is relatively strongly correlated on seven of the eight subjects relating to prison conditions. The more staff members claimed to make an effort to reintegrate inmates

Table 3
 Multilevel linear regression: correlations between treatment styles, institutional characteristics and prison conditions, level I, $p < 0.05$; level II, $p < 0.10$.

	Safety	Rules and rights	Enforcement	Contact with the outside world	Activities	Autonomy	Reintegration	Expectations for the future
Level 1 variables								
Double bunking (0 = no, 1 = yes)	-0.13	-0.21	-0.17	-0.20	-0.14	-0.16	-0.17	-0.09
Level 2 variables								
Ref.: Support weak, structure weak								
Support weak, structure moderate/strong	-0.13	-0.12	-0.11	-0.16	-0.21	-0.02	-0.15	-0.09
Support moderate, structure weak	-0.11	-0.14	-0.14	-0.09	-0.20	-0.03	-0.20	-0.10
Support moderate, structure moderate	-0.03	-0.02	0.00	-0.04	-0.08	0.09	-0.06	-0.01
Support moderate, structure strong	-0.01	0.07	0.05	0.05	-0.05	0.08	-0.05	-0.02
Support strong, structure weak/moderate	-0.07	-0.03	-0.03	-0.02	0.14	0.14	0.08	0.15
Support strong, structure strong	0.03	0.26	0.05	0.02	-0.07	0.25	0.23	-0.03
Motivational treatment	0.12	0.06	0.13	0.21	0.16	0.15	0.15	0.12
Constant	3.26	2.79	2.33	2.01	2.30	2.18	2.02	3.10
N at level I	3441	3483	3479	3457	2494	3472	3437	3503
N at level II	308	308	308	307	298	308	308	308
R2 (in a regression model without levels)	2%	4%	4%	10%	7%	6%	8%	1%

Control variables omitted from the table but not from the analysis, b-coefficients reported.

and to motivate them to take part in activities, the more satisfied inmates appeared to be with the prison conditions.

5. Conclusions

This article commenced with a hypothetical model based on theory and policy assumptions, starting from the assumption of a chain relation. We have found evidence for the existence of a link between the work situation of staff and the ways in which they treat inmates. It seems that the supposition is confirmed that a positive work situation is a precondition for PIWs to practise their profession. Aspects of staff management – such as work pressure, leadership and the debatability of moral issues – largely explain the extent to which PIWs provide support and structure to inmates. These factors also explain the extent to which motivational treatment is expressed in the actions of PIWs. The stronger the treatment styles are, the more highly the

content of the work is valued. In other words: the professional skill of penitentiary workers seems to go hand in hand with their professional pride.

The empirical analyses also show that the treatment by staff is related to the inmates' perception of prison conditions. The findings suggest that prison staff can contribute to improving this perception. Positive effects are found in a situation wherein staff actively apply both supportive and structuring styles thoroughly. Moreover, in case one of the these styles is weak, an even more unfavourable situation arises in comparison with staff that apply *both* styles to a weak extent. This points to the effectiveness of a combination of styles and the importance of a sound balance between treatment styles.

The most salient predictor in the models is the motivational treatment factor. It measures to what extent PIWs claim to stimulate inmates to take part in activities, help them make plans for their life after detention, and to encourage them to take a good look at themselves. This treatment style had many significant correlations with inmates' perceived prison conditions. The research result is all the more important since the correlations were established while controlling for factors such as the ethnicity of inmates, their length of stay, the use of cells for more than one person, the regimen of their detention, and the architectural design of the prison building. Our conclusion is, therefore, that the treatment by staff constitutes an important factor in addition to the classic predictors of prison conditions. Moreover, we found important tools to manage towards better prison conditions that may prevent for violence, riots and other deviant behaviour which are found in many prisons around the world.

6. Discussion

To conclude, we will discuss the implications of our findings for theory and the execution policy of the prison system as well as the limitations of this study.

With regard to the development of theory, the empirical findings presented here have generated some new insights. Never before was personnel policy linked to both treatment and prison conditions, and subsequently analysed for coherence. Various theoretical assumptions from earlier research could also be tested. In the literature and in Dutch policy assumptions, the general proposition is that a satisfied staff member will 'practice his profession better' (they will use treatment styles more often). This is assumed to contribute to improving prison conditions, which is central to the mission of the prison system (Molleman and Leeuw, 2012). For this assumption we have found empirical evidence. It are not only the treatment styles based on the harmony and security values that turn out to be important, but motivational treatment in fact shows the strongest coefficients of the explanatory factors in the models. Further research might examine how motivational treatment can be incorporated in value system theory (Liebling assisted by Arnold, 2004). The empirical results confirm that a respectful and helpful attitude of staff is important, but that structure must be provided as well. Motivational treatment turns out to exert an important influence on the perception of prison conditions and constitutes an interesting factor in the trend of 'responsibilization' (Crewe, 2011) in West European prisons.

The new insights acquired through this research can serve to (further) improve prison conditions through adaptations to the work situation. Leadership and the possibility of discussing moral issues, for example, are very important to the staff. An active treatment of inmates requires that staff members deliberately invest time and effort. To this end, the work pressure must be kept at a sensible level. PIWs who indicated that they often act according to the various treatment styles were also more positive about their work. Since there is a link

between these styles and the perceived prison conditions, it would be advisable to invest continually or even more decisively in leadership, the debatability of moral issues, pressure of work, and a well-balanced mix of treatment styles.

The knowledge presented here is all the more important because the factors can be manipulated. Some independent variables can barely be changed by penitentiary management or its staff, such as inmates' characteristics, the regimen or the prison's architecture. Other factors are more dynamic and can be influenced by policy, management and work performance, such as staff policy and treatment of inmates. To contribute to accomplishing the prison system's mission — which includes maintaining prison conditions at a proper level — these dynamic or changeable factors offer an important avenue. If inmates appear to be unclear on the rights and rules in prison and this is noted as a point for improvement, one option would be to focus on a more structuring treatment. We know from the results that directive leadership correlates with this. This will encourage both managers and staff members to shift their emphasis accordingly. In this way, these findings can be used in the daily practice of the prison system to make plans for improvement, to develop training courses and to advance staff and execution policies.

Some limitations to our results should be taken into account, however. First, the study is based on cross-sectional data, which prohibits any decisive statements about causal relations. We must also maintain some caution with regard to the degree of truthfulness of the perceptions as expressed by prison staff and inmates. Nevertheless, research has shown that the survey results are confirmed by other sources relating to prison conditions (Camp, 1999; Camp et al., 2002; Camp and Lambert, 2006). Since several independent sources prove to be coherent, this lends extra support to the results. The 'multisource approach' thus constitutes a strong point of this study.

The non-response, especially in the population of inmates, represents a second weakness in this study. Strong points of the study are that participation was anonymous and that the response groups (staff and inmates) represent the population reasonably well or even well. For the conclusions we need to apply some caution, as native Dutch inmates were overrepresented.

Future research should focus on a further specification of the most 'opportune' mix of treatment styles. More knowledge about the connection between treatment styles and the quality of detention will provide prison systems with useful ammunition to pursue their mission even more effectively. To explain the perception of prison conditions, psychological and criminological research often also analyses factors such as 'the seriousness of the committed offence' and the mental state of inmates. Such factors should be included in analyses in future studies to increase the explained variance, if possible. We also recommend the use of other sources in addition to surveys, such as observations, interviews, operational data and official records.

Appendix 1. Scales staff survey and Cronbach's alphas

Aspects of the work

Content of the work (α 0.85):

1. My job is enjoyable as regards content.
2. I can develop myself in my work.
3. I can make full use of my capacities in my position.
4. My work is sufficiently varied.
5. The work I do is useful socially.

Information and communication (α 0.84):

1. I am informed in time about important matters relating to my work.
2. The communication between wards is good.
3. I receive sufficient information to be able to do my job well.
4. The communication between my manager and his/her staff members is arranged well.
5. There is sufficient discussion of progress.
6. In general, I perceive the ward meetings to discuss progress as effective.

Amount of work (α 0.86):

1. The assignments I get are often hard to combine.
2. I often have more work than I can handle.
3. I regularly have to work against the clock.
4. I regularly have to work overtime in order to finish my work.
5. Because of the amount of work I often have to skip breaks.
6. My work often takes a different course than planned.

Leadership and collegiality

Collegiality (α 0.83):

1. My colleagues help me get the work done.
2. My colleagues take a personal interest in me.
3. I feel at home in this organisation.
4. My colleagues and I cooperate well.
5. My colleagues call me to account when something goes wrong.
6. My colleagues are good at their job.

Directive leadership (α 0.84):

1. My direct manager sees to it that the work is done on time.
2. My direct manager reprimands me when my work constantly falls below the expected standard.
3. My direct manager reprimands me when I do not perform as well as my colleagues do.
4. My direct manager criticizes work badly done.

Entrusting leadership (α 0.89):

1. My direct manager creates a work climate that enables me to develop new ideas about my work.
2. I decide together with my direct manager which part of a job I will perform independently.
3. My direct manager gives me a say in matters that concern me and my colleagues.
4. My direct manager consults me about the planning of the work.
5. My direct manager is accessible to his/her people.
6. My direct manager encourages me to come up with new ideas about the approach to work.

Treatment of inmates

Providing support to inmates (α 0.76):

1. In our ward we care about inmates.
2. In our ward we provide individual help and support to inmates.
3. We involve inmates in (the arrangement of) matters that concern them.
4. In our ward, there is a stronger emphasis on providing help and support to inmates than on order and rules.

Providing structure to inmates (α 0.84):

1. It is clear to inmates what house rules they must observe.
2. Changes to the house rules are communicated to the inmates.
3. Inmates know what to expect of staff members.
4. It is clear to inmates what is expected of them.

Motivational treatment (α 0.84):

1. We try to encourage inmates to change their ways.
2. I try to urge inmates to take part in activities.
3. I try to stimulate inmates to make efforts to rehabilitate.
4. In our ward we help inmates make plans for life after detention.
5. In my job I try to hold up a mirror to inmates.

Integrity and safety

Fairness (α 0.84):

1. Staff members can count on being treated fairly.
2. My (direct) colleagues are assessed in an objective and reasonable manner.
3. My direct manager treats his/her staff members respectfully.
4. In our organisation, consistently fair behaviour will ultimately take you furthest.
5. Any report by staff members about a colleague's undesirable behaviour is immediately taken seriously in my organisation.
6. When someone is rewarded or appreciated, he or she deserves it.

Morally conscious behaviour (α 0.78):

1. My colleagues are quite capable of taking stock of the consequences of their actions.
2. At work, I can entertain the same moral convictions I have in private life.
3. As soon as (direct) colleagues are confronted with a moral issue, they seek the advice of others within the organisation.
4. My (direct) colleagues act cautiously and with an eye to the consequences of their behaviour for others.
5. My (direct) colleagues feel responsible for the organisation's success.

Safety (α 0.86):

1. The working environment has been designed to make me feel safe.
2. Everything possible is done here to guarantee my safety.
3. The work is organised in such a way that nothing serious can happen to me.
4. I feel at ease when walking through the building.

Appendix 2. Scales inmates' survey and Cronbach's alphas

Safety (α 0.82):

1. Members of staff regularly threaten inmates here.
2. I feel safe in this institution.
3. I regularly feel unsafe in the exercise yard.
4. I am often afraid on my ward.
5. I am often afraid in my cell.
6. You have to be careful of certain inmates at this institution.
7. The members of staff provide a safe environment.
8. You have to be careful here with certain prison officers (PIWs).
9. There are places in this institution where I feel unsafe.
10. I regularly feel threatened by fellow inmates.

Rights and rules (α 0.81):

1. I agree with the rules that are in place here.
2. The house rules are unclear to me.
3. I was informed of the house rules when I arrived here.
4. I know what will happen if I break the house rules.
5. I was informed of my rights and obligations when I arrived at this institution.
6. The rights of inmates are clear.

Rule enforcement (α 0.66):

1. The prison officers (PIWs) apply the rules and punishments in a consistent manner.
2. Punishments take personal circumstances into account.
3. Punishments are implemented in accordance with the rules.

Reintegration (α 0.87)

1. Members of staff encourage me to work on my reintegration.
2. The institution makes no effort concerning my return to society.
3. The day programme makes it possible to work on my return to society.
4. If inmates require additional care or assistance for their reintegration, the institute provides for this.
5. In this institution I am being prepared effectively for my return to society.
6. Members of staff at this institution try to encourage inmates to change.

7. Detention in this institution is geared to reintegration.
8. If I wish, I can attend training and courses that will be useful to me once I am released.

Expectations for the future (α 0.67):

1. I expect that I will not be able to find a job after my detention.
2. I think that I will not reoffend after my detention.
3. I think that I can make a new start after my detention.
4. My future looks bleak after my detention.

Contact with the world outside (α 0.83):

1. There are sufficient possibilities to maintain contact with my lawyer.
2. I have sufficient privacy during telephone conversations.
3. There are sufficient possibilities to maintain contact with family and friends.
4. The evening and weekend programmes allow me to better maintain contact with my family/partner/friends.
5. It is easy for me to import items (for example a radio, a TV or clothing) from outside the institution.
6. I have sufficient opportunity at this institution to make telephone calls.
7. I have sufficient privacy during visiting hours.
8. The institution makes it possible to maintain contact with my family/partner/friends.

Activities (α 0.89):

1. I am satisfied with the following activities: recreation.
2. I am satisfied with the following activities: sports.
3. I am satisfied with the following activities: the library.
4. I am satisfied with the following activities: work.
5. I am satisfied with the following activities: education.
6. I am satisfied with the following activities: creative activities.
7. I am satisfied with the following activities: exercise.
8. I am satisfied with the following activities: reintegration activities/training.
9. I am satisfied with the following activities: spiritual counselling activities (group meetings, prayer, services, church services).
10. I am satisfied with the following activities: the evening and weekend programme.
11. I am generally satisfied with the day programme.

Autonomy (α 0.82):

1. Members of staff teach inmates to take responsibility.
2. I have sufficient freedom of movement.
3. Members of staff are open to my opinion.
4. My life here is completely determined by others.
5. I can decide for myself on matters that are important to me.
6. I am encouraged to arrange matters here myself.
7. I cannot determine anything here.

8. Everything here is decided for me.

Interaction with PIWs (α 0.94):

1. The prison officers (PIWs) relate to me in a normal manner.
2. The prison officers (PIWs) encourage me when I start a course or training.
3. The prison officers (PIWs) are friendly to me.
4. The prison officers (PIWs) are generally fair and trustworthy.
5. The prison officers (PIWs) help me solve problems.
6. The prison officers (PIWs) speak to inmates about undesirable behaviour.
7. The prison officers (PIWs) encourage me to participate in activities.
8. The prison officers (PIWs) always give feedback when I ask them something.
9. The prison officers (PIWs) relate to me in a respectful manner.
10. If I am feeling down, I can speak to the prison officers (PIWs).
11. The prison officers (PIWs) take action against discrimination if it occurs.
12. The prison officers (PIWs) all treat me in the same manner.
13. I am satisfied with the work of the prison officers (PIWs).

Appendix 3. Univariate statistics staff

	<i>N</i>	Mean	SD	Percent
Sex				
Male	1608			71.6
Female	530			23.6
Unknown	109			4.9
Age				
Aged 20–29	123			5.5
Aged 30–39	494			22.0
Aged 40–49	883			39.3
Aged 50 and older	626			27.9
Unknown	121			5.4
Education				
Low education	223			9.9
Intermediate education	1644			73.2
High education	267			11.9
Unknown	113			5.0
Years of service				
Aged 0–5	209			9.3
Aged 6–10	525			23.4
Aged 11–20	871			38.8
Aged 21 and older	488			21.7
Unknown	154			6.9
Content of the job	2247	3.71	0.69	
Information and communication	2246	3.12	0.72	
Amount of work	2247	3.22	0.75	

(continued)

	<i>N</i>	Mean	SD	Percent
Collegiality	2247	3.91	0.54	
Directive leadership	2238	3.31	0.69	
Entrusting leadership	2238	3.49	0.70	
Morally conscious behaviour	2244	3.50	0.55	
Fairness	2243	3.35	0.68	
Safety	2243	3.32	0.74	
Providing support to inmates	2172	3.70	0.57	
Providing structure to inmates	2173	3.89	0.54	
Motivational treatment	2177	3.77	0.56	

Appendix 4. Univariate statistics inmates

	<i>N</i>	Mean	SD	Percent
Ethnicity	4064			
Dutch	2428			59.7
Non-Western	1100			27.1
Western	269			6.6
Unknown	267			6.6
Length of stay in months	3607	4.3	5.1	
Double bunking (0 = no, 1 = yes)	3910	16.4%	0.37	
Regimen	4064			
Remand facility	1594			39.2
Prison	1241			30.5
Extra care ward	311			7.7
Open facility	270			6.6
Institutions for repeat offenders	138			3.4
High security	36			0.9
Psychiatric penitentiary	143			3.5
Women facility	331			8.1
Building type	4064			
Wing	960			23.6
(Double) cross	1526			37.5
Pavilion	434			10.7
High-rise	197			4.8
Panopticon	394			9.7
Patio	553			13.6
Safety	3755	3.58	0.62	
Rules and rights	3808	3.01	0.79	
Enforcement	3803	2.75	0.79	
Contact with outside world	3778	2.89	0.80	
Activities	2735	2.92	0.80	

(continued on next page)

(continued)

	<i>N</i>	Mean	SD	Percent
Autonomy	3794	2.91	0.73	
Reintegration	3750	2.59	0.78	
Expectation for the future	3827	3.51	0.86	

References

- Bass, B.M., Steidlmeier, P., 1999. Ethics, character, and authentic transformational leadership behavior. *Leadership Quart.* 10, 181–217.
- Belgische Kamer van Volksvertegenwoordigers, 2012. Voorstel van resolutie. Over de inachtneming van de godsdienstvrijheid en de bestrijding van radicalisme in de Belgische strafinrichtingen. Doc 53, 2346/001.
- Burns, J.M., 1978. *Leadership*. Harper & Row, New York.
- Boin, A., Rattray, W.A.R., 2004. Understanding prison riots: towards a threshold theory. *Punishm. Soc.* 6 (1), 47–65.
- Camp, S.D., 1999. Do inmate survey data reflect prison conditions? Using surveys to assess prison conditions of confinement. *Prison J.* 79 (2), 250–268.
- Camp, S.D., Gaes, G.G., Klein-Saffran, J., Daggett, D.M., Saylor, W.G., 2002. Using inmate survey data in assessing prison performance. A case study comparing private and public prisons. *Crim. Justice Rev.* 27 (1), 26–51.
- Camp, S.D., Gaes, G.G., Langan, N.P., Saylor, W.G., 2003. The influence of prisons on inmate misconduct: a multilevel investigation. *Justice Quart.* 20 (3), 501–533.
- Camp, S.D., Lambert, E.G., 2006. The influence of organizational incentives on absenteeism: Sick-leave use among correctional workers. *Crim. Justice Policy Rev.* 17 (2), 144–172.
- Cheeseman, K.A., Kim, B., Lambert, E.G., Hogan, N.L., 2011. Correctional officer perceptions of inmates and overall job satisfaction. *J. Crime Justice* 34 (2), 81–102.
- Crewe, B., 2011. Depth, weight, tightness: revisiting the pains of imprisonment. *Punishm. Soc.* 13 (5), 509–529.
- Craig, S.C., 2004. Rehabilitation versus control: an organizational theory of prison management. *Prison J.* 84 (4), 92S–114S.
- DJI, 2009. *Custodial Institutions Agency. Where Freedom Ends and May Be Regained*. DJI, The Hague.
- DiIulio, J.J., 1987. *Governing Prisons: A Comparative Study of Correctional Management*. Free Press, New York.
- Farkas, M.A., 1999. Correctional officer attitudes toward inmates and working with inmates in a “get tough” era. *J. Crim. Justice* 27 (6), 495–506.
- Gaes, G.G., 1994. *Prison Crowding Research Reexamined*. Federal Bureau of Prisons, Washington, D.C.
- Garland, D., 1990. *Punishment and Modern Society: A Study in Social Theory*. University of Chicago Press, Chicago.
- Het Laatste Nieuws, 2011 november 17. Opstootjes en brand in gevangenis Andenne. Available from: <http://www.hln.be/hln/nl/4833/Gevangenissen/article/detail/1349270/2011/11/17/Opstootjes-en-brand-in-gevangenis-Andenne.dhtml>.
- Huffington Post, 2012 august 13. Mississippi prison Riot: ‘Paisas’ Group Led Uprising Due to Alleged Mistreatment, FBI Says. Available from: http://www.huffingtonpost.com/2012/08/13/mississippi-prison-riot-paisas-immigrants-mistreatment_n_1773404.html.
- Irwin, J., Owen, B., 2005. Harm and the contemporary prison. In: Liebling, A., Maruna, S. (Eds.), *The Effects of Imprisonment*. Cullompton: Willan, pp. 94–117.
- Johnston, N., 2000. *Forms of Constraint. A History of Prison Architecture*. University of Illinois Press, Champaign.
- Kroner, D.G., Loza, W., 2001. Evidence for the efficacy of self-report in predicting non-violent and violent criminal recidivism. *J. Interpers. Violence* 16 (2), 168–177.
- Liebling, A., 2000. Prison officers, policing and the use of discretion. *Theor. Criminol.* 4 (3), 333–357.
- Liebling, A., assisted by Arnold, H., 2004. *Prisons and Their Moral Performance: A Study of Values, Quality, and Prison Life*. Oxford University Press, Oxford.
- Lindquist, C.H., Lindquist, C.A., 1997. Gender differences in distress: mental health consequences of environmental stress among jail inmates. *Behav. Sci. Law* 15 (4), 503–523.
- Listwan, S.J., Sullivan, C.J., Agnew, R., Cullen, F.T., Colvin, M., 2013. The pains of imprisonment revisited: the impact of strain on inmate recidivism. *Justice Quart.* 30 (1), 144–168.

- Miller, W.R., Rollnick, S., 2002. *Motivational Interviewing; Preparing People for Change*, second ed. The Guilford Press, New York.
- Mills, J.F., Loza, W., Kroner, D.G., 2003. Predictive validity despite social desirability: evidence for the robustness of self-report among offenders. *Crim. Behav. Ment. Health* 13, 140–150.
- Molleman, T., Leeuw, F.L., 2012. The influence of staff on prison conditions of inmates: a multilevel approach. *Eur. J. Crim. Policy Res.* 18 (2), 217–233.
- Northouse, P.G., 1997. *Leadership, Theory and Practice*. Sage, Thousand Oaks.
- Paulus, P.B., McCain, G., Cox, C., 1985. The effects of crowding in prisons and jails. In: Farrington, D.P., Gunn, J. (Eds.), *Reactions to Crime: The Public, the Police, Courts and Prisons*. Wiley, Chichester, pp. 113–134.
- Reisig, M.D., Lovrich, N.P., 1998. Job attitudes among higher-custody state prison management personnel: a cross-sectional comparative assessment. *J. Crim. Justice* 26 (3), 213–226.
- Roth, J., 1985. Consistency of rule application to inmates in long-term treatment institutions. *Soc. Sci. Med.* 20 (3), 247–252.
- Snijders, T.A.B., Bosker, R.J., 1999. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modelling*. Sage, London.
- Sparks, R.J., Bottoms, A.E., Hay, W., 1996. *Prisons and the Problem of Order*. Oxford University Press, Oxford.
- Specter, D., 2006. Making prisons safe: strategies for reducing violence. *J. Law Policy* 22, 125–134.
- Steiner, B., 2009. Assessing static and dynamic influences on inmate violence levels. *Crime Delinq.* 55 (1), 134–161.
- Tewksbury, R., Mustaine, E.E., 2008. Correctional orientations of prison staff. *Prison J.* 88 (2), 207–233.
- The Age, 2012 January 19. Toothbrush fury triggers prison riot. Available from: <http://www.theage.com.au/victoria/toothbrush-fury-triggers-prison-riot-20120119-1q73i.html>.
- Toch, H., 2006. *Living in Prison: The Ecology of Survival*. The Free Press, Washington D.C.