



‘What works’ for juvenile prisoners: the role of group climate in a youth prison

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Abstract

The Dutch juvenile justice system locks up an increasing number of adolescent boys and girls at a cost of approximately 250,000 for each inmate annually (Boone & Moerings, 2007; Tonry, 2005). Questions have been raised, however, about the cost-effectiveness of treatment in closed institutions. This study, with a sample of 49 adolescents residing in a Dutch youth prison, examined the role of group climate in establishing and maintaining treatment effects. Results show that an open group climate, with group workers paying more attention to the psychological needs of the adolescents and giving them ‘space’ to experiment, led to inmates feeling that they were ‘being understood by the group workers’. This perception of being understood was associated with greater treatment motivation and higher internal locus of control. Positive prison workers in the living group turned out to be a key factor in building an open group climate and subsequently higher internal locus of control and greater treatment motivation.

Key words

youth crime; juvenile delinquency; group climate; youth prison

Introduction

In recent systematic reviews of the effectiveness of correctional treatment in reducing recidivism among juvenile delinquents questions have

been raised concerning the negative effects of incarceration and coercion (Garrido & Morales, 2007; Parhar *et al*, 2008). Next to adequacy

of treatment during imprisonment, living circumstances after release and quality of aftercare, it is argued that group climate in prison is an important factor affecting treatment outcome, although the relationship with reduced recidivism rates still needs to be empirically confirmed (Liebling & Maruna, 2005). Group climate (sometimes called 'environment') refers to the inmates' and workers' perceptions of particular aspects of the culture—that is, the way one ought to think, feel and behave in an environment or situation (after Schein, 1993). The present study examines how group climate influences treatment motivation and locus of control (internal and external) in 49 adolescent inmates staying in a youth prison who were incarcerated for, on average, 18 months. It compares their locus of control with that of non-incarcerated serious delinquents and non-delinquent adolescents.

Effective treatment is thought to be dependent on treatment motivation. Notably, treatment motivation might even be the core of the 'responsivity principle'—one of the 'what works' principles of effective offender intervention—which states that correctional treatment programmes should be matched to offender characteristics, such as learning style, motivation and the offenders' living circumstances (Andrews & Bonta, 2003; Andrews *et al.*, 1990). Incarcerated juvenile delinquents need a high level of treatment motivation in order to be able to profit from interventions targeting their coping behaviours that are linked with behavioural adjustment both within and outside prison. More specifically, after release, adolescents need an internal locus of control to adequately cope with the difficulties that are associated with living in an underprivileged neighbourhood, being insufficiently prepared for the labour market, having diminished prospects due to conviction and 'having done time', which may result in unemployment and disappointments (Laub & Samson, 2003; Harvey, 2005; Wikstrom & Butterworth, 2006; Ashkar & Kenny, 2008; Huizinga & Henry, 2008).

Locus of control refers to the extent to which individuals believe that they can control events that might have an effect on them. Individuals scoring high on *internal* locus of control attribute success or failure primarily to their own behaviour. Individuals scoring high on *external* locus of control attribute success or failure primarily to factors outside their control. Juvenile offenders are often found to have a greater external locus of control, which is related to a denial of their

own responsibility for antisocial behaviour and the inability to cope with life, making them more vulnerable to low self-esteem and depression (Page & Scalora, 2002).

Much attention has been given recently to the effectiveness of treatment inside prisons. Although a systematic review showed that the effects of correctional treatment for incarcerated adults were almost zero (Parhar *et al.*, 2008), Garrido and Morales (2007) reported promising treatment effects for juvenile delinquents in prisons, especially in the case of cognitive-based interventions. Garrido and Morales explain these contradictory results by suggesting that adolescents are more susceptible to treatment in general. It should be noted, however, that the treatment or method/technique itself is thought to be responsible for no more than 15% of the outcome variance, whereas relationship factors, hope and expectancy, and what the client brings to treatment account for 30%, 15%, and 40% of the outcome variance, respectively (Asay & Lambert, 1999). Therefore, it is plausible to suggest that the increased susceptibility to treatment of adolescents, as suggested by Garrido and Morales, may be largely affected by extra-treatment factors, including the group climate in youth prison.

In Holland, imprisoned adolescents spend their time in living groups consisting of eight to 12 prisoners. Besides attending school they receive treatment for only a few hours a week. These treatments cover a wide variety of methods but are mostly cognitive-based. Compared to the time at school and in treatment, incarcerated juvenile delinquents spend most of their time in the living group (usually they can't leave this group, and recreational facilities are minimal). Research suggests that the influence of group climate and the relationship with the group workers is crucial for the way these youngsters develop, for their views and attachment to the outside world, and for the effects of imprisonment on their hopes and expectations for the future (Harvey, 2005).

In literature on residential treatment an open and supportive group climate is often contrasted with a closed or repressive group climate (Janzing & Kerstens, 2002; Toch, 2007, 2008). In an open climate equality within the boundaries of the institution and mutual respect are important goals. Proper care and attention for the adolescents is provided for in the interaction between inmates and staff. It should be noted that an open group climate is aligned with one of the most important pedagogical aims of the juvenile youth prison,

namely, facilitating a successful reintegration into society through restoring the bond with society that was damaged by the criminal offence.

A closed or repressive group climate is often thought to provide a secure environment for adolescents with severe mental and behavioural problems (eg. conduct disorder), who may need a quiet, extremely structured and predictable environment to recover. It is questionable, however, whether a closed group climate can be a secure environment, as it may also be characterised by an extremely asymmetric balance of power, great dependency on staff, lack of mutual respect, emphasis on incremental and haphazard rules and punishment ('chickenshit rules'), boredom, hopelessness, fear and lack of protection (Little, 1990; Harvey, 2005; Liebling & Maruna, 2005).

Severe stress emanating from being locked up could lead to either 'freeze' or 'fight' reactions (Gray, 2003). Freeze reactions are often associated with dependency, uncertainty and lack of predictable punishment. This can result in hopelessness and depression, which may be considered as symptoms of 'learned helplessness' (Maier & Seligmann, 1976). Short-term symptoms are often withdrawal reactions, self-mutilation and suicidal thoughts (Little, 1990; Harvey, 2005). Lack of agency and helplessness negatively affect important developmental tasks, such as experimenting with social situations, adaptation to the outside world, flexibility and self-governance (Neustatter & Gonis, 2003; Liebling & Maruna, 2005). Institutionalisation and boredom often lead to a developmental standstill (Harvey, 2005; Liebling, 2008). Loss of agency often results in an external locus of control (Irwin & Owen, 2005), while depression and feelings of hopelessness and despondency can have a negative effect on treatment motivation.

Fight reactions (aggression) are often consistent with a climate that characterises life on the street (Anderson, 2001; Wilkinson, 2001; Brezina, 2004; de Jong, 2005), a survival mentality with a cynical world view, delays in moral judgment (Stams *et al*, 2006) and a group identity based on deviance (Emler & Reicher, 1995; Warr, 2006). This deviant group identity serves to counteract feelings of discrimination, inadequacy and low self-esteem (Greve, 2001; Greve & Enzmann, 2003; De Jong, 2005). A closed or repressive climate can strengthen this world view in the sense that others are seen as responsible for the person's antisocial behaviour (external locus of control and

inadequate moral judgment) and one needs to be very suspicious of others' motives (Marchand & Vonk, 2005). Treatment motivation can be very low through defiance and external locus of control (Page & Scalora, 2002).

In present day Western society, the individual adolescent must take responsibility for his or her own future (Feldman, 2008). This requires a strong sense of agency, active coping abilities, self-control, social skills and competent participation in social institutions (eg. Hirschi, 1977). However, several authors argue that learned helplessness, non-adaptive locus of control and a cynical and defensive world view, which may be attributed to the loss of agency inflicted by adverse correctional treatment, could impede the successful reintegration of juvenile delinquents into society (Halliday & Grahams, 2000; Harvey, 2005; Irwin & Owen, 2005; Huizinga & Henry, 2008; Toch, 2008). Whereas a closed group climate fosters dependency and lack of agency, an open group climate facilitates the development of an internal locus of control by promoting autonomy and responsibility, which subsequently might be expected to have a positive influence on the propensity to trust others and on motivation for treatment. This may contribute to a more positive view of the world, a stronger social bond to society (eg. school and work) and confidence in the ability to change.

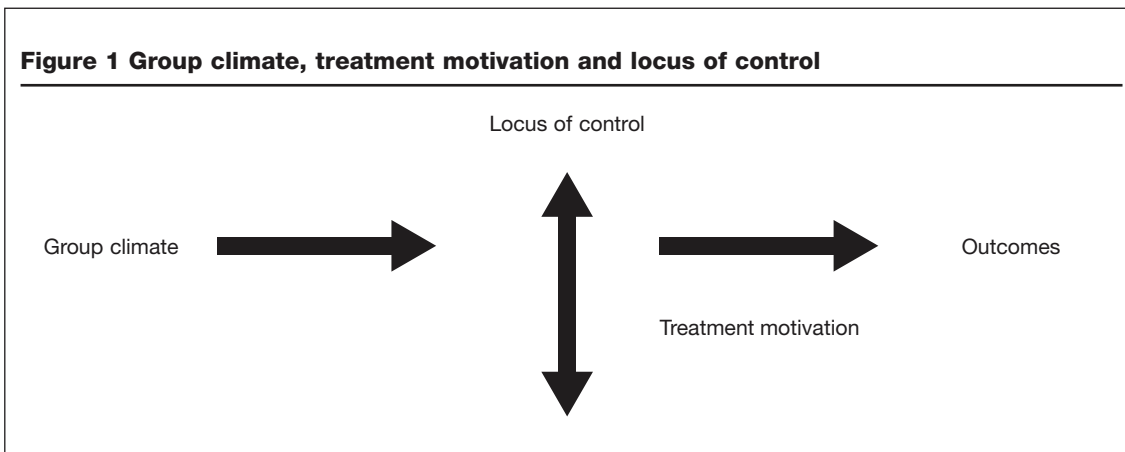
The aim of our study was to assess group climate, internal and external locus of control, treatment motivation and the way group workers could influence or shape group climate (**Figure 1**). First, we hypothesised that incarcerated juvenile delinquents would score lower on internal locus of control and higher on external locus of control than non-incarcerated delinquents receiving ambulatory treatment and a non-delinquent comparison group that was matched with the incarcerated delinquent group on age, distribution of boys and girls and levels of formal education. Second, we hypothesised that a more open and less closed group climate would be associated with more adaptive control (higher internal locus of control, and lower external locus of control) and greater treatment motivation.

Method

Participants

The study was conducted in a Dutch youth prison. The population consisted of 49 adolescents (38 male and 11 female). The mean age of respondents was 16.5 years ($SD=1.28$) and the mean length

Figure 1 Group climate, treatment motivation and locus of control



of stay in correctional facilities was 18.5 months ($SD=15.44$). The interviews took about 45 minutes and most participants filled out the questionnaire afterwards or in their cells. All adolescents participated voluntarily, signed an informed consent declaration and were told that their answers would be treated confidentially and anonymously and would be accessed only by the researchers. As a token of gratitude for their participation, they received a telephone card of 2.50. All names on the questionnaires and interview transcripts were deleted and given a code number in SPSS. In order to protect the privacy of the adolescents, researchers had no access to the names. Two comparison groups were involved in this study: a group of 33 non-incarcerated juvenile serious and violent frequent offenders (25 boys and four girls, mean age 15.8 years, $SD= 1.78$) receiving ambulatory treatment¹, and a non-delinquent group of adolescents attending vocational training school (15 boys and 14 girls, mean age =17.7 years, $SD=0.93$).

Questionnaires and interviews

Specially trained graduate students of the Leiden School of Social Studies administered all interviews and questionnaires.

The climate questionnaire had been designed previously for use in a prison for adult delinquents to assess open and closed (repressive) group climate (van der Helm, Stams & van der Laan, 2009) and was customised for use with adolescent inmates for the purpose of the present study. The climate questionnaire comprised 72 items to assess group climate. From these items two scales were constructed in a sample of adult offenders. The 'open climate' scale consisted of 18 items; the 'closed climate' scale contained four items. The items were rated on a five-point Likert scale,

ranging from 1= 'I do not agree' to 5= 'I totally agree'. An example of an item from the 'open' climate scale is: 'When I have a problem, there is always somebody I can turn to'. An example of from the 'closed' climate scale is: 'You better strictly adhere to the rules here'.

The climate questionnaire was subjected to a principal component analysis in order to replicate the two-factor solution found in the sample of adult offenders. The results showed a similar two-factor solution, with factor loadings comparable in magnitude to the loadings in the adult sample (**Tables 1 and 2**). Four items that did not have significant loadings on the climate scales in the adolescents sample loaded significantly on the open (two items) and closed (two items) climatic factor in the adult sample. The internal consistency reliability coefficients were somewhat lower in the present study than in the original study, but still satisfactory (Cronbach's alpha was .87 for the open climate scale and .70 for the closed climate scale). We found a significant but small correlation between open and closed climate ($r=.36$, $p<0.05$). A higher score represented a more open or a more repressive climate.

Some of the original 72 climate items did not load on the factors that emerged from the principal component analysis but were considered important nonetheless because they reflected salient issues in the open interviews that were held with the incarcerated juvenile delinquents (see below). These items were: 'Group workers allow me some space', 'Group workers are too busy to help me', 'Group workers always get their way', 'You can argue over the rules', 'Exceptions to the rules are possible' and 'They don't understand me here'. Correlations between these individual items and the climate scales ranged from $r=.33$ to $r=.76$ ('Group workers allow me some space' with open climate).

Treatment motivation was measured using an abbreviated form of the Dutch translation of the 'Readiness to Change Questionnaire' (Rollnick *et al*, 1992), which is based on the theoretical motivation model of Prochaska and Di Clemente

(1986) measuring the 'active change' phase (van der Helm, in press). This questionnaire, which was translated and validated by Binsbergen (2003), assesses different phases in motivational change. A five-point Likert scale was used, ranging from 'I =

Table 1 Open climate (factor 1): Factor loadings and reliability coefficients in two samples

Item		N= 49 Alpha=.87	N=48 Alpha=.94
		Factor loadings in the adolescent sample	Factor loadings in the adult sample
3	When I have a problem, there is always somebody I can turn to	0.58	0.74
6	I feel safe at the living group	0.53	0.69
7	Taking initiative is welcomed by group workers	0.35	0.50
10	Group workers treat me with respect	0.72	0.60
11	I trust the group workers	0.51	0.54
12	Group workers show respect to me	0.49	0.43
14	Group workers pay attention to me and respect my feelings	0.47	0.67
18	I get some peace of mind at the group	0.67	-- ¹
20	We trust each other at the group	0.68	0.56
24	I work toward my future	0.60	0.70
27	Life is meaningful here	0.55	0.76
31	Group workers stimulate me	0.78	0.47
33	I feel safe here	0.68	-- ¹
34	Complaints are being taken seriously	0.61	0.63
39	Treatment is helpful for me	0.78	0.67
40	I am aware of my problems	0.74	0.77
41	I feel I'm making progress here	0.60	0.48
46	There are always enough people to help me	0.78	0.79
55	When I complain about something, group workers take it seriously	0.71	0.74
56	We regularly discuss my treatment	0.76	0.44

¹Non-significant factor loadings in the adult sample

Table 2 Closed climate (factor 2): Factor loadings and reliability coefficients in two samples

Item no.	Content item	Alpha=.70	Alpha=.75
		Factor loadings in the adolescent sample	Factor loadings in the adult sample
2	You better strictly adhere to the rules here	0.57	0.35
5	You have to ask permission for everything	0.41	0.65
8	You always have to comply with requests of the group workers	0.47	0.52
36	I do not trust the security staff	0.49	0.52
39	You better give in and do what group workers tell you to do	0.60	-- ¹
40	Sometimes I am afraid of others	0.50	-- ¹

¹Non-significant factor loadings in the adult sample

I do not agree' to '5= I totally agree'. An example of an item from the active phase of motivational change is: 'I want to work at my problems'. Cronbach's alpha for this scale was .88. Higher scores on the scale for treatment motivation indicated greater treatment motivation.

The original Rotter Locus of Control scale (Pugh, 1994) was also customised for use in an adolescent (forensic) setting. The questionnaire measures both internal and external locus of control. An example of an item of the Internal Locus of Control scale is: 'The way my life turns out is dependent on what I do'. Cronbach's alpha for this scale was .72. An example of an item of the External Locus of Control scale is: 'If you want to succeed you have to know the right people'. Cronbach's alpha for this scale was .79. Higher scores on the locus of control scales indicated higher internal or external locus of control.

All incarcerated juvenile delinquents were interviewed for one hour. The topic list in the open interview mirrored the questionnaire. The interviews were used to create an in-depth description of the group climate, locus of control and treatment motivation and to cross-validate the results obtained with the questionnaires. All interviews were written out verbatim and the transcripts were coded and analysed with Kwalitan (Peters, Wester & Richardson, 1994), a computer programme for coding qualitative results.

Results

Quantitative study

The quantitative study consists of three sections. The first section contains results of preliminary analyses of the extent to which incarcerated juvenile delinquents perceive the group climate as open (supportive) or closed (repressive), and their self-reported locus of control and treatment motivation. In the second section, we examine differences in locus of control between incarcerated juvenile offenders and two comparison groups of non-incarcerated juvenile offenders and non-delinquent adolescents who were matched on age, sex and level of formal education (hypothesis 1). In the third section, associations between group climate on the one hand and locus of control and treatment motivation on the other are examined in correlational analyses (hypothesis 2). In the final section, two structural equation models that summarise the main results of both the qualitative and quantitative analyses were fitted to the data, analysing factors that emerged as salient and influential from the open interviews with the inmates (hypothesis 2).

Preliminary analyses

The scale means from the climate questionnaire indicated that incarcerated juvenile delinquents experienced the group climate to be more open ($M=3.60$, $SD=.69$) than closed ($M=3.20$, $SD=0.60$)— $t(32)=2.6$, $p<0.01$. The means for internal and external locus of control were $M=4.10$ ($SD=0.69$) and $M=2.34$ ($SD=.78$) respectively, which indicated that incarcerated juvenile delinquents reported relatively high levels of internal locus of control and low levels of external locus of control. This is contrary to our expectations, which were based on the review of the literature in the introduction. The mean scores for treatment motivation were rather high: 3.96 ($SD=1.46$).

Differences in internal and external locus of control between groups (hypothesis 1)

A series of t-tests did not show any significant differences in levels of internal control between incarcerated juvenile delinquents ($M=4.02$, $SD=.62$), non-incarcerated juvenile delinquents (4.05 , $SD=.60$) and students attending a vocational training school ($M=3.93$, $SD=.24$). Once again no significant differences were found in external locus of control between incarcerated juvenile delinquents ($M=2.3$, $SD=.78$), non-incarcerated juvenile delinquents ($M=2.2$, $SD=.60$) and students attending a vocational training school ($M=1.94$, $SD=.82$). This is not in line with the research findings that were presented in the introduction, indicating that juvenile inmates generally show high levels of external locus of control and low levels of internal locus of control.

Correlational analyses (hypothesis 2)

Correlational analyses (one-tailed significance) showed no significant relationships between closed group climate and locus of control and treatment motivation (**Table 3**). A more open group climate, however, proved to be associated with higher internal locus of control ($r=.47$, $p<0.01$) and greater treatment motivation ($r=.57$, $p<0.001$). No significant correlation was found between open climate and external locus of control.

Two variables that are indicative of a positive outlook were positively correlated with internal locus of control: 'I am learning the right things here' ($r=.51$, $p<0.001$) and 'I am having hope for the future' ($r=.51$, $p<0.001$). A number of group workers' attitudes towards inmates reflecting openness were also positively correlated with

Table 3: Means, standard deviations, and correlations between group climate, treatment motivation, and locus of control (33<N<43)

	M	SD	Open climate	Closed climate	Motivation	Internal control	External control
Open climate	3.60	0.69	1.00				
Closed climate	3.20	0.60	.36*	1.00			
Motivation	3.96	1.46	.57***	0.25	1.00		
Internal control	4.10	0.69	.47**	-0.12	0.15	1.00	
External control	2.34	0.78	0.31	0.22	.57***	-0.10	1.00

p<.05, ** *p*<.01, *** *p*<.001 (one-tailed significance)

higher internal locus of control: 'Group workers treat me with respect' ($r=.40, p<0.001$), 'I can always turn to a group worker whenever I have a problem' ($r=.44, p<0.001$) and 'Exceptions to the rules are possible' ($r=.42, p<0.001$). Group workers' attitudes that were positively associated with treatment motivation were trust ($r=.41, p<0.001$) and paying enough attention to the well-being of the inmates ($r=.46, p<0.01$). Other variables that were positively correlated with treatment motivation were: 'I am having enough fresh air' ($r=.58, p<0.001$), 'I know what's going to happen to me tomorrow' ($r=.42, p<0.01$), and 'Honesty inside is important' ($r=.41, p<0.01$). Boredom ('I waste my time here') was negatively associated with treatment motivation ($r=-.44, p<0.001$).

Structural equation modelling (hypothesis 1)

To investigate whether the variables showing the highest correlations ($r > .40$) with climate, and whether internal locus of control and treatment motivation (Figure 1) were connected, a series of structural equation models were fitted to the data using the statistical software package Amos 16. We chose only to present the two best-fitting models. 'Group workers allow me some space' was the dependent variable in the first model (Figure 1). It was chosen on the basis of interview information showing that 'space allowed by group workers' was highly indicative of an open climate, which was confirmed in a significant correlation of $r=.76 (p<.001)$ between 'Group workers allow me some space' and 'open climate'. In the second model 'treatment motivation' and 'internal locus of control' were inserted as dependent variables (Figure 2). Both fit-indices (CFI, TLI, and RMSEA²) and the model Chi-Square, also designated as the generalised likelihood ratio, were used to evaluate

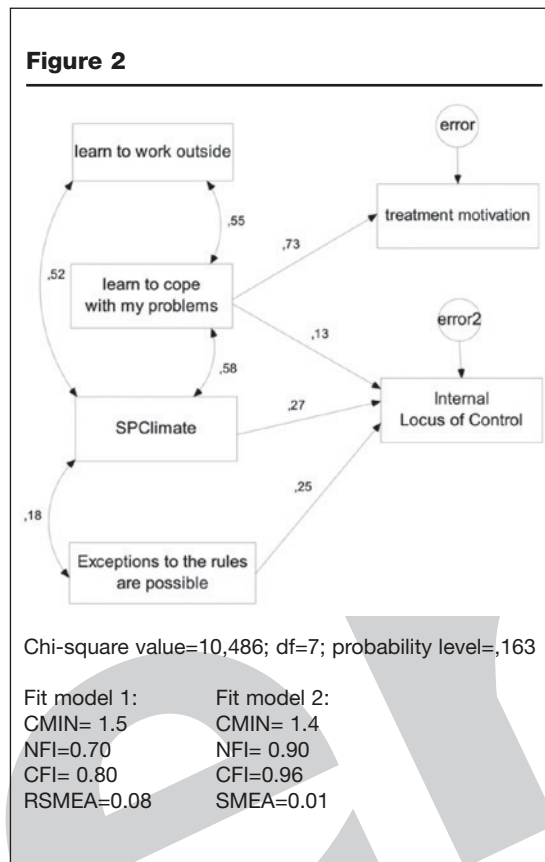
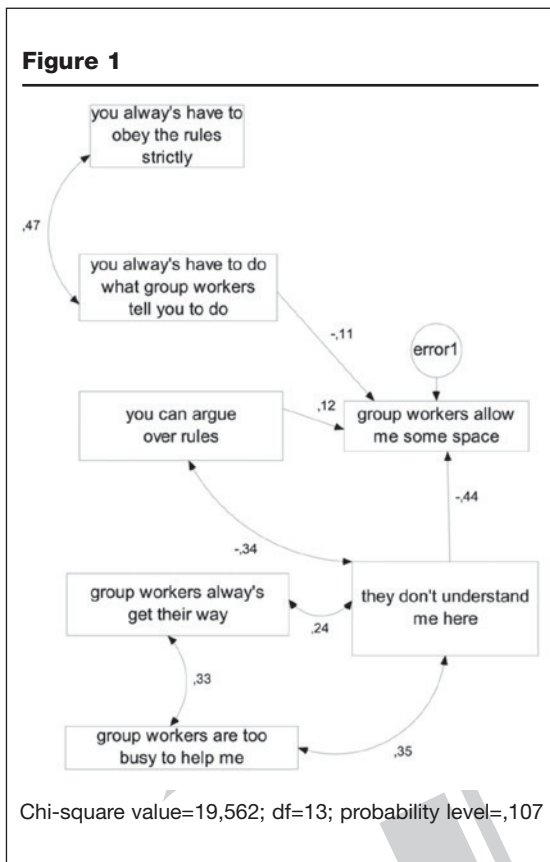
model fit (Kline, 2005). The following cut-off values are indicative of close model fit: NFI and CFI > .90, TLI > .95 and RMSEA<.06, whereas a non-significant Chi-Square indicates exact model fit (Hu & Bentler, 1999; Arbuckle, 2005; Kline, 2005).

Model 1 showed an exact fit to the data when using a null hypothesis significance test: $X^2(13)=9.56, p=.11$. However, fit indices that are less sensitive to differences in sample size than the Chi-square test (Civo *et al*, 2006) showed a marginal fit to the data: NFI= 0.70; CFI= .80; TLI=.62; RMSEA=0.08. It can be derived from Figure 1 that a perceived inflexible attitude of group workers and lack of attention (possibly a result of understaffing) were associated with inmates' experiences of not being understood and lack of space provided by the group workers.

Model 2 showed an exact fit to the data - $X^2(7)=10.49, p=.16$ - and a close fit when using fit indices: NFI= 0.90; CFI= .96; TLI= .88; RMSEA=0.01. Measures of responsivity by group workers (the way they thought group workers understood them and 'Group Workers allow me some space') were associated with 'open climate', and subsequently higher 'internal locus of control'. An open climate proved to be associated with inmates' coping behaviours and the idea that they were learning the right things, which resulted in higher treatment motivation.

Qualitative study

The interviews provided a wide-ranging picture of the adolescents living in prison. Most juvenile delinquents were quite frank and open to the interviewers (students). Some respondents gave detailed examples in their interviews of extortion, drug dealing and rape inside the prison. Group workers confirmed some of the most striking examples of norm-violating behaviours that were



reported by the respondents. To investigate climate aspects in the interviews we coded statements for evidence of open and closed climate. An example of a statement reflecting open climate was:

I: How do you feel here

R: Quite OK, I have a very good contact with a group worker, he always takes time for me whenever I feel down.

An example of a statement reflecting closed climate was:

R: We have a very stupid rule, if you don't drink your milk you have to go to your room [incarceration-PvdH.]

I: You don't agree with this?

R: Last time my milk was sour and I had to drink it. If I didn't I had to go to my room.

We counted the number of statements referring to an open and closed climate (hypothesis 2).

Open (supportive) group climate

The respondents (76%) reported huge climate differences within the living group, not only

depending on individual inmates' behaviour but also on the behaviour of the group workers. Important aspects of an open climate were having trust in group workers (35%), experiencing feelings of safety (50%), being treated with respect ('Even if I become aggressive') and 'Getting some space'. Group workers paying enough attention to arguments and feelings (43%) and the idea of working on their own problems and futures (78%) were very important for the adolescents. Also the possibility of discussing the rules and making exceptions to the rules were also important aspects of their perception of the group climate (41%).

Closed (repressive) climate

The most important characteristics of a closed climate were differences in professional performance of group workers, which were mainly connected with 'Getting no space from group workers' (76%) and excessively strict (96%), erratic (80%) or unfair rules (for instance, group punishment, 58%). Lack of attention (88%) and lack of trust in group workers (78%), differential treatment from group workers (65%), aggressive behaviour being tolerated by group workers (41%), group workers not adhering to rules themselves

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(56%) and not taking complaints seriously (44%) were often mentioned. Further characteristics were boredom (86%), lack of perspective (48%), depressive feelings (96%) and fear for own safety (16%).

Differences between quantitative and qualitative results

The incarcerated juvenile delinquents responded very differently to questionnaires and open interviews. They turned out to be more negative about the climate of the living group in the interviews. Remarks about excessively strict and unfair rules or punishment, lack of attention and trust of group workers, boredom, hopelessness and fears of safety were mentioned more often in the results of the questionnaire. The interview results showed relatively low levels of internal locus of control when compared to the results obtained with questionnaires. These contradictory findings led us to examine locus of control in the interviews.

To further specify these low levels of internal locus of control we coded the interviews for feelings and thoughts often related to low levels of internal locus of control: instances of depression, sleep problems, loss of initiative and powerlessness. We found signs of learned helplessness and depressive affect in 80% of the cases. For example:

I: How are you now?

R: Just waiting. I sit waiting and waiting. I am at a standstill and do nothing.

When coded for internally oriented versus externally oriented statements we found three times more externally oriented labels. An example of an externally oriented statement was:

I: Do you consider it your fault to be here?

R: No.

I: Why not? You are here for three incidents of grave assault.

R: It's not my fault, more from the other side.

I: The victim?

R: Yes, that was, eeeuh, from cause comes effect. He was the cause and this is the effect, he is outside and I am inside.

I: Was that also the case with the others?

R: Yes, if they didn't come to me there would be no problem.

A lot of respondents have just accepted their situation:

I: How do you feel now?

R: Just normal like at home.

I: Is it just like a home?

R: Yes.

And:

I: How does it feel to be outside?

R: Outside you don't feel at home, I'd rather go back because I'm not used to being outside with so many people around.

Discussion

This study examined incarcerated juveniles' perceptions of group climate, treatment motivation, locus of control and the relationships between them. The questionnaire results did not show differences in locus of control between incarcerated juvenile delinquents, non-incarcerated juvenile delinquents receiving ambulatory treatment, and a matched comparison group of juvenile non-delinquents (hypothesis 1 not supported). On the other hand, the interviews revealed lower levels of internal locus of control and signs of learned helplessness among the group of incarcerated juvenile delinquents. Unexpectedly, questionnaire self-report yielded rather high scores on both open (supportive) and closed (repressive) group climate. It is possible that inmates experience the group climate to be both open and closed, which may, as the interview data suggest, parallel the supportive and repressive attitudes of group workers. Notably, the climate was even perceived to be more open than closed.

Interview data, on the contrary, showed that the climate was extremely closed. Group workers, especially inexperienced ones, were described as very strict. Inmates reported integrity problems, differential treatment and lack of trust. Some group workers emphasised different rules, not taking rules themselves seriously. These differences constituted a considerable source of stress for the inmates. 'Good' group workers were group workers who could be trusted and the inmates could turn to when feeling down, who treated the inmates with respect and who were considered 'straight'.

The different results that were obtained with questionnaires and open interviews may be due to the problems that are associated with the use of self-report questionnaires in delinquent samples. For instance, Breuk and colleagues (2007) found that juvenile delinquents report

unrealistically positive scores on questionnaires measuring psychopathology and relationship quality, which were not in agreement with the fact that all juvenile delinquents were receiving treatment for severe behavioural maladaptation and relationship problems. Moreover, parents rated psychopathology in the clinical range and evaluated the quality of the relationship with their delinquent sons as very poor. A plausible explanation for substantial underreporting of behaviour problems and problematic relationships by juvenile delinquents is found in the propensity to give socially desirable answers. Possible fear of repercussions can be one of the sources of this answering tendency (Tourangeau & Yan, 2007). To illustrate this, two inmates told the interviewers they were discussing questionnaires at the group and the way one should answer specific questions. Researchers should therefore be careful not to rely on a single assessment method and instead complement self-report questionnaires with in-depth interviewing (see Stams *et al.*, 2006).

Responsivity, in particular the aspect of treatment motivation, is one of the most important principles underlying successful rehabilitation (Andrews & Bonta, 2003). As responsivity pertains to how the juvenile delinquent interacts with the treatment environment (Ward, Melser & Yates, 2007), it is crucial to focus on the group climate when dealing with the efficacy of behavioural interventions that are delivered in residential settings. The present study showed that an open group climate positively affected both treatment motivation and internal locus of control in incarcerated juvenile delinquents, and provided evidence that group workers can influence group climate (hypothesis 2 confirmed). Results of the open interviews showed the group climate to be more closed (repressive) than open (supportive). Moreover, we found evidence of an antisocial group climate among the incarcerated delinquents, which may have great consequences for the safety of the inmates. It should be noted that safety is a necessary condition for the establishment of an open group climate (Maitland & Suder, 1998; Kury & Smartt, 2002). Competition and aggression among inmates and workers are often characteristic of a closed and repressive climate, where group workers tend to shift from support to control and adolescents try to 'play the system' (Harambolos & Holborn, 1995; Harvey, 2005).

There are some important limitations of this study that need to be acknowledged. First, the

closed climate scale proved to be less reliable than the open climate scale, which may partly explain the absence of significant associations between closed climate and treatment motivation and locus of control. Second, we found evidence of serious underreporting of problems when using questionnaires, which limits the conclusions that can be drawn from the questionnaire data. Third, the small sample size and the inclusion of only one youth prison hamper general conclusions being drawn from the study findings. Finally, the control group of the non-incarcerated offenders was not matched on seriousness of offences and negative attitudes. It is possible that the incarcerated group was more extreme in extent and depth of their criminal activities, personal problems and antisocial values. Also the volunteer group from a vocational training school was not matched on these and other potentially confounding characteristics, such as learning problems, which may explain differences between the groups. Notably, the bias that results from factors that could not be statistically controlled in this study applies to the findings obtained with questionnaires, as the open interviews were only held with the group of incarcerated juvenile delinquents. As we found no significant group differences when using self-report questionnaires, it might be possible that hypothesised group differences in locus of control were suppressed by factors related to locus of control that differ systematically between the groups. Finally, the sample size was too small to allow multi-level analysis in order to account for dependency of measurements in hierarchically structured data (eg. inmates are nested into living groups). Notably, the neglect of statistical dependency results in capitalisation on chance and the risk of spurious research findings. Because of this and other limitations the results of our study should be interpreted with great caution.

The present study is probably one of the first studies to examine the relationship between group climate in a youth prison and responsivity, in particular the important aspect of treatment motivation. The results indicate that an open and supportive group climate appear to contribute to greater treatment motivation and higher internal locus of control. As the present study only provides preliminary evidence of associations between group climate, treatment motivation and locus of control, results should be replicated in a prospective, longitudinal study that allows for the examination of contextual effects by means of multi-level analysis.

Summary of policy and practice implication

- Group workers should be aware of the specific limitations that juvenile delinquents may have, in particular with regard to their possibilities of active problem-solving and long-term planning. The inmates should therefore be supported in pursuing short-term and self-concordant goals that have a positive meaning for them. This is thought to result in feelings of self-efficacy.
- Prison inmates tend to be more sensitive to reward than to punishment. Reward fosters the inmates' self-esteem, internal locus of control and sets the groundwork for an open group climate.
- Whereas an open group climate is a prerequisite for the establishment of treatment motivation, a closed group climate is counter-productive for any treatment that inmates receive during their incarceration.
- Adolescents need possibilities to explore and learn. Group workers should facilitate exploration and discuss what went wrong in an empathic way, acting both as a secure haven and a secure base.
- The selection and training of group workers should therefore be based on their professional ability to be responsive to incarcerated adolescents.

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Endnotes

¹Ambulatory treatment consisted of a wide spectrum of interventions, ranging from home visits by a police officer, to specific training programmes like Aggression Replacement Training, to comprehensive programmes like Multi-Systemic Therapy or Functional Family Therapy.

²CFI (Comparative Fit Index), TLI (Tucker-Lewis Index) and RMSEA (Root Mean Square Error of Approximation) are indices of goodness of fit that are independent of sample size. Models that fit well score favourably on these fit-indices. For further references see Arbuckle (2007).

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