

Group climate and treatment motivation in secure residential and forensic youth care from the perspective of self determination theory

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ABSTRACT

Treatment motivation in secure residential youth care is assumed to be a necessary condition for effective treatment, and is therefore a key element in the reduction of problem behavior and criminal recidivism. According to Self-Determination Theory (SDT) three basic psychological needs (autonomy, competence and relatedness) are essential for treatment motivation, which are characteristics of a positive residential group climate. Based on SDT, we examined whether a therapeutic (open) group climate and low levels of institutional repression were associated with treatment motivation of adolescents residing in (semi-) secure residential youth care facilities. An ethnically diverse sample was studied of 179 respondents ($M = 16.2$ years; $SD = 1.5$), in 12 Dutch (semi)secure youth care facilities and 9 forensic youth care institutions. We measured residential group climate with the PGCI and treatment motivation with the ATMQ, and fitted a Cross-Lagged Panel Model (CLPM) of residential group climate and treatment motivation. It was found that a positive group climate in the first month after placement predicted greater treatment motivation three months later.

1. Introduction

In the Netherlands, adolescents with severe behavioral problems who need protection against themselves or against others may be referred to or involuntarily placed in secure youth care facilities (SYC) after authorization by the civil court, while juvenile offenders are sentenced to detention in forensic youth care institutions (FYC) by the criminal court (Hilverdink, Daamen, & Vink, 2015). The involuntary character of these placements may have a negative impact on their treatment motivation (Brauers, Kroneman, Otten, Lindauer, & Popma, 2016), treatment outcomes and criminal recidivism (Parhar, Wormith, Derksen, & Beauregard, 2008; Van der Stouwe, Asscher, Stams, Hoeve, & van der Laan, 2018). It is assumed that juveniles need a high level of treatment motivation in order to be able to profit from interventions that target behavioral adjustment both within and outside secure residential settings (Andrews & Bonta, 2010; Olver, Stockdale, & Wormith, 2011). Several cohort studies in the past have linked group climate quality to treatment motivation (Heynen, van der Helm, Stams, J, & Korebrits, 2017; Van der Helm, Wissink, Stams, & De Jongh, 2011), but no all-encompassing theory (SDT) was presented to explain this link.

In the present study, treatment motivation as an outcome is

considered to be ‘a state of readiness or eagerness’ to seek out help and work actively at a solution (Miller & Rollnick, 2012). Treatment motivation presupposes causal agency, which enables a person to be the causal agent in his or her life by the promotion of self-regulation through self-determination skills (Shogren et al., 2015). Therefore, the development of treatment motivation is examined from the perspective of Self Determination Theory (SDT; Deci & Ryan, 2008, Deci, E. L. & Ryan, R. M., 2014; Ryan & Deci, 2000, Ryan & Deci, 2017) and residential group climate (author).

1.1. Self determination theory

Self Determination Theory (SDT) is an empirically based theory of motivation and development. In the theory internalized (intrinsic) treatment, as opposed to external, or forced motivation (which can produce *amotivation*), predicts better outcomes in a wide range of domains, such as work, education, and treatment (Ryan & Deci, 2017). Ryan and Deci (2000) argue that intrinsic and extrinsic motivation do not necessarily show a negative relation, but should rather be considered as a reflection of different degrees of self-determination. Self-determination entails that one is acting out of free choice and/or pleasure rather than external obligation and/or internal pressure.

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Intrinsic motivation, the prototype of self-determined activity, is placed at the self-determination end of this continuum. Amotivation (the relative absence of motivation) is located at the opposite end (for a complete overview of the SDT, see Ryan & Deci, 2017; Ryan & Deci, 2000).

SDT claims that the environment influences motivation by its impact on perceptions of competence, autonomy and relatedness. It is assumed that the experience of competence, autonomy and relatedness is an indication that one's psychological needs are fulfilled, which stimulates self-motivation. This means that environmental factors that create perceptions of competence, autonomy and relatedness will enhance motivation for self-enhancement, which is thought to positively affect social behavior and resiliency (Ryan & Deci, 2017; Stams & Van der Helm, 2017; Vansteenkiste & Soenens, 2015; Wolff & Baglivio, 2017). On the other hand, environmental factors that impair such perceptions produce negative emotionality, and have been shown to have negative effects on self-motivation (Grouzet, Vallerand, Thill, & Provencher, 2004; Ryan & Deci, 2000). Several studies have shown that intrinsic motivation can be negatively affected by a variety of environmental factors, such as negative feedback and rewards (Vansteenkiste & Soenens, 2015). Other environmental factors, such as having opportunity to choose and positive feedback, have been shown to have a positive impact on intrinsic motivation (See Grouzet et al., 2004, for an overview).

1.2. Residential group climate

In recent years, the social environment in residential youth care facilities has been examined from the perspective of residential group climate, which has been defined as *'the quality of the social- and physical environment in terms of the provision of sufficient and necessary conditions for physical and mental health, well-being, contact and personal growth of the residents, with respect for their human dignity and human rights as well as (if not restricted by judicial measures) their personal autonomy, aimed at recovery and successful participation in society'* (Stams & Van der Helm, 2017).

Residential group climate can be either closed (negative, repressive) or open (positive, comprising responsive group workers, possibilities for growth and a good atmosphere, Van der Helm, Wissink, et al., 2011). A closed residential group climate is characterized by repression, which diminishes autonomy, relatedness, and competence (Van der Helm & Stams, 2012). In (secure) residential youth care, autonomy is often severely restricted by group workers through punishment and reward systems and fear of losing control by staff (de Valk, Kuiper, Van der Helm, Maas, & Stams, 2016; Van der Helm, Boekee, Stams, & Van der Laan, 2011). Behavioral management in residential facilities often results in learned helplessness and diminishes opportunities for personal growth and development of social and cognitive competencies (de Valk et al., 2016). In many residential facilities withholding contact or even separation is used as a way of punishment for 'improper' behavior (De Valk et al., 2015; Ros, Van der Helm, Wissink, Stams, & Schaftenaar, 2013), or quality of relationships (i.e., relatedness) between adolescents and staff is heavily compromised by discontinuity in care (Souverein, Van der Helm, & Stams, 2013; Van der Helm & Van de velde, 2018).

An open residential group climate is characterized by responsiveness of staff, who provide emotional and social support, a safe and supportive atmosphere among adolescents at the living group, and opportunities for personal growth, which is assumed to foster autonomy, relatedness, and competence. Although conceptually a supportive presence of group workers and a positive emotional atmosphere among adolescents may be most strongly associated with the dimension of relatedness, and growth may be more strongly associated with personal autonomy and competence, we assume that in particular the combination of these three therapeutic residential group climate dimensions (i.e., support, atmosphere, and growth) as well as low levels

of repression provide the preconditions for self-determination, and therefore treatment motivation.

1.3. The present study

Based on self-determination theory, we hypothesize that an open and therapeutic group climate and low levels of repression are positively related to treatment motivation of adolescents in (semi-)secure and forensic youth care.

2. Method

2.1. Participants

The present study was conducted in 12 Dutch secure residential youth care facilities (SYC) and 9 youth correctional facilities (FYC). In the youth-correctional facilities only those adolescents were selected who were expected to stay > 4 months, and short stay was excluded. The sample consisted of 179 adolescents (66% male and 34% female) randomly selected at entrance from the living groups and asked by staff to participate (response rate = 84%) within one month after placement. The procedure was repeated three months after the last interview. The mean age of respondents was 16.2 years ($SD = 1.5$, range = 12–20 years). Most respondents were born in the Netherlands (84%), while 76% had a father or a mother who was born in a non-western country. The mean stay at the time of the research was 5.5 weeks ($SD = 13.2$, range = 2–20 weeks).

2.2. Procedure

Participants completed a questionnaire. All respondents participated voluntarily, signed an informed consent declaration, and were assured that their answers would be treated confidentially and processed anonymously, being accessed only by the researchers. All names on the questionnaires were deleted and given a code number in SPSS. To protect the privacy of the respondents, researchers had no access to the names. All questionnaires were administered by graduate students of the Leiden University of Applied Sciences (bachelor of social work and master youth care) and the University of Amsterdam (Department of Forensic Child and Youth Care Sciences), who received a training for this purpose.

2.3. Measures

Residential group climate was measured with the validated Prison Group Climate Inventory (PGCI; Van der Helm, Stams, & Van der Laan, 2011). The PGCI consists of four scales and 36 items rated on a 5-point Likert-type scale, ranging from 1 = *I do not agree* to 5 = *I totally agree*. Each item belongs to only one of the four scales for group climate. The Support scale (12 items) assesses contact group workers make with adolescents and their responsiveness to specific needs of the adolescents. Paying attention to adolescents, taking complaints seriously, respect, and trust are important characteristics of support. An example of a Support item is 'group workers treat me with respect.'

The Growth scale (eight items) assesses learning perceptions, competence, and giving meaning to the stay in the institution. An example of a Growth item is 'I learn the right things here.' The Repression scale (nine items) assesses perceptions of strictness and control, unfair and haphazard rules, and lack of autonomy at the living group. An example of a Repression item is 'You have to ask permission for everything here.' The group Atmosphere scale (seven items) assesses the way adolescents treat and trust each other, feelings of safety toward each other, being able to get some peace of mind, and having enough daylight and fresh air. An example of an Atmosphere item is 'We trust each other here. The four scales together form a higher order factor: 'residential group climate' (Van der Helm, 2011).

In the present study, reliabilities were good: ‘support’ $\alpha = 0.883$, ‘growth’ $\alpha = 0.864$, ‘atmosphere’ $\alpha = 0.782$, and repression $\alpha = 0.775$.

Treatment motivation was measured using the 11 items version of the validated Adolescent Treatment Motivation Questionnaire (ATMQ; Van der Helm, 2011), which is based on the theoretical motivation stage model of Prochaska and DiClemente measuring the ‘active change’ phase. A 5-point Likert-type scale was used, ranging from 1 = *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 on my problems.’ Higher scores on the scale for treatment motivation indicate greater treatment motivation. In the present study, Cronbach’s alpha for this scale was 0.88.

2.4. Statistical analyses

We first computed means, standard deviations and examined correlations between all observed residential group climate dimensions and treatment motivation at T1 and T2 in preliminary analyses. Subsequently we fitted a Cross-Lagged Panel Model (CLPM, Gershoff, Aber, & Clements, 2009) in Mplus of residential group climate and treatment motivation to model longitudinal pathways between group climate (context) and motivation, accounting for the nested structure of the data by using the ‘type is complex’ and cluster option in Mplus, which computes standard errors and a chi-square test of model fit that is based on the non-independence of observations (due to cluster sampling). The following cut-off values are indicative of close model fit: NFI and CFI > 0.95 and RMSEA < 0.08, whereas a non-significant χ^2 indicates exact model fit (Arbuckle, 2007; Hu & Bentler, 1999; Kline, 2005).

3. Results

3.1. Preliminary analyses

The means and standard deviations for the climate dimensions and treatment motivation at T1 and T2 and the correlations among these variables are presented in Table 1. Results show moderate to strong correlations among the group climate dimensions at T1 ($0.51 < r < 0.77, p < .001$) and T2 ($0.41 < r < 0.81, p < .001$) in the expected direction, and also moderate to strong stability of these group climate dimensions ($0.57 < r < 0.68, p < .001$) as well as treatment motivation ($r = 0.60, p < .001$) over a three-month period. Finally, all group climate dimensions at T1 and T2 were weakly ($r = 0.24, p < .01$) to strongly ($r = 0.73, p < .001$) associated with treatment motivation at T1 and T2. Support and growth showed somewhat stronger correlations with treatment motivation than did atmosphere and repression.

Table 1
Means, standard deviations and correlations of climate scales and treatment motivation

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Support T1	3.49	0.82	–									
2. Growth T1	3.41	1.00	0.77***	–								
3. Atmosphere T1	3.24	0.87	0.71***	0.60***	–							
4. Repression T1	3.25	0.80	–0.61***	–0.51***	–0.52***	–						
5. Support T2	3.35	0.87	0.59***	0.60***	0.47***	–0.43***	–					
6. Growth T2	3.32	1.07	0.49***	0.68***	0.36***	–0.40***	0.81***	–				
7. Atmosphere T2	3.18	0.82	0.45***	0.46***	0.57***	–0.41***	0.71***	0.59***	–			
8. Repression T2	3.26	0.80	–0.49***	–0.48***	–0.39***	0.65***	–0.66***	–0.60***	–0.55***	–		
9. Motivation T1	2.08	0.54	0.63***	0.73***	0.45***	–0.47***	0.51***	0.53***	0.32***	–0.44***	–	
10. Motivation T2	2.06	0.58	0.43***	0.57***	0.24**	–0.34***	0.67***	0.73***	0.41***	–0.54***	0.60***	–

Note. The Pearson correlation coefficients were noted. N = 179.

*** $p < .001$.

** $p < .01$.

* $p < .05$. (two-tailed).

3.2. Cross-lagged panel model

The CLPM model (see Fig. 1, Gershoff et al., 2009) showed no exact fit – $\chi^2 (22) = 40.379, p = .009$ – but a close fit to the data: RMSEA = 0.069; TLI = 0.971 and CFI = 0.986. Standardized path coefficients indicated somewhat stronger stability in residential group climate ($0.665, p < .001$) than in treatment motivation ($0.385, p < .001$). Only the (cross-lagged) path from residential group climate at T1 to motivation at T2 proved to be significant ($0.278, p < .01$), indicating that a more positive group climate during the first month of residential care was associated with greater treatment motivation three months later, whereas the path from treatment motivation at T1 to residential group climate at T2 was not significant ($0.077, p = .444$).

4. Discussion

The present study showed that a positive group climate in semi (secure) and forensic residential youth care facilities during the first month after placement of justice-involved adolescents predicted greater treatment motivation three months later, which confirmed our hypothesis derived from self-determination theory. These findings, which are in line with previous research (Heynen et al., 2017; Stams & Van der Helm, 2017) underscore the importance of living group quality for treatment motivation. Adopting a strength-based approach based on psychological needs of residents instead of behavioral control has been shown to improve group climate significantly (Barton & Mackin, 2012), and reduce aggressive and delinquent behavior (Van den Tillaart, Eltink, Van der Helm, Stams, & Wissink, 2018). Notably, a non-significant relation between treatment motivation and later group climate suggests that the positive effects of a strength-based approach on group climate quality may not be mediated by possible changes in treatment motivation.

Support and growth showed somewhat stronger correlations with treatment motivation than did atmosphere and repression. This can probably be explained by the observation that staff in Dutch (secure) facilities have been trained to provide relational support (Bramsen, Willemse, Kuiper, & Cardol, 2018) and methods that aim to enhance competence (Slot & Spanjaard, 1999), whereas autonomy, as a pre-condition for treatment motivation, may be compromised by generally high levels of repression (De Valk, Kuiper, Van der Helm, Maas, & Stams, 2018), which tend to be rather stable and difficult to influence (Stams & Van der Helm, 2017). In addition, group atmosphere deals with relatedness among adolescents, and may therefore be secondary, exerting a relatively indirect effect on treatment motivation compared to relational support provided by staff.

Our study revealed that group climate proved to be relatively stable over time compared to treatment motivation. Notably Stams and Van

SDT MODEL

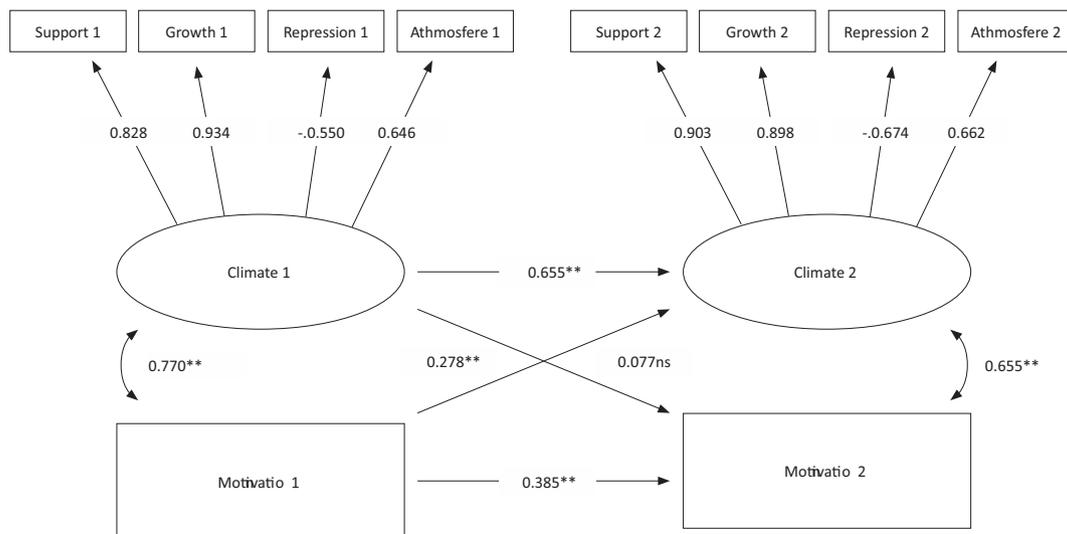


Fig. 1. Longitudinal Sem model.

der Helm (2017) showed that active feedback on group climate quality to staff as well as adolescents could improve positive aspects of the climate over time. However, reducing repression proved to be more difficult, probably because repression was assessed as a unidimensional construct by author. It is therefore possible that the feedback on repression provided to staff and adolescents was too general to bring about change or detect change in repeated assessments of repression. Moreover, repression may be more difficult to change than the positive aspects of residential group climate, because it is affected by detention itself, including deprivation of freedom, the secure physical (prison) environment, and the extreme power-imbalance between residents and staff (de Valk et al., 2016; De Valk et al., 2018; De Valk, Kuiper, Van der Helm, Maas, & Stams, 2017).

According to De Valk et al. (2018) repression is a multi-dimensional construct, which consists of five dimensions: *abuse of power*, *injustice*, *lack of autonomy*, *lack of meaning*, and *dehumanization*. These various dimensions could shed new light on the 'autonomy'- dimension of SDT theory, and probably ask for differential professional behavior of staff. Therefore, these aspects probably should be monitored regularly to satisfy basic psychological needs of adolescents in residential care.

Supportive staff-adolescent relationships, positive relationships among adolescents at the living group, a positive learning environment, and low levels of repression (e.g., coercion) seem necessary to satisfy the basic self-determination needs of adolescents who stay in residential care and subsequently foster their treatment motivation. This can only be attained by staff being aware of the basic psychological needs of adolescents in residential care. This might be achieved through psycho-education (Ranz, Horen, Mc Farlane, & Zito, 1991), staff intervention and supervision (The Dutch Safety Board, 2011a, 2011b), and the implementation of strength-based approaches (Barton & Mackin, 2012), and alternative ways to deal with challenging behavior (e.g., aggression) of adolescents in residential care (author). One such approach is Non-Violent Resistance (NVR, Day & en Heismann, 2010), which respects the adolescent's needs for relatedness, competence and autonomy by not fighting back and keep offering contact when in crisis.

There are some limitations to this study. A first limitation is that we did not assess dimensions of self-determination, that is, competence (i.e., perceptions of ability), relatedness (i.e., feeling socially accepted, included, and supported), and autonomy (i.e., exercising responsibility, choice, and decision-making). We derived our hypothesis from self-

determination theory in that a positive residential group climate would increase treatment motivation of adolescents in (semi-)secure residential youth care facilities. A suggestion for further research is using the Basic Psychological Needs and Frustration Scale (Frielink, Schuengel, & Embregts, 2016). A second limitation is that group climate was assessed by means of adolescent self-report only. Observations of group climate and in-depth interviews with adolescents as well as staff should be used in future research, besides questionnaires assessing group climate, self-determination and treatment motivation. Third, the research period was relatively short (4 months). Finally, the small number of participants, as well as the under- or overrepresentation of particular subgroups, does not allow a multi-group analysis (e.g., distinguishing between gender, age-groups, or ethnic background).

Despite these limitations, this study could have important implications. Residential group climate and basic human needs are often overlooked when assessing the effects of residential treatment (Strijbosch et al., 2015). Moreover, a study by Harder, Knorth and Kalverboer (2012) showed that adolescents' treatment motivation placed in secure residential care deteriorated from admission to departure. Weisz et al. (2013) estimated the effects of psychological evidence-based youth interventions on various outcomes to be only modest under optimal circumstances (efficacy studies), and small or even non-significant under clinically representative conditions, with no effect for multi-problem youth with complex needs (Weisz et al., 2017). Interestingly, Weiss, Westerhof, and Bohlmeijer (2016) found a moderate and positive effect of interventions on psychological well-being, which supports rehabilitative approaches that focus on positive youth development, such as the Good Lives Model of offender rehabilitation (GLM; Barnao, Ward, & Casey, 2016; Ward, 2002, Ward & Fortune, 2013) which shows many commonalities with SDT (Ward & Fortune, 2013), because it is based on developing capabilities ('competence') and strengths ('autonomy') in people as is SDT.

When we combine an effective treatment method (Cognitive Behavior Therapy) with a positive group climate, fulfilling SDT basic psychological needs, we could probably better personalize interventions (Ying & Weisz, 2016) and gain larger treatment effects by increasing treatment motivation and positive youth development in general (Lipsey, 2009). Treatment motivation is often assumed in (secure) residential youth care, but taking it for granted could seriously jeopardize effectiveness of treatment. Basic psychological needs of

children, together with group climate, especially in secure care, should be taken into account and researched more often in order to improve residential youth care. By this we could perhaps contribute to braking the chain of negative life events of children in residential youth care, first by preventing harm (Van der Helm, 2011), and secondly, by fostering resiliency of adolescents in (semi-)secure facilities (Wolff & Baglivio, 2017).

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Declarations of interest

None.

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