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The Feelings of Others Don't Impress Me Much – Effects of Living Group Climate on Empathy in Adolescent Male Offenders

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The present study is a replication in Germany of a study originally performed in the Netherlands regarding the association between a positive living group climate and self-reported empathy in incarcerated adolescent male offenders ($n = 49$). A structural equation model was fitted to the data and showed a relation between a positive living group climate and increased empathy after six months. The discussion focuses on group dynamics in youth prisons. The present results open the way to further research into the importance of group processes in residential youth care. A positive living group climate could turn out to be an important factor contributing to the effectiveness of secure institutional treatment.

Key words: empathy; living group climate; residential youth care.

One of the most important developmental tasks of adolescents is to become a person who can empathize with others, that is, someone who has the capacity to ‘understand and share another’s emotional state and context’ (Cohen & Strayer, 1996, p. 988). Empathy is considered to be the evolutionary mechanism behind altruism, prosocial behaviour, human civilization, and subsequently desistance from violence (De Waal, 2008; Pinker, 2011). Whereas high levels of empathy are associated with prosocial behaviour (Eisenberg, Spinard, & Sadovsky, 2006), lack of empathy is associated with antisocial behaviour, including aggression, delinquency (Jolliffe & Farrington 2004; van Langen, Wissink, van Vugt, van der Stouwe, & Stams, 2014) and criminal offence recidivism (van Vugt et al., 2011).

There is growing empirical evidence showing that the social environment has a major impact on both antisocial behaviour and prosocial functioning (van IJzendoorn & Bakermans-Kranenburg, 2014). Also, juvenile offenders change their behaviour in response to the social environment, that is, perceived environmental demands and pressures (e.g. Schubert, Mulvey, Loughran, & Losoya, 2012; Steinberg, 2009; van der Helm & Stams, 2012). A positive living group climate in terms of support, growth, positive atmosphere and low repression has been shown to be a positive indicator of more empathic behaviour. In a prison environment, repression is related to perceptions of strictness and control, unfair and haphazard rules, and a lack of flexibility by group workers. Low repression

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is thought to be a necessary condition for creating a positive learning environment in residential youth care (van der Helm, Stams, & van der Laan, 2011). ‘Support’ means that group workers are responsive to the specific developmental needs of the juveniles, involving juveniles in a therapeutic and empathic relationship, which may challenge their ego-centric, emotional and cognitive schemes and which models empathic responding. Growth pertains to the institutional investment in creating a positive learning environment for juveniles, including participation and role-taking opportunities, thus facilitating socio-emotional development, coping with social problem situations and development of empathy (Eltink, van der Helm, Wissink, & Stams, 2015; Heynen, van der Helm, Wissink, Stams, & Moonen, 2015). Group atmosphere pertains to the way inmates treat and trust each other and experience feelings of safety (van der Helm, Stams, & van der Laan, 2011). While a negative group atmosphere is thought to increase competition, stress, conflict and self-interest, a positive group atmosphere may foster positive attitudes, including empathy. Living group climate in youth correctional facilities can be considered as open and supportive if repression is low, support and growth are high and group atmosphere is positive.

In the Netherlands, juvenile delinquents receive structured clinical treatment during detention (Hoogsteder et al, 2015), whereas in the German system the primary goal of incarceration of delinquent juveniles is education (Bundesministerium der Justiz, 2007). As the present study was carried out in a German youth prison, it seems reasonable to suggest that the relation between living group climate and empathy might be affected by differences in the juvenile prison system between Germany and the Netherlands. Recent research comparing the outcomes of living group climate research in Germany and the Netherlands has shown significantly lower levels of support and group atmosphere in German juvenile justice institutions (Heynen, Behrens, & van der Helm, 2015).

Additionally, the population of German youth offenders proved to be somewhat older compared to the Dutch population (Heynen, van der Helm, Cima, Stams, & Korebrits, 2015).

Consistent with Fabes and Eisenberg (1998), who found age differences in the prosocial behaviour of children and adolescents in their meta-analysis, Eisenberg, Cumberland, Guthrie, Murphy, and Shepard (2005) found increases in empathic reasoning from 17 to 18 years of age to age 21 to 22 years in a sample of (Euro-American) girls. Although it is not clear whether these findings can be generalized to the sample of incarcerated delinquent boys in a German youth prison, it seems important to take age differences into account when examining the relationship between living group climate and empathy, in particular because age might also affect the perception of living group climate in incarcerated juvenile delinquents (van der Helm, Stams, & van der Laan, 2011).

Notably, van der Helm, Stams, van der Stel, van Langen, and van der Laan (2012) were the first to show in their cross-sectional study that an open and supportive (rehabilitative) living group climate was associated with higher levels of empathy in a small group of juvenile delinquents in a Dutch youth prison. The present study is a replication of van der Helm, Stams, van der Stel, et al. on living group climate and empathy in a German youth prison. Replication is considered to be extremely important because it is one of the most stringent tests of scientific knowledge, as ruling out the possibility that research findings are sample-specific should be a high priority. Moreover, replications are important from the perspective of examining the generalizability of study findings. Notably, a recent study showed that only 39% of the replication studies succeed in replicating the results of their original studies (Open Science Collaboration, 2015). Therefore, the present replication study examines the relationship between a rehabilitative living group climate and empathy in detained juvenile delinquents six months after placement in a

prison for German youth, accounting for the age of the juveniles. It is hypothesized that a positive and open living group climate is associated with increased empathy over a period of six months.

Method

Participants

The present study was conducted in a German youth prison. A sample of 49 adolescent male prisoners was selected from the extant prison population in January 2013, based on their accessibility and a minimum stay of three months in the institution. The participants resided in living groups of 15 to 20 inmates. Participants were aged between 18 and 23 years ($M = 20.45$, $SD = 1.43$). Most respondents were of German nationality (75%), while 7% were Turkish and 18% were of other nationalities. Education levels were generally low: 25% had not completed any education and 50% had completed the lowest level of vocational education. The main reasons for detention were 'inflicting personal injury' (57%), theft (50%), violence (32%), and possession or dealing of drugs (18%; multiple answers were possible).

Procedure

The present study had two measurements. The second measurement (T2) was conducted six months after the first measurement (T1). Participants completed the Prison Group Climate Instrument (PGCI; van der Helm, Stams, & van der Laan, 2011) during the first measurement wave and the Basic Empathy Scale (BES; Jolliffe & Farrington, 2006) after six months. After ethical approval had been obtained from the institutional review board of the University of Applied Sciences Leiden, all adolescents voluntarily agreed to participate in this study, 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.

Instruments

The Basic Empathy Scale (BES)

The BES (Jolliffe & Farrington, 2006) contains two empathy components: cognitive and affective empathy. Affective empathy is the capacity to experience the emotions of another (Bryant, 1982) and cognitive empathy is the capacity to comprehend the emotions of another (Hogan, 1969). The original BES consists of 20 items based on the four human basic emotions: anger, fear, sadness and joy (Eckman, 1992). The questionnaire consists of 20 questions ranging on a five-point Likert-type scale from 1 (*I don't agree*) to 5 (*I fully agree*). An example of an item that measures cognitive empathy is 'I can see when my friends are afraid', and an item measuring affective empathy is 'When I am with friends who are afraid, I feel afraid too'. The BES showed considerable convergent, divergent and construct validity in the validation study (Jolliffe & Farrington, 2004). In the present study, the validated German version of the BES was used (Heynen, van der Helm, Stams, & Korebrits, 2015). The German scale has been shown to be a valid and reliable instrument for use with incarcerated adolescents, with sufficient reliabilities for cognitive ($\alpha = .78$) and affective ($\alpha = .71$) empathy (Heynen, van der Helm, Stams, & Korebrits, 2015). In the present study, reliabilities were adequate for cognitive ($\alpha = .71$) and affective ($\alpha = .67$) empathy.

The Prison Group Climate Instrument (PGCI)

The PGCI (van der Helm, Stams, & van der Laan, 2011) consists of 36 questions ranging on a five-point-Likert-type scale from 1 (*don't agree*) to 5 (*fully agree*). Each question belongs to only one of the four aspects of living group climate: support, growth, atmosphere and

repression. The support scale assesses the professional behaviour of group workers and describes the prisoner’s experience of support by staff. The growth scale assesses learning perceptions, hope for the future and giving meaning to the prison stay. The repression scale assesses the strictness of the rules and the control prisoners experience during their imprisonment. Finally, the atmosphere scale assesses the group atmosphere related to the prisoners’ own feelings of safety and trust (Heynen, van der Helm, Stams, & Korebrits, 2014; van der Helm, Stams, & van der Laan, 2011). The scale has been shown to be valid and reliable (van der Helm, Stams, & van der Laan, 2011). In the present study, the German version of the PGCI was used (Heynen et al., 2014). The reliability coefficients of the German questionnaire are good for support ($\alpha = .85$) and growth ($\alpha = .85$), and sufficient for repression ($\alpha = .67$) and atmosphere ($\alpha = .66$; Heynen et al., 2014). The Cronbach’s alphas for the present study are also good for growth ($\alpha = .86$) and support ($\alpha = .84$), and sufficient for repression ($\alpha = .61$) and atmosphere ($\alpha = .63$).

Statistical Analysis

The first section of the results presents the preliminary analyses. Pearson’s correlation analyses were conducted in SPSS 21.0 (IBM Corp, 2012) to examine the associations between the different aspects of living group

climate and empathy. Subsequently, structural equation modelling (SEM) was conducted in Mplus v6.11 (Muthén & Muthén, 1998–2011) to test a model with direct paths between the latent variables of living group climate (support, growth, repression, and atmosphere) and empathy (cognitive and affective), accounting for age. The fit-indices – the comparative fit index (CFI), Tucker–Lewis index (TLI), normed fit index (NFI) and root mean square error of approximation (RMSEA)¹ – and the model chi-square statistic, also designated as the generalized likelihood ratio, were used to evaluate the model fit (Kline, 2005). The following cut-off values are indicative for a close model fit: CFI > .90, TLI > .95 and RMSEA < .06, whereas a non-significant chi-square indicates an exact model fit (Hu & Bentler, 1999; Kline, 2005).

Results

Preliminary Analyses

Table 1 presents the means and standard deviations of the four dimensions of living group climate and cognitive and affective empathy, as well as the correlations among these variables. Significant and positive correlations were found between support and affective empathy, $r = .299$, $p = .018$, and between atmosphere and affective empathy, $r = .333$,

Table 1. Descriptive statistics and correlations between age and test results ($n = 49$).

| | <i>M</i> | <i>SD</i> | Age | Support | Growth | Repression | Atmosphere | Cognitive empathy | Affective empathy |
|-------------------|----------|-----------|-------|----------|---------|------------|------------|-------------------|-------------------|
| Age | 20.45 | 1.43 | | | | | | | |
| Support | 2.84 | 0.71 | -.121 | | | | | | |
| Growth | 3.43 | 0.89 | -.077 | .328* | | | | | |
| Repression | 3.34 | 0.61 | -.030 | -.394*** | -.089 | | | | |
| Atmosphere | 3.12 | 0.50 | -.126 | .487*** | .345*** | -.210 | | | |
| Cognitive empathy | 2.83 | 0.58 | .008 | .233 | -.197 | -.318* | .192 | | |
| Affective empathy | 2.94 | 0.55 | -.055 | .299* | -.072 | -.200 | .333** | .679*** | |

Note: * $p < .05$ (1-tailed); ** $p < .01$ (1-tailed); *** $p < .001$ (1-tailed).

$p = .010$. A significant negative correlation was found between repression and cognitive empathy, $r = -.318, p = .013$. There were also some significant correlations between the subscales of the questionnaires. For the PGCI there were significant correlations between support and growth, $r = .328, p = .011$, support and repression, $r = -.394, p = .003$, support and atmosphere, $r = .487, p = .000$, and atmosphere and growth, $r = .345, p = .008$. For the BES there was a significant correlation between affective and cognitive empathy, $r = .679, p = .000$.

Structural Equation Modelling (SEM)

To investigate relationships the between living group climate at T1 and empathy at T2, a structural equation model was fitted to the data ($n = 49$), accounting for age. The model shows a good fit to the data, $\chi^2 (12) = 13.941, p = .057, CFI = .966, TLI = .944, RMSEA = .041$. A diagram of the resulting model is presented in Figure 1, wherein it can be seen that there is a significant relation

between a positive living group climate at T1 and empathy at T2, $\beta = .393, p = .025$.

Discussion

Marshall and Burton (2010) called for more research on group processes in offender treatment. The present study adds to the limited body of empirical research examining group processes in youth prisons and is a replication of van der Helm, Stams, van der Stel, et al. (2012), a Dutch study on the relation between an open and rehabilitative living group climate and empathy in detained juvenile delinquents in Germany. The results showed that a positive living group climate in terms of low repression and high support from staff, opportunities for growth and a positive group atmosphere was related to more empathy in the participating incarcerated juvenile delinquents after six months, which concurs with the results from van der Helm, Stams, van der Stel, et al. on the relationship between living group climate and empathy.

These findings are also consistent with recent studies showing an open and

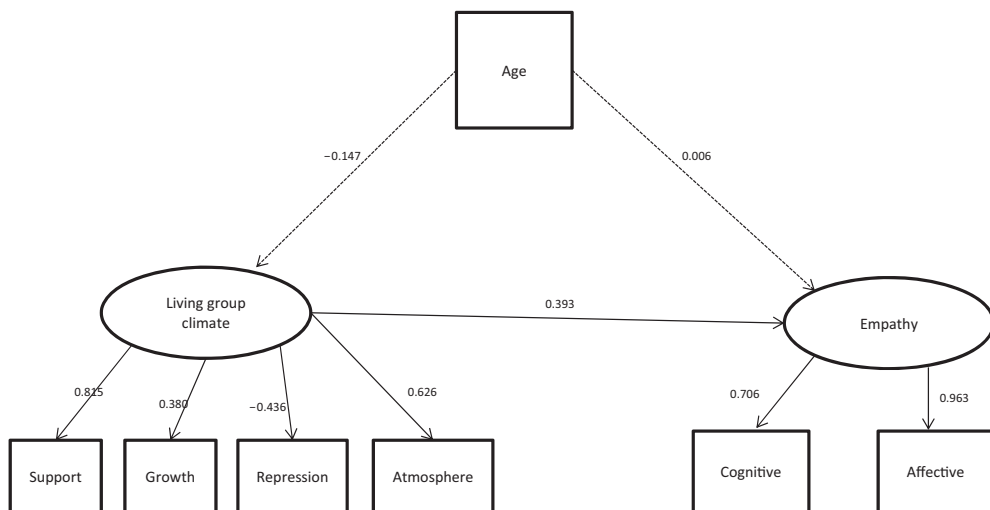


Figure 1. Structural equation model between open living group climate and empathy. Note: Solid lines represent significant paths and dashed lines represent non-significant paths.

rehabilitative living group climate (including fairness, respect, humanity and supportive relationships with staff) to be positively associated with active coping and treatment motivation (van der Helm, Beunk, Stams, & van der Laan, 2014), reactions to social problem situations (Eltink et al., 2015), and personality development (van der Helm, Stams, van Genabeek, & van der Laan, 2012), and negatively associated with mental health problems (Beijersbergen, Dirkzwager, Eichelsheim, van der Laan, & Nieuwbeerta, 2014), aggressive incidents during detention (Ros, van der Helm, Wissink, Schaftenaar, & Stams, 2013), self-reported aggression (van der Helm, Stams, van Genabeek & van der Laan, 2012), prison misconduct (Beijersbergen, Dirkzwager, Eichelsheim, van der Laan, & Nieuwbeerta, 2015), and criminal offense recidivism (Schubert et al., 2012).

Research on group dynamics in secure forensic settings points to the key role that group workers play in establishing an open living group climate and providing effective treatment (De Swart, 2011; Liebling, 2004; Ros et al., 2013; Sovereign, van der Helm, & Stams, 2013). Although more research is needed, several methods or interventions to improve living group climate quality have shown promising results. For instance, measuring living group climate regularly, providing group workers and incarcerated adolescents with feedback about the outcomes and subsequently discussing these outcomes can result in gradual improvements in living group climate (van der Helm, van Miert, Nagtegaal, Stams, & Beld, 2015). In the same vein, offering feedback to staff based on the results of work climate research can improve team functioning and subsequently living group climate because of parallel processes – that is, a prosocial team climate and respectful leadership can model a similar living group climate (van der Helm & Van Raemdonck, 2015). The EQUIP training programme (Gibbs, Potter, & Goldstein, 1995) is intended to encourage youth to think and act responsibly by means of a peer-

helping approach, making individuals feel responsible for each other and actually help each other (Nas, Brugman, & Koops, 2005). The effectiveness of EQUIP was demonstrated in a meta-analysis conducted by van Stam et al. (2014). Non-violent resistance training for prison staff has also shown promising results, but does not focus on relationships among the inmates (Omer, 2004). A training programme called TOP pedagogische medewerkers, (TOP-PM: TOP Pedagogical Group Workers) was developed and implemented in two Dutch prisons and seems promising, as it makes group workers aware of their influence on the living group climate, accounting for group dynamics (van der Helm, Boekee, & Seib, 2011). In a Dutch forensic residential institution a de-escalation officer was appointed to mediate conflicts between staff and patients and among patients themselves, which positively affected the living group climate (Jansen et al., 2014). Finally, in order to have a positive impact on empathy development, living group climate interventions should create a positive learning environment for the juveniles, in particular providing opportunities to practice adequate reactions to social problem situations (Eltink et al., 2015), which have been shown to be related to empathy (Heynen, Behrens, & van der Helm, 2016).

Although the present results are promising, the limitations of this study need to be acknowledged. First, only self-report measures were used to assess both empathy and living group climate, which constitutes a risk for biased results due to a tendency on the part of participants to give socially desirable answers that may inflate correlations due to common-method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, the sample consisted only of male prisoners, which limits generalizability. Future research should also focus on female delinquents because of the differences in empathic responses between males and females (Jolliffe & Farrington, 2004). Third, the present study was conducted on a small sample

that did not allow for multi-level analysis to account for statistical dependencies (inmates are nested within living groups). The results should be replicated in a larger prospective longitudinal study with at least three measurement waves in order to facilitate the examination of transactional processes and contextual effects by means of multi-level analyses. Ideally, self-reports should be combined with staff ratings, independent observations of living group climate, registered incidents and prison misconduct (Ros et al., 2013). A final limitation relates to the fact that empathy was not controlled for during the first measurement wave and living group climate was not controlled for during the second measurement wave, which sets limits on the causal interpretations of the findings because the individual stability of both empathy and perceptions of living group climate are not taken into account when examining the relation between living group climate and empathy over a six-month period.

The present results have to be interpreted with great caution. Only an experimental replication of this study with an intervention that targets living group climate warrants causal conclusions about the influence of living group climate on the development of empathy during detention. The current results show that there is an association between living group climate and empathy, and it is plausible to suggest that empathy is influenced by perception of one's social environment (i.e., living group climate), and in turn that perception of one's social environment is affected by one's role-taking capacity, including empathy. Future research should therefore examine the reciprocal effects between living group climate and empathy.

The present study is one of the first quantitative studies to investigate the relation between living group climate and empathy within a sample of incarcerated juvenile offenders in a youth correctional facility over a six-month period. The present results show that living group climate is positively associated with empathy and pave the way for

further research into the importance of group processes in residential juvenile justice facilities. The present study and previous studies indicate that a positive living group climate may be a major factor in the effectiveness of secure institutional treatment, and could result in a range of positive outcomes.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Note

1. The CFI, TLI, NFI and RMSEA are indices of goodness of fit that are independent of sample size. Models that fit well score favourably on these fit-indices. For further details, see Arbuckle (2007).

References

- Arbuckle, J. L. (2007). *Amos 16.0 user's guide*. Chicago: SPSS.
- Beijersbergen, K. A., Dirkzwager, A. J. E., Eichelshheim, V. I., van der Laan, P. H., & Nieuwbeerta, P. (2014). Procedural justice and prisoners mental health problems: A longitudinal study. *Criminal Behaviour and Mental Health, 24*, 100–112. doi:10.1002/cbm.1881
- Beijersbergen, K. A., Dirkzwager, A. J. E., Eichelshheim, V. I., van der Laan, P. H., & Nieuwbeerta, P. (2015). Procedural justice, anger, and prisoners' misconduct: A longitudinal study. *Criminal Justice and Behaviour, 42*, 196–218. doi:10.1177/0093854814550710
- Bryant, B. K. (1982). An index of empathy for children and adolescents. *Child Development, 53*, 413–425. doi:10.2307/1128984
- Bundesministerium, der Justiz et al. (2007). *Freiheitsentzug*. Mönchengladbach: Die Empfehlung des Europarates – Europäische Strafvollzugsgrundsätze 2006 [Deprivation of Liberty. Recommendations of the European Council].
- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disorder and comparison youth. *Developmental Psychology, 32*, 988–998. doi:10.1037/0012-1649.32.6.988
- De Swart, J. (2011). *De professionele jeugdzorger* [The professional youth care worker]. Amsterdam: Doctoral dissertation, Free University of Amsterdam.

- De Waal, F. B. M. (2008). Putting the altruism back into altruism: The evolution of empathy. *Annual Review of Psychology*, *59*, 279–300. doi:10.1146/annurev.psych.59.103006.093625
- Eckman, P. (1992). An argument for basic emotions. *Cognition & Emotion*, *6*(3–4), 169–200.
- Eisenberg, N., Cumberland, A., Guthrie, I. K., Murphy, B. C., & Shepard, S. A. (2005). Age changes in prosocial responding and moral reasoning in adolescence and early adulthood. *Journal of Research on Adolescence*, *15*, 235–260. doi:10.1111/j.1532-7795.2005.00095
- Eisenberg, N., Spinard, T., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 517–549). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Eltink, E. M. A., van der Helm, P., Wissink, I. B., & Stams, G. J. J. M. (2015). The relation between living group climate and reactions to social problem situations in detained adolescents. *International Journal of Forensic Mental Health*, *14*, 101–109. doi:10.1080/14999013.2015.1033110
- Fabes, R.A., & Eisenberg, N. (1998). Meta-analyses of age and sex differences in children's and adolescents' prosocial behavior. In N. Eisenberg & W. Damon (Eds.), *Handbook of child psychology, vol. 3: Socialization, personality, and social development*. Hoboken, NJ: Wiley.
- Gibbs, J. C., Potter, G. B., & Goldstein, A. P. (1995). *The EQUIP program: Teaching youth to think and act responsibly through a peer-helping approach*. Champaign, IL: Research Press.
- Heynen, E., Behrens, E., & van der Helm, P. (2016). Evaluation der Gruppenklima-Forschung in Deutschland (am Beispiel NRW) und den Niederlanden auf der Grundlage eines Vergleichs der verschiedenen Behandlungsmöglichkeiten in den jeweiligen Jugendstrafvollzugssystemen [Evaluation of living group climate research in Germany and the Netherlands on the basis of differences in treatment possibilities in the prison systems]. *Monatsschrift für kriminologie und strafrecht*, *99*, 68–77.
- Heynen, E. J. E., van der Helm, G. H. P., Cima, M. J., Stams, G. J. J. M., & Korebrits, A. M. (2015). The relation between aggression, CU-traits and living group climate in delinquent boys in youth detention. *International Journal of Offender Therapy and Comparative Criminology*. Advance online publication. doi:10.1177/0306624X16630543
- Heynen, E. J. E., van der Helm, G. H. P., Stams, G. J. J. M., & Korebrits, A. M. (2014). Measuring group climate in a German youth prison – a German validation of the prison group climate instrument (PGCI). *Journal of Forensic Psychology Practice*, *14*, 45–54. doi:10.1080/15228932.2013.868176
- Heynen, E. J. E., van der Helm, G. H. P., Stams, G. J. J. M., & Korebrits, A. M. (2015). Measuring empathy in a German youth prison – a validation of the German version of the Basic Empathy Scale (BES) in a sample of incarcerated juvenile offenders. *Journal of Forensic Psychology Practice*.
- Heynen, E. J. E., van der Helm, G. H. P., Wissink, I. B., Stams, G. J. J. M., & Moonen, X. M. H. (2015). “I don’t care about what you want!” The relation between juvenile delinquents’ responses to social problem situations and empathy in secure juvenile institutions. *Journal of Interpersonal Violence*. Advance online publication. doi: 0886260515618212
- Hogan, R. D. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology*, *33*, 307–316. doi:10.1037/h0027580
- Hoogsteder, L. M., Stams, G. J. J., Figge, M. A., Changoe, K., van Horn, J. E., Hendriks, J., & Wissink, I. B. (2015). A meta-analysis of the effectiveness of individually oriented Cognitive Behavioral Treatment (CBT) for severe aggressive behavior in adolescents. *The Journal of Forensic Psychiatry & Psychology*, *26*, 22–37.
- Hu, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, *6*, 1–55. doi:10.1080/10705519909540118
- IBM Corp. (2012). IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.
- Jansen, L., van Miert, V. S. L., Roest, J. J., Dekker, A. L., van der Helm, G. H. P., & Stams, G. J. J. M. (2014). *Onderzoeksrapport het leefklimaat van Inforsa in 2013* [Living group climate at Inforsa 2013, internal report]. Leiden: Hogeschool Leiden.
- Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior*, *9*, 441–476. doi:10.1016/j.avb.2003.03.001
- Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the basic empathy scale. *Journal of Adolescence*, *29*, 589–611. doi:10.1016/j.adolescence.2005.08.010
- Kline, R. B. (2005). *Principles and practice of structural equation modelling* (2nd ed.). New York: The Guilford Press.
- Liebling, A. (2004). *Prisons and their moral performance: A study of values, quality and prison life*. Oxford, UK: Oxford University Press.

- Marshall, W. L., & Burton, D. L. (2010). The importance of group processes in offender treatment. *Aggression and Violent Behavior, 15*, 141–149.
- Muthén, L. K., & Muthén, B. O. (1998–2011). *Mplus user's guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Nas, C. N., Brugman, D., & Koops, W. (2005). Effects of the EQUIP program on the moral judgement, cognitive distortions, and social skills of juvenile delinquents. *Psychology, Crime & Law, 11*, 421–434. doi:10.1080/10683160500255703
- Omer, H. (2004). *Nonviolent resistance. A new approach to violent and self-destructive children*. New York: Cambridge University Press.
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science, 349* (6251), aac4716.
- Pinker, S., (2011). *The better angels of our nature: The decline of violence in history and its causes*. UK: Penguin.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903. doi:10.1037/0021-9010.88.5.879
- Ros, N., van der Helm, G. H. P., Wissink, I., Schaftenaar, P., & Stams, G. J. J. M. (2013). Institutional climate and aggression in a secure psychiatric setting. *The Journal of Forensic Psychiatry and Psychology, 24*, 713–727. doi:10.1080/14789949.2013.848460
- Schubert, C. A., Mulvey, E. P., Loughran, T. A., & Losoya, S. H. (2012). Perceptions of institutional experience and community outcomes for serious adolescent offenders. *Criminal Justice and Behavior, 39*, 71–93. doi:10.1177/0093854811426710
- Steinberg, L. (2009). Adolescent development and juvenile justice. *Annual Review in Clinical Psychology, 5*, 47–73. doi:10.1146/annurev.clinpsy.032408.153603
- Souverein, F., van der Helm, G. H. P., & Stams, G. J. J. M. (2013). 'Nothing works' in secure residential youth care? *Children and Youth Services Review, 35*, 1941–1945. doi:10.1016/j.childyouth.2013.09.010
- van der Helm, G. H. P., Beunk, L., Stams, G. J. J. M., & van der Laan, P. (2014). The relation between detention length, living group climate, coping, and treatment motivation among juvenile delinquents in a youth correctional facility. *The Prison Journal, 94*, 260–275. doi:10.1177/0032885514524884
- van der Helm, G. H. P., Boekee, I., & Seib, S. (2011). *Handleiding training TOP PM* [TOP PM training manual]. Leiden: Hogeschool Leiden.
- van der Helm, G. H. P., & Stams, G. J. J. M. (2012). Conflict and coping by clients and group workers in secure residential facilities. In K. Oei & M. Groenhuizen (Eds.), *Progression in forensic psychiatry: About boundaries* (pp. 553–564). Amsterdam: Kluwer.
- van der Helm, G. H. P., Stams, G. J. J. M., & van der Laan, P. (2011). Measuring group climate in prison. *The Prison Journal, 91*, 158–176. doi:10.1177/0032885511403595
- van der Helm, G. H. P., Stams, G. J. J. M., van der Stel, J. C., van Langen, M. A. M., & van der Laan, P. H. (2012). Group climate and empathy in a sample of incarcerated boys. *International Journal of Offender Therapy and Comparative Criminology, 56*, 1149–1160. doi:10.1177/0306624X11421649
- van der Helm, G. H. P., Stams, G. J. J. M., van Genabeek, M., & van der Laan, P. H. (2012). Group climate, personality, and self-reported aggression in incarcerated male youth. *Journal of Forensic Psychiatry & Psychology, 23*, 23–39. doi:10.1080/14789949.2011.633615
- van der Helm, G. H. P., van Miert, V. S. L., Nagtegaal, J., Stams, G. J. J. M., & Beld, M. H. M. (2015). *Rapportage justitiële jeugdinrichtingen 2014, een onderzoek naar het leef-, leren werkklimaat binnen de justitiële jeugdinrichtingen* [Report juvenile justice institutions 2014, research about living group climate, learning climate and working climate in juvenile justice institutions]. Leiden: Hogeschool Leiden.
- van der Helm, G. H. P., & van Raemsdoek, K. (in press). Stabilizing and improving living group climate in a secure facility for adolescents with a mild intellectual disability. In R. Didden & X. Moonen. *Handboek LVB en psychopathologie* [Handbook MID and Psychopathology].
- van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2014). Prosocial development and situational morality, neurobiological, parental and contextual factors. In J. F. Leckman, C. Panter-Brick, & R. Salah (Eds.), *Pathways to peace: The transformative power of children and families* (pp. 161–182). Cambridge: The MIT Press. doi:10.7551/mitpress/9780262027984.003.0010
- van Langen, M. A. M., Wissink, I. B., van Vugt, E. S., van der Stouwe, T., & Stams, G. J. J. M. (2014). The relation between empathy and offending: A meta-analysis. *Aggression and*

- Violent Behavior*, 19, 179–189. doi:10.1016/j.avb.2014.02.003
- van Stam, M. A., van der Schuur, W. A., Tserkezis, S., van Vugt, E. S., Asscher, J. J., Gibbs, J. C., & Stams, G. J. J. M. (2014). The effectiveness of Equip on sociomoral development and recidivism reduction: A meta-analytic study. *Children and Youth Services Review*, 38, 260–275. doi:10.1016/j.childyouth.2014.01.002
- van Vugt, E. S., Gibbs, J. C., Stams, G. J. J. M., Bijleveld, C., van der Laan, P. H., & Hendriks, J. (2011). Moral development and recidivism: A meta-analysis. *International Journal of Offender Therapy and Comparative Criminology*, 55, 1234–1250. doi:10.1177/0306624X11396441