Chapter 1

General Introduction
Following the recent societal discussion regarding the negative effects of seclusion and restraint in Dutch mental health care, the Dutch minister of public health and the Dutch branch association for youth care (Youth Care the Netherlands) strive for a ban of these restrictive measures in secure residential youth care in 2021 (Jeugdzorg Nederland, 2019). Residential youth care institutions and their staff members are thus faced with a considerable task in the nearby future. As a result of this ambition, residential youth care needs to find effective methods to reduce seclusion and restraint. The research described in this thesis focuses on a promising method to reduce restrictive measures in the residential setting: Non-violence Resistance (NVR).

THE USE OF SECLUSION AND RESTRAINT IN RESIDENTIAL YOUTH CARE

Having been a residential staff member myself, I have experienced that, while working in residential care for children and adolescents is mostly rewarding, it is undeniably very difficult at times. Young people in residential care often show troublesome behaviour (e.g. verbal and physical aggression, non-compliant and self-destructive behaviour) that has to be dealt with by residential staff members (Seti, 2008; Wielemaker, 2009). The confrontation with such behaviour has shown adverse effects on staff stress levels, on work satisfaction, and on other aspects of work climate (perception of the work environment) (Dean, Gibbon, McDermott, Davidson, & Scott, 2010; Needham, Abderhalden, Halfens, Fischer, & Dassen, 2005; Stone, McMillan, Hazelton, & Clayton, 2011; Wielemaker, 2009). Studies furthermore suggest a negative influence of aggression on living group climate (perception of the social and physical group environment) (de Decker et al., 2018; Heynen, van der Helm, Cima, Stams, & Korebirts, 2017; Lynch Jr, Plant, & Ryan, 2005; Ros, Van der Helm, Wissink, Stams, & Schaftenaar, 2013; Van der Helm, Moonen, & Roest, 2013; Van der Ploeg & Scholte, 1988).

To prevent escalation towards aggressive outbursts or to control them, seclusion and restraint measures are often used. In their international review, De Hert, Dirix, Demunter, and Correll (2011) indicate that one out of four children or adolescents treated in residential psychiatric care is secluded at least once. Exact numbers of seclusion and restraint in secure residential youth care in the Netherlands are not available, but according to Dahl (2017) this number easily exceeds a hundred
children a year. In the short-term, these measures protect staff, other children and property from direct (further) injury or damage. However, in the long term this reciprocal use of ‘violence’ is likely to intensify aggression in both staff and children, and may lead to traumatic stress symptoms in the secluded child (Goren, Singh, & Best, 1993; Mohr, Mahon, & Noone, 1998; Natta, Holmbeck, Kupst, Pines, & Schulman, 1990; Smith et al., 2005). Furthermore, the use of seclusion and restraint is likely to interfere negatively with therapeutic aims (de Valk, Kuiper, van der Helm, Maas, & Stams, 2016; Finke, 2001). Research findings as well as reports of incidents in the media have led to increased public criticism of the use of coercive measures, punishment and discipline, and in particular the use of seclusion and restraint, as a reaction to aggressive or other problem behaviour (Jeugdzorg Nederland, 2019; Steinert, Noorthoorn, & Mulder, 2014). As a result, the view on handling aggressive behaviour in residential settings has changed over the past decade.

Although seclusion and restraint have become increasingly controversial over the years, staff members still report using coercive measures in reaction to aggression and other disturbing behaviour. Research on attitudes towards seclusion and restraint identified several aspects that can play a role in the recurrent use of these measures (Day, 2002; Duxbury, 2002; Happell & Harrow, 2010; Van Doeselaar, Sleegers, & Hutschemaekers, 2008). Firstly, staff members can view seclusion and restraint as necessary to increase safety at the group as well as personal feelings of safety. Secondly, they may feel it creates a sense of control as a clear response to violation of rules. A third reason is the view that it can be used to teach the child self-control, coping skills and to obey rules. Finally, workplace culture can be an important factor, as regular exposure to seclusion and restraint use is likely to result in its acceptance. Compliance to the common views on a ward seems stronger than eventual ethical dilemmas (Day, 2002; Duxbury, 2002; Happell & Harrow, 2010; Van Doeselaar et al., 2008).

In her qualitative study about managing challenging behaviour in residential care, McLean (2015) found that staff members continuously experienced dilemma’s in their daily work, increasing work related stress. In handling aggressive behaviour, staff members feel conflicted about having to choose between the need of the group versus the individual, between being consistent versus being flexible and between the need to control the child and it’s behaviour versus the need to form a
positive relationship. They feel frustrated when nothing seems to work and when they feel no support from others. As a result, they sometimes have the tendency to keep incidents a secret from their family/personal network, because of the fear of a negative perception of their work and the children. Finally, the employees can get the feeling that they cannot change or stop the violent behaviour, which has a negative impact on work related stress as well (Bromley & Emerson, 1995; Howard & Hegarty, 2003; Lynch Jr et al., 2005; Van der Ploeg & Scholte, 1988).

**DECREASING SECLUSION AND RESTRAINT**

In the beginning of my career in psychiatry, around 2005, I worked as a residential staff member on an acute admissions psychiatric ward for adolescents. In this period, seclusion and restraint use in Dutch mental health care was increasingly being criticized in Dutch media. This was followed by the goal to decrease coercive measures by 10 percent every year from 2006, a goal set by the Dutch branch organization for mental health care (GGZ Nederland). Mental health care institutions were financially supported to achieve this goal (Vruwink, Mulder, Noorthoorn, Uitenbroek, & Nijman, 2012). Two members of our management team responded to the call to decrease seclusion and restraint and searched for ways to accomplish this. Several interventions had been developed showing promising results in reducing seclusion and restraint measures or improving confidence in staff members dealing with challenging behaviour, such as Collaborative Problem Solving (CPS) and the Comprehensive Behavioural Management Mode (CBM) (Dean, Duke, George, & Scott, 2007; Ercole-Fricke, Fritz, Hill, & Snelders, 2016; Greene, Ablon, & Martin, 2006; Martin, Krieg, Esposito, Stubbe, & Cardona, 2008; Nunno, Holden, & Leidy, 2003). However, the ultimate aim of such interventions is to change the child's behaviour. When attempts to collaborate with the child fail and a child's behaviour does not change, these interventions imply that staff members are doing something wrong. As a consequence, staff members may experience doubt and feelings of helplessness, sometimes resulting in burnout symptoms (Brouwers & Tomic, 2016; Harder, Knorth, & Zandberg, 2006).

An alternative approach to dealing with aggressive behaviour is to shift the focus from altering the child's behaviour to altering the caregiver's behaviour and diminishing their feelings of helplessness. The two managers were inspired to explore this
alternative approach after a lecture of Haim Omer about Non-violent Resistance (NVR), a concrete and practical method for dealing with severe escalation and impasses in families without using coercion. NVR seemed to offer a way out of the impasse that had arisen from conflicting visions (strict versus soft, authoritarian versus anti-authoritarian) that were, and still are often present in today’s society when it comes to parenting and dealing with troublesome behaviour. They explored the idea that NVR principles and actions that help parents to diminish their feelings of helplessness in dealing with severe escalation, may be helpful for residential staff as well. Staff members on the ward, including myself, were initially reluctant to change our way of handling aggression. In contrast to the management, we felt justified in using seclusion and restraint and could not imagine having other tools to cope with the sometimes severe aggression we were confronted with. However, we did also feel that we needed tools to improve cooperation within the team as well as with the children and their parents, in order to decrease the feelings of helplessness we often experienced. Since the objective of NVR is to make caregivers feel less powerless and more supported, we decided to give NVR a chance.

**NON-VIOLENT RESISTANCE**

Non-violent Resistance (NVR) is a way of thinking and acting which originated in the arena of socio-political conflict and is known by most through the actions of Gandhi and Martin Luther King Jr. in their struggle against oppression. Both Gandhi and Martin Luther King Jr. had a strong moral dislike against violence, realizing that to counter violent behaviour of their oppressors, actions (acts of resistance) speak louder than words. Non-violent resistance is a method to influence authority by using the power of togetherness, by using public opinion and strong non-violent acts of resistance (e.g. demonstrations, strikes). The idea is that by repeatedly countering violence with non-violence, the power of violence diminishes, because it loses its sense of legitimacy. These views on power, strategy, and non-violent struggle of people such as Gandhi and Martin Luther King Jr. later inspired Haim Omer and his team at Tel Aviv University. They transferred these views to the field of aggressive and self-destructive behaviour of children and adolescents by developing a parent training programme. The processes which make NVR an effective strategy in socio-political conflicts are comparable to the dynamics of most interpersonal interactions, including the interaction between parents and...
children. In his book ‘Nonviolent Resistance: A New Approach to Violent and Self-Destructive Children’ Omer (2004) describes how NVR principles can be used with success in family settings. Using a systemic perspective of parenting and the parental relation with the child, he applied NVR as a way for parents to resist a child’s violent and destructive behaviour whilst promoting a safe environment. Parents of children with behavioural problems, just as oppressed people, feel helpless and perceive themselves as less powerful than their child. Most parents have tried a long list of interventions to change their child’s behaviour for the better, without success. Parents and child are caught in a negative cycle of behaviour, usually along the lines of parental submission resulting in growing demands by the child leading to growing parental frustration and hostility resulting in retaliation by the child leading to parental submission, etc. The child’s challenge of the parental authority requires a consistent response by parents, whereas in the face of the perceived continual problem behaviour parents can feel powerless, believe the situation is unchangeable and may reply with frustration which can escalate to a form of aggression. The above described negative cycle consists of two forms of escalation patterns:

- Symmetrical or reciprocal escalation - threats or punishments lead to more hostility in the form of unacceptable behaviour, which in turn leads to more rules or punishment and so on.
- Complementary escalation - parents giving in results in an increase in the demands and unacceptable behaviour of the child.

NVR aims at handling both forms, helping parents to act (instead of giving in) in a non-violent (instead of punitive) way. It bridges the gap between setting boundaries and showing understanding for the other. It is not about being stronger than the child, but about being present in his or her life.

Central tenets of NVR are:

*Presence*

Clear presence is a powerful way to demonstrate respect and commitment. Parents convey to their child that no matter what happens, they stay involved and cannot be pushed aside. Presence can be both physical as well as emotional.
De-escalation
It is important that parents recognize their own role in the before-mentioned escalation process. By delaying their response (strike the iron while it’s cold), they can (re)gain self-control and regulate emotions, thereby de-escalating the situation.

Resistance
Resist rather than control the child’s unacceptable behaviour by using parental presence. NVR is about persistence and not about winning, parents are thereby relieved from the immediate goal of changing their child’s behaviour.

Support
To help change a sometimes isolating situation (created by the violent behaviour of their child and the tendency to keep this a secret for the outer world), potential sources of support (e.g. friends, relatives, teachers) need to be mobilized.

(Re)building the parent-child relationship
Both parent as well as their child develop demonic attitudes (stereotypical thinking, assuming the other has negative intentions), not helping to solve their conflict. Deliberate acts of respect and reconciliation help to shift this attitude. Focusing on the relation and the positive sides of their child enables them to see more than just the problematic behaviour and making it harder for the child to hold on to the negative thoughts about their parents.

The best-known techniques or tools of NVR are:
The Announcement, which is a formal letter that informs a child about which behaviours parents will be resisting in the future. Parents inform their child that they will no longer be tolerating specific problem behaviour and that there are a number of (specified) people who are supporting the parents in ending the violence at home, whilst at the same time expressing positive regard for him or her as a person.

The Sit-in, serves as a manifestation of resistance by being present. It is a way to set a clear boundary, without prescribing how the child should behave. Instead, the child is asked to think for itself about a solution (e.g. ‘We see that you are angry, but we don’t find it acceptable that you damage things. We expect a solution from you...')
to deal with these situations in a different way’). This request clearly demonstrates what is not accepted as well as the confidence that the child is able to think of alternatives. Parents are instructed to wait silently for the child's response, for a maximum of one hour.

Parents are furthermore encouraged to refuse their children’s demands and actively find out where their child is spending time by systematically contacting the child’s friends or visit hang-out places.

USING NVR IN RESIDENTIAL CARE INSTITUTIONS

In the years following the initial idea of using NVR in residential care, managers and staff worked on adapting the NVR principles and techniques for use by residential staff. In the residential setting, for example, the larger number of alternating caretakers had to be taken into account (see chapter 2). After years of gaining experience with this method within the residential setting, my team at the acute admissions ward, became more positive and word began to spread within and outside the organization that NVR may be a valuable tool in dealing with aggression within the residential setting. With the interest of other institutions to use NVR, questions about adaptability, implementation and effectiveness were raised more and more frequently. These questions marked the starting point of the research described in this thesis.

AIM

The main purpose of this thesis is threefold:

1. Describing the adaptation of NVR for residential settings,
2. Studying the implementation process in terms of facilitating and hampering factors, finding a way to assess NVR implementation fidelity and,
3. Examining the effect of NVR implementation on work climate, living group climate, aggression and seclusion and restraint in residential child and adolescent settings.
STUDY DESIGN

Research on usability/adaptability, implementation and effectiveness, is needed to make a funded decision to adopt a new approach. When studying the effectiveness of a new intervention the random controlled trial (RCT) is seen as the ‘gold standard’. NVR however, is an example of a basic intervention/first degree approach, an intervention concerning the whole group used every day (Knorth, 2002; Scholte & Van Der Ploeg, 2000), making randomization on an individual level impossible. Randomization on group level is difficult as well, because of the variety in treatment content, severity and complexity of problems between groups. A shift to a more cumulative view on gathering evidence for effectiveness (realist evaluation approach) therefore is more feasible and suitable. Evaluating effectiveness and implementation process in actual practice, by recognizing the merits of quasi-experimental studies and qualitative studies could help to develop theory building and adaptability to the ever changing context of residential youth care (Knorth, Harder, Zandberg, & Kendrick, 2008; Pawson & Tilley, 1997; Redfern, Christian, & Norman, 2003; Veerman & van Yperen, 2007). Therefore, in this thesis we describe research conducted in the complicated day to day practice by combining quantitative and qualitative methods.

This thesis contains both retrospective and prospective studies, using existing data from before the start of our study in 2014 as well as new data gathered between 2014 and 2017.

In 2007 NVR was adapted for use in child and adolescent psychiatric inpatient care and implemented across several units of a child and adolescent psychiatric organization in Amsterdam, the Netherlands. Between 2011 and 2014 this NVR adaptation was implemented in two other child and adolescent psychiatric inpatient settings and one setting providing both child and adolescent psychiatric care and secure residential youth care (on different locations), across the Netherlands. As one of the aims of this thesis is to learn more about the implementation process of the adapted NVR for use in residential settings, we decided to use these four implementations (between 2007 and 2014) to increase our knowledge, based on the existing documentation about implementation efforts, training and supervision. It was furthermore possible to retrieve seclusion and restraint numbers from the...
organization’s registration systems as a first indicator for possible effect of NVR on these measures.

Between September 2014 and June 2016, NVR was implemented using a prospective quasi-experimental stepped wedge design. In this study, three Dutch sites (14 different wards) for residential care were included, each providing a different category of child and adolescent residential care (residential psychiatric care, residential youth care and secure residential youth care). These institutions (implementation sites) consisted of different units in which group workers/psychiatric nurses provided 24-hour care assisted by behavioural therapists, psychiatrists and parent counsellors. Seven measurements to assess work climate and living group climate took place approximately every three months. Furthermore, aggressive incidents in the three months prior to NVR implementation and in the three months after implementation were retrieved from the digital registration system of the institution. For this study we chose to report aggressive episodes instead of seclusion and restraint figures, because the participating youth care institution did not use seclusion and restraint and the institution that provided secure youth care could not provide reliable figures on the number of seclusion and restraint measures due to a change in the registration system. Research shows that aggressive behaviour is one of the main reasons to use seclusion and restraint measures (Paavola & Tiihonen, 2010; Raboch et al., 2010) so a reduction of aggressive incidents could be an indicator for a reduction of seclusion and restraint.

To further enhance our understanding of the implementation of NVR, a qualitative study was performed in a sub sample of NVR trained staff members from the three implementation sites in which we also assessed work and living group climate.

At the start of our research it seemed sufficient to monitor the extent to which the employees were present at the NVR training and supervision moments as a way to assess NVR implementation fidelity. However, due to the possible major influence of the constantly changing context of residential youth care and the complexity of the methodology itself, assessing whether employees have received NVR training did not seem to be sufficient anymore. Assessing whether or not staff members have been able to incorporate NVR into daily practice seemed essential. However, no instrument was available for this assessment. We therefore developed a new
questionnaire to assess NVR implementation fidelity. Staff members of four residential settings for children and adolescents with mild intellectual disabilities that were in the process of implementing NVR in 2017 were asked to fill out the new questionnaire for validation purposes.

OUTLINE OF THIS THESIS

Chapter 2 describes how Non-violent Resistance (NVR) was adapted for child and adolescent residential settings. Possible hampering and facilitating elements of implementing NVR are presented based on a retrospective analyses of experiences in four different child and adolescent residential settings. Finally, as one of the main aims of implementing NVR was to reduce seclusion and restraint, rates before and after implementation are reported.

Chapter 3 describes a qualitative evaluation of staff members’ perspectives on benefits and challenges regarding the use of NVR. Staff members from the three sites that implemented NVR between 2014 and 2016, who had completed a nine-month NVR training and implementation period, were interviewed about potential benefits, active ingredients, implementation and consolidation.

Chapter 4 describes the effect of implementing the adapted version of NVR on work climate, living group climate and aggression in child and adolescent residential care. For this purpose, NVR was implemented between 2014 and 2016 at three sites providing child and adolescent residential care, using a quasi-experimental stepped wedge design. These implementation sites consisted of nine different units in which group workers provided 24-hour care assisted by behavioural therapists, psychiatrists and parent counsellors. Residential staff members were asked about the work climate and children about the living group climate every three months over a period of 18 months, before, during and after implementation of NVR (see fig. 1). In addition, the average number of aggressive incidents before and after NVR implementation are compared.
Chapter 5 describes the development and psychometrical validation of the first version of an instrument to measure implementation fidelity of NVR for use in residential settings. As no instrument for such monitoring was available, a new questionnaire was developed, named Reaction to Unacceptable Behaviour Inventory version 1.0, (in short: RUBI). The questionnaire was completed by staff members of four residential settings for children and adolescents with mild intellectual disabilities during implementation of NVR in 2017. Based on these data, the reliability and validity of the instrument were evaluated.

In Chapter 6, a summary and general discussion of the findings of the different studies in this thesis is presented. It provides implications for practice regarding implementation and use of NVR in residential practice, as well as implications for future research, such as measuring implementation fidelity and improvements in research design.

**Fig. 1 Number of measurements**