Chapter 1.

General introduction
Juvenile delinquency is considered to be a major problem for society (Mears & Travis, 2004). Crime rates are high, as is recidivism, with the majority of the juvenile and young adult offenders coming into contact with the criminal justice system within a few years after release (Abrams & Snyder, 2010; Wartna et al., 2012). As a result, many efforts are made by policy makers, youth care workers and other professionals in the criminal justice system to reduce reoffending by developing and implementing interventions aimed at criminogenic needs and recidivism reduction. Although research has shown that certain institutional evidence-based treatment programs can contribute to recidivism reduction (Landenberger & Lipsey, 2006; Lipsey, 2009; Lipsey & Cullen, 2007), treatment during detention alone appears to fall short in preventing the majority of juveniles and young adults from reoffending.

Accomplishing a successful reentry and desistance from crime is complex, and young offenders are often faced with cumulative disadvantages. Youth leaving correctional facilities are confronted with significant barriers on a range of social indicators, such as housing (Lutze, Rosky, & Hamilton, 2013) and educational and vocational attainment (Abrams et al., 2010; Osgood, Foster, & Courtney, 2010). Many young people enter and exit the juvenile justice system with high rates of mental health and substance abuse disorders, which may also add to the likelihood of recidivism (Grisso, 2004; Hoeve, McReynolds, McMillan, & Wasserman, 2013; Vermeiren, Jespers, & Moffitt, 2006; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Furthermore, during the reentry phase a young offender is not only confronted with the transition from a life inside the institution to the broader community, but in addition he/she is faced with a transition from adolescence to (young) adulthood. This period of ‘emerging adulthood’ is one in which young adults are relatively independent in terms of social roles and are searching for an identity and new life directions, i.e. establishing a base for a livelihood and a family. It brings along its own trials and tribulations, which are even more challenging with the stigma of a criminal record (Arnett, 2000). Hence, they are vulnerable youths, often with long histories of contacts with child welfare and criminal justice services that seem to need a great deal of (in)formal support and continuation of care (Abrams, Shannon, & Sangalang, 2008).

The problems surrounding the reintegration of juvenile and young adult offenders are not only common in the USA (where most studies (e.g., Altschuler, Armstrong, & MacKenzie, 1999; Altshuler & Brash, 2004; Mears et al., 2004) on this topic have been conducted), but are also present in European counties, such as The Netherlands. The pressing concern of recidivism reduction has also been acknowledged by Dutch politicians and policy makers (Kabinet Rutte II, 2012; VbbV, 2007). Although the majority of the juvenile and young adult offenders
only spend a relatively short period in detention, with on average a detention period up to 3 months\(^1\) (Wartna et al., 2012), they encounter various problems regarding the attainment of a stable income and housing, and many have financial debts (Weijters & Noordhuizen, 2012). Furthermore, for the small group of young offenders with a more extensive detention period, for example due to a compulsory treatment order [PIJ-maatregel], the service and treatment needs upon reentry are even greater (Donker & De Bakker, 2012).

Therefore, some scholars argue that youth leaving a detention or secure care facility require specific interventions that consist of more than just surveillance-orientated probation services to maintain prosocial behaviors and skills learned in secure confinement (Abrams et al., 2008; Altschuler et al., 2004; Spencer & Jones-Walker, 2004). It appears to be difficult for young offenders to generalize what is learned inside into their daily lives outside of the institution, and skills learned seem to have little lasting effect unless they continue to be reinforced in the community post-release (Abrams et al., 2008; Steinberg et al., 2004). Hence, during the past two decades various reentry and aftercare programs have been developed to increase the chances of juvenile and young adult offenders for successful reintegration and desistance from crime (Mears et al., 2004). The importance of aftercare is also recognized in The Netherlands, although it has been difficult to realize beyond providing regular probation services (Boendermaker, 1998; Van der Laan et al., 2007) up until more recently, with the development of the New Perspectives Aftercare Program (NPAP) (Vogelvang & Schut, 2008).

**Theories on desistance and aftercare**

Research has shown a direct link between age and crime and there is a broad consensus among scholars for the existence of an adolescence-peaked age–crime curve, with the majority of the offenders desisting from crime in (young) adulthood (Farrington, 1986; Gottfredson & Hirschi 1990; Moffitt, 1993; Sampson & Laub, 2003). Desistance is often viewed as a developmental process in which one changes from active involvement in offending to a (permanent) state of non-offending (Bushway, Piquero, Broidy, Caufmann, & Mazerolle, 2001; Davis, Bahr, & Ward, 2013; Sampson & Laub, 2003). Since it is critical to identify young offenders at highest risk of repeat offending, various theoretical frameworks at-

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\(^1\) This excludes recidivism of juveniles placed in secure care facilities who committed one or more delinquent acts.
tempt to explain the onset of and desistance from crime. Several of the most well-known theoretical frameworks will be briefly discussed below.

One group of explanatory models adopt a static theoretical framework, which postulates that variations in criminal behavior can be explained by individual differences in latent criminal propensity that remains constant over time. The most prominent static theoretical framework is the control theory by Gottfredson and Hirschi (1990). They argue that low self-control is a predisposition to impulsive behavior, which in turn causes criminal behavior and interferes with job and relationship stability. Although the level of self-control remains stable during childhood, adolescence and (young) adulthood, it can be remedied by good parenting skills and supervision (Devers, 2011).

By the same token, dynamic theories assume that change is possible. They are also referred to as developmental life course (DLC) models (Farrington, 2003) and explain the onset and desistance of criminal behavior through the life course while taking into account different developmental phases and life events. One widely supported theoretical DLC framework is the dual taxonomy of offending behavior model by Moffitt (1993). According to this model two groups of delinquent youth can be distinguished, a relatively small group with an early onset of antisocial behavior that will continue with their criminal behavior into adulthood and become career criminals (life-course-persistent offenders) and another, larger group of offenders with late onset of offending behavior that will age out of crime in young adulthood (adolescence-limited offenders) as soon as the maturity gap is closed and the juveniles have made a successful transition from adolescence into adult roles as partner, parent and employee. These groups have a distinct etiology and should also be treated differently, with an intervention focus on the life-course-persistent offenders, who often display a high criminal activity level, have poor self-control, and low cognitive ability and are at high risk of recidivism (Moffitt, 1993).

While the majority of the offenders desist from crime in young adulthood, a number of offenders show just the opposite development, as revealed by more recently published longitudinal studies that reveal the existence of a third offending pattern, namely, a late-onset trajectory (Blokland & Palmen, 2012; Piquero, 2008; Piquero, Hawkins, & Kazamian, 2012). These studies show that a substantial group of offenders only start to commit crime past age 18 or become more frequent offenders as they make the transition into adulthood. These findings are explained by the interactional theory of Thornberry and Krohn (2005). According to their interactional theory, the onset, duration and desistance from crime is a matter of ‘reciprocal causation’. An escalating offending pattern during young adulthood “may reflect individual characteristics whose negative outcomes had thus far been buffered by a supportive social environment” (Blokland et al., 2012,
p. 45). When social support and bonds start to weaken during emerging adulthood, and young adults are forced into independence, these deficits in human capital become apparent and together with deviant peer association may increase delinquent behavior, which in turn affects bonding (Farrington, 2003a).

This problem of ‘cumulative continuity’ is also supported by the developmental life course theory that received the most empirical support with regards to the desistance process: the age-graded theory of informal social control by Sampson and Laub (1993), which emphasizes the importance of social bonds and assumes that changes in life circumstances may generate turning points in an individual’s criminal pathway through which their behavior can be modified. The longitudinal study of crime by Sampson and Laub (2001) shows that delinquent behavior is inhibited during childhood and adolescence by social ties, for example to their family and school. During (young) adulthood, social bonds and life transitions, such as attaining stable employment, marriage or quality relationships in life can modify trajectories of criminal offending. The reentry phase can also be seen as a turning point, providing a window of opportunity, since young offenders are then motivated to change (Davis et al., 2013).

Sampson and Laub (2001) argue that desistance is most likely when offenders have a desire to change, view change as possible and have connective social structures that support a lasting change in behavior, which is generally compatible with the cognitive transformation theory of Giordano, Cernkovich and Rudolph (2002). They developed an interactionist perspective with a combination of four underlying mechanisms of change: openness to change; particular circumstances or ‘hooks’ (i.e. social characteristics, such as obtaining a job or participating in a treatment program); the development of a different identity and conventional ‘replacement self’ that no longer wants to be involved in crime; and finally, a change in criminal attitude and the reinterpretation of one’s previous delinquent behavior, from positive and viable towards something that is destructive for others and themselves (Davis et al., 2013; Giordano et al., 2002).

In sum, both personal characteristics, environmental factors and life events can help explain why people desist from crime. As Davis et al. (2013) summarize, “according to life course theory, desistance depends on both subjective factors and social influences. Subjective factors are internal characteristics such as attitudes, self-esteem, identity and motivation. Social influences include employment, marriage, parenthood, friends and treatment interventions.”

As life course theory emphasizes that internal motivation, social bonds and a support system are key elements in the desistance process, it is not surprising that research has shown that interventions merely focusing on external control and coercion to reduce recidivism, such as the Intensive Supervision Programs (ISP’s), did not have the presumed effects (Bouffard & Bergseth, 2008, Petersilia
& Turner, 1993). Consequently, policy makers and program developers were stimulated to move beyond the purely coercive criminal justice responses, and to develop and implement coordinated responses of social services, treatment and case management for ex-offenders (Lutze et al., 2013; Taxman, Young, Byrne, Holsinger, & Anspag, 2002).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) initiated the Intensive Aftercare Program (IAP) (Altschuler & Armstrong, 1994). According to Altschuler and Armstrong’s IAP model, an aftercare program should include a distinct (institutional) transition phase with an assessment of offender’s risk and needs and classification of special needs subpopulations to enable matching treatment modalities, followed by coordinated case management and supportive community resources combined with cognitive behavioral treatment elements and matching surveillance services post release (Altschuler et al., 1999). Considering these policies and procedures, IAP is indirectly based on the What Works principles of effective judicial interventions, derived from the ‘Risk-Need-Responsivity’ (RNR) model (Andrews & Bonta, 2010). The RNR model assumes that the intensity of the intervention should be adjusted to the risk of reoffending (the intensity should increase along with the recidivism risk), target the criminogenic needs (risk factors that directly influence criminal behavior, such as cognitive distortions or coping skills) and align with the responsivity of the offenders (including motivation and cognitive abilities), hence be suitable and appropriate for the specific group that the intervention targets (Andrews, Hoge, Bonta, Gendreau, & Cullen, 1990). The Intensive Aftercare Program provided a blueprint for other aftercare and reentry interventions that have been developed and implemented since, and some of which have been followed by research into its effectiveness (Winterfield & Brumbaugh, 2005).

**Studies on aftercare programs**

To ensure successful reentry and reduce future problematic and delinquent behavior that puts society at risk, it is important to gain insight into whether aftercare is effective, and for which specific groups of juvenile and young adult offenders. A number of studies on the effectiveness of aftercare and re-entry programs for juvenile and young adult offenders have been carried out, with mixed results, varying from programs that successfully reduce recidivism and show positive effects on intermediate outcomes (Cillo, 2001; Fagan, 1990) to others, where few differences in the prevalence of reoffending between the treatment and comparison groups were found (Lattimore & Steffey, 2009; Wiebush, Wagner, McNulty, Wang, & Le, 2005). These inconsistent findings underscore the need for addi-
tional research to identify effective aftercare models and strategies for delinquent youthful offenders. Even more so, since not many reentry and aftercare programs have been studied in robust experimental research in the form of a Randomized Controlled Trial (RCT), which is generally recognized as the best method for effectiveness research (Farrington & Welsh, 2005a; Weisburd, 2000).

Of the limited amount of RCT’s carried out, the majority consists of efficacy trials, carried out in a clinically controlled setting (i.e. a research clinic with well-trained staff and a sample specifically selected for the study). Efficacy trials are distinctly different from effectiveness studies, which are conducted in more dynamic everyday practice settings (Weisz, Jensen-Doss, & Hawley, 2005; 2006). The study on NPAP is an effectiveness study, conducted in a real-world setting in which factors are at play that cannot be controlled experimentally, e.g., the standard of usual care, which often includes active treatment ingredients, providing a stronger standard for testing whether NPAP is reliably superior to the care usually provided (Weisz et al., 2013) and making an important contribution to the small body of experimental effectiveness studies carried out in the criminal justice system.

In addition, most studies that have been carried out merely incorporate recidivism outcomes and overlook other measures of success and potential moderators of program effectiveness, such as treatment duration and intensity, the moment of enrollment in the aftercare program (prior to or post release), whether or not aftercare is provided on a voluntary or compulsory basis and the background characteristics of the offenders (e.g., age, ethnicity and number and severity of prior offenses). Moreover, no comprehensive overview and meta-analysis of all previous effectiveness research on aftercare programs for juvenile and young adult offenders has been carried out, leaving a critical gap in the empirical evidence on juvenile aftercare, which this dissertation intends to fill.

**The intervention New Perspectives Aftercare Program (NPAP)**

The first comprehensive aftercare program that has been developed and implemented in The Netherlands in recent years is the New Perspectives Aftercare Program (NPAP), an intensive aftercare program for serious juvenile and young adult offenders, aged 16 to 24 years, reentering society after a period of detention or stay in a secure care facility, with a moderate to high recidivism risk. The goals of the treatment are the prevention of recidivism by modifying cognitive distortions and behavior and improving skills.
The intervention is intensive, vigorous and highly individualized, i.e., adapted to the needs of the offender, combining reintegration in the neighborhood, work or school and focusing on the network of the juvenile or young adult as a whole. The intervention strategies include coordinated case management, motivational interviewing and cognitive behavioral interventions focused on controlling impulses, problem solving and criminogenic thinking patterns (Vogelvang, & Schut, 2008).

NPAP is divided into three phases and is typically delivered for 9 months, with a 3-month follow-up period. The first (reentry) phase commences during the last three months of detention to ensure a smooth transition from the closed environment back into the community, followed by an intensive phase of three months with 6-8 contact hours a week and a consolidating phase. The youth care workers have low caseloads (six to seven clients maximum), are available 24 hours a day, are outreaching, invest in a therapeutic relationship with their clients, and aim to build a prosocial network that the juveniles and young adults can rely on beyond the intervention period.

NPAP is thought to be a promising aftercare intervention by the Dutch Offending Behaviour Programmes Accreditation Panel of the Ministry of Security and Justice in The Netherlands (2009), since it includes all the characteristics (multifaceted, community-based and offender-focused) that are generally recognized as features of effective interventions aimed at positive behavioral change and recidivism reduction in juveniles and young adults (Altschuler & Armstrong, 1994; Lipsey, 1992).

Firstly, according to the program developers (Vogelvang & Schut, 2008), NPAP is based on the ‘Risk-Needs-Responsivity’ (RNR) model, focusing on moderate to high-risk juveniles, targeting their criminogenic needs (e.g., criminal and antisocial attitudes, poor coping and lack of prosocial skills) and responsivity, which is, tailoring the intervention to the learning style, motivation, specific capabilities, strengths and limitations of the individual offender (Andrews, Bonta, & Hoge, 1990). Secondly, Crick and Dodge (1994) developed a social information processing model explaining aggressive and delinquent behavior. By systematically challenging distorted social information processing further aggressive behavior can be prevented. In addition, the coping-relapse model (Brown, St. Amand, & Zamble, 2002) is applied. All the youths’ personal and contextual factors influencing their delinquent behavior are carefully mapped and functional behavior assessments provide the youth insights in their cognitions and behavior, ultimately intended to lead to positive behavioral change. Furthermore, NPAP incorporates general treatment principles by stimulating the therapeutic alliance and treatment motivation of the offenders (Wampold & Brown, 2005). Although NPAP is considered to be a promising intervention, an increasing de-
mand for accountability demands rigorous scientific research on its effectiveness to establish the value of this Dutch aftercare intervention (Ministry of Justice, 2009).

**Aims of this dissertation**

The aim of this dissertation was threefold:

First, to provide an overview and analysis of the effectiveness of aftercare programs for juvenile and young adult offenders globally, and to answer the important and practically relevant question of “what works for whom” (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002).

Second, to share information and experiences on conducting an experimental study in a juvenile and adult criminal justice setting, so that lessons can be drawn that can be of use to fellow researchers planning to conduct an experimental study in the forensic youth care field. Third, to study the effectiveness of the first evidence-based aftercare program in The Netherlands: the New Perspectives Aftercare Program (NPAP). The intention was to examine whether NPAP produces outcomes that are superior to the existing services (‘treatment as usual’). The primary outcome was defined as a decrease in the frequency and seriousness of criminal behavior. In addition, the overall level of psychosocial functioning after a period of incarceration was included as an outcome. This was measured by comparing the level of cognitive distortions and criminal thinking patterns and increase in the competence and problem solving skills of the adolescent or young adult. The second goal was to determine the conditions that may affect the effectiveness of NPAP: characteristics of clients (ethnicity, age, criminal record, age of onset of offending, etc.) and characteristics of the intervention (start during vs. after detention, mandatory or voluntary nature of the referral to aftercare and whether or not participants commenced and completed the intervention).

We postulated that NPAP would have a positive impact on several outcome measures, including recidivism, since the intervention is based on several What Works principles and has an underlying theoretical framework, supporting its potential effectiveness.

**Design of the studies included in this dissertation**

In the first study included in this dissertation meta-analytic techniques were used to study the effectiveness of aftercare programs for juvenile offenders (Lipsey &
Wilson, 2001). The second study is a descriptive study of the implementation of the RCT study on the effectiveness of NPAP. The final two studies of this dissertation incorporate the findings of the prospective longitudinal study on the effectiveness of the NPAP aftercare program. The design of the effectiveness study is a randomized controlled trial (RCT), with randomization at the individual level. In general, there is consensus among researchers that RCTs are the gold standard when it comes to conducting effectiveness research (Consolidated Standards for Reporting Trials, 2010; Farrington et al., 2005). One of the major advantages of an experimental design is that it can rule out (or at least significantly reduce) some important threats to validity, such as the impact of confounding factors (e.g., differences in client characteristics that may affect treatment outcomes between study participants in the experimental and control condition). Furthermore, by random assignment it is possible to avoid a systematic bias when dividing participants into a treatment and comparison group, and one may assume that both groups are equivalent if the sample size is sufficiently large (Asscher et al., 2007; Cook, 2003; Farrington, & Petrosino, 2001; Weisburd, 2003)

In this multi-site research design, three major cities in The Netherlands were included, i.e., Amsterdam, The Hague and Utrecht. The study involved random assignment of individuals referred to NPAP, equally divided into an experimental (NPAP) condition and control condition, in which participants received ‘treatment as usual’ (TAU), one of the interventions that were usually available for this target group from a broad array of social and mental health interventions, including juvenile and adult justice services, child welfare services, and youth care services.

Juveniles and young adults aged 16 to 24 were eligible for the aftercare program and inclusion in the study if they 1) had spent a minimum of four weeks in detention; 2) had committed a minimum of three criminal acts during their lives, including one serious offense; 3) moderate to serious problems regarding social skills, criminal thinking patterns and behavior based on the How I Think (HIT) and/or EXIT questionnaires 4) had a medium to high recidivism risk based on a recent risk assessment by the RISc3 (Adviesbureau Van Montfoort & Reclasser-

2. The ethical committee of the Faculty of Social and Behavioural Sciences, School of Child Development and Education of the University of Amsterdam approved the design of the study.

3. RISc stands for ‘Risico Inschattingsschaal’ [Risk Assessment Tool] and is the Dutch adaptation of the Offender Assessment System (OASys) (OASys Development Team, 2001).
ing Nederland, 2004) or the SAVRY\(^4\) (Lodewijks, Doreleijers, Ruiter, & Wit de Grouls, 2006). Exclusion criteria were a low IQ (<75), severe psychiatric problems and/or substance abuse problems and lack of motivation (Vogelvang & Schut, 2008).

After having explained the study and having obtained written informed consent, the included juveniles and young adults were approached by the researchers for an assessment prior to the start of NPAP or TAU (T\(_1\)), a test during the intervention (after 3 months, T\(_2\)), a posttest immediately afterwards (9 months later, T\(_3\)), and a follow-up assessment 1 year after the end of the intervention (T\(_4\)). At each measurement wave, a range of standardized questionnaires were filled out by the participants to identify an individual’s socio-demographic characteristics, cognitive and behavioral problems, motivation, prosocial and coping skills and changes thereof.

Additionally, juvenile and adult criminal records up to July 2013 were obtained from the Research and Policy Database for Judicial Documentation, coded according to the Recidivism Coding System (RCS) (Wartna, Blom, & Tollenaar, 2011) and analyzed to study time to recidivism, the frequency and severity of recidivism of the participants following release from secure care or detention and referral to aftercare.

**Outline of this dissertation**

**Chapter 2**

In this chapter the results are presented of the meta-analytic review on the effectiveness of aftercare programs for juvenile and young adult offenders. Examined is which client, intervention and study characteristics were related to the effectiveness of aftercare interventions.

**Chapter 3**

As a first step in the process of conducting this randomized controlled trial on the effectiveness of NPAP, a chapter was included on the key practical challenges that were encountered during the process of implementation, and while conduct-

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4. The SAVRY is the Dutch translation of the Structured Assessment for Violence Risk in Youth (Borum, Bartel, & Forth, 2002).
ing the experimental study, together with formal and informal organizational cultural barriers that were faced, and ways of overcoming them.

**Chapter 4**

This chapter includes the results from the study on the effectiveness of NPAP as measured by changes in self-reported attitudes and behavior. It describes whether the intervention was effective in decreasing participants’ cognitive distortions and criminal thinking patterns and increasing social and problem solving skills compared with participants receiving TAU. Several potential moderators of the effectiveness of NPAP are examined, since the aftercare program might work for some participants, but not for others.

**Chapter 5**

Finally, the effectiveness of NPAP was examined based on official records, by comparing the time to reoffending and various types of recidivism between the NPAP and TAU group.

Based on findings from the prior meta-analysis on the effectiveness of aftercare, moderator analyses are conducted including age, ethnicity, age at first police contact, and number and severity of prior offenses.

**Chapter 6: General Discussion**

The main findings, strengths and limitations of this dissertation are discussed. Implications for practice and policy are presented and suggestions for future research are made.
Figure 1. Randomization process of the effectiveness study on the New Perspectives Aftercare Program

1. Referral of juvenile
2. Meets criteria NPAP
   - Juveniles under CTO: Excluded from randomisation
   - Randomisation
   - NPAP
3. Does not meet criteria NPAP
   - Otherwise
   - Treatment as Usual (TAU)