



Swedish young offenders in community-based rehabilitative programmes

Patterns of antisocial behaviour, mental health, and recidivism

Hanna Ginner Hau

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Abstract

The overall aim of this thesis was to explore patterns of antisocial behaviour, mental health and recidivism among Swedish young offenders in community-based rehabilitative programmes (n=189). Study I explored the character and severity of self-reported behavioural problems prior to programme participation. Four distinct subgroups were identified: *subgroup (SG) 1* (n=60), boys exhibiting adolescent delinquency; *SG 2* (n=65), boys exhibiting pronounced adolescent delinquency; *SG 3* (n=48), boys exhibiting pronounced adolescent delinquency as well as criminality including violence; *SG 4* (n=16), boys exhibiting pronounced adolescent delinquency as well as criminality including violence and drug-related crimes.

Study II investigated the mental health of the participants, by means of the Strengths and Difficulty Questionnaire (SDQ). When relating SDQ-scores to the previously identified subgroups, SG 1 with the least prominent history of antisocial behaviour was found to resemble a normative sample, while the subgroups with more extensive histories of antisocial behaviour had significantly elevated scores on the hyperactivity/inattention and conduct problem scales.

Study III investigated recidivism in criminality in the 18-months following programme start, finding that 60% of the participants had been registered as suspected of new crimes. SG 3 and 4 with the most extensive histories of antisocial behaviour were responsible for a significantly larger part of recidivism than expected. By contrast, SG 1, reporting the least antisocial behaviour in their past, was responsible for a significantly smaller part of the recidivism. This was true for all crimes as well as crimes of violence specifically, confirming the subgroups identified based on the self-reports.

The results are related to developmental theories of antisocial behaviour and to contemporary research on risk assessment. Implications for the practice of rehabilitation of convicted young offenders are discussed.

Key words: Young offenders, Rehabilitation, Adolescence, Prevention, Risk-assessment, Juvenile justice, Recidivism, Mental health

List of publications

This thesis is based on the following papers, which will be referred to by their Roman numerals:

- I Ginner-Hau, H., & Smedler, A.C. Different problems – same treatment. Swedish juvenile offenders in community-based rehabilitative programmes. *International Journal of Social Welfare*. *In press, reprinted with the permission of the publisher*. In press.
- II Ginner-Hau, H., & Smedler, A.C. Self-reported strengths and difficulties in Swedish young offenders in community-based rehabilitative programmes. Submitted.
- III Ginner-Hau, H., & Smedler, A.C. Recidivism in convicted young offenders participating in community-based rehabilitative programmes. Submitted.

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1. Introduction

Adolescent delinquency attracts both media and political attention and is of great public concern. Various scientific disciplines approach the topic from their different perspectives and, independently of their scientific domain the researchers active in this field all, in one way or another, deal with the very stable empirical observation that the crime-rates during adolescence are much higher than they are for those in all other periods of life (Nagin & Land, 1993). It is also to be regarded as empirically well-established that this peak in crime rates is neither solely attributable to the fact that many people commit more crime during adolescence, nor is it wholly due to the fact that a high number of adolescents commit crimes. Rather the high criminal activity on the threshold of adulthood is explained by a sharp rise in both the prevalence of persons committing crimes, i.e. a higher proportion of persons committing crimes in this age group, and the frequency with which the crimes are committed, i.e. the number of crimes committed by each offender (Farrington, 1986). Crime rates start to climb around the age of 12 and, having peaked during the late teen years, they then decrease into adulthood (Thornberry, 1997).

During the 1990s, a number of theories explaining criminal behaviour in terms of developmental pathways, or trajectories, were introduced. One, if not the most important of these, was presented by Moffitt (1993). Her empirically founded theory proposes two major developmental pathways, leading to either adolescent-limited (AL) or life-course-persistent (LCP) crime. It is still the most frequently discussed and well-researched developmental theory of delinquency (Bartol & Bartol, 2009). Moffitt's theory, like other developmental theories, such as that of Patterson and Yoerger (1982), is founded on longitudinal data, in a quest to explain the great heterogeneity in antisocial behaviour observed among adolescents. These theories conclude that, in the offender population, distinctive trajectories or pathways can be defined and that these pathways reflect fundamentally different patterns in the backgrounds of the offenders, which, in turn, may be related to their respective prognosis and likelihood for continued criminal behaviour (Blokland, Nagin & Nieuwbeerta, 2005).

More or less parallel in time with the emergence of the developmental theories of delinquency, Lipsey (1995) reviewed 400 studies of the treatment of

juvenile delinquents and found that, on average, treatment did reduce recidivism. And up until today a number of meta-analyses have concluded that there are treatments available that have a positive overall effect on reducing recidivism amongst youths (e.g. Andrews et al., 1990; Dowden & Andrews, 1999; Latimer et al., 2003; Lipsey, 1995; Lipsey, 2009). Meta-analyses reviewing the research on the effects of interventions with young offenders have provided convincing evidence that a rather broad range of these interventions reduce recidivism (Lipsey & Cullen, 2007). The results from this body of research are however not easily transformed into guidelines for everyday practice. One reason for this is that the majority of the reviews focus on a particular programme, or a type of programme. However, a mere list of the names of programmes shown by research to have positive effects will not provide practitioners with useful guidance (Lipsey, 2009). In their recent meta-analysis Latimer et al. (2003) do however present a rather comprehensive summary of empirically based recommendations (pp. 20-21). Some of these empirically based recommendations are that treatment should be conducted in a therapeutic environment and to use multiple forms of counselling and that youths should be screened for difficulties related to anger and to provide anger management components when suitable. Furthermore school performance should be targeted and educators should be involved directly within the treatment when necessary. Likewise, antisocial attitudes should be targeted, and both cognitive and social skills enhanced. The programme length should be limited to six months and provide a maximum of 20 hours for low risk offenders and increase dosage for high risk offenders. Meaningful and substantial family involvement should be encouraged.

Naturally, this research on how to most effectively reduce recidivism among young offenders as well as research deepening the understanding of antisocial development are of great importance, as the high crime rates among adolescents constitute a serious concern for society. The reduction of recidivism rates among young offenders is a crucial task both for the social services and the justice system.

Where the justice system is concerned, most western countries have a long tradition of treating young offenders differently from adult offenders. Most commonly, this difference in treatment is based on the idea that young offenders are not only guilty of a crime, but they are also children or adolescents with needs that are often strongly associated with their criminal behaviour. This almost inevitably leads to a conflict between the application of justice, i.e. imposing a consequential penalty corresponding to the seriousness of the crime committed, and the requirements in terms of the juvenile's welfare, i.e. in accordance with the needs of the young offender (Goldson, 2002). But, whereas research has led to developmental theories of juvenile delinquency and improved knowledge about what interventions most effi-

ciently reduce recidivism, the juvenile justice systems in most western countries have tended to develop in an increasingly punitive direction. Ironically, development leading to a potentially efficient intervention for young offenders has been taking place in parallel with the developments within the juvenile justice systems, where justice has been promoted presumably at the expense of welfare considerations.

Although Swedish policy and practice also have made a new shift toward punitive strategies and standards concerning young offenders, the social welfare agencies still have the primary responsibility for young people involved in criminality. Thereby Swedish youth justice system is still to be considered as primarily resting on a welfare principle and as having a fundamentally rehabilitative approach (Hollander & Tärnfalk, 2007). However, what rehabilitative measures are taken with young offenders is on a national level unknown. There is also no documentation on the characteristics of the offenders that are referred to social services. Therefore, the overall aim of this thesis was to explore behavioural characteristics of and individual differences among Swedish young male offenders who had been convicted and referred to their local social services for rehabilitative measures. The focus of this thesis was thereby not the measures but the youths themselves. This point of focus was chosen as increasing the knowledge about the young offenders referred to social services seemed as a reasonable starting point for discussing the measures taken with this group. When the data collection was initiated, there was no systematic documentation available on the young offenders that are referred to social services. The aim to improve the knowledge about this group of young offenders was achieved by studying a sample of male offenders, aged 15-17, participating in various community-based rehabilitative programmes (known as “påverkansprogram” in Sweden) organized and run by the local social services. At the time of the data collection, this was the most common measure taken with young offenders referred to social services (Brå, 2005).

The young offenders that participated in the programmes were investigated by analysing data on behavioural problems from five data sources. The information that was used in this research was registry data concerning i) contacts with social agencies and ii) registered criminality prior to the start of the programme. Furthermore the iii) self-reported histories of antisocial behaviour and iv) self-reported mental health, collected in connection to the start of the programme, were analysed. Finally v) registry data on criminality during the first 18 months after the start of the programme were used. These data sources were explored in order to contribute to an increased knowledge about the behavioural problems in the investigated group. Apart from the criminal behaviour a particular focus was on mental health as the growing amount of

research in this area points to this as an important and overlooked risk-factor for criminal behaviour (Goldstein et al., 2005).

Apart from exploring the available data the aim with this thesis was also to discuss the findings in relation to two major areas of theory and research on adolescent delinquency. The first of these two fields was the one of developmental theories of juvenile delinquency, mainly focusing on the theory of Moffitt (1993) but also discussing the present findings with regard to the developmental theories of Patterson (1982), and Loeber and Loeber-Stouthammer (1998).

Also, the aim was to discuss the findings in relation to the role of the relationship between assessed risk and choice of intervention. The so called risk-principle has been formulated on more than two decades of research on effective interventions, showing that adherence to the risk principle is crucial for interventions to be effective (Andrews & Bonta, 2010; Lowenkamp, Latessa & Holsinger, 2006). To connect empirical findings from a representative sample of Swedish young offenders to these two major fields of academic knowledge was considered to provide theoretical perspectives that would be useful in the understanding and development of every day practice. This could serve as a possible starting point for a discussion on how to improve interventions for convicted young offenders that are referred to social services.

2. Young offenders, justice, and welfare

2.1 Juvenile justice

The majority of young people admit to engaging in some type or types of delinquent behaviour, but only a small part will be referred to a juvenile court (Lawrence & Hemmens, 2008). How young people who break the law should be treated in comparison to adult offenders is a matter of some debate and the way in which they are treated varies considerably from one society to another. However, that they should be treated differently appears to be specified in the legislation and incorporated in the policies of every western country. For more than a century, most western countries have been treating children who break the law differently from adult offenders (Goldson, 2002), but the history of particular laws and legal procedures addressing juvenile offenders goes back thousands of years (Lawrence & Hemmens, 2008).

The international variation in the youth justice systems between countries is much greater than what is found in the adult systems. The way in which different countries have decided to apply the justice system for young people is probably best understood within the broad context of each country's history and social institutions, including the criminal courts (Doob & Tonry, 2004). There are many different models and, in the last decades of the 20th century, many of them, notably in North America and in Europe, have undergone drastic change — in general in a more punitive direction (Junger-Tas, 2006).

2.2 The welfare approach in contrast to the justice approach

Typically, both the policy concerning and practical aspects of dealing with juvenile crime are guided by the dual perspective of 'welfare' and 'justice' (Goldson, 2002). Even though this is an oversimplification of the nature of juvenile justice, the tension arising from defining the consequences for those youths who have offended in terms of their social or psychological needs and

in terms of punishing them for what they have done, is obvious in the juvenile justice system of many jurisdictions (Doob & Tonry, 2004). In a resume of the situation prevailing in seven western countries, Tonry and Doob (2004) found that even if there were great differences in the juvenile justice systems, all of the countries investigated attempted to both treat the young offender and punish the offence, even if they did so in varying degrees. Inevitably, this implies that there is an intrinsic conflict between the young offender's needs and the legal consequences for the committed crime. It was also found that the emphasis on welfare or justice varied over time. In fact, the changes towards a more repressive approach in juvenile justice seen in the last few decades could be described as a tendency for policy and practice to become more strongly oriented towards control and punishment, which is inevitably at the expense of the welfare approach (Hill, Lockyear, & Stone, 2007). Nevertheless, the application of a justice approach need not be particularly punitive and a child welfare approach is not necessarily particularly effective (Doob & Tonry, 2004). However, the trends in juvenile justice over recent years are likely to have led to an increased focus on the offence rather than on the young person's circumstances and needs.

2.3 Juvenile justice in Sweden

Since the beginning of the 20th century, Sweden has had a praxis of treating young offenders differently from older ones. The system has been fairly stable over time and is, to a large extent, resting on the principle of rehabilitation (Janson, 2004). Even if rehabilitation is emphasized, as in the other Scandinavian countries, sentencing is intended to reflect the values of both justice and welfare (Junger-Tas, 2006). All of the Scandinavian countries embrace a long-standing welfare principle. However, contrary to most Anglo-Saxon countries, in Scandinavia juvenile offenders are tried and, if found guilty, convicted by the same courts as adults (Brammer, 2003; Hill, Lockyear, & Stone, 2007). The age of criminal responsibility is fifteen years of age. In keeping with the welfare principle, special policies apply to young offenders, including waivers against prosecution, restrictions on prison sentences, and handing over offenders to the local social services (Janson, 2004; Hollander & Tärnfalk, 2007). In Sweden, the social services also play an important part in the court procedure for young offenders as they can be requested to describe the child's situation during the trial of a juvenile offender and to specify the child's needs in a written statement to the prosecutor of the criminal court. If the young offender is assessed as being in need of receiving some form of care the statement should also include a clear description of what kind of measures he or she will receive, if after conviction he or she would be referred to the social services (Tärnfalk, 2007). Over the years

questions have been raised regarding the appropriateness of the social services being responsible for measures targeting convicted young offenders and it has frequently been argued that this responsibility should be removed and given instead to the courts. The government has still not acted on these requests (Janson, 2004; Junger-Tas, 2006). In addition, even if there has been a clear change in a more punitive direction, the rehabilitative focus is still strong (Hollander & Tärnfalk, 2007). The criminality of young offenders is regarded primarily as a social welfare problem (Sarnecki & Estrada, 2006).

However, the strong emphasis on treatment in the Swedish justice system has been criticized, both for its lack of scientific evidence that the treatments provided are effective and for the lack of legal transparency and its questionable fairness (Sarnecki & Estrada, 2006). Even if research over the last two decades has produced growing evidence that the treatment of young offenders actually may work (Lipsey, 2009), there is still no evidence that efficient measures are administrated by the Swedish social services (Bergmark & Lundström, 2007; Ginner-Hau & Smedler, in press; Kaunitz & Strandberg, 2009). In Sweden, as in many other countries there is an ongoing debate about the existence of better ways to deal with young offenders.

The most recent change took place in 2007, when community based rehabilitation (“ungdomsvård”) became more clearly reserved for those in presumably well-documented and undisputable need of rehabilitation (Swedish Government Official Reports, 2004). This change was based on the assumption that there was a group of young offenders who were referred to the social services for rehabilitative measures without having any particular rehabilitative needs (the term for this measure was before 2007: “överlämnande till vård inom socialtjänsten”). With the changes in 2007, the measure that was restricted to providing solely rehabilitative interventions became reserved for those who have more apparent needs.

During 2005 and 2006, 2 624 and 2 775 young offenders respectively were referred to the social services for care, according to the criminal records from the National Council for Crime prevention. After the introduction of the new law in 2007, there were 1 589 court referrals, and in 2008 the number was reduced to 1 447 young offenders referred to the social services following court procedures. As criminality is registered by the National Council for Crime Prevention and the register for the social services is organised by the National Board of Health and Welfare, it takes a certain amount of detective’s work to track down the ‘measures’ that a given young offender has been assigned to (Andershed, Andershed & Söderholm-Carpelan, 2010). From earlier studies of Swedish court orders, however, it can be stated that the most common measures for convicted young offenders are counselling,

mentoring, different kinds of rehabilitative programmes and various forms of out-of-home placement (Brå, 2002, 2005). In 2004, the single most common measure was found to be attending rehabilitative programmes (Brå, 2005).

3. Developmental perspectives on young offenders

Criminal behaviour is common during adolescence. A majority of Swedish male nine-graders, who are about 15 years old, report that they have committed at least one minor offence during the last twelve months (Ring, 1999; Brå, 2010). Furthermore most people who commit a crime at some point in their lives do so during adolescence (Estrada & Granath, 2008). The increase in antisocial behaviour can already be seen in late childhood and, during the earliest teen years, delinquent and criminal behaviour increases rapidly (Thornberry, 1997). During middle to late adolescence, the prevalence of criminal engagement peaks and, for most offenders, is followed by a rapid decline in offending by the early twenties (ibid). Studying the relationship between age and crime, researchers have observed that this pattern is typical, with criminal activity tending to peak in the late teens (in cohorts from earlier periods) to the mid-twenties (in contemporary cohorts) and then decline throughout adulthood (Moffitt, 2007). This trend has, with very few exceptions, been consistently observed in both men and women for most types of crimes, and also across several nations and historical periods (Hirsch & Gottfredsson, 1983). Nagin and Land (1993) have claimed that the age-crime curve, displaying the sharp increase in crime rates in mid-adolescence followed by an equally sharp decrease in those rates in early adulthood, is the most important empirical finding in criminology.

These findings strongly suggest that the appropriate way of studying the causes of criminal behaviour would be from a developmental perspective (Thornberry, 1997). During the past three decades, the psychological study of crime has shifted away from relatively stable personality traits as the main determinants of criminal behaviour, towards a developmental and interactive cognitive focus (Bartol & Bartol, 2009).

There is strong empirical evidence that antisocial behaviour observed before the age of twelve is associated with a higher risk of criminality in adulthood. Furthermore, the earlier in life this behaviour is observed, the higher the risk that it will continue in later life (Lipsey & Derzon, 1998; Loeber & Farrington, 2000; Krohn et al., 2001). In this respect, it should be noted that it is primarily the five percent of the boys who have committed crimes before the

age of 12-13 that continue to engage in criminal activity as adults (Lahey et al., 1998; Loeber & Farrington, 2000; Loeber & Hay, 1997). Based on this empirical observation, the age of onset of criminal activity has become a major focus in developmental theories of crime (Tremblay, 2000).

Accordingly, the age of onset is central in the developmental theories of Moffitt (1993) and Patterson with colleagues (Patterson, 1982; Patterson, DeBaryshe & Ramsey, 1989; Patterson & Yoerger, 2002). As Moffitt's theory of life-course-persistent (LCP) and adolescent-limited (AL) antisocial behaviour and Patterson's coercion theory are two of the most frequently discussed developmental theories of juvenile delinquency, and as both are interesting from a psychological perspective, they will be described in some detail. Also included in the theoretical discussion is a more concise description of the developmental theory of Loeber and Stouthammer-Loeber (1998). In the latter, in addition to the age of onset, the presence of Attention Deficit/Hyperactivity Disorder (ADHD)¹ plays an important role in the identification of developmental pathways of antisocial behaviour.

3.1 Life-course-persistent (LCP) and adolescence-limited (AL) antisocial behaviour

At present, Moffitt's developmental theory is probably the most researched and discussed developmental theory of delinquency (Bartol & Bartol, 2009). In this theory, the age-crime curve is divided into groups of offenders based on the timing and duration of the antisocial behaviour. The first group is constituted by the life-course persistent (LCP) offenders. This group is a small one where antisocial behaviour starts in childhood and is frequent and persistent from then on. According to the taxonomic theory, the antisocial behaviour prevalent in this group has its origins in what Moffitt sees as neuro-developmental processes (Moffitt, 1993, 2007). The theory suggests that the origin of life-course persistent antisocial behaviour can be found early in life when the difficult behaviour of a high-risk child is aggravated by a high-risk social environment (ibid). The child's risk derives from neuropsychological variations that are either inherited or acquired. Initially this can be observed as subtle cognitive deficits, difficult temperament, or hyperactivity. The risk of the environment consists of factors such as inadequate parenting, disrupted family bonds, and poverty. As the child becomes older, the environmental risk domain is expanded to include poor relations to other people, such as peers and teachers, as a result of which the child loses the

¹ ADHD – Attention Deficit/Hyperactivity Disorder is a psychiatric diagnosis defined by behavioural criteria for inattention, impulsivity and hyperactivity, formulated e.g. in the DSM-IV (American Psychiatric Association, 1994).

opportunity to learn prosocial skills. Gradually the transactions between these persons and the environment create a disordered personality. Over the two first decades of life, features such as physical aggression and persisting antisocial behaviour are developed. According to the theory developed by Moffitt, in these youngsters, the antisocial behaviour persists into midlife and will affect several life domains, i.e. illegal activities, problems with employment, and victimization of intimate partners and children.

The adolescence-limited antisocial behaviour, on the other hand, is suggested to have its onset in puberty. This period of life is called the “maturity gap” by Moffitt and her colleagues, defining the years between the biological maturation and access to the privileges and responsibilities of adulthood. The antisocial behaviour of otherwise healthy adolescents is supposed to emerge out of the psychological discomfort they experience while living in this “gap”. It becomes normative to be attracted to delinquent behaviour and to mimic it in order to demonstrate autonomy from the adult world, including the parents, but also to become respected among peers and to accelerate social maturation. As their prior development was normal, the majority of the adolescent-limited delinquents change their behaviour when they grow into their adult roles and leave the antisocial behaviour behind.

In addition to these two original groups, Moffitt has added a third group of offenders (Moffitt, 2003, 2007; Moffitt et al., 2002). Empirically, a small group was identified, consisting of males who had engaged in extreme pervasive, and persistent antisocial behaviour during childhood, but were not extreme enough to be considered as belonging to the life-course persistent group during adolescence. Moffitt and her colleagues suggest that offenders in this group are likely to suffer from personal characteristics that isolate them from their social peer groups where a great deal of the criminal acts take place and thus, despite the similarities they have with LCP, they commit fewer crimes (Moffitt, 2003; Moffitt, 2007; Moffitt et al. 2002). This third group is however consistent with the original taxonomic theory that “childhood-onset antisocial behaviour is virtually always a prognosticator of poor adult adjustment” (Moffitt, 2007, p. 55).

3.2 The ‘coercion’ developmental model

Likewise Patterson and his colleagues propose that for the early starters, the risk of developing more serious criminal behaviour is higher than for those who commence criminal activity later in adolescence. Their developmental model is largely based on social learning theory, which claims developmental

trajectories for antisocial behaviour to be initiated, maintained, and diversified in a cumulative way through daily social experiences in a network that is aversive, inconsistent, and unsupportive (Snyder, Reid, & Patterson, 2003). The major difference when compared to Moffitt's theory is that the Patterson group emphasises the role of parenting to a greater extent than the specific characteristics of the child (Bartol & Bartol, 2009).

Based on data from The Oregon Social Learning Center, Patterson and colleagues have formulated two different trajectories to juvenile offending based on the age of the onset of criminal behaviour. The early-onset trajectory is thought to have its beginnings during the preschool interval and produces a child who is both socially incompetent and also at risk of early arrest and of going on to make a career of adult crime. In the late-onset trajectory, on the other hand, delinquent boys were found to possess marginal levels of social competence and marginal levels of deviance. They were arrested once or twice after the age of 14 years, but as adults, these boys were likely to desist from adult crime (Patterson & Yoerger, 2002).

For the early-onset trajectory, this model argues that the most important predictor of early-onset offending is the family environment. In order to escape aversive parental discipline and authority, individuals following the early-onset trajectory will already as small children learn to use coercive behaviours, such as temper tantrums and whining. Already at 18 months of age these coercive exchanges between parents and children can be seen (Granic & Patterson, 2006). Between 2 and 12 years of age, the rates of overt antisocial behaviour show a significant decline and are accompanied by very low rates of covert behaviour. There is very little or no growth in the covert behaviour during this interval. For this trajectory, the next interval begins during early to mid-adolescence. It is characterized by a rapid growth in covert forms of antisocial behaviour. Furthermore, during this interval, parenting and contextual variables continue to play a significant role, but what is a more decisive factor is the amount of unsupervised time youths have and their access to positive reinforcement of deviant behaviour provided by deviant peers (Patterson & Yoerger, 2002; Granic & Patterson, 2006).

Patterson and Yoerger (2002) state that the late-onset model might be characterized as the "marginality model". What characterises the late-onset individuals is the marginal levels of deviancy and social competency. Their families live in a marginally disadvantaged context and their parents are marginally skilled in taking care of their family. They are more antisocial than non-delinquents, but less antisocial than the early starters. For this group, too, the maintenance of antisocial behaviour depends more strongly on access to a deviant peer group than it does for the early starters. Furthermore, the likeli-

hood of arrest as young adult is rather low for late starters, whereas it is rather high for early starters.

According to the coercion developmental model, poor parental monitoring of children's activities, disruptive family transitions (e.g., divorce) and inconsistent parental discipline are all major psychosocial contributors to early-onset delinquency (Brennan et al., 2003; Patterson, 1982). According to the model, the key predictor of early-onset offending is a family environment where the child learns to use coercive behaviours (e.g., tantrums or whining) in order to escape aversive parental discipline and authority.

The coercion theory also considers certain individuals (e.g., those with an irritable temperament) to be more likely to elicit inept parenting strategies (Bartol & Bartol, 2009), but what is central in the coercive cycle is that the parent and child both behave in a way that is aversive to one another in an attempt to control each other's behaviour (ibid). During early childhood, the child's aversive behaviours increase both in intensity and frequency, eventually leading the parent to unwillingly reinforce the child's behaviour (ibid). As the child becomes increasingly irritating, the power-assertion techniques of the parent escalate and a level of hostility is presumed to be displayed toward the child (ibid).

Bartol & Bartol (2009, p. 149) summarise the three variables that, according to the coercion theory, distinguish early from late-onset trajectories as follows:

“1) the early-onset process begins during the preschool years, whereas the late-onset begins in mid-adolescence; 2) the inept parenting is more severe for the early-onset, as compared to the late-onset; and 3) the levels of social incompetence are more pronounced for the early- as compared to the late-onset delinquency. Early-onset delinquents tend to demonstrate limited levels of social skills, more disruptive peer relations, and lower self-esteem. Late-onset delinquents exhibit similar deficiencies, but not to great degree as early-onsets do.”

3.3 The Loeber and Stouthamer-Loeber model

As in the theories of Moffitt and of Patterson and colleagues, the age of onset of anti-social behaviour is fundamental for the Loeber and Stouthamer-Loeber (1998) model. However this model proposes five distinct developmental trajectories. In the first two, two different life-courses of persistent offenders are identified. In addition, in this model, LCP offenders are considered to have developed aggression in childhood that has continued and accelerated in adulthood. But here, based on the aggressive behaviour, two sub-groups are distinguishable according to whether a) serious aggression began

in early childhood or in later childhood/early adolescence and b) ADHD symptoms are present or not. Of these two life-course persistent groups, the group called the preschool-onset subtype, in which the onset of aggression is exhibited in the preschool period, and in which the children fulfil the diagnostic criteria for an ADHD diagnosis, anti-social behaviour/criminal behaviour is considered to be especially persistent. The other group, called the childhood-adolescent-onset subtype, displays a mid-childhood onset of aggressive behaviour and does not fulfil the diagnostic criteria for ADHD.

In this model, the role of ADHD is central and, according to Loeber and Stouthamer-Loeber (1998), the role of ADHD in the first of the subgroups is important as it is “(a) associated with poor cognitive and academic functioning; (b) it is implicated in the maintenance of oppositional behavior; and (c) it activates an early, accelerated development of aggressive behaviours, conduct problems, and substance abuse” (p. 246). The model also identifies two subgroups of offenders with a limited degree of aggression but exhibiting other antisocial behaviour. These individuals are characterized by serious aggression that they outgrow, which is evident either during the preschool-elementary school years or in late adolescence/early adulthood. The fifth group is comprised of the late onset offenders. This group includes those who show no problems early in life, but develop serious forms of aggression and antisocial behaviour later on. The development of antisocial behaviour in this group is assumed to take place during late adolescence or early adulthood. This assumption is based on findings in several studies that a minority of adult violent offenders do not exhibit serious aggression early in life.

4. Young offenders and mental health

Apart from the age of onset, all of the developmental theories presented point towards some kind of dysfunction that is detectible early. This dysfunction is regarded as a central reason for distinguishing different pathways of antisocial behaviour. Over the past few years, the study of mental health has received increased interest. Goldstein et al. (2005) state that the relationship between mental health and delinquency has become a major focus, after having been a neglected area of study. In addition, it has repeatedly been pointed out that too little attention is being paid to the mental health needs of the population of juvenile offenders (Goldstein, et al., 2005). Increasingly, problems such as mental retardation, learning disorders, attention-deficit hyperactivity disorders, substance abuse and anxiety disorders are discussed, and considered to be important determinants for young people's criminal behaviour and entry into the justice system (Kessler, 2002). It has also been suggested that there are vast unmet needs for mental health services amongst the people in this group (Redding, Lexcen & Ryan, 2005). Naturally, epidemiological data would provide the key to developing a better understanding of the psychiatric disorders of juvenile detainees, but, even though exploration of this field of research is growing, as yet, relatively few empirical studies have been published (Teplin et al., 2007).

According to the now growing body of research on mental health problems among juveniles in the criminal justice system, there is a wide variability in the frequency with which mental health problems are identified (Teplin et al., 2007). Several factors contribute to this, but, on the whole, the variability in rates can be explained by the use of inconsistent samples in the different studies and the inadequate application of research methods (Teplin et al., 2002). For example, variations in sample strategies are found, small samples are used and measurements are insufficient (Teplin et al., 2002).

Fazel, Doll and Långström (2008) have specified and exemplified these methodological limitations; some reports have been based on self-reporting questionnaires alone others on data from medical reports, in some research, only selected populations have been interviewed or the sample has consisted of youths in foster care rather than in detention and yet the results are incorporated with those of children in detention. Fazel, Doll and Långström (2008) also give examples of the inconsistencies in the definition of mental

health, in that some studies have reported information on the prevalence of any psychiatric disorder, rather than specifying the disorders. There is also a variation between the reports in the sense that many studies do not report mental distress in terms of a valid psychiatric diagnosis. Instead, frequency of symptoms are reported, but they are based on varying assessment tools and it is unclear to what extent they would meet criteria for a formal diagnosis.

4.1. Prevalence

Taking the methodological inconsistencies into consideration, however, it remains an indisputable fact that a number of studies have reported very high prevalence rates of mental illness among detained and incarcerated juveniles, and also among juvenile offenders generally (Cocozza & Skowrya, 2000; Domolanta et al., 2003; McGarvey & Waite, 2000; Teplin et al., 2002; Goldstein et al., 2005). However, as discussed above, estimates of the percentage of juvenile offenders with mental health problems vary greatly, and it is most likely that this is because of the methodological differences mentioned (Redding, Lexcen & Ryan, 2005). It has been concluded that the prevalence of mental health problems is at least twice as high amongst juvenile offenders as among non-offending youths (Cocozza & Skowrya, 2000). Some estimates have suggested that, even after controlling for conduct disorder, nearly 60% of boys and over two-thirds of girls involved with the juvenile justice system meet the diagnostic criteria for one or more psychiatric disorder (Teplin et al., 2002). Prevalence figures vary greatly but from different epidemiological studies it has been estimated that about 18-22% of adolescents show signs of problems in adjustment, ranging from moderate to severe (Frick & Silverthorn, 2001). Even when one knows that there are methodological shortcomings that must be taken into consideration, these figures indicate the existence of mental health problems among young offenders as an area that should be of great concern for the juvenile justice system.

4.2. Character

As stealing and destroying property are actions that often result in contact with the juvenile justice system, a high prevalence of conduct disorder is to be expected among young offenders (Wierson, Forehand, & Frame, 1992). However, as mentioned previously, the prevalence of psychiatric disorders is high even when conduct disorder is controlled for. The most common disorder

ders among young offenders are associated with mood, substance use, and attention-deficit hyperactivity disorders (Teplin et al., 2002; Ulzen & Hamilton, 1998; Wasserman et al., 2002). Despite the behavioural overlap between conduct disorder and delinquency, research has shown that the primary diagnosable disorder among young offenders often is something other than conduct disorder (McManus et al., 1984), for example, identified mood disorders such as major depressive disorder and dysthymia, as a common primary diagnosis. In addition, depression has been reported to be the most common mood disorder among juvenile delinquents (Goldstein et al., 2005).

The majority of studies on the mental health of young offenders have been performed on young offenders in detention. But a high prevalence of mental health problems has also been shown for young offenders in the community. An evaluation of the mental health and psychosocial needs of young offenders in England and Wales, including offenders both in the community and in safe care, showed that the mental health problems related to anxiety or where post-traumatic stress symptoms and self-harm were evident within the month leading up to the study being conducted revealed that offenders in custody and in the community had needs in the mental health area. Almost one in five had significant depressive symptoms, one in 10 reported ADHD and every other subject included in the study met the criteria for conduct disorder (Chitsabesan et al., 2006). In a systematic review of 25 psychiatric surveys of adolescents in juvenile detention and correctional facilities, Fazel, Doll and Långström (2008) found that approximately 3% of the boys had a psychotic illness, 11% had a major depressive disorder and 12% were diagnosed with ADHD; 53% had a conduct disorder.

4.3. Screening

Due to the absence of screening to identify the mental health needs of young offenders, these are often not identified, and therefore remain unmet (Bailey & Tarbuck, 2006). This is in spite of the fact that young offenders entering the juvenile justice system often have mental health needs that are of similar character to those in the youth population that receive inpatient or community-based mental health treatment (Evens & Vander Stoep, 1997). Young offenders seem to be less likely to have received adequate treatment for their mental health problems compared to youths in the community at large (Pumariega et al., 1999). This is not to suggest that it is the lack of treatment that leads to delinquency, but it does imply that juvenile offenders have mental health needs that often go unrecognized and untreated (Redding, Lexcen, & Ryan, 2005).

There is also some research indicating that adequate mental health care may be important for reducing recidivism. For instance, Lewis and colleagues compared male young offenders receiving appropriate mental health care to those who did not, and found that the latter group committed twice as many offences and twice as many violent crimes (Lewis et al., 1994).

Identifying and understanding the mental health needs of juvenile offenders may assist policy-makers as well as mental health and criminal justice professionals to develop and implement effective approaches to the assessment and treatment of juvenile offenders (Goldstein et al., 2005). Furthermore, despite the difficulty of handling juvenile offenders with mental health problems, providing them with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2007). Thus, even if many juvenile systems do not have the capacity to recognise and meet the mental health needs of juvenile offenders, the first step is to take measures to identify those in need of mental health services. Therefore, systematic screening procedures to pick up the mental health needs in this group need to be developed (Teplin et al., 2007), whereupon specific problems could be identified and the means of addressing them could be examined.

5. The risk principle

According to Andrews and Bonta (2010), the conclusion that treatment can be effective in reducing recidivism was consolidated by two significant developments that occurred in the 1980s. The first of these was the development of meta-analytic techniques that allowed the large body of literature on the treatment of offenders to be summarised in a quantitative fashion. The second major development was that of a theory of a psychology of criminal conduct. Prior to these developments, sociological criminology had been the domineering paradigm, which effectively relies on explaining criminal behaviour by locating the cause of crime in the social structure, and in keeping with that takes a greater interest in explaining aggregated crime rates, rather than the criminal behaviour of individuals (Andrews & Bonta, 1994).

One proposal arising from the change in the perspective on criminal behaviour was the suggestion made by Andrews et al. (1990) to focus on the following three principles for effective interventions:

- “1. Risk principle: Direct intensive services to the higher risk offenders and minimisation of services to the low risk offenders.
2. Need principle: Target criminogenic needs in treatment.
3. Responsivity principle: Provide the treatment in a style and mode that is responsive to the offender’s learning style and ability.” (Andrews & Bonta, 2010, p. 45)

The risk, need, responsivity model (RNR) is to be regarded as the core of effective programming according to Andrews and colleagues (Andrews et al., 1990; Dowden & Andrews, 1999, 2003). Over the recent years the number of principles has grown. But despite the fact that Bonta and Andrews recently (2007) outlined a number of principles for effective treatment, the three principles of the RNR model are still considered to be the core (Andrews & Bonta, 2010).

According to the RNR model, the risk-principle concerns who should be treated and the character of treatment should be guided by each offender’s level or risk of re-offending. In most meta analyses conducted to date, the level of risk has, so far, been defined by the offender’s previous criminality, where the more extensive the criminal history is taken to mean the higher the risk (Andrews et al., 1990; Dowden & Andrews, 1999, 2003; Lipsey, 2009).

Thus the offender with a high risk of committing new crimes is presumed to be the one who benefits the most from treatment, given that the treatment is of sufficient intensity. Some studies have even shown that treatment to low-risk offenders can have a negative effect (Andrews & Dowden, 2006).

The assignment of cases to treatment is assumed to be based on reliable and valid assessments of risk (Andrews & Bonta, 2010). Several meta-analyses have shown that, in general, measures that are not based on an adequate risk-assessment have no or only weak effects. And treatment programmes that do assess the risk and needs, and adjust the measures accordingly, are in general more successful in reducing recidivism compared to those that do not (Andrews et al., 1990; Dowden & Andrews, 1999, 2003; Lowenkamp, Latessa, & Holsinger, 2006). There is a rapidly growing body of evidence that adherence to the risk-principle will indeed increase a programme's effectiveness in reducing recidivism and the relevance of the risk-principle has been confirmed by research over more than a decade (Lowenkamp, Latessa, & Holsinger, 2006). A number of meta-analyses have confirmed and supported the principle of focusing on offenders who are at higher risk of re-offending (Andrews et al., 1990; Dowden & Andrews, 1999, 2000; Lipsey & Wilson, 1998; Lowenkamp, Latessa, & Holsinger, 2006).

On the basis of an evaluation of 13 676 offenders in 97 community based programmes, Lowenkamp, Latessa and Holsinger (2006) conclude that the strong evidence for the importance of adherence to the risk-principle implies that 1) objective and standardized methods for assessing risk are needed, and consequently the design of the programmes needs to be clearly tied to levels of risk; 2) offenders with lower risk levels are best served by appropriate supervision and those who are at higher risk should be kept in longer programmes designed to address their risk factor and needs; 3) offenders should not be classified as higher risk because they have one particular risk factor, but because of a multitude of risk factors. Thus, a range of services and interventions should be provided that target the specific criminogenic needs of the high-risk offender; 4) in order to have the greatest impact on recidivism, the choice of treatment should be clearly tied to an offender's risk level; and 5) sentencing should be tied to risk-level and judges need to apply validated methods when risk assessment is conducted. Equally important, correctional intervention options that are appropriate for the risk level of the offender need to be at the disposal of the judge.

The need principle is concerned with what should be treated. This principle differentiates between the concepts of criminogenic and noncriminogenic needs: Of the many needs an offender might have, some are functionally related to criminal behaviour — these are criminogenic needs — while others only have a small or no actual relationship to criminal behaviour — the non-criminogenic needs. Some major criminogenic needs are having pro-criminal

attitudes, an antisocial personality and procriminal associates. Some non-criminogenic needs are self-esteem, vague feelings of emotional discomfort and lack of ambition. Naturally, high-risk offenders will have more criminogenic needs and thus require both more services (as stipulated by the risk principle) and a greater breadth of services if they are to be tackled. The criminogenic needs are dynamic risk factors and they serve as the target of change in rehabilitative measures (Andrews & Bonta, 2010).

The responsivity principle concerns the how of the intervention. The responsivity principle deals with what cognitive and social learning practices are best applied in the treatment of a particular offender as a result of his individual strengths, ability, motivation, personality, and bio-demographic characteristics (such as gender, ethnicity, and age). Obtaining a good correspondence between the treatment and the characteristics of the client is fundamental for all psychological treatment (Barlow, 2004; Kazdin, 2008).

6. Aim

The overall aim of this thesis was to explore behavioural characteristics of, and individual differences among convicted young offenders referred to social services in Sweden, and to relate the empirical findings to developmental theories of antisocial behaviour and to contemporary research on risk assessment. This was achieved by studying a sample of male offenders, aged 15-17, participating in various community-based rehabilitative programmes (known as “påverkansprogram” in Sweden) organized and run by the local social services. At the time of the data collection, this was the most common measure taken with young offenders referred to social services (Brå, 2005).

The focus of this thesis was not, however, the programmes as such, but rather, the character of the young offenders participating in the programmes. They were investigated from three interrelated standpoints: The first was an exploration of the different developmental pathways that led to juvenile delinquency within this group. The second concerned the mental health of the participants, and the third was the matter of risk assessment in the everyday practice of the Swedish social services. The risk, that is, of the juvenile delinquents re-offending subsequent to attending the programme. These aspects were investigated in three interrelated studies, which were guided by the following research questions:

I) The purpose of the first study was to explore the character, diversity and severity of antisocial behaviour within a group of young Swedish male offenders, all of whom had been sentenced to participation in a ‘rehabilitative programme’ conducted by the social services within their local communities. The following research questions were investigated:

- How extensive is the self-reported history of antisocial behaviour among young offenders participating in the rehabilitative programmes?
- What dimensions of self-reported history of antisocial behaviour can be identified, based on the self-reports?
- On the basis of the patterns emerging from the self-reported history of antisocial behaviour, can different problem profiles be identified for the juvenile offenders?

II) The purpose of the second study was to investigate the mental health of young offenders in community-based rehabilitative programmes in Sweden.

- How does the prevalence of self-rated mental health problems among convicted young offenders in Swedish community-based programmes compare to that of the adolescent population at large?
- Is there a relationship between the severity of the patterns revealed in self-reported histories of antisocial behaviour, and the present level of mental health among convicted young offenders?

III) The overall objective with the third study was twofold. First to follow up criminality in a sample (n=189) of convicted males, aged 15-17, participating in community based rehabilitative programmes. Second, to investigate whether subgroups identified based on self-reported history of antisocial behaviour are reflected in registered data prior to and after the point of time for collection of self-reports at the start of the programme. The investigation aimed to answer the following research questions:

- To what extent do Swedish, male offenders in community-based rehabilitative programmes commit new crimes 18 months after the start of the programme?
- Are groups identified by self-reported history of antisocial behaviour at start of the programme also reflected in contacts with social agencies prior to start of the programmes and/or registered criminality prior to start of the programme and/or recidivism during the first 18 months after the start of the programme?

Both for the entire investigated group and for the previously identified subgroups recidivism was investigated in terms of a) frequency of committing new crimes, b) frequency of committing new crimes of violence, c) of those who re-offend, what is the time to committing new crimes.

7. Method

7.1 Participants and procedure

All three studies were based on data collected during the first 10 months of 2004 within a project conducted by the Swedish National Council for Crime Prevention. This research was approved by the Ethics Committee of the Swedish National Council for Crime Prevention and the Stockholm Regional Ethics Board.

In 2003, the National Council for Crime Prevention conducted a nationwide survey in Sweden's 290 municipalities to obtain data on the community-based rehabilitative programmes for convicted juvenile offenders. Of the 266 municipalities that responded, 121 (45%) reported having such programmes. All 121 of these municipalities, which, incidentally, included Sweden's three largest cities, were invited to participate in the investigation under discussion here. In the large cities, all social services are handled by smaller, local administrations. Therefore, in addition to the 121 central administrations, the letter of invitation was also sent directly to the 47 area offices of the three largest cities, making a total of 168 invitations. Initially, 90 of the 168 administrations expressed an interest and stated their intention to participate. Seventy of them actually participated in the investigation, either for the entire inclusion period, or part of it. However, in the end, only 49 municipalities completed the study, meaning that they had participants in their programmes who gave their informed consent to participate and who were included in the entire investigation.

It is plausible that the majority of the municipalities that dropped out after giving their initial agreement did so because they happened to have no participants engaged in programmes during the inclusion period. In fact, several of the municipalities that dropped-out explicitly reported that, contrary to their own expectations, they had no participants in programmes for the time being. The majority of the municipalities that declined to participate did so either because they had very few participants or because of ongoing changes within their programmes. It should also be mentioned that, in spite of two reminders, 23 of those invited (14%) never responded to the invitation. How-

ever, the 49 participating municipalities were representative of the 121 that were initially invited, in terms of geographical location, socio-economic structure and number of inhabitants.

In the participating municipalities, subjects were included consecutively during the first 10 months of 2004. During this period of time, all juvenile offenders who participated in community-based rehabilitative programmes and gave their informed consent were included in the study.

In each participating municipality, social workers involved in the programme assisted in the recruitment of subjects. Meetings were held with social workers representing each municipality immediately prior to the start of the inclusion period, to inform them about the routines to be adopted for data collection, as well as ethical issues. In particular, the requisites for informed consent, further described under 'procedure', were stressed.

In total, 261 presumptive participants, estimated to comprise 36% of all young offenders engaged in community based rehabilitative programmes throughout Sweden during the inclusion period, were asked to participate. The number is proportional to the number of participating municipalities and it is reasonable to assume that very few potential participants in these municipalities were not asked to participate. Of the 261 youths who were asked to participate, 221 agreed to be included in the study, and of these juvenile offenders, 23 (9%) were girls. This thesis only included the boys and data from the girls will be explored in future studies. This thesis was limited to the study of the young male offenders also as this by far is the largest group of young offenders that the courts refer to social services. Furthermore, as research in general has been focusing on young male offenders and the number of girls is fairly low, the possibilities for studying the girls in this sample are limited. Nevertheless, the data collected on the girls needs to be further investigated and will be the subject of a publication in the future. Four boys dropped out during the data-collection and another five were excluded because of missing data. Thus, the analyses presented here are based on 189 boys participating in juvenile justice programmes in 2004. When compared to all of the young males convicted during the first sixth months of 2004 according to the National Council of Crime Prevention (Brå, 2005), the boys included appear to be reasonably representative of all young male offenders who had been sentenced and referred to the social-services, in terms of their age, previous convictions, and the main offence behind the the verdict leading to attendance in the rehabilitation programmes (see Tables 1–2).

Table 1. Age of study participants, compared with age of all young male offenders in rehabilitative programmes, and age of total population of young male offenders referred to social services during the first six months of 2004.

Age in years	Study group	All young offenders in rehab programmes*	All young male offenders referred to local social services.*
	Per cent (no.)	Per cent (no.)	Per cent (no.)
15	9 (16)	23 (97)	23 (277)
16	38 (72)	39 (169)	36 (449)
17	34 (64)	31 (134)	32 (389)
18	18 (34)	7 (31)	8 (96)
19	1 (1)	0 (0)	1 (7)
15-19	100 (189)	100 (431)	100 (1208)

*Source, Brå 2005

Table 2. Main offence in present verdict, previous convictions and previous contacts with the social services for study participants compared with all young male offenders in rehabilitative programmes, and total population of young male offenders to social services during the first six months of 2004.

Main offence in present verdict	Study group	All young offenders in rehab programmes*	All young male offenders referred to local social services*
	Per cent (no.)	Per cent (no.)	Per cent (no.)
Violence	40 (76)	41 (178)	38 (460)
Theft	35 (66)	37 (159)	37 (451)
Traffic violation	8 (14)	2 (9)	2 (25)
Vandalism	4 (8)	4 (16)	5 (54)
Drug related	2 (4)	3 (12)	4 (44)
Other	11 (21)	13 (57)	14 (174)
Previously convicted	30 (55)	35 (152)	45 (538)
Previous contact with social services	45 (85)	55 (235)	64 (767)

*Source, Brå 2005

During the inclusion period, all of the participants in the programme and their parents were provided with written information about the study before being entered into the programme. At the starting point of the rehabilitative programme, the participants were again informed about the study, making it clear that their participation in the research was voluntary and independent of their participation in the programme or any other contact with the social services, and that the data would be strictly confidential and not passed on to the police or the local social services. The participants were also informed that, in providing their consent, they would be subject to follow-up by the researchers through registers of reported crimes.

After giving their informed consent, and before the programme started, the participants filled out the questionnaires. The social worker assisting in the data collection had been instructed to be available to answer questions concerning the questionnaire, without taking part in answering the questions in the questionnaire. The social workers were also instructed to provide the subject with an envelope for the filled-out questionnaires, which was to be sealed by the subject before handing it over to the social worker. Information about the rehabilitative programmes was collected using a form where the social worker in charge recorded the length and the content of every session. The majority of the programmes consisted of short interventions of between 3 and 10 sessions. The programme contents were quite diverse, but the most common element was various site visits to e.g., prisons, hospitals and police stations.

7.2 Measures

I) A self-report questionnaire was used to collect information about previous antisocial behaviour. In the present analysis, 21 items were included covering questions concerning e.g. vandalism, burglary, shoplifting, using and selling various types of illicit drugs, assault, fighting, robbery, and arson. Each question was answered by one of the following alternatives: Never (0), 1–2 times (1), 3–5 times (2), 6–10 times (3) or more than 10 times (4). The items in the questionnaire were largely based on items derived from a validated instrument used in a project comparing self-reports of delinquency in 13 countries (Junger-Tas et al., 1994 via Ring, 1999; Tuvblad, Grann, & Lichtenstein, 2006).

II) Mental health was measured by the Swedish version of the SDQ self-report questionnaire (the Strength and Difficulties Questionnaire; Goodman, 1997; Smedje et al., 1999; Malmberg, Rydell, & Smedje, 2003). The SDQ is a brief screening instrument consisting of 25 items on five subscales, covering four problem domains (emotional symptoms, conduct problems, hyperactivity-inattention and peer-related problems) and one domain of assessing personal strengths, in terms of pro-social behaviour. In addition, the instrument contains a brief impact supplement assessing whether the respondent perceives himself to have a problem and, if so, the impact that this has on his everyday life adjustment and on his relationship with his family and peers. The SDQ is a relatively new instrument, but it has already been widely used as a brief psychiatric screening tool for children and adolescents. It exists in both a parent and a teacher-rated version, and in a self-reporting version. The latter was originally intended for young people of 11-16 years old, and con-

tains the same 25 items as the parent and teacher versions but with slightly different wording (www.sdqinfo.com). The instrument's psychometric properties have been evaluated in several studies, including some Scandinavian ones (Goodman, 2001; Goodman & Scott, 1999; Koskelainen, Sourander, & Vauras, 2001; Malmberg, Rydell, & Smedje, 2003; Smedje et al., 1999; Lundh, Wångby-Lundh, & Bjärhed, 2008; Van Roy et al., 2006).

III) Information on previous contact with the social services were collected from the agencies' statements to the courts. Information of registered criminality prior to the start of the program was retrieved from the national criminal records.

Information on recidivism was collected from the index of suspicions, a register of reported crimes with reasonable suspicion and where this degree of suspicion is maintained after a police investigation, regardless of whether eventual prosecution took place or not. The point of time was defined as the date when the crime was reported. The time-frame for the follow-up was 18 months from the time at which the programme started.

7.3 Methodological considerations

In all empirical research, the design and data collection should, ideally, be guided by how best to answer the research questions under consideration. For example, for the purposes of the present studies, in addition to gathering responses to the self reports, it would have been desirable to include information from other informants, such as parents, teachers and the case social worker. Other more extensive measures might have given more in-depth information on, for example, antisocial behaviour and mental health. Likewise, the follow-up study would have contributed more information if data other than registered criminality had been included, and if the follow-up period had been longer. However, research is always limited by circumstances, such as time and money, and by all sorts of practical considerations. The latter has certainly been true for the project presented here, as the collection of data from the Swedish social services presents a challenge in many ways, but maybe most of all because it is immensely time-consuming. The choice of research methods was limited both by having to collect data within a project run by the National Agency for Crime Prevention, and by relying on the assistance of the social workers. Furthermore, the limited time a convicted young offender can be expected to spend on participation in a research project, as well as ethical considerations, limited the scope of the data collection, both in terms of the choice of what measures to use and the possibilities of retrieving data from other informants, such as parents and teachers.

7.4 Statistical analysis

I) Principal component analysis

Specific dimensions of self-reported delinquency were explored by investigating whether any variables in the set formed coherent, and relatively independent, subsets of variables, and by identifying those that did. As the main interest was to obtain an empirical summary of the data, with the intention of reducing the number of variables to a smaller, but still theoretically meaningful, number of components, Principal Component Analysis (PCA) was found to be the most suitable method (Tabachnik & Fidell, 2001).

Cluster analysis

Using the components in the previously performed PCA, individual component scores were computed and checked for reliability using Cronbach's alpha. The summarised standardised scores (z-scores) were used in a person-oriented cluster analysis with the intention of identifying problem profiles. The existence of outliers was also controlled for at this stage, using the component-scores to identify individuals who did not lie within the Euclidean distance 0.5 of any other case. Inclusion or exclusion of these cases had no noticeable effect on the cluster solution, and therefore all 189 cases were included in the analysis presented below.

The cluster analysis was accomplished with the guidance of the LICUR procedure (Linking of Clusters after removal of Residue, Bergman, 1998).

II) The SDQ-scores of the entire investigated sample of young offenders (n=189) and the results for each of the three subgroups were compared to a 'norm group'. This comparison group, representing the adolescent population at large, consisted of 5 363 boys of 16-19 years of age, who were part of a large-scale study of SDQ in Norway (Van Roy et al., 2006). The total problem score and each of the five subscales were compared for the groups. Comparisons were performed using both the means and the prevalence of scores within the clinical range defined by Van Roy and collaborators (2006). For the comparison of means, a two sample t-test was performed.

In addition, SDQ-scores for the three subgroups of young offenders were compared using ANOVAs in conjunction with Bonferroni post hoc test. For these analyses, SPSS 13 was used. For subgroup comparison of individuals scoring in the clinical range, the EXACON module from the statistical program SLEIPNER was used (Bergman & El-Khoury, 1998).

III) For subgroup comparison of contacts with social services and convictions prior to the start of the programme and for recidivism, the EXACON module from the statistical program SLEIPNER was used (Bergman & El-Khoury, 1998)

In order to investigate the incidence of differences in time until recidivism for those committing new crimes we conducted a survival analysis by employing the Kaplan-Meier procedures, comparing time for the three subgroups from start of program to date of the registering of a police-report of a new crime.

8. Results

Study I) Antisocial behaviour was extensive (Table 3) and, according to a principle-component analysis (Table 4), consisted of three dimensions: 1) adolescent delinquency; 2) violence and theft; and 3) drug-related crimes. The solution explained 51% of the variance, and also appeared to be conceptually sound; in other words, the behavioural dimensions made sense, indicating that the classifications corresponded to a genuine qualitative difference in the types of crime.

Table 3. Self-reported history of antisocial behaviour, expressed in percentage and median frequency.

Behaviour	Percentage of study participants	Median frequency
Truancy	97	11 times or more
Drunkenness	82	6-10 times
Shop-lifting	78	3-5 times
Infliction of injury to person	76	3-5 times
Use of marijuana	65	1-2 times
Initiation of fight	61	3-5 times
Vandalism	60	3-5 times
Illegal driving	59	3-5 times
Theft of bike, moped or motorbike	58	3-5 times
Threat, harassment, bullying	57	3-5 times
Burglary	41	1-2 times
Graffiti	41	3-5 times
Theft of purse or wallet	33	1-2 times
Car theft	31	1-2 times
Running away	27	3-5 times
Arson	23	3-5 times
Use of drugs other than marijuana	16	1-2 times
Cruelty to animal	16	1-2 times
Robbery	16	1-2 times
Dealing with marijuana	15	3-5 times
Dealing with drugs other than marijuana	9	6-10 times

Table 4. Factors of self-reported antisocial behaviour.

	Factor 1:	Factor 2:	Factor 3:
	Violence and theft	Delinquency typical of adolescence	Drug-related crimes
Threat, harassment, bullying	0.772	0.178	0.011
Robbery	0.727	-0.104	0.313
Initiation of fight	0.718	0.297	0.025
Infliction of injury to person	0.667	0.364	0.084
Theft of bike, moped, or motor bike	0.630	0.354	0.136
Burglary	0.619	0.349	0.097
Arson	0.606	0.146	0.149
Theft of purse or wallet	0.534	0.155	0.305
Car theft	0.504	0.356	0.037
Cruelty to animal	0.490	-0.157	0.245
Illegal driving	0.470	0.452	-0.163
Drunkenness	-0.014	0.640	0.168
Truancy	0.068	0.631	0.105
Shop lifting	0.354	0.581	0.175
Vandalism	0.464	0.554	0.164
Graffiti	0.316	0.526	0.163
Run away	0.174	0.492	0.017
Dealing with marijuana	0.277	0.094	0.829
Use of drugs other than marijuana	-0.028	0.335	0.767
Dealing with drugs other than marijuana	0.232	-0.038	0.696
Use of marijuana	0.088	0.459	0.684

Figures in bold represent factor loadings above cut-off 0.45.

Using cluster analysis, the participants were divided into four subgroups representing different levels and characteristics of delinquency, which explained 73% of the variance in antisocial behaviour.

- Cluster 1 (n=60): Boys exhibiting adolescent delinquency.
- Cluster 2 (n=65): Boys exhibiting pronounced adolescent delinquency.
- Cluster 3 (n=48): Boys exhibiting pronounced adolescent delinquency as well as criminality, including extensive violence and serious theft.
- Cluster 4 (n=16): Boys exhibiting pronounced adolescent delinquency as well as criminality including extensive violence, serious theft and drug-related crimes.

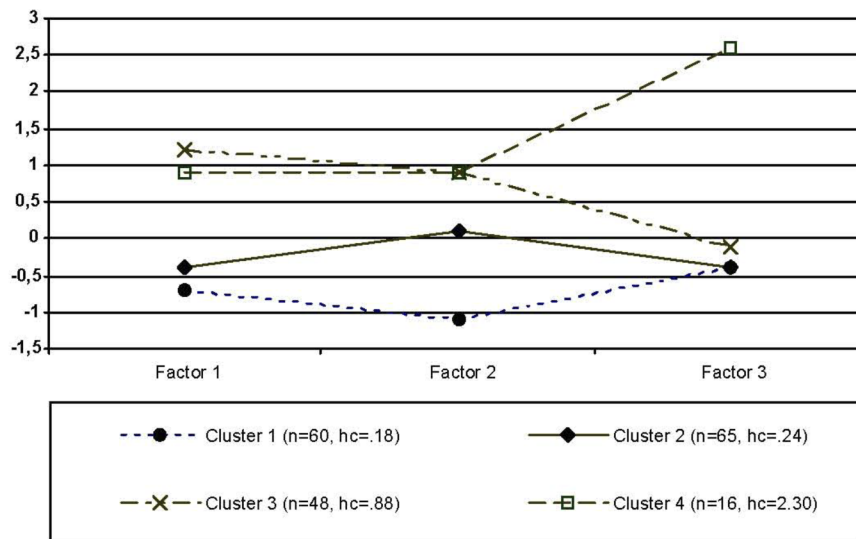


Figure 1. Graphical illustration of the cluster means of the preferred four-cluster solution expressed in z-scores. Factor 1 = Violence and theft; Factor 2= Adolescent delinquency; Factor 3 = Drug-related crimes; hc = homogeneity coefficients. N = 189.

Table 5. SDQ-scores for total and 5 subscales (mean and standard deviation) for norm group, investigated group and subgroups 1-3.

	Norm group (n=5364) M (SD)	Inv group (n=188) M (SD)	Sub-group 1 (n=60) M (SD)	Sub-group 2 (n=64) M (SD)	Sub-group 3 (n=64) M (SD)	Post hoc
Total	10.4 (5.6)	12.0 (4.8)***	10.38 (4.81)	11.42(4.43)	14.06(4.32)***	1 & 3*** 2 & 3**
Emotion	2.1 (1.9)	2.2 (1.9)	2.25 (1.96)	1.97 (1.7)	2.36 (1.95)	n.s.
Conduct	2.2 (1.8)	3.1 (2.0)***	2.33 (1.73)	2.75 (1.69)*	4.28 (1.96)***	1 & 3*** 2 & 3***
Hyper-activity	4.1 (2.2)	4.8 (2.1)***	3.95 (1.95)	4.88 (2.04)**	5.66 (1.84)***	1 & 2* 1 & 3***
Peer problem	2.0 (1.9)	1.8 (1.4)	1.95 (1.52)	1.83 (1.44)	1.77 (1.31)	n.s.
Proso- cial	6.8 (2.0)	7.5 (1.8)***	7.8 (1.55)***	7.75 (1.73)***	7.09 (1.92)	n.s.

Post hoc test for significant differences between normgroup and investigated group, and between clusters; 1-3; $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$, n.s. = no significant differences

Study II) The young offenders' SDQ scores were significantly higher than those of the norm group for the scores on the scales for total difficulties, conduct problems and hyperactivity/inattention (Table 5). Further comparisons showed that the young offenders also had a significantly higher incidence of scores in the clinical range (Table 6), and the problems that they reported had a more negative impact (Table 7) on their everyday lives than had been found for the problems identified in the comparison group. However, the heterogeneity was substantial, and the subgroup characterized by the most extensive history of antisocial behaviour was largely responsible for the overall results. In conclusion, we found a high incidence of mental health problems, primarily in the form of conduct disorder and hyperactivity/inattention among young male offenders referred to social services, and a clear association between the existence of such difficulties and extensive antisocial behaviour

Table 6. Borderline and Cut off SDQ-scores in the norm group, the entire investigated group, and for subgroups 1-3.

Borderline	Norm group (%)	Inv. group (%)	Sub-group 1 (%)	Sub-group 2 (%)	Sub-group 3 (%)
Total difficult. 16-18	7.4	10.1	3.3	7.8	18.8**
Emotional 5	5.4	6.4	5.0	7.8	6.3
Conduct 4	9.8	19.1*	15.0	15.6	26.6**
Hyperactivity 7	7.0	14.9	13.3	9.4	21.9**
Peer problems 4	7.4	4.8	5.0	4.7	4.7
Prosocial 5	13.3	10.6	5.0	9.4	17.2
Cut off	Norm group (%)	Inv. group (%)	Sub-group 1 (%)	Sub-group 2 (%)	Sub-group 3 (%)
Total difficult. 19-40	8.7	8.5	6.7	6.3	12.5
Emotional 6-10	6.3	5.9	8.3	1.6	7.8
Conduct 5-10	15.1	19.1	8.3	12.5	35.9***
Hyperactivity 8-10	6.9	8.5	1.7	9.4	14.1
Peer problems 5-10	12.0	4.3*	6.7	4.7	1.6**
Prosocial 4-0	12.5	3.2**	1.7**	1.6**	6.3

Percentage of individuals in respective subgroup. Asterisk indicates significant differences compared to norm group. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$

The prosocial scale is a measure of “strengths” and the only SDQ subscale for which a high score indicates superior psychological adjustment. The mean for the prosocial scale was significantly higher ($p < .001$) for the investigated group at large than for the norm group. The means for subgroups 1 and 2 were significantly higher ($p < .001$) than the mean for the norm group.

The impact supplement of the SDQ assesses whether the respondent is experiencing himself as having a problem, and to what extent perceived difficul-

ties have an impact on his overall distress and social capacity. The impact score for subgroup 3 was significantly higher than the impact score of the norm group, indicating that boys exhibiting pronounced antisocial behaviour also reported that their problems had an elevated negative influence on their every day life. This may be taken as an indication that they do indeed have insight into their own problems.

Table 7. Impact scores (mean and standard deviation) for norm group, investigated group and subgroups 1-3

	Norm group (n=5363)	Inv group (n=188)	Subgroup 1 (n=60)	Subgroup 2 (n=64)	Subgroup 3 (n=64)	Post Hoc
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	
Impact	1.3 (1.9)	1.5 (2.3)	0.85 (1.64)	1.7 (2.5)	1.9 (2.5)**	ns

Asterisk indicates significant differences compared to norm group. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$

III) The results are presented in tables 7-8 and figure 2. Table 7 shows the percentage of individuals who were suspected of committing crimes during the first 18 months after the start of the programme, both the recidivism rates as a whole and separate recidivism for crimes of violence. The results are presented for the entire group and for each of the three subgroups. As can be seen the majority of the group, i.e. 60%, was suspected of having committed crimes during the first 18 months after the start of the programme. Almost half of the participants, 48%, were suspected for crimes of violence during this period of time. As is indicated by the asterisk subgroup 1 had a significantly lower proportion of re-offenders than the investigated group at large. Vice versa, also indicated by the asterisk, subgroup 3 was responsible for a disproportionately high part of the participants that committed new crimes. In subgroup 2, on the other hand, the number of individuals committing new crimes was close to the mean of the investigated group at large.

Table 8. Registered criminality in general and registered crimes of violence during the first 18 months after start of programme.

	Recidivism (%)	Recidivism, violence (%)
Entire group (n=189)	60%	48%
Subgroup 1 (n=60)	47%*	32%*
Subgroup 2 (n=65)	57%	51%
Subgroup 3 (n=64)	75%*	60%*

Asterisk indicates recidivism for a subgroup as significantly (0.05) higher or lower than average for the entire group.

Table 9 contains the percentage of individuals that at some point had contact with the social services prior to the sentence that resulted in programme participation. It also shows the percentage of individuals that had been sentenced prior to the sentence that resulted in the programme participation. The results are presented for the entire group and for each of the three subgroups. As can be seen just below half of the entire group had had previous contacts with social services and about one third had been previously sentenced. As is indicated by the asterisk, subgroup 1 was responsible for disproportionately low part of the individuals that had had prior contact with social services and had been previously sentenced. Vice versa, also indicated by the asterisk, subgroup 3 was responsible for a disproportionately high part of the individuals that had had contact with social services and had been previously sentenced. In subgroup 2, on the other hand, the number of individuals committing new crime was neither higher nor lower than the mean of the entire group.

Table 9. Contact with social agencies and convictions prior to the start of programme.

	Previous contacts with social agencies	Previously convicted
Entire group (n=189)	44%	30%
Subgroup 1 (n=60)	34%*	12%*
Subgroup 2 (n=65)	46%	34%
Subgroup 3 (n=64)	53%*	41%*

Asterisk indicates recidivism for a subgroup as significantly ($p < 0.05$) higher or lower than average for the entire group.

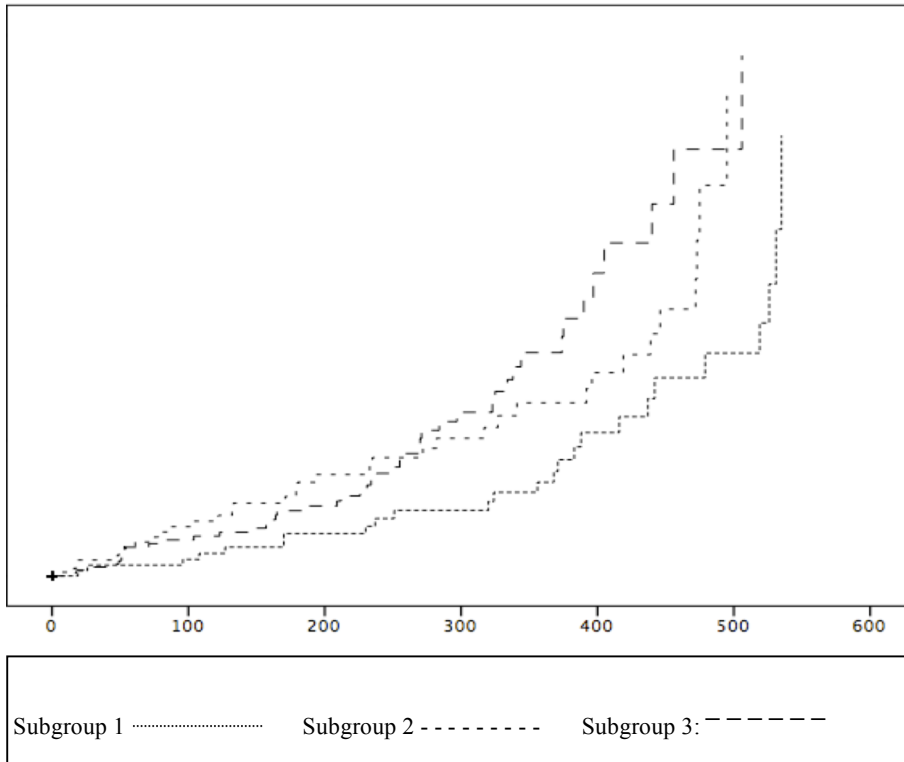


Figure 2. Recidivism in the subgroups by number of days since start of programme

The graphs in figure 2 represent the survival rates for each of the groups. The graphs demonstrate that the survival rates were highest for subgroup 1 and lowest for subgroup 3. Differences in the three subgroups were observed not only in how many that committed new crimes, among those who committed crimes there were also differences between the groups. The duration to committing a new crime was longest for subgroup 1 and shortest for subgroup 3.

9. Discussion

The overall aim of this thesis was to explore behavioural characteristics of and individual differences among Swedish young male offenders who had been convicted and referred to their local social services for rehabilitative measures. This was achieved by studying a sample of male offenders, aged 15-17, participating in various community-based rehabilitative programmes (known as “påverkansprogram” in Sweden) organized and run by the local social services.

In 2004, when the data for this study was collected, the social agencies proposed rehabilitative programme for 26% of the convicted young offenders that were referred to social services. Thereby rehabilitative programmes were the single most common measure taken with young offenders that had been convicted and referred to social services in 2004 (Brå, 2005). However, there was no clear definition available of what the basic properties of such a programme were. In connection to the collecting of data for this research a thorough documentation of the programmes was conducted. This documentation shed light to the problem that one could not draw any conclusions – once a young offender had been assigned to a rehabilitative programme – on what kind of interventions the individual actually had received. The programmes often contained site visits to the local hospital or the police station. Another common component was different kinds of pre-structured counselling sessions. Often counselling and site visits were combined. The way in which these and other components were combined and factors such as how many sessions the programme consisted of, and if it was an individual programme or performed in group sessions were in the different participating municipalities found in a veritable myriad of combinations. This made the programmes diverse to the extent that on a national level rehabilitative programme could only be regarded as a term used for a pre-structured measure, not a specific intervention (Brå, 2008). Nevertheless, since a rehabilitative programme was so frequently suggested to such a large group of young offenders a deeper understanding of the participants in these programmes was considered to be beneficial for the general field of interventions targeting convicted young offenders referred to social services.

The dearth of systematic documentation is not unique for rehabilitative programmes but is true in general for the measures taken with convicted young

offenders. The lack of data concerning both the rehabilitative needs of this group, and what interventions they are actually receiving, was regarded to make the further investigation of this group of offenders as a particularly urgent research task. Therefore, the self-reports that were collected from this nationwide group of convicted young offenders were considered to be a unique set of data with the potential to provide important information not only about young offenders in rehabilitative programmes but about young offenders convicted in Swedish courts in general. The data collected through self reports at programme start, was further complemented by registry data from prior social service records as well as previous convictions and follow-up data of registered criminality from the index of suspicions.

The investigation of this data was however not only conducted with the aim to just explore behavioural characteristics of and individual differences among Swedish young male offenders who had been convicted and referred to their local social services for rehabilitative measures. An additional aim was to discuss the empirical findings from this group of convicted young offenders from everyday practice in relation to 1) developmental theories of antisocial behaviour (Bartol & Bartol, 2009) and 2) the risk principle as a guide to assessment and intervention (Bonta, 2010; Lowenkamp, Latessa, & Holsinger, 2006). To relate the field of developmental theories of antisocial behaviour to the findings from Swedish everyday practice in this study was considered to offer a theoretical understanding of the behavioural problems the interventions aim to change. For interventions that aim to reduce recidivism among young offenders research has convincingly shown that adherence to the risk-principle, which simply states that intervention efforts should be matched to risk level, leads to a more successful outcome (Lowenkamp, Latessa, & Holsinger, 2006).

Therefore, to also discuss the results from the studies in relation to an analysis of adherence to the risk principle was regarded as a possibility to connect data from Swedish everyday practice to what is one of the major findings from intervention research in the field. Connecting empirical findings from the study of this group of young offenders to these two fields of academic knowledge was considered to make a possible contribution by making theoretical perspectives useful in the understanding and development of the everyday practice.

The following discussion is subdivided into five parts. Firstly general findings from the three studies (I-III) and the conclusions that can be drawn from them are summarised. In sections two and three the findings are discussed in relation to developmental theories of antisocial behaviour and with respect to adherence to the risk-principle, respectively. These first three parts constitute the basis for following discussion of the tension between scientific evidence

and everyday practice, which is presented in the fourth section. And finally, in section five, some future perspectives of the research and practice of social services work with convicted young offenders are developed.

9.1 Summary of prevalence and character of identified behavioural problems

9.1.1 Self reported histories of antisocial behaviour

From the self-reported histories of antisocial behaviour it could be concluded that the behavioural problems of the youths that participated were extensive. For example, more than 78% of the young males concerned had at some point in their lives inflicted injury on another person, 59% had driven illegally and 58% had stolen a bike or a motorbike. The median frequency with which all of these acts had been committed was 3-5 times for the entire sample, meaning, therefore, that half of the group had committed at least one of these acts 3-5 times or more, depending on the offence being examined. Compared to the available data from a general sample of Swedish ninth graders, who are about 15 years of age (Ring, 1999; Brå, 2010), these frequencies of antisocial behaviour were obviously high. The group was also found to be very heterogeneous, and based on the self-reported history of antisocial behaviour for distinct profiles were identified (cp. page 41) representing fundamentally different histories of antisocial behaviour.

9.1.2 Registered criminality and contact with social services prior to start of programme

A large part of the group had a troubled past, which was also confirmed by registry data both in the form of previous contacts with social authorities (44%) and in previous registered criminality (30%). The heterogeneity that was found in the self-reported data collected at the start of the programmes was also found to be present in the registered criminality previous to the point of collection of self-reported data. The subgroups with the most extensive histories of antisocial behaviour were responsible for a disproportionately large part of both previous contacts with social agencies and previous registered criminality. Likewise the subgroup reporting the least antisocial behaviour in their past was responsible for a disproportionately small part

than expected both of contacts with social agencies and previous registered criminality.

9.1.3. Registered criminality during the first 18 months after the start of the programme

The high crime-rates within the group were not only seen in the self-reported histories of antisocial behaviour and registry data prior to the start of the programme. Also crime rates in the follow-up were high. As many as 60% of the participants were registered as suspected for some kind of new crime within the 18 months immediately following the start of the programme and 48% of the entire group was registered as suspected for a crime of violence during this period of time. Thereby both self-reported and registered data before and after the start of the programme showed that on a group-level the programme participants exhibited high levels of criminal behaviour. Furthermore the subgroup profiles that were found in the self-reported data collected at the start of the programmes and confirmed by registry data prior to the programmes were also confirmed in registered criminality after the point of collection of self-reported data. The subgroups with the most extensive histories of antisocial behaviour were overrepresented among the re-offenders. By contrast, the subgroup reporting the least antisocial behaviour in their past was responsible for a significantly smaller part of the recidivism than expected. This was true both for all recidivism and for recidivism in terms of crimes of violence.

9.1.4. Self-reported mental health at the start of the programme

At the start of the programmes data on self-reported mental health was also collected by the use of the Strengths and Difficulties Questionnaire (SDQ). The sample's deviant scores on this measure also indicated that this was not a group of teenage boys who were just occasionally involved in criminal acts and who were caught incidentally. Rather, it showed that this was a sample with a need for qualified treatment not only in the areas of antisocial behaviour. The results gave further support to the conclusions that this was a group of troubled young males, as had also been concluded from the self-reported histories of antisocial behaviour and registered delinquency. The scores for the entire group was significantly higher than those of a large general sample of Norwegian boys of approximately the same age (Van Roy et al., 2006) for both the total difficulties scale and the subscales for conduct disorder and hyperactivity. A further analysis of the SDQ-scores showed that the group

was very heterogeneous also on this measure. While the scores of the subgroup that had reported the least extensive histories of antisocial behaviour were not significantly higher on any of the scales, the subgroup with the most extensive history of antisocial behaviour reported significantly higher scores than the comparison group, both on the scale for total difficulties and on the subscales of hyperactivity/inattention and conduct problems. The scores of subgroup 2, that reported mainly extensive delinquency typical of adolescence, were significantly higher on the hyperactivity/inattention and conduct subscales. This was also true for subgroup 3, with the most extensive history of antisocial behaviour, but for this group the differences in comparison to the norm group was greater and this group also scored significantly higher on the total difficulties scale.

The investigated group also reported significantly higher scores than the norm group on the prosocial scale. When running the comparisons by subgroups it was however found that significant differences for higher scores on the prosocial scale were only found in the two subgroups that mainly reported delinquency typical of adolescence and pronounced delinquency typical of adolescence. By contrast, the group with the most extensive behavioural problems had prosocial scores at the same level as the norm group.

9.2. Developmental theories of antisocial behaviour

The patterns observed in self-reported histories of antisocial behaviour were supported by the findings from both contact with social agencies and registered criminality prior to the programme, registered criminality the first 18 months after the start of the programme and self-reported mental health at the start of the programme. This strongly indicated the presence of fundamentally different behavioural problems among the young males that participated in rehabilitative programmes. To identify groups of individuals with different developmental pathways of antisocial behaviour was never the purpose of this study. For such conclusions the available data are insufficiently detailed. However, the results strongly indicate the incidence of different developmental pathways of antisocial behaviour among the young males participating in rehabilitative programmes. The results indicating this can be summarised as follows:

a) Differences in age of onset. Age of onset is central for all developmental theories of antisocial behaviour (Bartol & Bartol, 2009) including the developmental theories of Moffitt (1993), Paterson and co-workers (1989) and Loeber and Stouthamer-Loeber (1998). In all of those theories onset before puberty is considered as the most important indicator for a developmental

pathway that is on the course of a criminal career that is extensive in both time and scope. A retrospective study has limited access to data regarding age of onset. The data presented in the present thesis that was indicative of age of onset was 1. previous contact with social services, and 2. registered criminality prior to the start of the programme. For both these variables differences were found between the subgroups that had been identified through self-reports. There is however additional self-report data available that was not part of any of the three studies included in the thesis that indicates differences in age of onset. In the subgroup reporting the most extensive antisocial behaviour a significantly larger proportion than expected reported antisocial behaviour before the age of 12. By comparison, a significantly lower proportion of early onset was found in subgroup 1, which was characterized by reporting the least antisocial behaviour (Brå, 2008).

b) Differences in aggression. According to Moffitt (1993) physical aggression is one of the features characterising the life course persistent (LCP) offenders. Also in the theory of Loeber and Loeber-Stouthamer (1998) aggression is playing an important role in defining developmental trajectories of antisocial behaviour. If differences in aggression are considered to be reflected in differences in crimes of violence such differences were indeed observed in the investigated group. This was evident in the self-reported histories of antisocial behaviour that served as the basis for identifying the four profiles. The differences found in violent behaviour, which was an important variable in the identification of the four subgroups, was also reflected in registered criminality 18 months after the start of the programme.

c) Differences in self reported difficulties (SDQ). Even if all three developmental theories discussed here are concerned with characteristics that possibly could be reflected in the scores of the SDQ, this connection is most clear in the theories of Moffitt (1993) and Loeber and Loeber-Stouthamer (1998). For Moffitt (1993, 2007) this connection consists in that the child's risk derives from neuropsychological variations that are either inherited or acquired. Initially this can be observed as subtle cognitive deficits, difficult temperament, or hyperactivity. When it comes to Loeber and Loeber-Stouthamer (1998) the role of ADHD is central in distinguishing the two LCP-pathways of this model from one another. Thereby, for both these theories the differences particularly in hyperactivity/inattention are of interest. Also from other fields of research the finding of the combination of high scores on the subscales for hyperactivity/inattention and conduct problems in the subgroups characterized by extensive histories of antisocial behaviour is interesting. The combination of hyperactivity and conduct problems is a well documented risk-factor for serious behavioural problems (af Klinteberg, Andersson, Magnusson & Sattin, 1993; Bergman & Andershed, 2009; Lynam, 1996). The self-reported prosocial skills and relative lack of peer

problems among the young offenders are quite noteworthy. The findings could be interpreted as a lack of insight into one's own difficulties in meeting social expectations. However, an alternative interpretation is that the boys do see themselves as exhibiting prosocial behaviour, and that this may be realistic in the sense that they are functioning well within their own social context. During adolescence, the peer group is the most important social arena, and the young offenders may either not be aware of or not bothered by the fact that the adult world might see things differently. Criminality among teenagers is common enough so that it may not necessarily be considered socially deviant per se. There is also a strong social component to antisocial behaviour during adolescence, it generally occurs in the company of peers and antisocial acts during this period in life are more likely to occur in groups than is the case for adults (Erickson & Jensen, 1977; Warr, 2002). This is also in line with Moffitt's (1993) theory of adolescent antisocial behaviour, which claims teenagers desire to impress peers as one of the main reasons to delinquency during this developmental period.

d) Differences in self-reported prosocial skills (SDQ). There is a strong social component to antisocial behaviour during adolescence, it generally occurs in the company of peers and antisocial acts during this period in life are more likely to occur in groups than is the case for adults (Erickson & Jensen, 1977; Warr, 2002). Therefore, the high scores of prosocial skills might not be as surprising as they first seem. Particularly since the high scores mainly derived from the least criminal subgroup. Among the young offenders antisocial behaviour might even be regarded as a rather social activity during adolescence. For some adolescents, crimes are committed in order to become respected among peers and to accelerate social maturation (Moffitt, 1993).

e) Differences in self reported school problems and antisocial peers (Brå, 2008). This data, that was not included in the three studies, is to some extent relevant for all three theories but most of all for the theory formulated by Patterson (1982). His developmental model is largely based on social learning theory, which claims developmental trajectories for antisocial behaviour to be initiated, maintained, and diversified in a cumulative way through daily social experiences in a network that is aversive, inconsistent, and unsupportive (Snyder, Reid, & Patterson, 2003). In line with this theory the highest number of school problems and antisocial friends was reported in the two groups with the most extensive histories of antisocial behaviour (Brå, 2008).

In sum, both self-reported data and registry data lend support to the view that the subgroups do indeed represent different developmental trajectories. This conclusion is strengthened by the data coming from three points of time; before the start of the programme (contact with social services, registered criminality), at the start of the programme (self-reports), and 18 months after

the start of the programme (registered criminality). Even if the data limits the possibilities to draw more elaborated conclusions about the developmental trajectories that could be identified in this group, the data here is what can be expected to be available in a study that is not prospective and longitudinal. Still, to use several complementary theories contributes with a theoretical understanding of the data that was collected in everyday practice settings.

9.3. Adherence to the risk principle

The systematic differences found in this group are not only interesting from a theoretical perspective such as developmental theories of antisocial behaviour. It also provides important information about the adherence, or rather lack of adherence, to the risk principle when assigning young offenders to rehabilitative programmes.

Several meta-analyses have shown that, in general, measures that are not based on an adequate risk-assessment have no or only weak effects. And treatment programmes that do assess the risk and needs, and adjust the measures accordingly, are in general more successful in reducing recidivism compared to those that do not (Andrews et al., 1990; Dowden & Andrews, 1999, 2003; Lowenkamp, Latessa, & Holsinger, 2006).

Therefore it was surprising to find that young persons with quite heterogeneous, and for a substantial part of the group pronounced, behavioural problems participated in these programmes. In 2004, when data was collected, these community-based programmes were the single most common measure suggested for young offenders referred to social services. The programmes were however undefined and rather limited in scope, and with a content that in most cases has no or only a very limited connection to the more than two decades of research on what kind of interventions that have been shown effective in reducing recidivism.

The design of these programmes might have been adequate if they were only used for a well-defined group of offenders with a very limited history of antisocial behaviour. Instead they were targeting an extremely heterogeneous group including a substantial number of individuals that reported extensive histories of antisocial behaviour as well as mental health problems.

It is doubtful whether the participants were at all assigned to the programmes based on any kind of systematic assessments of risk and needs. Rather the results indicate that, despite the well-established empirical evidence for the importance of adherence to the risk principle for interventions to be efficient, this does not appear to be guiding the assignment of young offenders to rehabilitative programmes. As, apparently, the social services were not adhering

to the risk-principle when assigning young offenders to these programmes, it is reasonable to doubt whether the programmes could ever efficiently reduce recidivism, even if the content were to be changed into evidence-based measures. There is strong evidence that rehabilitative measures can effectively reduce recidivism if the right measures are targeting the right offenders (Andrews et al., 1990; Dowden & Andrews, 1999, 2003; Lowenkamp, Latessa, & Holsinger, 2006). This was quite clearly not the case in the sample that has been investigated here. In fact, the programmes the young male offenders were participating in could even be harmful as low risk offenders would most likely run the risk of participating in programmes along with high-risk offenders.

9.4. Practice and evidence

Data used in this research was collected within a project carried out by the National Agency of Crime Prevention (Brå). The agency's original intention was to compare the recidivism rates for different kinds of programmes, i.e. to investigate whether some programmes were more effective than others. The idea was to have a quasi-experimental design. At an early stage it became evident that even if any differences in outcome might have been detected between some agencies or kinds of programmes it would not be possible to attribute these differences to the differences in programme effectiveness. The programmes were carefully documented and were found to be vastly different both within and between the municipalities. This early finding made it impossible to clearly identify programmes that could be compared to each other in a meaningful way. Furthermore, as have been demonstrated in this investigation, these unspecific interventions were given to a very heterogeneous group. Therefore the plans to evaluate programme effectiveness in terms of recidivism rates could simply not be realised. In retrospect, with access to data that was collected about the programmes and the participants, the initiation of such a study may appear to have been rather naïve. But the study started out with no available systematic knowledge neither about the programmes nor the participants. The difficulties in investigating measures within the social services was carefully considered prior to the inclusion period but the diversity in how the measures were designed and applied was beyond what could have been imagined prior to the data collection actually took place. It turned out the measure rehabilitative programme (in Swedish "påverkansprogram") simply was a term used for any set of pre-structured components. These components and the combination of components varied to such a degree that sentencing a youth to a rehabilitative programme, is more like assigning him to a "black box" than to a well-defined measure.

The social service units are too numerous and too small for any statistically significant results to be obtained for specific interventions. Furthermore, no guidance is readily available in terms of specified, recommended assessment methods and rehabilitative measures. No support is provided in the form of resources, such as supervision of the content and application of the courses, or the choice of candidates for attendance on the programmes, nor is there any nationally organised continued education for young offenders. Finally, there is no nation-wide control of or information available covering the way in which young offenders are assessed and the type of interventions that are available in the many municipalities. What happens after the courts have referred a young offender to the social services is unknown, there is simply no documentation available. Thereby the referral of a young offender to social services may in fact be like referring him to a “black box” where there is no control over what interventions are performed, their goal and components. Around the time for this data collection Aggression Replacement Training was subject to increasing interest and implementation. Kauntiz and Strandberg (2009) however convincingly demonstrated that even when being based on a manual, ART programmes performed by the social service were so remote to the original manual that they hardly could be regarded as actually manualised.

Since this data was collected, the juvenile justice system has been changed somewhat. Rehabilitative measures are now intended to be reserved for those who are especially in need of interventions of this type, and other young offenders are to be assigned to community service. This change was based on the assumption that young offenders had been assigned to rehabilitative measures without having an outspoken need for interventions up until then (Ungdomsbrottsutredningen, 2004). However this assumption had not been systematically investigated, and indeed, the data from the study presented here shows that this assumption was false. In connection to the change in legal praxis, the National Board of Health and Welfare published a handbook for the social services on how to work with convicted young offenders (Socialstyrelsen, 2009). A handbook for the social services in dealing with young offenders is certainly very much called for. However, this handbook does not contain any clear definition of ‘needs’ as seen in a practical context, nor does it provide national practical guidelines on how to assess needs. Taking into consideration the small numbers of convicted young offenders that the majority of the municipalities are working with (Brå, 2005) – which is rather unlikely to have changed substantially in just a couple of years – it is hardly feasible that the municipalities can allocate the resources, develop systematic routines, and provide the requisite clinical experience to perform reliable assessments of young offenders.

Since this data was collected, more effort has been made to spread knowledge to the social services about which measures have been shown to be effective in reducing the recidivism rates of young offenders. As a result of a governmental task force, the National Board of Social Welfare published an overview of research on effective measures for young offenders in 2010 (Andershed, Andershed, & Söderholm, 2010). For the reasons discussed above, however, it is debatable to what extent such publications can be useful for the Swedish social services. Furthermore, the fundamental findings of the last two decades of research that the assessment of risk and the adjustment of interventions according to risk are essential for effective interventions, the many small municipalities in Sweden are unlikely to come up with effective interventions for young offenders.

The conflict between justice and welfare in Sweden, as well as in most countries, is prominent within the juvenile justice system and further restricts the possibility to develop effective measures for convicted young offenders. Over the past 30 years, developments have taken place in the direction away from welfare towards the implementation of justice (Hollander & Tärnfalk, 2007). At the same time, the demands on the social services to apply effective measures have risen. Ironically, the changes in the legal system since this data was collected have not provided the social services with the resources required to perform effective measures directed at young offenders, or made specific assessment routines mandatory. Instead, they have obliged the municipalities to 'offer' extensive community service to young offenders. This is an alternative that is likely to impose considerable demands for resources on the communities, but which has shown no effect on reducing crime (Nyström & Brännström, 2010)

The emphasis on the application of justice in parallel with the increasing demands for effective measures to be implemented becomes even more contradictory in the light of a recent meta-analysis conducted by Petrosino and colleagues (2010), where the result shows that the justice procedure itself has no effect on reducing recidivism rates.

The results from this study point to the fact that there are several obstacles to evaluate the effect of the measures taken with respect to young offenders. This is, of course, of great concern for a juvenile justice system that has a strong rehabilitative focus. The difficulty of evaluating the effects of Swedish practice where the rehabilitation of antisocial youths is concerned has been pointed out previously by Holmquist, Hill and Lang (2005) and Kaunitz and Strandberg (2009). Both of these studies intended to evaluate the effects of Aggression Replacement Training (ART), which, on paper, is a well-defined measure. Nevertheless, in these studies, the heterogeneity of the participants and the variability in how the programme was implemented, as well as the

problems creating relevant comparison groups, were some of the reasons why these studies failed to collect data that enabled reliable conclusions to be drawn about the effect of ART compared to other measures.

If it is neither possible to implement measures that have been shown to be efficient in other countries, and if it is not possible to evaluate measures within the social services there will be no way to find out whether the Swedish juvenile justice system actually does rehabilitate young offenders. The juvenile justice system has been criticised from a justice perspective as being unforeseeable and arbitrary (Sarnecki & Estrada, 2006). From a legal perspective, it may of course be problematic to focus strictly on the needs of the young offenders. The lack of proportionality and foreseeableness could however be justified if young offenders received measures according to their needs that are effective in reducing the risk for recidivism. The results from this study shows however that this is hardly the case, leading to the conclusion that the Swedish juvenile justice system in practice might neither promote justice, nor welfare.

9.5. Future research

Bonta (2010) claims that the major developments in offender-related research have risen from the availability of new statistical methods enabling data to be analysed reliably from a large number of studies through a meta-analysis, and from the movement away from traditional sociological criminology towards a psychological approach to criminal behaviour. This research, however, shows that the results of meta-analytical studies have had quite limited influence on the everyday practice of attempting to rehabilitate convicted young offenders. One of the central reasons for this has been suggested here to be the organisation of the Swedish juvenile justice system, which provides unfavourable conditions for evidence-based practice. These basic conditions for everyday practice can and will only be altered if there is the political will to decide to implement reform. Researchers and practitioners can only be aware of and bring attention to the problems that the existing decentralized system brings about. Therefore academic efforts should not only focus on the effects of specific measures but also to strive to identify the way in which theory and research can contribute to the body of knowledge available by providing knowledge that despite the practical limitations can be useful in everyday practice.

Furthermore, research that could make a significant contribution in the social services work with young offenders need to be interdisciplinary, including disciplines such as social work and political science. Several fields of psychology, such as developmental psychology and social psychology, could

however contribute to the understanding of young offenders. Specific theories such as those of Moffit (1993), Patterson (1982), Loeber and Loeber-Stouthamer (1998) can lend conceptual tools for better understanding young offenders in regular practice. Furthermore, this investigation shows that research adopting a broader perspective than that of the effects of specific interventions might contribute important knowledge by further investigating the character of young offenders. If practitioners are made aware of the presence of different developmental pathways and in particular, that antisocial behaviour among young offenders and the prevalence of mental health problems in this population are factors of great importance for designing measures that corresponds to the needs of this group, considerable advances could be made in the field. Furthermore being aware of the variety of needs in this group and having the tools and the competence to assess them is a precondition to adjust interventions according to risk level, which is in itself fundamental for effective intervention.

The high response rate, low partial attrition and the obviously valid data retrieved from self-reporting also reveal that this kind of data is useful for collecting more information about young offenders. This group has often been regarded as one that is difficult to engage in research, but the high percentage of young offenders that gave their informed consent tells a different story. There could also be doubts about whether this group is willing to and capable of reporting reliable and valid information about themselves. It may be well worthwhile to further develop and use self report techniques to be used with young offenders in an applied setting, in assessment and when assigning appropriate measures. Altogether it can be concluded that, if asked, this group is both willing to provide researchers with relevant information of high quality and capable of supplying it.

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