7 – General Summary and Discussion

Part of this Discussion was previously published as:

Over the years the way in which the risk for future violent behaviour is assessed has undergone various changes, not only in form but also in content. Currently, a combination of actuarial assessment of risk and protective factors adjusted by Structured Professional Judgment by the clinician is a popular paradigm. That there currently is very limited support for the use of structured risk assessment instruments as a method for violence prevention is troubling. Research efforts seem to focus on the development of new risk assessment instruments and on establishing their psychometric properties, rather than on testing the effectiveness of existing instruments in the prevention of future violent behaviour. Since the prevention of future violent behaviour is the main aim of treatment in forensic psychiatry, investigation of this issue seems warranted. This thesis aims to do so.

In this final chapter the main findings from the Risk Assessment and Care Evaluation (RACE) study will be summarized and reviewed. Additionally, strengths and limitations will be discussed. Lastly, the implications for both clinical practice and research will be considered. First, however, the context for this thesis will be provided.

**CONTEXT OF THE STUDY**

Incidents involving the mentally disordered have received extensive media coverage and left their marks on Dutch society (e.g., the Alphen Spree Shooting in 2011). As a result thereof, the public’s attention for violence committed by the mentally disordered has increased. Consequent pressures on the government have led to various reports about this problematic group of people (e.g., van der Horst et al., 2012; Nagtegaal, 2010; van Nieuwenhuizen et al., 2011; Wartna, Alberda, & Verweij, 2013). In addition, reforms of both the judicial and mental health care systems are ongoing. The most notable changes will be the introduction of two new laws sometime in the near future: the Forensic Care Act (FCA) and the Mandatory Mental Healthcare Act (MMHA).

As a result of these laws several things will change: 1) the ultimate responsibility for mentally disordered offenders will no longer only reside with

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1 See Chapter 1.
2 Wet forensische zorg, Wfz
3 Wet verplichte Geestelijk Gezondheidszorg, WvGGZ
the Ministry of Security and Justice\textsuperscript{4} but will instead be shared with the Ministry of Health, Welfare and Sports\textsuperscript{5};

2) interventions will be aimed at the psychiatric disorder contributing to the risk of recidivism rather than at the offence itself, and 3) enforced out-patient treatment becomes possible thus reducing the need for more expensive clinical care (van der Horst et al., 2012; Scholten, 2012). These changes are commonly expressed as “mental health care, unless ….” (Council for Public Health Care\textsuperscript{6}, 2012). Combined with recent budget cuts the introduction of these two new laws is thought to result in more out-patient treatment at the cost of clinical capacity (van der Horst et al., 2012).

The aim of these adaptations is to achieve maximum results with reduced resources. Moreover, it would keep the burden associated with treatment on clients themselves as low as possible. However, as discussed in Chapter 1, violence involving the mentally disordered poses a huge problem for society. Not only direct material and psychological costs should be considered but also the long-term protection of the community against future violence involving those likely to recidivate. The shift to more out-patient treatment therefore makes it increasingly important to quickly and correctly determine who is likely to become violent (again) and to intervene, either through treatment, incarceration or both. Moreover, these changes mean that there will be less stringent supervision of clients in general. In forensic psychiatry it is common practice to use risk assessment instruments to help determine which offenders pose the highest risk\textsuperscript{7}. Additionally, risk assessment instruments help treatment staff in the detection of the risk and/or protective factors which should be addressed through treatment. However, although risk assessment instruments are part of common practice in forensic psychiatry, no study to date has examined the preventive effect of their use on recidivism (emphasis added; de Ruiter & Nicholls, 2011).

An additional challenge in forensic psychiatric treatment is client motivation for treatment and the establishment and maintenance of a

\textsuperscript{4} Ministerie van Veiligheid en Justitie, VenJ
\textsuperscript{5} Ministerie van Volksgezondheid, Welzijn en Sport, VWS
\textsuperscript{6} Raad voor de Volksgezondheid en Zorg, RVZ
\textsuperscript{7} For a more extensive description of the origins of risk assessment instruments and the various forms they take please see Chapter 1.
therapeutic relationship (Drieschner & Boomsma, 2008). In both regular and mental health care this issue has been successfully addressed through Shared Decision Making in which client and clinician share their information, reach an agreement about treatment and then implement it (Drake et al., 2009; Hamann et al., 2003; Joosten et al., 2008; Joosten et al., 2009). Moreover, some evidence has been found linking lower levels of offending of clients to them having a therapeutic relationship with their case manager (for an overview see: van der Horst et al., 2012). The addition of Shared Decision Making to our intervention therefore seems a sensible choice.

**Main findings**

The RACE study (trial number 1042 at www.trialregister.nl), is the first randomized controlled trial addressing the issue of violence prevention through the use of risk assessment and Shared Decision Making. In a unique collaboration, the three out-patient forensic psychiatric clinics in the north of the Netherlands all participated (i.e., locations Assen, Leeuwarden and Groningen). The size of the sample (n>600) makes our findings generalizable to out-patient forensic psychiatry in the Netherlands in particular.

An in-depth description of the way in which our intervention could be used on an individual level for a typical client receiving treatment in out-patient forensic psychiatry is provided in Chapter 2. In Chapter 3 of this thesis we examine the role and usefulness of including dynamic risk and protective factors as well as a final structured professional judgment in the prediction of violent behaviour. This examination is continued in Chapter 4, where the potential contribution of client self-assessment for violence prediction is investigated. In Chapter 5 we provide the first test of a preventive effect of the use of risk assessment combined with Shared Decision Making on recidivism. Lastly, in Chapter 6, an examination of client functioning and well-being as linked to the intervention is presented. Findings as reported in these chapters are summarized below.

In Chapter 2 a detailed description is provided of a typical client receiving treatment in one of the out-patient clinics, and the way in which our intervention was incorporated in the care he received. Mr. J. is a typical
example of the clients in out-patient forensic psychiatry in that he is a fairly young man (aged 24 at the time) who has had a somewhat troubled past including physical abuse by his stepfather and the use of drugs at an early age. He has been convicted several times for offences ranging from burglary and theft to sexual and physical assault. He was referred for treatment by probationary services after assaulting his girlfriend. His main psychiatric diagnosis is one of Personality Disorder Not Otherwise Specified with Antisocial, Narcissistic and Dependent traits. He was never diagnosed with Schizophrenia or with any other form of Psychosis.

As the first step of our intervention, both J. and his case manager completed the Short Term Assessment of Risk and Treatability (START; Nicholls et al., 2006; Webster et al., 2006) to prepare for their discussion of the treatment plan (see Appendices A and B for Dutch versions and Appendices D and E for English versions). During this second step of the intervention, they followed a protocol developed to increase Shared Decision Making. The aim of this approach at reaching a consensus about future treatment goals between case manager and client (see Appendix C). At consecutive treatment planning sessions this procedure was repeated with the addition of an evaluation of previous agreements (see Appendix C). Both case manager and client provided a rationale for their choices and proposed treatment they considered appropriate. Overall, both case managers and clients found this approach useful and informative.

In Chapter 3 we tried to address several concerns about studies to date which examined the predictive validity of the START. Specifically, so far results have been restricted by one or several of the following limitations: small samples, only examination of in-patient settings, completion of the START by research assistants rather than clinicians, and completion of the START on case files rather than in clinical practice (Braithwaite et al., 2010; Chu et al., 2011a, 2011b; Desmarais, van Dorn, et al., 2012; Desmarais, Nicholls, et al., 2012; Gray et al., 2011; Nicholls et al., 2006; Nonstad et al., 2010; Wilson et al., 2010). We specifically examined if the prediction of future violent behaviour with historic risk factors could be improved by including 1) dynamic risk factors; 2) dynamic protective factors, and 3) the final structured professional judgment. We then investigated if models should include the full strengths and vulnerability scales or if inclusion of the key strengths and critical vulnerabilities sufficed for successful predic-
tion. Predictive validity for all these models was examined for a follow-up period of 3 and of 6 months.

Findings showed that inclusion of neither dynamic risk nor protective strength factors could improve the prediction of violent behaviour based on only static, historical risk factors. However, predictions over a 6-month period were significantly improved by the addition of a structured professional judgment of the case manager, informed by the completion of a risk assessment. Although this final model was only modestly accurate (AUC = .65) in predicting future violent behaviour, our findings are similar to what has been reported for the START in the clinical settings where it was developed (Braithwaite et al., 2010; Chu et al., 2011a; Desmarais, Nicholls, et al., 2012). Furthermore, our findings provide further support for the use of the structured professional judgement approach in risk assessment (Douglas & Kropp, 2002).

In Chapter 4 we addressed an issue that has hitherto been fairly unexamined, that of client self-assessment of future risk for violent behaviour. Clients have their own unique insights and perspectives into why they get involved in violent or criminal behaviour. As such these could be valuable additions to risk assessments made by case managers. We examined this for 201 clients in out-patient forensic psychiatry, testing if the clients perspective could improve the predictive validity of case-manager rated STARTs.

We found that clients were able to complete the instrument but that agreement between client and case manager on key strengths and critical risk factors was poor (mean correlation was -0.18 and 0.20 respectively). This different selection seems to reflect different views on why clients (re-) offend and should be addressed in treatment planning, for instance, by introducing shared decision making of the treatment plan. This is important because the optimal multivariate prediction model included not only the case manager’s final structured professional judgment for violence against others but also the client’s self-assessed critical vulnerabilities and key strengths (AUC = .70). Clients self-assessments therefore seem to be a useful addition to clinicians ratings of future risk.

Promising as these findings for the predictive validity of the START in our out-patient setting may be, the main aim of forensic psychiatry is
the reduction of recidivism. In Chapter 5, therefore, we tested whether we could achieve this goal by combining risk assessment with Shared Decision Making of the treatment plan. We randomized 58 case managers and 632 of their clients to either Intervention (n = 310) or Care-As-Usual (n = 322). Intention-to-treat multilevel logistic regression analyses on case manager reported outcomes showed that there was a general treatment effect. That is, at baseline 22% of clients had been involved in an incident, which at follow-up was reduced to 15%. This reduction was highly statistically significant (p < 0.01). However, we found no significant differences between the two treatment conditions (Odds Ratio = 1.46, 95% CI: 0.89 – 2.44, p = 0.15), showing that our intervention did not result in additional reductions of recidivism. Due to implementation issues only 65% (n = 201) of clients in the intervention group actually received the intervention at least once (as treated). An even smaller group of 23% (n = 72) received it multiple times (as planned). Since this could have influenced our findings we repeated our analyses for “as treated” and “as planned” groups. Results however remained the same. Repetition of these analyses on client reported outcomes did not lead to new insights or different conclusions.

We hypothesized that these findings might, in part, be due to a shift of treatment to more client functioning and Quality of Life factors rather than those associated with risk of recidivism. If so, then this would provide strong support for the Risk-Needs-Responsivity theory of offending behaviour over the Good Lives Model (resp RNR and GLM; Andrews et al., 1990; Ward & Stewart, 2003). As discussed in Chapter 1, GLM states that recidivism can be reduced by providing the offender with socially acceptable ways of increasing Quality of Life and well-being thus reducing the offenders need to rely on unacceptable ways of obtaining a Good Life. RNR opposes this, stating that to reduce recidivism you have to address risk factors. If our intervention had therefore shifted treatment to the (sole) improvement of factors associated with client functioning and Quality of Life, this might then explain why we found no effect of the intervention on recidivism rates. We tested this hypothesis in Chapter 6. However, we found no evidence for such a shift. Again we found that clients in both study groups improved significantly over time, but that none of these improvements could be attributed to the intervention (all p >

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8 Discussed more fully below.
0.25 for multilevel linear regression models testing the effect of the intervention on the various outcomes).

LIMITATIONS AND STRENGTHS

We faced several challenges when we conducted the RACE study. Some of these challenges are a result of the study design, others of the implementation of research in clinical practice.

The biggest challenge to our study and findings comes from the problematic implementation already mentioned above. Because of this, 44% of eligible clients could not be included in the study. Of those included in the Intervention group, only 65% (n = 201) actually received the intervention. An even smaller group (23%, n = 72) received the intervention as planned, that is, repeatedly. An intervention that was not applied cannot be expected to have an effect. An intervention that was only partly applied according to protocol cannot be expected to have the full effect. Therefore, such imperfect implementation makes it difficult to show additional improvements over care-as-usual. Even more so if this care-as-usual has been provided to those in the intervention group for a considerable time before their inclusion in the study. Those that were included had on average received care-as-usual for 26 months before their inclusion in the study. All of these factors played a role in this study.

Particularly the results reported in Chapter 5, could have been negatively influenced by the imperfect implementation of our study plan. Therefore we followed-up on our initial intention-to-treat analyses using case manager reported outcomes by also conducting “as treated” and “as planned” analyses for outcomes as reported by case managers and as reported by clients. Somewhat disappointingly, none of these additional analyses showed an effect of the intervention on violent outcomes. Since the clients who received the intervention multiple times might be selected groups, the results from these supplementary analyses should be interpreted with caution. Nevertheless, the negative results of these additional analyses make it unlikely that imperfect implementation could be the sole explanation for not finding an effect of the intervention on violent and criminal behaviour.
Still, a further examination of the reasons for the poor compliance with the study protocol is necessary as these problems are likely to play a role in many settings where such measures may be implemented. We found that we only had limited success in motivating case managers to carry out activities for the study on a long term basis. Specifically, since data collection spanned a period of 4 years, case manager motivation tended to fluctuate both on an individual and an institutional level. Implementation of new software, mergers with other mental health care providers and changes in staff all exerted their influence by drawing the clinicians’ attention away from their work for the study. Furthermore, evaluations with clinicians showed that they mostly experienced the tasks necessary for the completion of the study as burdensome, particularly the filling out of forms and providing anonymized information to the researchers. They objected far less to the intervention itself.

To accommodate case managers as much as possible we regularly visited all locations and joined staff meetings. Additionally we send monthly overviews to case managers and scheduled appointments with them to provide them with support in completing the various questionnaires at the appropriate time. We composed binders for each client containing the necessary questionnaires, which worked better for some case managers than others. We considered a more digital approach to the data collection, but at the time of the start of the study (September 2007) the challenges this would pose from an IT point of view were such that the study would have been delayed too much. We therefore decided to collect data the old-fashioned way, using pen and paper. However, given the technological changes that have since taken place (e.g., almost everybody now has a smart phone and knows how to use it) future studies might want to examine the possibilities that have opened up.

With the recent introduction of technological developments like the Electronic Patient File and the implementation of Routine Outcome Monitoring some of these necessary, but time consuming tasks might be reduced. As researchers we would now be able to contact the ICT department and ask them for anonymized demographic, background and outcome information. However, at the time the RACE study was conducted all this information had to be provided by the case manager by completing pen and paper protocols. This thesis then also shows that proper implementation in clinical care depends on personnel and orga-
izational factors that need to be addressed in a coherent and persistent way before meaningful results can be obtained. The implementation of a randomized controlled trial has its particular challenges, but these are not so different from the efforts needed to change clinical practice in and of itself (Forsner, Hansson, Brommels, Wistedt, & Forsell, 2010).

Although the less than perfect implementation of our protocol should be considered the main limitation of our study, it should be noted that we also found moderate levels of agreement between clinicians independently completing the START for the same client (see Chapter 3). This is a cause for concern, since a lot may depend on such a risk assessment. For instance, treatment planning can, and should (Andrews & Bonta, 2010; Ward, Melser, et al., 2007; Whitehead et al., 2007), be guided by the outcome of structured and evidence-based risk assessment. Yet if two clinicians assessing the same client come to very disparate conclusions about which factors need attention, how can we be sure that a client actually receives the most appropriate treatment?

A possible solution to this problem is to have a consensus meeting of the treatment team to determine a final risk assessment. This approach is recommended by the developers of the START (Webster, Martin, Brink, Nicholls, & Desmarais, 2009), and in a clinical setting, where the treatment team will be familiar with all clients, it is a feasible approach. However, in the out-patient setting in which the RACE study was conducted, more often than not clients were only known to their own case manager and such a consensus meeting was therefore impossible. Possibly, additional training of case managers can increase consistency of assessments with the START across case managers, as it has been shown to do for research assistants (Desmarais, Nicholls, et al., 2012; Wilson et al., 2010). We did offer several booster-sessions for case managers, but attendance was low. Future examinations of the START might, therefore, want to pay explicit attention to this issue.

Despite these limitations, findings for the accuracy of predictions and the contribution of risk and protective factors and the structured professional judgment were comparable to those of earlier studies, and as such seem unlikely to have had a major influence on the findings reported in Chapter 3. Moreover, it is common clinical practice at the participating out-patient settings that clients are mostly seen by one case manager and
that no team evaluations of the client are conducted unless deemed necessary. As such then, our approach and findings reflect clinical practice.

A third limitation of our study is that due to the nature of the intervention we were unable to blind either case managers, clients or both to their randomisation status. This may have resulted in different levels of client and case manager commitment in the two groups (Campbell et al., 2000). We have some indications that this might be so, as significantly lower proportions of clients from the control group were willing to participate in baseline interviews compared to clients from the intervention group which may be characterized as sampling bias. As a result, the clients from the control group may be less representative and yield better overall outcomes than if all patients within this condition had been recruited. However, there were only minimal significant differences on a small number of factors between clients in the control and intervention group at baseline (see Chapters 5 and 6), making it unlikely that our data are negatively influenced due to a sampling bias. In contrast, one would expect the lack of blinding to favour the intervention group above the control group as far as the result of the intervention is concerned. As discussed above, our findings for both groups for both violent and client functioning outcomes were similar, suggesting that such an effect did not play an important role in explaining our findings.

Aside from these limitations our study also has several strengths. To our knowledge this is the first randomized controlled trial investigating the preventive effect of risk assessment in clinical practice. Studies so far have only reported on the prediction of violence through the use of risk assessment instruments. Admirable as the progress in the field has been as a consequence of these studies, the ultimate goal of forensic psychiatric treatment is to prevent new criminal/violent acts. This thesis fills that gap. An additional strength of this study is that we not only included case managers assessment of clients’ risks but also clients’ self-assessments which proved to be a valuable addition to the prediction of future violent behaviour. Additionally we implemented a protocol emphasizing Shared Decision Making of the treatment plan. This has particular importance in forensic psychiatry where the need for care often continues even though clients may no longer experience formal pressures to do so. Therefore, boosting and maintaining client motivation for treatment is a key part of case managers’ work. We found that including the client’s perspec-
tive is a worthwhile approach in forensic psychiatry. Particularly since clients reported many more violent and criminal incidents during study interviews than registered by their case managers in their case files (see Chapter 5 for details).

**Implications for Clinical Practice**

Taken together these findings can be explained in two ways. Firstly, it is of course possible that our intervention was simply ineffective. There is currently very limited support for the use of risk assessment instruments as a method for violence prevention. So far only a small number of studies, 4 including our own, examined this issue (Abderhalden et al., 2008; Kling et al., 2011; van de Sande et al., 2011). A definitive answer about the contribution of structured risk assessment to violence prevention cannot be given at this time. The first signs are not good. The 4 available studies find either no significant reduction of violent outcome, or the interpretation of their findings is problematic due to differences between study groups at baseline. Differences in clinical setting of the various studies further complicate the integration of findings. Our own data were collected in a community based forensic mental health setting. In contrast, the other three studies were completed in acute psychiatric (admission) wards. These two settings service different populations, making comparisons less straightforward. It is too early for a proper systematic review on this subject, but the overall picture is not yet convincingly in favour of changing treatment policies by systematically employing structured risk assessment in clinical care.

Regarding Shared Decision Making and its effect on client functioning and Quality of Life there is a bit more of an evidence base from regular mental health care which hints at its ineffectiveness specifically in our sample. As Joosten et al. (2008) have shown, Shared Decision Making can independently improve client functioning and outcome. Their conclusions are drawn from studies mostly concerned with general medical conditions like ischemic heart disease and cancer. In contrast, Borschmann et al. (2013) recently conducted a randomized trial of shared crisis plans for people with a Borderline Personality Disorder. They found no significant differences between those receiving care-as-usual and those receiving the intervention in terms of frequency of self-harm,
client functioning or well-being. Although their sample was fairly small (total sample n = 88) and therefore may suffer from a lack of power, their findings with respect to Shared Decision Making are in line with our own. What the Borschmann et al. (2013) study has in common with the RACE-study is that most participants suffered from a Personality Disorder. This was not the case for the studies reviewed by Joosten et al. (2008). Even though this may seem counter-intuitive, it is possible that Shared Decision Making is just not suitable for those with more pervasive psychiatric conditions like Personality Disorders. Further investigation of the conditions under which Shared Decision Making does have a beneficial influence on client outcome seems called for.

A second explanation of our findings might be an already high level of standard care provided by experienced case managers who on average had worked in forensic psychiatry for 7 years at the start of the study. Combined with the long period of care-as-usual (on average 26 months) received before inclusion in the study, this might also explain the high baseline functioning of clients on all outcomes. Such standard care might, for instance, already include informal risk assessment based on personal experiences and Shared Decision Making with the client, although in a less explicit way than in our protocol. If so, then our intervention would be a mere formalization of current clinical practice. Moreover, any intervention aiming to improve upon it will be faced with a daunting task. Support for this explanation comes from studies of Assertive Community Treatment which was shown to be effective in earlier studies conducted in the United States where care-as-usual was often poor or none existent due to the health insurance situation. More contemporary European studies have shown limited or no effects, possibly because of better care-as-usual (Burns, 2010; Burns et al., 2002). It is also in line with our finding that, during the study, clients in the care-as-usual group continued to improve both with respect to general functioning and recidivism.

**Implications for theories about offending**

Taken together, the findings discussed in this thesis raise questions about common theories about offending. Particularly relevant is the theoretical debate between those advocating the Risk-Needs-Responsivity model (RNR; Andrews et al., 1990; Andrews et al., 2011) on the one side and
those championing the Good Lives Model on the other side (GLM; Ward & Gannon, 2006; Ward, Melser, et al., 2007; Ward & Stewart, 2003). Both theories stress the need for assessing dynamic risk factors and addressing them through appropriate treatment. Where they differ is that GLM also proposes assessing and treating protective factors as an independent goal which should aid in the prevention of recidivism. In contrast, RNR states that to reduce recidivism one should focus on risk factors for recidivism. Improvement of client well-being, though worthwhile, should not be an independent aim of forensic psychiatry since it bears no direct relationship to recidivism.

Surprisingly and against our expectations, our findings seem to support neither theory. Bouman, de Ruiter, and Schene (2009) showed that there was a correlation between recidivism and client functioning, thus providing support for GLM. Despite this earlier finding in a setting similar to our own, we could not improve client functioning through risk assessment of protective factors and consequently addressing these factors in treatment. Our findings, therefore, would favour RNR over GLM. More notably then, is that we also could not establish an effect of risk assessment and Shared Decision Making on recidivism. A basic premise of both RNR and GLM. Although various evidence for either theory has been published (e.g., Andrews et al., 2011; Covell & Wheeler, 2011; Fortune et al., 2012; Polaschek, 2012) and they both make intuitive sense, our findings represent the first randomized controlled trial of this issue. Given, therefore, the preliminary nature of these findings we would advocate further investigation.

**Suggestions for future research**

As may be clear from the previous sections, there are still a lot of questions about both the theory and practice of risk assessment and Shared Decision Making in forensic psychiatry. Although the findings from our trial do not provide support for the practice of using risk assessment instruments to prevent violence we would caution against throwing away the good with the bad. After all, ours is the first randomized controlled trial and replication of the findings reported in this thesis is necessary before we consider stopping a practice that has so defined the field of forensic psychiatry over the last decades. Moreover, prediction and
correlational studies, though providing less stringent scientific evidence, are in favour of the practice of risk assessment and treatment of Quality of Life factors of mentally disordered offenders (e.g., Bouman, Schene, et al., 2009; Doyle et al., 2012; Philips, Koeter, van den Brink, & van der Staak, 2004; Telles et al., 2012; Vitacco, Gonsalves, Tomony, Smith, & Lishner, 2012). In contrast, some researchers have noted that the evidence base for current clinical risk assessment practices is lacking (Cooper, Griesel, & Yuille, 2007; Wand, 2012; Wand & Large, 2013).

However, the most important risk and protective factors associated with recidivism have by now been established and are agreed upon by the research community. There is no disputing the existence of correlations between mental illness, substance abuse, client well-being, Quality of Life and recidivism. That is why all, or a considerable selection of these factors are commonly included in risk assessment instruments (Nicholls, Brink, Desmarais, Webster, & Martin, 2007; de Vogel, de Ruiter, van Beek, & Mead, 2004; Webster et al., 1997). It seems time then to move forward and start investigating the benefits of risk assessment instruments and their contribution to more effective treatment interventions in terms of reduction of criminal and violent behaviour and ways in which to involve clients more in their treatment. As we ourselves have experienced, introducing randomized trials in clinical practice is difficult, but it can be done, and is an essential step before implementation can be advocated.

**In conclusion**

This thesis tried to determine whether the use of structured risk assessment and Shared Decision Making could prevent criminal and violent behaviour. A definitive answer to this question cannot be given at this time. Initial evidence, including the current report, does not support current ideas about its use in clinical practice. However, findings are preliminary and the evidence base for a systematic review on this issue is still lacking. Problematic implementation is an issue faced by many researchers trying to assess the usefulness of promising interventions in clinical practice (Forsner et al., 2010; Légaré, Ratté, Gravel, & Graham, 2008; Nonstad & Webster, 2011; Parks, 2007; Wright & Webster, 2011).

Changes in applicable laws, in the way participating organizations are run, in staff of the treatment teams as well as the introduction of techno-
logical advances like Routine Outcome Monitoring can complicate such an undertaking even further. On the other hand, some of these changes also offer opportunities for researchers. Moreover, it is necessary that as a field we move forwards and start to conduct studies of high methodological standard in clinical practice since that is what we are ultimately trying to improve. Until such evidence has accumulated, the overall picture is not yet convincingly in favour of changing treatment policies by systematically employing structured risk assessment in clinical care.