Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
An Initial Assessment of the Importance of Responsivity Factors in Rehabilitative Treatment for High-Risk, Persistent, Violent Adult Male Offenders: A Review and Meta Analysis of Global Treatment Programmes

A thesis presented in partial fulfilment of the requirements for the degree in Masters of Arts in Psychology at Massey University, New Zealand.

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ABSTRACT

Whilst considerable attention has been placed on researching what contributes to a fall in reoffending, this has been limited to younger, lower risk male offenders and focussed on risk and criminogenic needs. Little research exists about the less easily measured process factors which address the Responsivity principle and even less about what is effective with the highest risk violent adult male offenders.

However much information has been published about the characteristics of such men and interpersonal difficulties and complex needs would both seem to be significant responsivity issues to engaging successfully in treatment. This thesis offers a preliminary exploration into the impact of attention to the therapeutic alliance and the flexibility of treatment to respond to individual needs.

An associated issue is whether non completion rates are linked to each of these factors and subsequent reoffending rates.

The statistical significance of this meta analysis suffers from a small numbers of studies with this high risk population and a lack of reporting of quality information about these matters. To this end a systematic review of studies is appended to assist the reader to have a fuller picture.

The aim of this study is to invite more interest to understanding the responsivity principle in action. Consistently over the past 30 years studies report very modest treatment effect sizes for a wide range of offenders. Presumably better treatment outcome rates are possible. If treatment effect sizes are to increase, one course of action could be to experiment with the under explored areas of responsivity. Another possibility is to examine the extreme outliers in treatment effects and understand the reasons for these. Both of these approaches are incorporated in this study.
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INTRODUCTION

This thesis is concerned with assessing the contribution that responsivity or process factors make to the effectiveness of global treatment programmes for high risk, persistent violent adult male offenders. Responsivity is largely considered from a programme perspective, notably addressing therapist, therapeutic alliance, group therapeutic climate and setting factors.

Firstly the issues involved in measuring the effectiveness of treatment will be outlined. These include discussion about the appropriate measures for outcomes and the history of the developments in the field culminating with a comprehensive consideration of the use of meta analysis generally. A meta analysis will be used in this thesis to evaluate the effectiveness of rehabilitative programmes with violent offenders from a responsivity perspective. This will be followed by a review of theories and research relating to the characteristics of high risk, persistent violent adult male offenders. Few studies have focussed on the effectiveness of treatment with the highest risk, adult offenders who have been convicted of non sexual violent offences and without a mental health diagnosis. Even fewer studies have reported on responsivity factors for this subgroup. Therefore existing theories and research concerning the responsivity principle will be outlined in relation to treatment with offenders. This will encompass the existing literature relating to treatment non completion as this information is increasingly been viewed as providing valuable information pertaining to failures in responsivity (Beyko & Wong ,2005 ). The presentation of the results of the current small meta analytic study will follow the literature review including discussion and potential areas for future research.

MEASUREMENT OF EFFECTIVENESS

How is the effectiveness of correctional treatment currently measured and what are the limitations of such measures?
The goal in providing rehabilitation to offenders is to reduce and hopefully eliminate re-offending in the community (Andrews & Bonta, 2010). As a result the outcome measure most often used to measure effectiveness has been that of recidivism. Difficulties with the use of recidivism as an outcome measure include ignoring other potential moderators and that single events are not indicative of the process of individual change.

The use of recidivism is a broad and some would say blunt outcome measure to measure programme success and individual behaviour change. It operates from the underlying assumption that any further offending is a failure in the effectiveness of the programme (Losel, 1995 in McGuire, 1995; Lipsey, 1995 in McGuire, 1995). This assumption ignores other potential moderators such as reintegrative issues relating to employment, housing, substance abuse, relationships or external events such as significant losses, redundancy, accidents or illness which may be triggers to reoffending (Kilgour & Polaschek, 2012). In an evaluation of Special Treatment Units in New Zealand those offenders who had compiled a more robust release plan had lower reoffending outcomes and even those with less robust or realistic release plans had longer survival to reoffending than those offenders who did not have any plan (Kilgour & Polaschek, 2012).

Policing policy and sentencing trends may effect conviction statistics. Some writers suggest that cultural moderators operate given that Maori are at higher risk of being arrested, convicted and sentenced to imprisonment than non Maori in New Zealand (Jackson, 1988).

In addition reconviction statistics are considered to be much lower than actual offending. Only one in every five domestic violence assault is actually reported to police (Rosenfeld, 1992 in Babcock et al, 2004).

The use of reoffending as a measure of change also implies that change is a single absolute event which occurs at one point in time (Ward & Laws 2010, Prochaska, Diclemente & Norcross, 1992).
Theories of change developed within the addiction recovery movement and early qualitative research with offenders who have desisted from offending suggest that changes in behaviour occur in a step wise fashion (Leibrich 1993) with small changes towards an overall different behaviour, similar to the behaviourist concept of shaping (Martin & Pear, 2007).

The transtheoretical model of change (Prochaska, Di Clemente & Norcross, 1992) model describes a zig zag or a number of lapses to old behaviour whilst the new behaviour is increasingly strengthened (Wales & Tiller, 2011 in McMasters & Riley, 2011; Prochaska, Diclemente & Norcross, 1992). Assimilation models explain much the same process but individuals may proceed through change in a less linear fashion and may exhibit characteristics of more than one stage of change concurrently (Day, Bryan, Davey & Casey, 2006). Desistance research with offenders suggests that a slow movement away from old behaviour often instigated by significant turning points or significant relationships (Maruna, 2004, Leibrich, 1993; Sampson & Laub, 2005). Qualitative research with very serious persistent offenders in a British prison indicated that the quality of the interactions with therapeutic and correctional staff in a prison therapeutic community was one of the significant aspects in giving up criminal behaviour (Wilson & McCabe, 2002).

If change occurs over a period of time, then treatment programme providers wishing to assess their effectiveness may be forced to wait significant periods of time for feedback if they are solely reliant on subsequent recidivism data. Indeed follow up times varied from 6 months to 10 years in one meta analysis examining treatment effectiveness (Lipsey, 1995 in McGuire 1995). New Zealand data for those offenders in 2003 who had served more than 10 prison sentences prior to 2003 and were released revealed that 42% were returned to prison within 12 months of release and 71% within 3 years of release http://www.corrections.govt.nz/research/reconviction-patterns-of-released-prisoners-a-36-months-follow-up-analysis.html. Canadian data suggests that 60% of release
“failures” occur within 6 months of the release date and 90% occur within a year (Nouwens, Motiuk & Boe, 1993). By the time such data is collated and reported, significant time has elapsed. As a result researchers have recognised the need for more sensitive outcome measures in order to fully capture the effects of any intervention (Losel, 1995 in McGuire, 1995). Earlier signs of desistance from offending might be indicated by a decrease in the frequency of offending, larger intervals between offending or a reduction in the seriousness of offending (Leibrich 1993). An example may be moving from grievous bodily harm charges to a charge of disorderly conduct. Some propose the idea of calculating a degree of recidivism using a scale to score seriousness of offending rather than a binary reoffence measure (Gendreau, Grant & Leipciger, 1979).

Rather than have at least a 12 month delay, intermediate outcome measures provide an alternative interim assessment measure for programme assessors which combined with later recidivism data may provide a more comprehensive picture of the effectiveness of treatment (Polaschek, 2011). Misconduct data has been utilised as an interim measure of changes in institutional behaviour within the prison environment (Polaschek, 2011; Marshall, Marshall, Fernandez, Malcolm & Moulden, 2008). Other intermediate outcome measures include psychometric assessment of changes in attitudes generally through self report or therapist assessments also have the potential to be either proxy measures for intervention effectiveness or as comprehensive evidence of change when combined with recidivism data (Polaschek, 2011).

However the danger with relying on intermediate targets is that these changes may not actually translate into changes in reoffending. A study of juvenile violent offenders found that self reported psychometric treatment gain did not translate to a reduction in reoffending (Lipsey, 1995 in McGuire, 1995). Such personality psychometric measures, as a proxy for criminal behaviour, may be an appropriate measure of treatment effectiveness where attitudes may have been the target of
treatment (Losel, 1995 in McGuire, 1995). But in an intervention aimed at addressing aggression
despite self report scores indicating an increase in knowledge about anger, one of the treatment
goals, reoffending outcomes were not reduced (Howells, Day, Williamson, Bubner, Jauncey, Parker
& Heseltine, 2005). Whilst the intervention may have been successful in increasing knowledge if it
is not combined with the opportunity to learn and practise new skills in the natural environment
(Wormith, 1984), actual aggressive behaviour may remain unchanged. An additional explanation
may be that self report information may be characterised by self presentation or other biases.

History of Measurement of Treatment Effectiveness

Early measurement of outcomes were generally intermediate measures of success such as self
report, psychometric testing of psychological attitudes (Hoff, Slug & Grunberger, 1956) or the
reporting of case studies (Corsini, 1958, 1951). As the discipline grew summaries of research results
tended to be presented by way of narrative review which allowed for the inclusion of studies with
both intermediate and recidivism outcome measures. A narrative review is a narrative presentation
of often heterogeneous studies for the reader to make their own conclusions influenced by their own
values and theoretical position. It is particularly useful where only a few studies exist in the area of
interest and the data is more manageable. However narrative reviews have a greater potential for the
biases of researchers to operate in the selection or omission of studies (Lipsey & Wilson, 2001).

In 1974 Robert Martinson (1974) a social activist wanting to liberalise the prison system, published
a narrative review of 231 studies of rehabilitative interventions with offenders. He reviewed each
study defining rehabilitative success as a 100% fall in recidivism (Palmer, 1975). His overall
conclusion was the often quoted statement that "with few and isolated exceptions, the rehabilitative
efforts that have been reported so far have had no appreciable effect on recidivism " (Martinson,
1974, Pg. 25).
Initially the studies which aimed to rebut Martinson’s conclusions also took the form of narrative reviews (Palmer, 1975). The narrative review was then modified by the addition of a quantitative rating for individual studies by criminologists, Steven Lab and John Whitehead (1988). Each of the 55 studies they considered was rated according to the effect on recidivism for that sample. Whilst they acknowledged that behavioural interventions appeared to be successful in reducing recidivism compared to interventions designed to change personality, their overall conclusion was that diversion was the only intervention which resulted in a reduction in recidivism (Lab & Whitehead, 1988).

Addressing the issue of potential researcher bias opened the door to more quantitative methods of analysis in the field. Although psychotherapy had been utilising meta analyses to measure treatment effectiveness for some time (Orlinsky, Ronnestad & Willutzki, 2004), the meta analysis did not appear regularly in correctional literature circles until the late 1980s or early 1990s (Andrews et al, 1990b, Izzo & Ross, 1990, Gendreau, Little & Goggin, 1996).

A meta analysis summarises the results of different studies by converting quantitative outcomes adjusted for individual study sample sizes to a common statistic known as an effect size. The effect size has been described as “the magnitude of the impact that treatment has on recidivism” (Babcock, Green & Robie, 2004, Pg. 1038) for pure experimental designs and for quasi experimental designs as an approximation of “the strength of relationship between treatment and recidivism, uncontrolled for external confounds” (Babcock et al, 2004, Pg. 1038). A meta analysis can also be viewed as a distribution of effect sizes (Lipsey & Wilson, 2001). A meta-analysis enables quite disparate studies to be compared and contrasted on the common ground of a quantitative outcome measure. Many differing measures exist for an effect size including the difference in means adjusted by standard deviations, Cohens $d$ odds ratio and Pearsons $r$ correlation coefficient (Field, 2005). Some of the tasks of a meta analysis involve converting the published data
into an effect size and standardising this with others in the meta analysis.

Canadian psychology researchers, Andrews and colleagues produced their first meta-analysis in 1990 (Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990b) which involved 154 studies. They included 87 from Lab and Whitehead's (1988) narrative review and 67 studies from their own research. The studies were grouped by appropriateness or adherence to Risk Need Responsivity (RNR) principles that they had outlined in an earlier article (Andrews, Bonta & Hoge, 1990a). The Risk Need Responsivity Principles they presented were attempts to address earlier researchers' (Palmer, 1975) questions about what were the factors involved in treatment programmes were being effective for some but not necessarily all individuals. These principles will be explained further below. This classification of studies by appropriateness, produced an overall positive mean effect size for appropriate studies of 0.30 for reoffending. What was not explored in the study was that two programmes classified as appropriate, actually produced negative effect sizes and were clear outliers (Andrews et al, 1990a).

A number of other meta analyses were subsequently produced, primarily by researchers from Carlton University in Canada (Gengrea, Little & Goggin, 1996; Antonewicz & Ross, 1994; Izzo & Ross, 1990) and provided similar although less positive results. Mark Lipsey produced a comprehensive meta analysis of over 400 individual studies with juvenile offenders and has continuously aimed to improve the meta analysis statistical process to provide meaningful and avoid misleading data (Lipsey, 1995 in McGuire, 1995; Lipsey 1998; 1999). In Europe Redondo, Sanchez-Meca & Garrido (1999) and Losel & Koferl (1987) produced similar results. Narrative summaries of the overall conclusions of the meta analytic studies were produced (Hollin, 1999; McGuire, 1995) as well as a meta analysis of the meta analyses (Losel, 1995 in McGuire, 1995).
The correctional literature has been comprehensive in establishing the preferred modalities to achieve effective outcomes as discussed earlier. Behavioural programmes which used cognitive and modelling strategies were considered most effective in the earlier literature (Gendreau, 1996) and psychodynamic, nondirective/client centred therapies, or any modalities which focussed on non criminogenic needs and not on multiple causes of offending were either less effective or “made offenders worse” (Gendreau, 1996). There has been clear support for cognitive behavioural modalities, skills training, multimodal programmes using concrete, structured approaches (Lipsey, 1995 in McGuire, 1995) and for those with behavioral & social learning theoretical underpinnings (Losel, 1995 in McGuire, 1995; Andrews & Bonta, 2010). One meta analysis found that 75% of the successful programmes and 38% of unsuccessful programmes had a cognitive behavioural model as a theoretical basis for their programme design (Antoniwicz & Ross, 1994).

Effect Sizes

Cohen, 1988 (Field, 2005) regarded effect sizes of $r$ of 0.10 and lower as a small effect, 0.30 a medium effect and 0.50 and above as large effect sizes (Cohen, 1988 in Field, 2005). The effect sizes for offender treatment and recidivism outcomes are at best extremely modest although they do compare favourably with medical science, similar to the effect sizes for aspirin given preventively for heart attacks (Andrews & Bonta, 2010). Lipsey's (1995 in McGuire, 1995) meta analysis was considered to provide the most conservative mean effect size of 0.05-0.08 as it includes unpublished material, the highest number of studies(443) and the most conservative sample size weighting (Losel, 1995 in McGuire, 1995). An effect size of 0.10 was produced by a meta analysis of 13 meta-analyses assessed by Losel(1995 in McGuire, 1995). Although this is more positive, it is still small especially when compared to effect sizes for general psychotherapy. General psychotherapy records effect sizes ranged in one early psychotherapy meta analysis from 0.26 for Gestalt psychotherapy to 0.91 for systematic desensitisation (Smith & Glass, 1977) although
understandably voluntary clients with no anti social history would be expected to have better
treatment outcomes (Babcock & al, 2004)).

Studies producing statistically significant results are more likely to be published (Pratt, 2002). The
fear that there will be a repeat of the post Martinson withdrawal of fiscal funding after “nothing
works” may lead to decisions not to publish studies of unsuccessful treatment programmes (Van
Voorhis, Cullen & Applegate, 1995). Such publication bias is likely to lead to artificially inflated
effect sizes if only successful studies are published (Losel, 1995 in McGuire, 1995; Pratt, 2002).

Another issue impacting on effect size is non completers. Differing sampling designs may include
non completers in participant data, as a control group or excluded from the data completely by only
sampling completers of the programme. Given the increased rate of reoffending of non completers
(McMurran & Theodosi, 2007), effect sizes are likely to be inflated for such studies that exclude
non completion data. Using intention to treat statistics are used in effect size calculations to counter
this problem but has produced very high non completion rates for domestic violence programmes
which include individuals who are assessed but never actually begin treatment (Gondolf & Foster,
1991). A similar effect on effect sizes is likely given that official reoffending statistics exclude
crime that goes undetected and offences where no conviction is laid (Rosenfeld, 1992).

Correctional meta analyses are dominated by adolescent studies. The maturation effect may account
for some of any reduction in reoffending (Losel, 1995 in McGuire, 1995) as the majority of young
offenders desist from offending with no need for treatment intervention (Moffit, 1993). The
emphasis of the research on the younger age group has the potential to mask or fail to capture the
treatment effects on an older, persistent sample.
The value of individual effect sizes is also affected by the composition of the control groups although efforts to ensure equivalent groups on demographic factors are usually documented. Some control groups may not be "untreated controls" such as those in social therapy prisons in Germany (Losel, 1995 in McGuire, 1995) or persistent offenders who have undergone previous treatment and associated accumulation effects (Wilson, 2004). Matching of control groups may be based on demographic factors selected through offender databases or simply the groups who choose not to take up treatment. Although demographically equivalent, the choice to take up treatment indicates a level of motivation which differs from the individual who chooses not to take up treatment, what is referred to as “creaming” in domestic violence studies (Davis & Taylor, 1999). Many studies compare treatment completers with treatment non completers which assumes the only difference between the groups is the treatment and fails to take account of the more complex needs of non completers which will be elaborated on below.

Although random assignment to treatment and control groups has been attempted with batterer treatment studies in North America, ethical issues about safety and urgency for treatment have lead to overrides in some cases in domestic violence studies (Taylor, Davis & Maxwell, 2001; Palmer, 1992).

One of the greatest strengths of a meta analysis is that the data process is well documented and readers can gauge the reliability from the method described. Usually the coding procedures and the studies are listed comprehensively which allows for the possibility of replication by other researchers (Lipsey and Wilson 2000).

As with any meta analysis done retrospectively classification can be problematic and coding often is done with incomplete information. Suggestions to address incomplete information include using
statistical techniques to rule out the problem of missing data, contacting the primary study
researchers or collecting data using methodologically sound survey techniques from programme
providers (Koetzle Shaffer & Pratt, 2009). Whilst this may be realistic with more recent
programmes, it will create a bias against older programmes for which such data may no longer be
available (Koetzle Shaffer & Pratt, 2009). Even then the coding of study characteristics may not be
sensitive enough to fully capture the subtleties of responsivity such as the social climate of the
treatment programme (Martinson, 1974) or personal attributes of therapists such as warmth (Lipsey
& Wilson, 2000). Meta analyses concerned with therapist qualities and skills and therapeutic
alliance quality have been elusive due to lack of measurement and reporting at the individual study
level something which if the knowledge base is to be expanded needs to change (Ross, Polaschek &
Ward, 2008; Palmer, 1992). Earlier meta analysis researchers have commented on the inadequate
programme and staff descriptions in study results(Antoniwicz & Ross, 1994).

Advantages and Limitations of Meta Analysis

A meta analysis may be a useful strategy in the early stages of the research relating to a construct of
interest. Moderator variables identified in qualitative research with single n studies or small samples
can be measured for their impact on outcome variables. The meta analysis provides a structure to
manage very large amounts of data and as a result provides increased statistical power and therefore
confidence in the validity and generalisability of the results. Outliers of the data also can provide
useful guides for the direction for further research (Lipsey & Wilson,2000). For the purposes of
establishing some correlation between process variables and treatment outcomes, a meta analysis
provides a preliminary guide before embarking on more focussed research.

The use of homogeneous studies leads to more meaningful demonstrations of a positive mean effect
sizes for interventions but it also creates lower generalisability to a wider population (Lipsey and
Wilson, 2000). The majority of correctional research has been conducted with North American samples and approximately 80% of these samples have been adolescents or children (Losel, 1995 in McGuire, 1995). This makes for difficulties generalising these results to adult offender populations from other continents. However the more heterogeneous the samples, the lower the validity of the results (Lipsey, 1995 in McGuire, 1995) although as the number of studies increases loss of validity becomes less of a problem. When there are only very small numbers of studies, any statements about generalisability have the potential to be misleading and descriptions of the relative results of individual studies such as a narrative review may prove to be the least misleading results (Lipsey, 2003, Pg.80).

In view of this, this thesis includes both a narrative review and a meta analysis due to the small number of studies that meet the methodological criteria set out in the Method section. The small number of studies also reflects the lack of focus on the high risk, persistent, violent adult offender due to the focus on serious adolescent violent offenders (Lipsey, 1995 in McGuire, 1995) most likely from a prevention point of view. Writers in the correctional field have commented on the gap in the effectiveness literature for serious violent adult offenders (Howells, 2004; Joliffe and Farrington, 2009, Polaschek & Collie, 2004; Dowden & Andrews, 2000). Some writers have suggested file drawer problems and a fear of poor results leading to a similar post Martinson fiscal response of closing down unsuccessful programmes (Van Voorhis et al, 1995) whilst others contend that many worthwhile programmes are never actually evaluated. (Polaschek & Collie, 2004). This thesis attempts to offer an exploration into the effectiveness of treatment for this under-examined population, particularly from a responsivity perspective and at this point it is considered useful to consider the known characteristics of this high risk, persistent violent adult population.
CHARACTERISTICS OF HIGH RISK, PERSISTENT, VIOLENT, ADULT OFFENDERS

Offender characteristics have generally been of most interest to researchers in correctional rehabilitation, partly in an effort to more accurately predict those who are at greatest risk of reoffending (Gendreau, Little & Goggin, 1996; Lipsey & Derzon, 1998 in Loeber & Farrington, 1998; Andrews et al, 1990) and to better protect the community. Research from RNR theorists, developmentalists and desistance theorists contributes to what is known about the characteristics of high risk and persistent offenders.

High Risk and Persistence

The dominant theoretical models underlying correctional practice is the Psychology of Criminal Conduct which has as its central foundation the three principles of risk, need and responsivity (Andrews et al, 1990a). In the Risk Need Responsivity (RNR) literature, risk is defined as the risk of reoffending rather than the risk of harm to others. Someone who is assessed at high risk of reoffending under the RNR model has a high number of criminogenic needs underlying their offending behaviour (Andrews et al 1990a). Although this creates a circular relationship between the Risk and Need principles (Losel, 1995 in McGuire, 1995), it also ensures that interventions address needs which have been identified as linked to offending behaviour (Andrews and Bonta, 2010).

Developmentalists contribute the concept of persistence to the discussion of the risk of reoffending. Persisters are those offenders who continue to reoffend beyond their early twenties (Moffit, 1993). Natural desistance from offending behaviour without the need for any intervention is known as the maturation effect or adolescent limited offending (Moffit, 1993; Losel, 1995 in McGuire, 1995). What appears to differentiate persisters from desisters is that persisters have an earlier onset of offending behaviour, often late in childhood, and appear more likely to commit violent offences.
(Bartusch, Lynam, Moffitt, & Silva, 1997). Others have found early onset of offending, between 6 and 11 years of age and early substance use highly predict serious violent juvenile offending (Lipsey & Derzon, 1998 in Loeber & Farrington, 1998). Some research disputes that persistence has a developmental cause and indicates that higher levels of impulsivity, hyperactivity and less verbal ability are characteristic of child onset offenders compared to adolescence-onset offenders. (Bartusch et al, 1997, Hirschi & Gottfredson, 2000). United Kingdom theorists consider persisters comprise less than 5% of the male population yet they are believed to commit between 50%-70% of all violent crimes (Moffit 1993, Hodgins, 2007). For the purposes of this thesis the term persistent will be used interchangeably with high risk as it captures the maturer offender as well as the chronicity of the offending.

Demographic and behavioral characteristics associated with High Risk/Persistent Offenders

Qualitative cluster analysis has identified that high risk New Zealand prisoners in 2002 were approximately 28% of the total prison population (Wilson, 2004). The mean age of the sample surveyed was 27 years and 83% identified as Maori. Whilst 71% had convictions for serious assault, almost all also had dishonesty charges and 88% had compliance related convictions such as escape or breaches of community sentences suggestive of more generalised offending behaviour (Wilson, 2004). Early age onset of anti social behaviour, antisocial associates (of which 82% were family members), difficulties at school, minimal employment history, unstable accommodation, prevalence of personality disorder and intimate relationships with a mean duration of five years were all characteristics noted in the same study (Wilson, 2004).

Similar patterns of generalised offending have been found with a subgroup of offenders who were more seriously violent in a domestic relationship (Holzworth-Munroe & Meehan, 2004). Lower risk domestically violent offenders tended to use milder forms of violence generally as a response to
relationship stress (Holtzworth-Munroe & Meehan, 2004). Two persistent typologies were identified. One type of offender would tend to be highly emotionally labile prior to violence, had an anxious attachment style in relationship and was described as "dysphoric or borderline" (Holtzworth-Munroe & Stuart, 1994). The other "generally violent and antisocial" typology tended to experience difficulties with substance abuse, impulsivity, a lack of interpersonal skills and an avoidant attachment style possibly as a result of experiencing very severe levels of family violence in childhood (Holtzworth-Munroe & Stuart, 1994).

Reliable predictors of general life course persisters appears to be past anti social behaviour, and the early age of onset of such antisocial behaviour (Bartusch et al, 1997; Moffitt, 1993; Serin & Lloyd, 2009; Wilson, 2004). Other consistent variables appear to be adverse family circumstances and events (Moffit, 1993) leading to deficits in social problem solving and self regulation, such as aggression being reinforced as an effective problem solving strategy (Megargee, 2009 in Butcher 2009), substance addictions, poor school and employment histories (Moffit, 1993).

Qualitative desistance researchers have identified significant differences in cognitive scripts between those who desist from crime and those who persist (Maruna, 2009). Persisters were individuals who favoured catastrophic negative cognitions, saw themselves as not having choices or with limited ability to successfully cope or solve problems (Maruna, 2009; Ward & Laws, 2010, Zamble & Quinsey, 1997; McMasters & Riley, 2011). By contrast desisters saw themselves as having choices and also having the ability to cope with difficult situations and make good decisions (Maruna, 2001; Ward & Laws, 2010).

Characteristics of Non Completers

Non completers may share many of the same demographic characteristics as persistent offenders
(Wormith & Olver, 2002) or higher risk reoffenders (Olver, Stockdale & Wormith, 2011). Non completion of treatment amongst high risk New Zealand prisoners was correlated with low pre contemplation scores, borderline personality diagnosis, a shorter sentence length, poor employment history, few social connections, previous substance abuse or other type of treatment, higher risk of reoffending and previous robbery conviction (Wilson, 2004). Being unemployed, single and/or childless, having a lower income, less education, previous criminal history, problems with substance abuse, mental health concerns and difficulties in relationships were identified as demographic predictors of non completion of treatment for domestic violence (Olver, Stockdale & Wormith, 2011). Other evidence from domestic violence research is that those scoring highly for borderline, avoidant and antisocial personality were most like to drop out of treatment early (Dutton, Bodnarchuk, Kropp, Hart & Ogloff, 1997; Holtzworth-Munroe & Meehan, 2004). The individuals who prematurely dropped out of a forensic therapeutic community programme had co-morbid substance abuse issues, were extraverted, tough minded, verbally aggressive and narcissistic with poor self control (Jones, L. 2007). Similarly men who spent shorter periods of time in a prison therapeutic community in the United Kingdom before leaving prematurely were described as "extrapunitively hostile, neurotic & tough minded" (Shine, 2007, Pg. 48). Rapists are more likely to drop out of sex offender treatment than child sex offenders due to higher levels of aggression (Beyko & Wong, 2005). Developmental deficits in pre frontal cortex functioning associated with an inability to inhibit behaviour and regulate emotions characterised non completers of a sex offender treatment programme (Fishbein, Sheppard, Hyde, Hubal, Newlin, Serin, Chrousos & Alesci, 2009). Non completers in another sex offender treatment programme demonstrated impulsive, aggressive and disruptive behaviours in treatment (Beyko & Wong, 2005). Non completers were identified as individuals who tended to display disruptive behaviour, have negative attitudes towards treatment, a diagnosis of psychopathy and a previous history of imprisonment (Wormith & Olver, 2002). Clients who are expected to be too disruptive are often excluded from
treatment at the assessment stage (Wormith & Olver, 2002).

Sheilagh Hodgins (2007) sees the value in differentiating persistent violent offenders into three groups with very different treatment needs. Two of the groups are characterised by the presence of anxiety but express this differently. One group favours an internalised expression and the other manifesting anxiety behaviourally (Hodgins, 2007). The third group are individuals either with a diagnosis of psychopathy or scoring highly on the Psychopathy Checklist -Revised scale (PCL-R) (Hare, 1991) for whom anxiety is absent (Hodgins, 2007).

Individuals assessed as being psychopaths or scoring highly on the PCL-R scale (Hare, 1991) tend to be those identified as both persistent and violent offenders (Mullen, 2007). For this reason it is worth elaborating on the characteristics of psychopathy as part of the discussion relating to the characteristics of persistence and leading into the discussion about violence. The scores of PCL-R (Hare, 1991) are considered to predict violence at rates that are considerably better than chance (Megargee, 2009 in Butcher, 2009; Salekin, 2002).

Psychopathy

The PCL-R (Hare, 1991) measures both the psychological aspects and behavioural manifestations of psychopathy. The first dimension of the measure describes an egocentric selfish interpersonal style comprising glibness or superficial charm, grandiose sense of self worth, pathological lying, manipulativeness, shallow affect, lack of remorse, empathy and degree of callousness (Thornton & Blud, 2007 in Herve & Yuille, 2007). The second dimension measures chronic antisocial behaviour including impulsivity, juvenile delinquency and early behaviour problems, the need for stimulation, a parasitic lifestyle and a lack of realistic goals (Thornton & Blud, 2007 in Herve & Yuille, 2007). The psychopathy construct is a circular one given that previous antisocial behaviour is one of the symptoms: "Why does he keep committing crimes? He is a psychopath. How do you know he is a..."
psychopath? He keeps committing crimes”. ”(Mullen, 2007, Pg.s5; Quinsey, Harris, Rice & Cormier, 1998).

Psychopathy has been associated with higher levels of violence (Simourd & Hoge, 2000), greater longevity in offending behaviour and treatment resistance or ineffectiveness (Quinsey, Harris Rice & Cormier, 1998). Some research studies have attempted to understand what function antisocial behaviour may serve for psychopaths (McMurran & Ward, 2010) and investigated underlying high levels of shame, (Morrison & Gibert, 2001) and low self worth and vulnerability leading to compensatory violent behaviour(Walker & Bright, 2009). Contradictory views propose that aggression results from external challenges to highly narcissistic individuals with inflated self esteem (Bushman & Baumeister, 1998).

Violence is considered to require both the use of physical injury and force (Blackburn, 1998). In addition the perpetrator must intend to cause harm to the victim. Most models see violent behaviour as an interaction between the individual and events that occur in the environment (Megargee,2009 in Butcher, 2009) rather than an individual deficit.

Violent offenders comprised the largest offending subgroup in New Zealand's prison population at Dec 2011. At 40.3% of the prison population they are nearly twice as prevalent as the next highest category of sexual offenders (www.corrections.govt.nz). As mentioned above, the earlier the first offending, the more likely that individuals will go on to commit violent crimes. Violent offenders do not tend to specialise in violence, many have extensive criminal histories of varied offences (Polaschek & Reynolds, 2000 in Hollin,2000). Some say the lack of explanatory theory for violent offending behaviour (Polaschek and Collie, 2004) has impeded the design of treatment programmes for violent behaviour and by implication their effectiveness. In the absence of such theory, anger
management programmes have tended to dominate despite possible counter-therapeutic indications for those individuals considered to be over-controlled with anger (Davey, Day & Howells, 2005).

Client characteristics of violent offenders have been established through the development of psychometric instruments with good validity and reliability. The PCL-R (Hare, 1991) as discussed earlier is a good predictor of violence.

The Violence Risk Scale (Wong & Gordon, 2000) is another assessment tool covering static and dynamic factors both for prediction and ascertaining treatment targets. Static factors include age of first violent offence and current age, criminal history, history of violence, prior release failures or escapes and instability of family upbringing. The dynamic factors which are seen as treatment targets are violent lifestyle, criminal personality (psychopathic characteristics), emotional control, stability of intimate relationships, weapon use, interpersonal aggression, substance abuse, insight into violence, security level on release, compliance with supervision, release to high risk situations, community support, relationships, cycle of violence, impulsivity, cognitive distortions, history of violent offending, criminal peers, criminal attitudes, mental health history, work ethic (Wong & Gordon, 2000).

One of the other significant measures of predictions for violence is the LSI-RNR instrument developed by Andrews, Bonta and Wormith (2009). The measure comprises ten subscales: criminal history, education/employment, finances, family/marital relationships, accommodation, leisure/recreation, associates/companions, alcohol & drugs, emotional/personal and attitude/orientation.

Others have identified the role of substance abuse, particularly alcohol on violence (McMurran &
Gilchrist, 2004; McCulloch & McMurran, 2008). The co-morbidity of alcohol and other substance use with domestic violence has been documented as high as 73% in a survey of domestic violent offences (Gilchrist, 2003a in McMurran & Gilchrist, 2008) and has resulted in suggestions that domestic violence treatment be broadened to include substance treatment (McMurran & Gilchrist, 2008). Research has indicated a functional role may exist for alcohol or other substances in managing anxiety for those using violence for material gain and as such may be appropriate treatment targets (McMurran, Jinks, Howell & Howard, 2011). However, New Zealand qualitative research suggests that the prevalence of a Substance Use Disorder amounted to 93% of a sample of both violent and non-violent prisoners and was not necessarily limited to violent offending (Jones, A., 2007). No statistical significances were found between violent and non-violent samples (Jones, A., 2007). Whilst clearly addressing one of the factors identified in the characteristics of persistent offenders, treatment needs were not the focus of this meta-analysis so substance abuse treatment components were not coded.

Other writers suggest that poor emotional intelligence is linked to difficulties in making emotional connections with others, a low ability to empathise and therefore having less to lose in terms of relationships (Baumeister and Lobbestael, 2011). A longitudinal study of adolescents exposed to family violence as children and followed up at 25 years and 31 years found that affect dysregulation acted as a mediator for violent behaviour against women (Dankoski, Keiley, Thomas, Choice, Lloyd & Scery, 2006). Individuals from chaotic family backgrounds or with attachment problems were found to be more likely to have poor coping strategies for shame, fear, rejection, sadness or anxiety increasing the likelihood that violence against women would either be driven by immediate external aggression or as a result of rumination (Dankoski et al, 2006). Support for a link between empathy and offending was demonstrated in a meta-analysis (Joliffe & Farrington, 2004) where a significant difference between violent and non-offenders was demonstrated relating
to cognitive effect (Day, Casey & Gerace, 2010). Whilst intuitively this appears to make sense especially given the importance of positive social relationships in desistance from crime, in this meta analysis the focus was on responsivity issues and not on treatment content so no coding was made of emotional content delivery.

Masculinity part of gender identity has also been explored in a community study as a link to violence (Milovchevich, Howells, Drew & Day, 2001).

Age
As discussed earlier developmental empirical evidence has suggested that most adolescent offenders desist from offending behaviour by their mid twenties without the need for rehabilitative treatment simply due to the maturation effect. The responsivity needs of an older population are likely to be different to that which is adolescent limited. Practitioners in the field and researchers acknowledge that what works for juvenile offenders has "dismal results" (Moffitt, 1993, p684) with the life persistent serious offender. The majority of the literature covered in meta analyses refers to adolescent samples and by isolating studies with adult samples it is hoped to capture responsivity trends of the persistent offender.

From the summary of the previous literature about this sample, some trends relating to responsivity barriers for treatment begin to emerge. Anti social personality characteristics, poor social problem solving skills, substance abuse, impulsivity and lack of emotional control, adverse or unstable family and marital relationships and a high sensitivity for danger are some of the most obvious barriers to treatment and likely to be influenced by the attention to creating a robust therapeutic alliance and flexibility of the treatment to deal with multiple needs. It has been suggested that interventions may possibly have focussed on lower risk offenders also known as "amenable" offenders simply
because they were easier to work with (Wormith & Olver, 2002). Amenable individuals have been described as having high interpersonal maturity (Grant and Grant, 1959 in Palmer, 1975), some motivation for change, good cognitive and verbal communication abilities (Glaser, 1973 in Palmer, 1975) as well as being the most psychologically healthy of the offender population (Blackburn, 1998) and are considered more likely to reduce their rate of reoffending as a result of treatment (Adams, 1961a in Martinson, 1974). This population are clearly not amenable clients and for this reason, invoking the Responsivity principle is seen as crucial to treatment success. It is at this point it is useful to outline the research literature, practice and theory relating to responsivity to offender treatment.
RESPONSIVITY PRINCIPLES AND PRACTICE

The responsivity principle identifies the need to match treatment with individual learning needs and styles (Andrews & Bonta, 2010) in order to maximise the potential for learning. It is commonly referred to as the “How” of correctional rehabilitation. Most of the attention of the correctional literature has been focussed on the “What” (criminogenic needs to be targeted) (Andrews et al, 1990a; Andrews et al, 1990b; Lipsey, 1999; Lipsey, 1995 in McGuire, 1995; Gendreau et al, 1996; Antonowicz & Ross, 1994) and the “Who” to intervene with (the Risk principle) (Andrews et al, 1990a; Andrews et al, 1990b; Andrews & Dowden, 2006). A brief revision of each of the Risk and Need principles with reference to this population is now presented before returning to examine the implications of the Responsivity principle.

The Risk Principle

The Risk principle established in the Psychology of Criminal Conduct requires that the most intensive interventions are utilised with those at highest risk of reoffending (Andrews et al, 1990a), although this principle has not always been empirically supported in meta analyses (Antonowicz & Ross, 1994; Dowden & Andrews, 2000). A meta analysis focussed on testing the Risk Principle found good support for female and young male offenders but much reduced statistical support for the Risk Principle with older male offenders (Andrews & Dowden, 2006). Proposed reasons for this were weaknesses in coding of individual studies and that the early findings related to risk were conducted on juvenile samples and therefore may not be generalisable to an older population (Andrews & Dowden, 2006; Lipsey, 1995 in McGuire, 1995). Some writers have proposed that there may just be some offenders who are treatment resistant (Kilgour & Polaschek, 2012) but another possible interpretation may be that a different or possibly complementary approach is needed for interventions offered to high risk offenders than the one currently offered by RNR theorist (Ward, Melsner & Yates, 2009). Such an approach is taken in forensic treatment in the United Kingdom where an intensive 27
week anger treatment which addresses developmental issues in treating anger is offered to the highest risk complex needs forensic client and a generic 12 session anger management intervention to the lower risk client (Novaco, Ramm & Black, 2000 in Hollin, 2000). A similar approach is taken in Aotearoa with the medium intensity rehabilitation programme, a 132 hour psychoeducational group treatment approach over 13 weeks and the nine month therapeutic community Special Treatment Unit approach for higher risk incarcerated offenders involving 100 2.5 hour sessions (Kilgour & Polaschek, 2012).

The lack of reporting of risk information in many studies (Andrews & Dowden, 2006; Lowenkamp, Latessa & Holsinger, 2006) possibly contributes to a lack of clarity about the effectiveness of treatment for higher risk offenders. Although the Risk Principle is generally accepted in the correctional field, studies of domestic violence treatment indicate that not only is there a failure to report risk information but offenders at all risk bands are offered the same treatment for domestic violence (Dutton & Corvo, 2006) and some sexual (Lovins, Lowenkamp & Latessa, 2009) offending. It has been suggested that interventions may possibly have focussed on lower risk offenders also known as "amenable" offenders simply because they were easier to work with (Wormith & Olver, 2002). Amenable individuals have been described as having high interpersonal maturity (Grant and Grant, 1959 in Palmer, 1975), some motivation for change, good cognitive and verbal communication abilities (Glaser, 1973 in Palmer, 1975) as well as being the most psychologically healthy of the offender population (Blackburn 1998) and are considered more likely to reduce their rate of reoffending as a result of treatment (Adams, 1961a in Martinson, 1974). As previously outlined poor interpersonal skills, emotional regulation difficulties, communication skill deficits and a high sensitivity for threat are characteristic of high risk(persistent) violent offenders and therefore the antithesis of the amenable offender profile predicted to do well in treatment (Wormith & Olver, 2002).
The Need Principle

RNR approaches limit treatment targets to the big eight criminogenic needs or intervention targets—Antisocial attitudes, Antisocial associates, Substance Abuse, Antisocial Personality, Antisocial history, Relationship Difficulties, Employment/Education and Leisure Activities which have consistently been supported by the empirical evidence of a statistical relationship between these needs and reoffending statistics (Andrews & Bonta, 2010).

As previously discussed, interpersonal difficulties, social problem solving and emotional regulation amongst others are likely to be responsivity barriers to engaging in treatment and could be considered legitimate treatment targets on those grounds (Howells & Day, 2006).

Another controversial potential treatment target may be the presence of high levels of shame. Although it may appear counter intuitive, studies have indicated individuals scoring high on psychopathy psychometric measures also have scored highly for shame despite what appears to be callous disregard for others (Morrison & Gilbert, 2001). There has also been a link established between poorer outcomes in treatment as well as an increased likelihood that a lapse into antisocial behaviour becomes a full relapse (Gilbert, 1998 in Tarrier, Wells & Haddock, 1998). Individuals with high levels of shame, associated also with high scores for psychopathy (Morrison & Gilbert, 2001) experience difficulties separating their behaviour from their global judgements of themselves as "evil" or "bad" and this is seen to interfere with both their willingness and ability to make changes (Proeve & Howells, 2002). Individuals experiencing high levels of shame are also more likely to be sensitive to confrontation, more likely to blame others and respond violently (Walker & Bright, 2009).

Conversely individuals who have high levels of guilt are more focussed on changing behaviour, more likely to seek forgiveness and to offer restoration (Gilbert, 1998 in Tarrier, Wells & Haddock, 1998). In a domestic violence treatment programme Shame Transformation treatment resulted in statistically
significant differences in self esteem and emphatic concern for treatment group compared to the control group (Loeffler, Prelog, Unnithan & Pogrebin, 2010). It is unclear whether these intermediate treatment gains translated into a reduction in reoffending. However similar theoretical support for a similar approach with sexual offenders has been supported (Proeve & Howells, 2002). Others say it is the high levels of narcissim and inflated self esteem that leads to increased violence in response to external challenges rather than high levels of shame, an approach supporting the conventional psychopathic profile (Baumeister, Bushman & Campbell, 2000; Bushman & Baumeister, 1998).

Whilst the enhanced Risk Needs Responsivity (RNR) approach (Andrews & Bonta, 2010) advocates for strength based values, the RNR approach still has a primary orientation to deficits inherent in identifying criminogenic needs as treatment targets. Critics see the lack of shared goals has potential to disrupt a quality therapeutic alliance and lead to “treatment resistance” from the client, impacting on successful treatment outcomes (Ward, Melser & Yates, 2007). Additionally generic “one size fits all” programmes delivered in a didatic teaching style under RNR principles also have potential to contribute to a decrease in the quality of the therapeutic climate in a group by failing to take into account individual case formulations (Polaschek, 2010; Ward et al, 2007). Two approaches which take a strength based approach with regard to collaborating with the client in treatment are the Good Lives Model and Motivational Interviewing. Both approaches have the ability to enhance RNR approaches whilst ameliorating disruptions to the therapeutic alliance and allowing for flexibility in treatment. A quick overview of each of these is considered useful at this point.

The Good Lives Model
The treatment focus in the Good Lives Model is to generate pro social alternative (non criminal) secondary goods in order to meet primary human goods, such as intimacy and security (Ward &
Brown, 2004). It is the product of a collaborative process with the client rather than an imposed process by the therapist. The Good Lives Model has an underlying behavioural orientation in focussing on the development of approach goals, in conjunction with the extinction of anti social behaviour; a combined approach which decreases the likelihood of future anti social behaviour more than extinction alone (Martin & Pear, 2007).

Although Good Lives theoretical literature is widespread (Ward, Yates & Willis, 2012; Langlands, Ward & Gilchrist, 2009; Whitehead, Ward & Collie, 2007; Ward & Brown, 2004; ) a lack of empirical research into the Good Lives Model limits it's acceptability in comparison to the extensive meta analytic literature relating to RNR interventions (Harkins, Flak,Beech & Woodhams, 2012; http://www.goodlivesmodel.com/glm/Evaluations.html).

Motivational Interviewing

Another strengths based approach that values the therapeutic relationship and the client's own resources is contributed by motivational interviewing. Whilst extrinsic pressure such as Parole Board requirements have a place in getting people to enter treatment and for some keeping them there (Day, Tucker & Howells, 2004 ; Cordess, 2002 in McMurran 2002), once in treatment it is commonly understood that intrinsic motivation is preferable for change to be sustainable.

Motivational interviewing techniques which were developed for use in treatment for recovery in addiction assist in the development of intrinsic motivation for a change in behaviour. The spirit of motivational interviewing embraces the autonomy of the client discovering what they need to do to create change, and therefore the therapeutic alliance can not involve the external imposition of power (McMaster & Riley, 2011). Motivational interviewing involves creating a collaborative alliance with the client in an atmosphere of naïve enquiry where client resistance is not challenged but “rolled with”
The socratic questioning approach is rather designed to develop cognitive dissonance between the client's stated goals and their actual behaviour (Miller & Rollnick, 2002 in Anstiss, Polaschek & Wilson, 2011).

A pilot pre-treatment intervention of motivational interviewing operated by a Department of Corrections psychologist in New Zealand has produced extremely promising outcomes in not only improving volitional readiness for treatment (Anstiss, Polaschek & Wilson, 2011) but a subsequent reduction in recidivism for medium risk offenders over a variety of offending types. As a cost effective intervention this not only has significant implications for resourcing but it suggests that some other factors are involved in changing antisocial behaviour other than a focus on addressing criminogenic needs through skill acquisition (Anstiss, Polaschek & Wilson, 2011). An analysis of the NZ Dept of Corrections Short Motivational programme's effectiveness with a sample of high risk predominantly dishonesty offenders showed improved motivation for change which was sustained 3-6 months after the programme (Austin, Williams & Kilgour, 2011). A lack of research in this area particularly for offenders specifically with a history of violence and high risk of reoffending makes for a lack of generalisability of these results to the sample in this thesis.

In addition to the dominance in attention on supporting RNR criminogenic needs in correctional research, the research focus both in psychotherapy and correctional rehabilitation has tended to have been on demonstrating that one modality is more effective than another (Beutler, Malik, Alimohamed, Harwood, Talebi, Noble & Wong, 2004 in Bergin & Garfield, 2004; Lipsey 1995 in McGuire, 1995). Therapeutic modality has been comprehensively researched particularly by RNR researchers (Andrews et al, 1990a,b; Lipsey, 1995, 1999) and social learning and cognitive behavioural modalities have repeatedly been supported empirically. Some say as much of 80% of all research focuses on techniques or modality (Marshall & Burton, 2010) despite psychotherapy research
suggesting that techniques contribute only 15% to change (Norcross, 2002 in Marshall & Burton, 2010; Hubble, Duncan & Miller, 2002).

In general psychotherapy, 30-40% of positive treatment outcomes are consistently attributed to the quality of the therapeutic alliance (Norcross, 2002 in Marshall & Burton, 2010; Hubble et al, 2002). There appears to be a growing recognition of the need to understand what is contributed by the therapist and the interaction between client and therapist rather than solely focussing on elements of the programme (Dowden & Andrews, 2004). The United Kingdom correctional accreditation panel has also recognised that relationship and interactional factors contribute at least as much to outcomes as does modality (Maguire, Grubin, Losel & Raynor, 2010). Qualitative research with very serious persistent offenders in a British prison indicated that the quality of the interactions with therapeutic and correctional staff in a prison therapeutic community was one of the significant aspects in giving up criminal behaviour (Wilson & McCabe, 2002). These relational factors are addressed by the responsivity principle.

The Responsivity Principle

Few studies have focussed on the process variables with serious violent offenders (Polaschek & Ross, 2010; Ross, Polaschek & Ward, 2008) although forensic populations have attended to this area and can provide some guidance for practitioners (Jones, 2007; Novaco, Ramm & Black, 2000; Howells & Day, 2007, Howells & Tennant, 2007). Research related to the principle of Responsivity has included the construct of psychopathy (Barbaree, 2005; Hemphill, Hare & Wong, 1998); the abuse of offenders as children with consequent post traumatic stress symptomology (Lowenkamp, Holsinger & Latessa, 2001); shame (Morrison & Gilbert, 2001) and self esteem (Hubbard, 2006).

Responsivity factors or the “how” of treatment have also been called non programmatic factors
(Andrews, 2011), “black box” (Palmer, 1995) and process factors (Marshall, Fernandez, Serran, Mulloy, Thornton, Mann & Anderson, 2003; Serran, Fernandez & Marshall, 2003). These incorporate the less easily identifiable factors involved in the therapeutic alliance between the client and the therapist (Harkins & Beech, 2007), the client and the group and the client and the setting in which treatment takes place. Non programmatic factors were considered to contribute to a 50% reduction in violent offending in a community treatment project compared to a control group (Palmer, 1992). These non programmatic factors were small caseloads, extensive (broad based) and/or intensive (frequent) contact, individualisation and flexible programming, personal characteristics and professional orientation of parole officers (therapists), specific abilities and overall perceptiveness of agents and explicit detailed strategies (Palmer, 1992).

Attention to the Responsivity Principle in treatment involves addressing individual learning needs so as to optimise learning opportunities (Andrews & Bonta, 2010). The general responsivity principle as outlined originally by theorists suggests the use of social learning and cognitive behavioural modalities in addition to the therapist utilising relationship enhancing and structuring skills (Andrews, 2011). Specific responsivity factors have been elaborated by the original theorists as the need for individual case formulation and individual factors such as personality, motivation for change and for completing the programme as well as the need for age, race and gender to be addressed (Andrews, 2011).

Although attention to the Responsivity principle is seen as essential in improving effectiveness of treatment with any offenders (Andrews & Bonta, 2003; Looman, Dickie & Abracen, 2005; Marshall, Ward, Mann, Moulden, Fernandez, Serran & Marshall, 2005) this thesis suggests that responsivity is the crucial principle in improving outcomes for the non amenable (Wormith & Olver, 2002) or high risk violent offender due to their interpersonal difficulties and complex needs.
A useful starting point in considering responsivity is the non completion literature and research. This provides useful information about particular client characteristics which may create barriers to full engagement and offers specific responsivity guidance. An study in 2005 which examined predictors of treatment attrition from a sexual offending programme found that disruptive and rule breaking behaviours and poor treatment engagement explained 95.3% of the sample of non completers (Beyko & Wong, 2005). The traditional view of the resistant client not wanting to change (Howells & Day, 2007) is challenged by information from qualitative cluster research where 94.6% of 150 high risk New Zealand prisoners were actually engaged in programmes and the majority recognised that their criminal behaviour was a problem (Wilson, 2004). Beyko and Wong's (2005) study suggests that the focus move from client deficits to the improvements needed for the treatment programme to be responsive to the non amenable offender (Beyko & Wong, 2005).

Very little is known about treatment refusers (Jones, D., 2007) and they are not considered at all in this thesis.

Readiness theories and models provide a structured way to consider these responsivity barriers and these will be considered briefly before returning to consider general responsivity issues to do with therapeutic relationship, both relationship enhancing and structural factors. As the majority of correctional programmes are delivered in groups this discussion will be extended to include group therapeutic climate.

Lastly proxy measures of the centrality of the therapeutic alliance and the flexibility of the treatment programme will be proposed for the current study given that no therapist, therapeutic alliance or therapeutic climate quality data is reported in any of the studies of interest.
Non Completion of Treatment

Non completion information provides some potentially useful information in readiness for treatment and therefore improving responsivity for persistent offenders (Beyko & Wong, 2005). Just how much of an issue is non completion with correctional clients? Non completion rates for treatment with offenders are higher than with general psychotherapy populations (Wormith & Olver, 2002) although intuitively this would be expected given the possible deficits in motivation, the difficulty of treating those with anti social behaviours and the therapeutic climate limitations offered by prison environments (Losel, 1995 in McGuire, 1995). A meta analysis of non completion rates across 114 different studies of 41,438 offenders revealed an overall mean attrition rate of 27.1% from offender rehabilitation programmes (Olver, Stockdale & Wormith, 2011) indicating that nearly one third of all offenders entering treatment are failing to complete treatment. An even higher mean attrition rate of 37.8% was recorded from 35 domestic violence programmes predominantly run in the community (Olver, Stockdale & Wormith, 2011). When statistics are calculated from initial treatment assessment referral non completion rates as high as 93% have been recorded in community domestic violence programmes (Gondolf & Foster, 1991). In a New Zealand qualitative study of high risk prisoners 37% reported previous treatment non completion and nearly half of these (41 %) were exited early by programme staff, presumably for disruptive and non compliant behaviour (Wilson, 2004). A Canadian study of 93 moderate to very high risk offenders treated predominantly for non sexual violence reported that 37.6% failed to complete treatment, were assessed as being at overall higher risk of reoffending than completers and spent approximately 5 months less time in treatment than the completers (Wormith & Olver, 2002).

Other than the use of resources which could be utilised elsewhere, non completors can actually be "made worse" by treatment (McMurran & Theodosi, 2007, p. 341). This statement was made in a
United Kingdom meta analysis study of a wide range of offending types including sexual offences, domestic violence, drug offenders in both prison and community settings where reoffending outcomes were worse for non completers than both treatment completers and controls. Treatment non completers tended to be higher risk offenders but the authors acknowledged that matching of risk levels between treatment and non treatment groups may not have been comparable (McMurran & Theodosi, 2007). The authors suggested possible explanations for the worsening of risk as being an increase in antisocial attitudes, lack of skills in coping with difficult issues which had been activated by the programme, feelings of confusion, a lowering in self efficacy and self esteem creating both internalised and externalised emotional distress (McMurran & Theodosi, 2007). Their findings are supported by another meta analysis where at every risk level- moderate, high and very high, non completers had subsequent higher rates of reoffending than matching risk levels of completers (Wormith & Olver, 2002).

Retaining higher risk offenders in treatment has the potential to make a significant impact in reducing the risk of reoffending (McMurran & Theodosi, 2007; Wormith & Olver, 2002). Some writers suggest that rather than retain those offenders who may be treatment resistant and potential non completers, a better strategy may be to identify them at an earlier stage of assessment and exclude them from interventions so that their behaviour does not impact on the other group participants' learning (Kilgour & Polascheck, 2012).

Ideally low attrition rates should indicate a well designed and delivered treatment programme (Beyko & Wong, 2005) but without comprehensive enquiry this can not be assumed. Attrition rates tend to be lower within the prison setting where attendance at the programme does not have to compete with other contingencies (Olver, Wormith & Stockdale, 2011). In Te Whare Manaakitanga, formerly the Violence Prevention Unit at Rimutaka prison in New Zealand, the high base rate of high risk
offenders in treatment has lead to a commitment by treatment staff to focus on retention in treatment and as a result low levels of treatment attrition are recorded (Polaschek, 2010). Low attrition rates may also result from selection criteria which excludes non amenable clients, clients may engage only superficially and comply with the programme in order to gain parole or where programme exits are rare due to high tolerance for disruptive behaviours (Beyko & Wong, 2005).

A significant amount of information has been gleaned from qualitative studies with non completers as to contributing factors in particular the lack of emotional regulation and behavioral skills to maintain themselves in the programme. The reasons given for non completion in a Dangerous and Severe Personality Disorder Unit in the United Kingdom, were that the programme evoked general distress or specific emotional reactions such as shame which the individual was not willing or was unable to tolerate (Sheldon Howells & Patel, 2010, Howells & Day, 2006). The significant personal effort required to make changes has been "too much" for some (Pg 536, Polaschek, 2010). Qualitative research on premature exits from Grendon Therapeutic Prison indicate that there was a higher drop out rate in the Assessment Unit, due to emotional frailty, difficulties with group participation, low cognitive ability and not being considered ready to really address problems or take responsibility for their behaviour (Sullivan, 2010 in Shuker & Sullivan, 2010). Client initiated exits in the Violence Prevention Unit at Rimutaka Prison in Wellington have been due to negative attitudes about the programme's potential success, fear of personal safety, wanting a transfer to be closer to family and increased anxiety as a result of the programme (Polaschek, 2010).

Behavioural readiness barriers tend to be reflected in programme initiated exits as a result of disruptive behaviour or rule breaking within the unit (Polaschek, 2010, Wormith & Olver 2002). Disruptive, intimidatory behaviour or rule breaking is likely to lead to expulsion from treatment for individuals who have difficulties with emotion regulation (Butcher, 2009). Individuals scoring highly
on the psychopathy PCL-R scale (Hare, 2003) are reported as easily bored, disruptive, impulsive, seeking dominance and tend to ignore rules and avoid completing homework (Thornton & Blud, 2007 in Herve & Yuille, 2007). They also may have difficulty sustaining new behaviours & are likely to give up if results don't happen quickly. (Thornton & Blud, 2007 in Herve & Yuille, 2007).

The result has been that individuals with long standing anti social behaviours have been ejected from treatment programmes for the very behaviours treatment should be addressing (Ross, Polaschek & Ward, 2008). Anticipating and planning for increased stress and anxiety to emerge in the form of disruptive behaviour in treatment appears a preferred approach to reducing reoffending outcomes and reducing programme expelled non completers (Ross, Polaschek & Ward, 2008).

Another possibility for reducing non completion rates is suggested by the research indicating poor ratings of early working alliance appeared to increase the risk of early non completion of treatment (Horvath, 1994 in Horvath & Greenberg, 1994; Polaschek & Ross, 2010). More discussion on therapeutic alliance follows below.

Treatment Readiness
A useful theoretical approach to addressing problems of non completion is a treatment readiness approach that encompasses the Responsivity principle of the RNR model (Andrews et al, 1990a) through a structured assessment of potential treatment barriers and individual case formulation. The Multifactor Offender Readiness Model(MORM) was developed by identifying seven possible impediments to the effective treatment of men presenting with anger management issues (Howells & Day, 2003). Other programmes such as a Corrective Thinking programme for offenders in the United States have identified that the more responsivity barriers there are for clients, the more they are unlikely to benefit from treatment (Hubbard & Pealer 2009).
Potential barriers identified to readiness for anger treatment included complexity of the individual cases, the treatment setting, client attributions about their anger problem, whether treatment was coerced or mandatory, a lack of understanding of the function of anger for client, ethnic or cultural differences and gender differences in the expression and experience of anger (Howells & Day, 2003).

The MORM model describes cognitive, affective, behavioural, volitional and personal or social identity factors which are considered as internal factors relevant to the individual offender as well as external factors such as the programme itself and the setting (Ward, Day, Howells & Birgden, 2003).

One response to readiness barriers has been pretreatment interventions. Pre treatment interventions can be offered to the individual to address readiness barriers such as teaching skills or enhancing motivation (Howells & Tennant, 2007). The Millfields Personality Disorder Forensic Unit offers a module in pre treatment skills in listening, communicating, giving and receiving feedback in groups with high risk personality disordered offenders and was considered to have been successful in preparing patients for treatment in particular reducing anxiety (Shine, 2007).

A pre-treatment intervention with sexual offenders called a “preparatory program” aims to engage clients in a group process with the goal of getting them used to talking about problems in a group, reducing fears about treatment and building self worth. The results suggest that the group that completed the preparatory treatment had increased levels of motivation and hope. The same group also had lower reoffending rates when released for both general and violent offending (Marshall, Marshall, Fernandez, Malcolm & Moulden, 2008 ). Pre Treatment interventions were only reported in three of the studies investigated for the attached meta analysis – Babcock & Steiner, 1999 ; Boe, Belcourt, Ishak & Bsilis, 1997 and Henning & Frueh, 1996 .
A potential solution to readiness barriers, particularly to those of an affective nature, suggested by theorists is to employ skilled therapists who have the ability to respond in a flexible fashion (Howells & Day, 2003). The prevailing RNR approach of delivering generic one size fits all programmes has allowed for group facilitation by practitioners skilled in delivering content and material in an engaging fashion but not necessarily skilled in dealing with complex affective and behavioral barriers (Howells & Day, 2003; Jones, D., 2007; Shine, 2007; Novaco, Ramm & Black, 2000; Howells & Day, 2003; Polaschek, 2010). Both the attention to the therapeutic alliance and the flexibility to respond to individual needs are the subjects of the meta analysis. The therapeutic alliance will be considered first.

A therapeutic alliance can be viewed as having three different aspects (Horvath & Greenberg, 1994). These are the goals for treatment, the tasks to be worked on to achieve these goals (Ross, Polaschek & Ward, 2008) and an "affective" bond between therapist and client (Horvath & Greenberg, 1994). The Revised Theory of the Therapeutic Alliance suggests that the attachment experiences of both client and therapist are also relevant (Ross et al, 2008). Theorists are increasingly realising that experienced, highly trained clinicians are needed to work with persistent violent offenders as therapists are required to manage transference that inevitably present in the therapy group with the potential for therapeutic rupture (Jones, D., 2007; Shine, 2007; Novaco et al, 2000; Howells & Day, 2003; Polaschek, 2010). Skilled therapists were not necessarily better at developing a therapeutic alliance with general psychotherapy clients, but they were more skilled at assessing the quality of the alliance and attending to any repairs to any actual or possible therapeutic rupture in a timely fashion (Henry & Strupp, 1994 in Horvath & Greenberg, 1994). The same study found that failure to recognise ruptures may have lead to the client leaving treatment prematurely (Henry & Strupp, 1994 in Horvath & Greenberg, 1994). Rupture identification and repair could be seen as part of the flexibility required in treatment as well as an aspect of therapeutic alliance however this is not identified nor
measured in any of the studies considered in the meta analysis.

The therapeutic alliance can however be considered on three levels – the individual clinician's attributes and skills, the therapeutic climate created in the group setting and the therapeutic community model often used in a prison setting but one study includes this model in a community residential setting (Berry, 1998).

There is little research relating to the therapeutic alliance and climate for correctional clientele other than for samples of sex offenders so this will provide the bulk of the support for the factors examined in the metaanalysis and systematic review. Some useful indicators can also be gleaned from the forensic literature with highly disordered patients who tend to provide challenges in the formation of therapeutic alliances (Howells & Tennant, 2007; Shine, 2007).

Therapist attributes

Whilst none of the studies considered for the meta analysis reported therapist attributes and this could not be measured, it is still considered useful to briefly review what is known as background knowledge for what contributes to a positive therapeutic alliance.

The research literature with sex offenders has well established principles about the importance of the therapist being warm, non judgemental and non confrontational (Marshall & Burton, 2010; Frost & Connelly, 2004; Ross et al., 2008; Drapeau, Korner, Granger, Brunet & Caspar, 2005; Marshall, Serran, Fernandez, Mulloy, Mann & Thornton, 2003). According to the Psychology of Criminal Conduct good therapeutic relationships are characterised by therapists who are " respectful, caring, enthusiastic, collaborative & valuing of personal autonomy" (Andrews & Bonta, 2010 Pg.47). In a Canadian study with probation officers and their clients, better recidivism outcomes occurred for
clients with probation officers who were "warm, tolerant and flexible yet sensitive to conventional
rules and procedures" (Andrews & Kiessling, 1980, Pg 36-37). The skills of the facilitator to create a
"safe environment" (Pg 183, Howells & Day, 2006) of warmth, acceptance and no fear of
intimidation, mockery, rejection or criticism is considered to be the most influential aspect in
engagement with clients who present with affective barriers to treatment (Howells & Day, 2006).
Aboriginal clients reported greater engagement in treatment when they felt they trusted both the
therapist and the programme (Beyko & Wong, 2005).

Conversely therapists who are confrontational, judgemental and hostile tend to elicit denial or
defensive behaviour from the client and produce negative treatment outcomes (Marshall & Serran,
2004). Sex offenders in a qualitative research study reported they would challenge therapists to gauge
the therapist's response. If the response proved to be harsh and defensive, they reported they either
would drop out of treatment or only superficially engage whilst appearing to be compliant (Drapeau et
al, 2004).

Therapist process skills of interest when considering responsivity include the ability to be flexible or
highly structured, the therapist awareness of potential therapeutic ruptures, appropriate management
of counter transference and the ability to create an optimal group therapeutic climate.

The desistance literature suggests that important social relationships can be one of the "turning points"
in change from a criminal lifestyle (Sampson & Laub, 2005 in Ward & Laws, 2010; Serin & Lloyd,
2009). An extension therefore of the therapeutic relationship are relationships of the individual client
with other group members and within the therapeutic setting. With this in mind meaningful
interactions not only with the group leader but also between group members are considered by some
as possibly having more impact on client change than the delivery of information or skill
training (Morgan & Winterowd, 2002). Qualitative research with persistent offenders at Grendon prison indicates that the therapeutic relationships and the overall climate and values of the prison therapeutic community contributed to individuals' desire to make changes from an antisocial lifestyle (Wilson & McCabe, 2002). Supportive Group Therapy, where therapists made personal follow ups with domestic violence offender participants who missed a session, produced better treatment outcomes than a standard cognitive behavioural intervention (Morrel, Elliot, Murphy & Taft, 2003).

Given that most of the offending group of interest in this thesis have difficulty in making and sustaining positive interpersonal connections, a group which encourages interpersonal interactions has the potential to give the individual a positive experience of belonging to a law abiding group (Stephenson & Scarpitti, 1974). The more cohesive the group, the greater the sense of belonging of members, the greater the potential to influence each other and conform to shared group norms (Stephenson & Scarpitti, 1974). Theoretical support exists for the creation of a therapeutic environment where clients feel able to communicate how they are feeling about the therapist and the treatment without fear of judgement or denial from the therapist or that they will be exited (Ross et al, 2008). A study of a manualised sex offender treatment programme in the United Kingdom found different group leaders were responsible for very different treatment outcomes than what would have been expected from a generic programme. The most positive treatment outcomes were for the treatment groups which recorded high on the Expressiveness Scale that "measures the extent to which freedom of action and expression of feelings are encouraged in the group" (Pg 131, Beech & Hamilton-Giachristis, 2005). This “expressiveness” variable contributed approximately 40% to positive treatment outcomes (Beech & Hamilton-Giachristis, 2005). The negative or low treatment outcomes from the same study were associated with overcontrolling leaders (Beech & Hamilton-Giachritsis, 2005). This has particular implications with domestic violence treatment programmes where the Duluth model is widely used with the aim of jolting and confronting men into making changes by highlighting the male abuse of power and priviledge (Dutton & Corvo, 2006). The
confrontation and imposition of a harsh shaming psychoeducational approach is hypothesized to damage any potential therapeutic alliance and lead to poor treatment outcomes (Dutton & Corvo, 2006). Even though most men are mandated to complete treatment by the Courts, approximately 40-60% of men who do attend the first session, did not go on to complete treatment and associated non-completion rates as high as 93% (Gondolf & Foster, 1991; Buttell & Carney, 2002).

Although group interventions with other antisocial individuals expose men to one of the Big Eight Criminogenic Needs of antisocial associates, the benefits of groups where individuals act as resources for one another is considered extremely valuable (Yalom, 1995). Grounded theory analysis with sex offenders indicated that discussion of the issues that arise in group therapy continue on after the group has finished for the day (Frost & Connelly, 2004). However, group therapy also has the potential to create contagion effects and act as a barrier to self-disclosure in treatment for fear of manipulation or violence from others (Ross et al., 2008) and can create collusion between group members (Frost, 2011 in McMasters & Riley, 2011) which can reduce treatment outcomes.

The quality of the social climate of the prison setting and the therapeutic climate in which a programme is actually delivered, over the period of time of programme delivery are always potential confounds when assessing treatment outcomes (Martinson, 1975). These constructs tend to be difficult to operationalise and therefore test and few studies in the correctional field have attempted to address this at a programme level (Beech & Hamilton-Giachristis, 2005; Beech & Fordham, 1997) or at an institutional level (Day, Casey, Vess & Huisey, 2012).

Prison settings offer "therapeutic immersion" away from the distraction of everyday stresses of money and relationships that many clients face when released (Frost, 2011 in McMasters & Riley, 2011). Incarcerated clients tend to have increased motivation and ability to attend to spend time out of an
individual cell and there is an increased capacity to manage emotional activation safely with the 24 hour presence of prison officers (Frost, 2011 in McMasters & Riley, 2011). A secure environment within a prison may also offer more opportunities for pro social learning than most offenders' community settings (Ware et al, 2009). In a therapeutic community every relationship and event that occurs between individuals is valued as an opportunity to learn from "mistakes", to practise new skills, receive feedback and assistance (Ware, Frost & Hoy, 2009). Therapeutic communities aim to increase new pro social behaviours rather than having a goal of removing ingrained behaviours (Mullen, 2007, Wormith, 1984; Shine, 2007).

Compared to the limited time spent in a rehabilitative programme with the overall time in a custodial setting, correctional staff also have more opportunity to inadvertently reinforce behaviors therapy staff are endeavouring to extinguish. Prison systems can abruptly terminate what may have become significant positive relationships as a result of client, corrections officer or therapist transfers or systemic changes potentially reinforcing old attachment difficulties (Ross et al, 2008). Managerial and custodial staff may not agree with rehabilitative practices (Gendreau, Goggin & Smith, 1999). Opposition by institution staff to a psychodrama group treatment programme in a prison setting programme was seen as contributing directly to increased rates of reoffending (Adams & Vetter, 1981).

Despite these conditions often being present, plenty of evidence exists to suggest that treatment within a prison context has been successful (Losel, 1995 in McGuire, 1995; Antonowicz & Ross, 1994. In fact the more restrictive the prison setting (ranging from minimum to maximum security), the more prisoners valued interpersonal learning in treatment groups (MacDevitt & Sanislow, 1987). Therapeutic communities are not always an appropriate option for treatment. A clinical therapeutic community with no professional input, completely run by peers (other offenders) and interventions
which included nude encounter groups resulted in an increase in violent recidivism for those scoring as psychopaths (those scoring over 25 on the Psychopathy Checklist – Revised, PCL-R) (Hare, 1980) (Harris, Rice & Cormier, 1994). Therapeutic community treatment was considered effective for non psychopaths in reducing recidivism (Harris et al, 1994). However overall the empirical results for the applicability of therapeutic communities in treatment of those scoring highly on the PCL-R (Hare, 1980) are poor (Harris et al, 1994).

FLEXIBILITY

Flexibility of treatment to be responsive to individual learning needs includes the matching of therapist style to offenders; dosage of treatment and the use of manuals and specified procedures. Whilst therapist style was not able to be identified from the studies considered, it is still seen as useful to review the literature to date.

General psychotherapy studies indicate the importance of matching angry and defensive clients with a more flexible and less directive therapist style so as to minimise client reactivity which may lead to disruptive behaviour and early termination from a programme (Beutler & Consoli, 1993). Palmer (1975) proposed the idea of matching therapists with correctional clients depending on the client's need for structure or flexibility (Palmer, 1975). In his view the more intelligent, higher functioning clients would benefit from a match with a less authoritarian, more flexible practitioner (Palmer, 1975).

However others suggest that the interpersonal coping styles of violent offenders which often manifests as disruptive behaviours may require therapists to act with great flexibility and sensitivity and in a less authoritarian fashion especially in a group setting (Howells & Day, 2004) to avoid transference and client initiated exits. Child sexual offenders reported they had the most difficulty with "overcontrolling" therapists (Drapeau et al, 2005; Marshall & Serran, 2004) and negative or low
treatment outcomes for sex offender group treatment were associated with overcontrolling leaders (Beech & Hamilton-Giachritsis, 2005).

There are opposing views on the need for structure in particular with highly anxious clients. Forensic practitioners working with a high risk clientele have identified that group members may be unfamiliar with a shared leadership and unstructured style and as a result anxiety, resentment or anger may evoke particular disruptive behaviours (Nichols 1976). A highly structured and directive approach may also be preferable for those highly anxious correctional clients (Howells & Day, 2004) who find unfocussed, unstructured groups too anxiety provoking. Marshall and colleagues in a Canadian prison setting and a centre for mentally disordered sexual offenders found that a clear group structure and leadership were very important for personality disordered offenders (Marshall et al,2008).

Dealing with therapeutic ruptures adopting a psychodynamic framework may be useful for recognising transference and counter transference as learning opportunities rather than to treat such incidents "disruptive behaviour" which result in an exit from treatment (Jones,D. 2007 ; Shine, 2007) potentially with an increased risk of reoffending (McMurran & Theodosi, 2007).

Flexibility of Treatment Dosage

The client group of interest in this thesis are at high risk of reoffending and according to RNR principles (Andrews & Bonta, 2010) should be matched with an appropriate high dosage of treatment. Low dosage has been viewed as 26 weeks or less, with less than 2 contacts per week and / or less than 100 hours in total (Lipsey, 1995 in McGuire, 1995). High dosage was defined as everything greater than low dosage rates (Lipsey, 1995 in McGuire, 1995) . "Usually a few months' duration" (Gendreau,1996, Pg. 149) was said to amount to intensive service but for high risk offenders approximately 300 hours intervention has been proposed (McMasters & Wells, 2011 in McMasters &
Riley, 2011). A study conducted in a Canadian prison found that for every week of treatment there was a reduction in recidivism of 1.2-1.7% and for high risk offenders with multiple needs a programme of 300 hours appeared to reduce recidivism rates by approximately 20% (Bourgon & Armstrong, 2005). The systematic review of interventions for violent offenders conducted by Jolliffe and Farrington (2009) found support for improvements in both general and violent offending for programmes that were of longer duration and for greater total time in treatment. The mean duration for the 12 treatment programmes they investigated was 18 weeks, the longest treatment was of 40 weeks duration (Jolliffe & Farrington, 2009). A study of a 20 hour generic predominantly prison based anger management programmes in two Australian states, concluded the dosage was inadequate for the level of content to be delivered, for the practice of the skills required and to deal with the multiple psychological and social problems of higher risk participants (Howells, Day, Williamson, Bubner, Jauncey, Parker & Heseltine, 2005). Eighteen months appeared to be an ideal length of therapeutic community treatment for some of the highest risk personality disordered offenders at Grendon Prison in the United Kingdom (Cullen, 2010 in Shuker & Sullivan, 2010; Newton, 2010 in Shuker & Sullivan, 2010). A mean reoffending rate of 50% was recorded for those offenders who had treatment stays less than 19 months compared to a mean reoffending rate of 19% for those who stayed over 19 months (Cullen, 2010 in Shuker & Sullivan, 2010; Newton, 2010 in Shuker & Sullivan, 2010).

Programme Flexibility

One of the major issues identified in poor programme outcomes has been low programme integrity – that is departures in implementation from the intended programme design. Researcher involvement in design and implementation of treatment programmes has been shown to have a very real impact on effect sizes (Lipsey, 1995 in McGuire, 1995). Better outcomes are reported from smaller studies possibly due to greater treatment integrity and monitoring (Lipsey, 1995 in McGuire, 1995). The process of beginning with a successful pilot treatment intervention which is then rolled out on a
national basis has resulted in a fall in effect sizes sometimes to a point below what may be considered
effective (Wales & Tiller, 2011 in McMasters & Riley,2011 ). In New Zealand "Straight Thinking"
initial programmes performed adequately but were later removed due to the poor results when these
were “rolled out” over the country (Wales & Tiller,2011 in McMasters & Riley, 2011).

Manualisation

The use of programme manuals, where the programme content is comprehensively described as well
as procedures involved in delivery, has been one way to address programme drift where generic
programmes that have been rolled out in multiple locations. The use of manuals can vary from the
highly prescriptive "one size fits all" (Ward & Laws, 2010) to manuals which simply provide
guidance to clinicians (Marshall, 2009). Some see the increasing manualisation in the correctional
field as reducing the clinician's flexibility to deliver the material both at the pace and in the sequence
that meets the individual or group's need ( Polaschek, 2011 ; Howells & Day, 2004 ). Others say that
this has lead to a "watering down" of the influence of the clinician to one of simply being a guide
(Jones D, 2007 ). Strict adherence to a manual can mean irrelevant programme modules which can
lead to boredom, disruptive behavioura and loss of credibility for both the therapist and programme
(Ross et al, 2008; Marshall, 2009). Domestic violence research has revealed increasing adherence to a
manual resulted in poorer reoffending outcomes (Marshall & Burton, 2010). The use of an extremely
prescriptive manual where there was a failure to incorporate updated empirical knowledge over the
extended period of the study was correlated to poor treatment outcomes in a sex offender treatment

The use of the psychoeducational feminist based Duluth model for domestic violence offenders has
been criticised for being overly confrontational and failing to address individual offending trajectories
with a resultant deterioration of the therapeutic relationship (Dutton & Corvo, 2006). Some argue
that such an approach models the very coercive and controlling behaviours that programmers are attempting to eliminate (Baker, 2011 in McMaster & Riley, 2011). If the quality of the emotional connection is a fundamental factor in change as suggested by qualitative studies (Wilson & McCabe, 2002) then an underlying punitive tone in manualised programmes will consequently affect client engagement and potential programme effectiveness (Jones, 2007). Empirical evidence from a manualised sex offender treatment suggested that what "should" have been the same programme was actually producing very different outcomes due to therapist differences in how they created a therapeutic climate (Beech & Hamilton-Giachristis, 2005). So whilst evidence suggests programme integrity is important in good outcomes for treatment, manualisation does not necessarily lead to standardisation.

Ethnic and cultural needs

Flexibility also relates to specific responsivity to individual needs. The empirical literature relating to responsivity has been considerably limited compared to that supporting the other two principles (Beyko & Wong, 2005). Ethnic and cultural differences may require re-examination of the underlying values of any treatment as well as the components of a programme such as delivery style, same ethnicity facilitators (Day, Davey, Wanganeen, Howells, De Santalo & Nakata, 2006). Maori completers from kaupapa Maori based Te Piriti sexual offender treatment programme in New Zealand had sexual recidivism rate of 4.41% compared to the overall sexual recidivism rate for all completers from Te Piriti of 5.47% (Nathan, Wilson & Hillman, 2003) and a sexual recidivism rate of 13.58% for Maori completers from non kaupapa Maori programme Kia Marama recorded a sexual (Nathan, Wilson & Hillman, 2003). Although cognitive behavioural interventions have been shown to be effective with global samples (Andrews & Bonta, 2010; Losel, 1995 in McGuire, 1995; Redondo et al, 1999), the focus on cognitive processes and the avoidance of emotional activation methods represents a values difference between cultures (Durie, 2001) and potentially lower responsivity for
indigenous cultures who tend to view healing and learning as a holistic process involving spiritual, physical and emotional components in addition to cognitive learning (Durie, 1994).

High levels of trauma symptoms in indigenous prison populations has provided support for theories of inter-generational trauma from colonisation rather than an ethnic explanation for criminal offending (Day, Davey, Wanganeen, Casey, Howells & Nakata, 2008). Intergenerational trauma can be construed as a responsivity barrier. Grief and Loss programmes in Australia run by indigenous staff, allow for narratives and traditional rituals (Day, Davey, Wanganeen, Howells, Casey & Nakata, 2008) and have produced promising outcomes in intermediate targets. Similarly Indian sweat lodges and healing ceremonies blended with traditional sex offender programmes in Canada (Ellerby & Stonechild, 1998 in Marshall, Fernandez, Hudson & Ward, 1998) have produced promising attempts to provide specific responsivity treatment.

Whilst this is a promising area for exploration, these variables have not been coded in this meta analysis as the focus suggested by the work in Australia and Canada is that the impact of colonisation requires different treatment approaches as well as content. A suggested approach would be to sample from a wide range of offending types to ascertain whether any relationship exists between culture or ethnicity and treatment outcomes.

Other external factors which impact on client contact are systemic issues such as the reasonableness of workload, impacting on staff stress levels, the client and non-clients contact ratio, the degree to which clients are matched to staff or groups, levels of coercion and where the timing of the treatment programme is within the client's overall sentence (Ross et al, 2008). For community interventions where programmes are run during the evening, other issues such as fatigue levels are likely to impede the learning potential for participants (Loeffler et al, 2009).
One of the greatest potential moderators of reoffending outcomes are post programme factors both reintegration issues or for those continuing to serve long prison sentences after treatment without release. A reduction in treatment gains was reported for those not released from Special Treatment Units in New Zealand (Kilgour & Polaschek, 2012). In addition poor reoffending outcomes were reported for those individuals with reintegrative deficits on release (Kilgour & Polaschek, 2012). It was intended initially to code for the presence of reintegrative support in the current meta-analysis but only four of the 30 studies provided any indication whether this was in place and this was not considered sufficient.

Some of these factors described above have been coded for the study and the methodological process follows.
The preceding literature review has provided some background to the sample of interest; namely adult, male, serious violent offenders and the moderators of particular interest – therapeutic alliance, flexibility in programme delivery and the relationship of each of these particularly to recidivism and non completion.

Exclusions from Study Criteria

Violence for the purposes of this study excludes sexual offenders although the literature on rape does suggest some adult sexual offences may be demonstrations of power and control through violence rather than being sexually motivated (Gannon, Collie, Ward & Thakker, 2008). Most treatment programmes for sexual offending do not differentiate between child sexual offenders and adult sexual offending and as there is still considerable debate on the antecedents to adult sexual assault, it is considered clearer to omit adult sexual offenders from this study.

Although evidence and practice from violent forensic treatment programmes is useful to consider in the discussion relating to clinical practice, forensic programmes are also excluded from the sample as they involve other confounds which can not easily be eliminated, such as co morbidity of mental disorders, the effects of pharmacology and differences between a health and justice setting.

Whilst often domestic violence is seen as "different" to general violent offending, (Polashek & Collie, 2004) some theorists acknowledge the more serious domestic violent offender tends to also be a generalist violent perpetrator (Holtzworth-Munroe & Meehan, 2004) although such definite subcategories are not accepted by all and also not generally reported in studies (Gondolf, 2011). The Risk and Need principles appear to not be adhered to in the treatment of domestic violence offending (Dutton & Corvo, 2006). The Duluth psychoeducational approach with a focus on power imbalances between men and women rather than individual criminogenic needs appears to be the predominant approach to treatment. Neither are treatment programmes tailored to the risk of reoffending (Dutton & Corvo, 2006). The domestic violence studies considered for inclusion in this meta analysis have not directly identified risk so unless there was clear evidence from the article
that the sample was predominantly high risk or recidivist offenders, the studies were assumed to be dealing with a wide range of risk levels. However the wide ranging risk levels are included to provide a greater sample for the meta analysis and a point of comparison with general violence offending programmes. Including treatment programmes utilising the Duluth model offers an opportunity to see if there are significant treatment outcome differences when a confrontational style and didactic programme format are used compared to a more unstructured approach (Jennings, 1987).

Study Search Method

Only three reviews of effectiveness of violent treatment programmes appear to exist all of which draw entirely on non domestic violent adult male offender samples. Most of the reviews published of effectiveness of rehabilitation of violent offenders appear to focus on juvenile samples (Losel, 1995 in McGuire, 1995). Writers in this field have commented on the gap in the effectiveness literature for serious violent adult offenders (Howells, 2004; Joliffe and Farrington, 2009, Polaschek & Collie, 2004; Dowden & Andrews, 2000). Even as recently as 12 years ago Dowden and Andrews commented that "no meta-analytic review to date has examined whether any forms of correctional treatment are effective in reducing violent recidivism"(Dowden & Andrews, 2000, Pg 451.).

These three reviews will form the base of the studies on general violence to be considered with a focus on responsivity. In addition domestic violence treatment studies for higher risk offenders will be included to enhance both the number of studies to be examined and provide comparison with a RNR approach.

The most recent review and meta analysis located was commissioned by the Swedish Government by two British psychologists (Joliffe & Farrington, 2009) and resulted in only 12 studies, after excluding treatment programmes for domestic violence, forensic samples and sexual offending. also with considerable cross over between the studies. The review only considered studies with an
outcome measure for recidivism and violent recidivism and excluded studies which did not include control groups or those that did not report outcomes for violent offenders separately to non violent offenders. Studies including non equivalent groups were included as long as they met certain criteria which established that they could be compared with each other. Studies covered the period 1975 to March 2009 and were located used a comprehensive search strategy described by the authors. The Joliffe and Farrington review included a study involving assessing the effectiveness of electronic monitoring as an “treatment intervention”(Finn & Muirhead-Stevens, 2002) as well as a 15 - 20 minute brief intervention after sentencing in court (Watt, Shepherd & Newcombe, 2008), both which were excluded from the current study as the variables of interest relate to assessing the effectiveness of a therapeutic relationship and intervention programme in a traditional sense.

Of the 10 studies considered in the most recent meta analysis (Joliffe & Farrington, 2009) 30% showed a statistically significant effect on reducing reoffending and 1 study that of Motiuk et al, 1996 indicated that both general and violent reoffending increased subsequent to the intervention, a negative effect size. Overall reductions in the percentage reconvicted for general recidivism was recorded at 7-9% and 6-7% for violent recidivism (Joliffe & Farrington, 2009) , both of which are lower than effect sizes recorded of 10-40% when appropriate programmes adhering to Risk Need Responsivity principles (Losel, 1995 in McGuire, 1995).

In 2004 Devon Polaschek and Rachel Collie from New Zealand conducted a narrative review, locating only nine studies which met their criteria of serious violent offending and excluded men whose violence was domestically orientated or predominantly sexual (Polaschek & Collie, 2004). Their criteria as with Joliffe & Farrington, 2009 required an untreated comparison group and an outcome measure of recidivism for violent offenders or violent recidivism as an outcome measure. They commented on the lack of details published in the studies such as programme content and delivery, participant, setting and therapist characteristics (Polaschek & Collie, 2004). Polaschek and Collie's(2004) review identified two additional programmes – the Cognitive Skills Programme
from Canada described by Robinson (1995), and also from Canada's Rideau Treatment Centre, Marquis, Bougon & Pfaff (1996). Robinson (1995) 's evaluation of a cognitive skills training programme was considered that it was not possible to disentangle the violent and non violent offender outcomes. Polaschek and Collie (2004) also included Bush (1995a,b) study of the CSC programme in Vermont, Canada. They note that Henning & Frueh (1996) report on the same programme, a study which is included in Joliffe & Farrington (2009) review.

Polaschek and Collie, 2004 concluded that there had been modest progress in the field of violent offending but this evaluation also identified problems in having accurate or sufficient data (Polaschek & Collie, 2004).

Canadian Risk Need Responsivity theorists Don Andrews and Craig Dowden conducted a meta analysis of 35 studies which reported violent recidivism as the outcome variable. Only 11 of the 35 studies actually related to psychological intervention with adults who had committed non sexual violent acts (Dowden & Andrews, 2000) and there is substantial cross over between their meta analysis and Polaschek & Collie's (2004) review. Dowden and Andrews meta analysis produced no further studies other than the ones identified by the other two reviews.

Dowden and Andrews' (2000) meta analysis produced an overall mean effect size of 0.07, increasing to 0.12 when interventions based on increased criminal justice sanctions were excluded. However given the large proportion of studies were young offenders, sexual offenders, studies assessing effectiveness of arrest and other community initiatives such as work release, their results can not “easily inform the design of programmes for physically violent offenders” (Polaschek & Collie, 2004, Pg 322). Only one study of the 35 differentiated on risk (Polaschek & Collie, 2004).

Domestic violence meta analyses were similarly few. The latest meta analysis identified was that by Feder & Wilson, 2005 which identified ten studies - four utilising random assignment of participants and six quasi experimental studies. All studies originated in North America and
provided varying degrees of detail as to the programmes offered. None of the studies appeared to
differentiate on risk.

The writers reported mean $d$ for experimental studies of 0.26, no treatment control groups mean $d$
of -0.14 and for non completer control groups a mean $d$ of 0.97, all based on official reoffending
statistics rather than victim reports. However in their discussion they attribute higher mean outcome
effect sizes for experimental studies to the restricted nature of the population, suggesting the sample
may be more motivated or “creamed”. They suggest that an earlier meta analytic review not
separating control groups comprising non completers may lead to inflated effect sizes due to
unmeasured variables such as motivation differences between the groups.

The other significant meta analysis for domestic violence identified was produced by Babcock,
Green & Robie, 2004, comprising twenty two studies - five of these comprised experimental studies
and seventeen, quasi experimental. Seven out of the ten studies included by Feder and Wilson are
included by Babcock et al, 2004. Four of the 22 studies in the Babcock et al (2004) study were
unable to be located despite requests from one of the authors. The remaining 18 studies provided
varying degrees of detail as to the programmes offered and no risk differentiation for any of these.
All studies originated in North America. Treatment mean effect sizes vary from what is regarded
as a small positive 0.18 effect size (Babcock, Green & Robie, 2004) down to a zero effect size for
Duluth models (Feder & Forde, 1999 in Dutton & Corvo, 2006) and often very high non completion
rates, as high as 90% when referrals to assessment were included (Gondolf & Foster, 1991).

A more detailed search strategy is outlined below.

PURPOSE OF CURRENT STUDY

The previous literature review on engagement, readiness, therapeutic alliance and other programme
factors has emphasized certain key themes which will be considered in the meta analysis.
The first is that high risk persistent, violent offenders have complex criminogenic needs, indeed under RNR approaches high risk offenders are defined as having high numbers of criminogenic needs (Andrews et al, 1990a). The role of responsivity or flexibility to address the complexity of individual needs in treatment and the contribution this may make to recidivism outcomes is of interest. Treatment approaches that are effective are hypothesized to have greater flexibility in structure and an ability to respond to readiness barriers and therefore will direct more attention to assessment, individual assistance and support.

The second is that high risk persistent, violent offenders are more likely to have interpersonal difficulties making engagement and retention in interventions problematic. Interventions that are of greater intensity and longer duration with an increased focus on factors such as developing a robust therapeutic alliance or the involvement with a therapeutic community model are hypothesized to result in lower reoffending rates.

The third is that programmes which address factors potentially related to non completion will result in better recidivism outcomes. This alludes to readiness and the previous two themes and implies that non completion data potentially can provide an additional indication of treatment effectiveness. It is also hypothesized that lower non completion rates will be associated with greater overall attention to the therapeutic alliance and increased flexibility in the programme to respond to individual needs.

Whilst the quality of the therapeutic alliance and the therapeutic climate and individual therapist factors are highly implicated in the areas of enquiry detailed above, the lack of reporting in individual studies about these factors means that any systematic review or meta analysis to establish
the strength of these factors with violent offending treatment programmes is not currently possible.
Proxy operationalisation of programme factors may provide some indication as to responsivity but
will not elucidate the subtler factors of warmth, non judgementalness and supportiveness which
may or may not be present in therapists or the working alliance they create individually or in the
group. Until individual researchers begin to provide such data a more detailed and accurate
qualitative review is simply impossible.
Other than utilising the demographic and risk data provided, further investigation into client factors
will not be pursued in the following analysis.

HYPOTHESES

1. Treatment approaches that are effective with high risk/persistent adult male violent offenders are
hypothesized to have greater flexibility in structure and an ability to respond to readiness barriers
and therefore will direct more attention to assessment, individual assistance and support.
This will be evidenced by:
   Higher total coding scores for the sum of the following variables: Case Formulation,
   Extent of Assessment, Pre treatment intervention offered, Flexibility of Intensity, Style,
   Specific Goals, Manualisation, Procedures and Role of Therapist, translated to higher
effect sizes.

2. Interventions that are of greater intensity and longer duration with an increased focus on factors
such as developing a robust therapeutic alliance, emotional control and opportunities to practice
new behaviour either with an emphasis on role play or a therapeutic community are hypothesized to
result in lower reoffending rates.
   This will be evidenced by:
Higher total coding scores for the sum of the following variables: Offender/staff ratio, frequency, Duration, Total No of Hours, Individual support offered, reintegration, post treatment follow up, style, role of therapist, Interpersonal focus and emotional focus, translating to higher effect sizes.

3. Higher non completion rates will be associated with lower overall attention to the therapeutic alliance.

This will be evidenced by:

Lower coding scores for the sum of the following variables: Offender/staff ratio, frequency, Duration, Total No of Hours, Individual support offered, reintegration, post treatment follow up, style, role of therapist, Interpersonal focus and emotional focus, will be reflected in higher non completion rates.

4. Higher non completion rates will be associated with lower flexibility.

This will be evidenced by:

Lower total coding scores for the sum of the following variables: Case Formulation, Extent of Assessment, Pre treatment intervention offered, Flexibility of Intensity, Style, Specific Goals, Manualisation, Procedures and Role of therapist, will be reflected in higher non completion rates.

5. Non completion scores will be related to treatment outcomes.

This will be evidenced by:

Lower non completion rates will be correlated to higher effect sizes.

METHOD

RESEARCH DESIGN
This research comprises a meta analysis and a narrative review of studies assessing the importance of process factors in treatment effectiveness of programmes targeted at high risk violent adult male offenders. As previously mentioned much research has focused on the what and the who of rehabilitation but very little empirical studies have focussed on the responsivity principle or how treatment is implemented. The population of interest with poor interpersonal skills and complex criminogenic needs would intuitively seem to require an approach intensive of therapeutic time and demanding of therapist and programme flexibility in order to best be responsive to clients' learning needs. Measurement of process factors such as the quality of the therapeutic alliance are still in early stages of development with correctional clients (Ross et al, 2008) and most studies reporting on effectiveness of treatment give very little information about process factors and still less which might enable such factors to be assessed. At this stage of the research proxy measures for these process factors appear to be the only way forward in commencing an examination of the contribution they might make to effectiveness when measured by recidivism outcomes.

The programme's valuing of the therapeutic relationship would seem to be a function of programme duration and intensity; the provision of additional support over and above structured treatment time. The programme would seem also to be valuing the responsivity principle if a high level of flexibility is in place; if there is individual support and if the programme content is highly tailored to individual needs. In addition to this issue of making very broad assumptions in order to assess proxy measures, the very small number of studies identified, 30 in total, limit any generalisability of the quantitative results of the meta analysis and for this reason a narrative review is also appended. The purpose of the thesis is to open up areas of possible enquiry and to at least test the idea that process factors such as therapeutic relationship as in general psychotherapy contributes significantly to treatment outcomes

Outcome Measures
The outcome variable of interest was reoffending as measured in individual studies as police reports, arrests and new convictions. The reoffending rates of treatment groups were compared to the reoffending rates for a control group. An additional outcome variable of non completion of treatment is also compared to other potential moderator variables and reoffending outcomes.

Dependent Variables
Treatment interventions included in the meta analysis broadly fell into two subgroups – those that targeted domestic violence where the offending occurred within a familial context and those that target more general violence. Treatment designs ranged from cognitive behavioural, psychoeducational group interventions, to unstructured group interventions. They range from eight week or twenty hour duration to 300 hours total duration and are presented in prison, community justice and secure community residential settings.

Only adult male treatment samples were included.

STUDY INCLUSION CRITERIA
The study investigates the effectiveness of a treatment or intervention applied to a sample of violent adult male offenders. Violent offenders were those with current criminal violent convictions and excluded sexual offending and individuals diagnosed with a personality or mental health disorder undergoing forensic treatment in a forensic setting.

Pretest- posttest designs (measures of variables before and after treatment on single sample) were also excluded. This type of methodological design tends to overstate effect size and as mentioned earlier in a correctional setting tends to involve self report data or measures on personality attributes that do not necessarily translate in reductions in reoffending (Lipsey & Wilson, 1993 in Babcock et al, 2004). Only studies that included a comparison of one or more intervention options with one or
more control conditions were included. Studies also needed to report outcome variables that measured reoffending outcomes in both groups. Random assignment studies were preferred due to the greater methodological quality however given the small number of studies available for analysis, quasi experimental designs were also included that had made some attempt to establish equivalency of the experimental and control groups.

The difficulty locating sufficient studies related to violent offending has meant the need to include research studies with mixed samples of serious and less serious offenders and this is particularly noticeable in the samples in the domestic violence studies which tend not to report risk or to differentiate offending according to risk. Some effort to estimate risk was made where previous conviction data was provided but this was on an average basis and did not reflect that a few very high risk offenders may have been included in a large sample of very low risk offenders. However the loss of potentially useful information as well as the additional statistical power of including more data has informed the inclusion of these treatment programmes.

Previous meta analyses were employed to provide a wider net of material than would have otherwise been possible although study results reported in conference proceedings were unable to be obtained. All of the general violent offending studies from Joliffe & Farrington (2009) meta analysis were included with the exception of the electronic monitoring intervention, Finn & Muirhead-Steves (2002) and a brief alcohol intervention (Watt et al, 2006). This provided an initial sample of ten studies which excluded any domestic violent offending.

To reflect the treatment effectiveness for domestic violence programmes, this study included the studies included in the most comprehensive and most current meta analysis which was able to be located assessing treatment effectiveness, that of Babcock, Robie & Green( 2005) . To ensure that studies relating to effectiveness of batterer or domestic violence interventions after this date were
included further searches of the databases covered by the Massey University library were conducted covering the period Jan 2004 to June 2012. A similar search was conducted for the period Jan 2009 to June 2012 to locate general violent offending programmes. The strategy is set out below.

Search Strategy

Only two meta analyses and one narrative review were located for violent offending. Two of these excluded domestic violence offending and the third included studies for youth, arrests were treated as interventions and sexual offending studies. All three studies mentioned the paucity of enquiry for violent offending treatment outcomes (Dowden & Andrews, 200; Joliffe & Farrington, 2009; Polaschek & Collie, 2004).

Joliffe and Farrington, 2009 conducted a comprehensive search of CSA Illumina, OVID, Science Direct, Dissertation Abstracts, ZETOC, OCLC Firstsearch and ISI Web of Knowledge. It was considered appropriate to rely on the completeness of their review data for general offending until December 2008. To ensure that more recent relevant were not overlooked, a search of the same search terms used by Joliffe and Farrington, 2009 was undertaken for the period January 2009 until May 2012 inclusive. Key terms in the abstract of a document "violen*, aggressiv*, serious* batter* AND offend*, crim*, delinq*, prison*, inmate*, felon* AND treat*, intervention*, program*, correction*, project, therapy, rehabilitat* AND adult AND male produced 67 studies from a search of Psychoinfo, Academic Search Premier, PSYCArticles, Psychological and Behavioural Collection. The terms "felon, inmate, prison and batter " were added to Joliffe & Farrington’s original search criteria. None of these searches revealed studies with an outcome variable of recidivism or experimental and control group design. Given that Joliffe and Farrington (2009) had excluded from their search any documents containing the term "domestic", an additional search for the period 1 January 2004 to December 2008 was conducted which resulted in 189 documents. Five
studies were identified but were excluded on the basis of lack of recidivism outcomes, non violent offending samples and pre-post test designs.

From the Babcock et al (2004) meta analysis four studies were not able to be located as they referred to conference proceedings and despite communication to the author of the meta analysis and web searches were not able to be located. These were all quasi experimental studies of low methodological design.

One single domestic violence effectiveness study was located from the search strategy after 2005, this was a study based in Taiwan with high risk offenders, (Lin , Su, Chou, Chen, Huang, Wu, Chen, Chao & Chen, 2009) and was incorporated into the meta analysis.

A additional study assessing a treatment programme targeting gangs in prison was also identified and included (Di Placido, Witte, Simon, Gu & Wong (2006).

Outcome Measures
Some differences existed between studies about how recidivism data was calculated. In Babcock et al's (2004) meta analysis victim or partner report was also reported and generally was higher than police reports. However given that recidivism data for the general violent offending treatment studies was reported using official convictions, police report data was used in the meta analysis calculations to preserve consistency for comparison purposes. Undetected crime clearly indicates that real recidivism is higher than official statistics record and as few as one in five violent domestic offences are reported (Rosenfeld, 1992).

Calculation of the Effect Size
The meta analysis has resulted in 30 studies which utilise some type of control group compared with a treatment group addressing violent offending for either general violence or domestic violence. All studies except for Morrell, Elliott, Murphy & Taft, 2003 study reported treatment
effects by either percentage of reconvicted or absolute numbers of treated and control participants. These were converted by odds ratio to z statistic which was then in turn converted to Pearsons r correlation coefficient as a measure of effect size. The Morrel et al study reported reoffending outcomes as F statistic which was in turn converted to a Pearsons r correlation coefficient.

Two studies provided different sample sizes to those calculated in the existing meta analysis produced by Joliffe & Farrington, 2009 and Babcock et al, 2004. These were Hughes,1993 where recidivism rates were given for only 37 high risk offenders and Di Placido et al, 2006 where the percentage reoffended statistics were provided for 135 released offenders for the full two year follow up period. Group sample sizes for 143 released offenders was provided but eight of these were returned to prison before the two year follow up period was over. An assumption that these eight were evenly distributed over the four groups may well be erroneous.

In addition two studies are included which compare different treatment effects with the same control group, these being Boe et al(1997) for two different treatments and Dunford(2000) with three different treatments. Two studies are included by Polaschek for the same treatment programme period but split into high and medium risk offenders and their different comparison groups. The potential effects are that the Polaschek effect sizes are diluted by the sample sizes being smaller than the total sample. In contrast the Serin study is contributing more to the weighted r with comparison of the same treatment group with 2 different controls.

Metastat Software

Metastat DOS software was used to analyse the Pearson r correlation coefficient as a standardised effect size. This software was developed by Rudner, Glass, Evartt & Emery and was available for download free of charge from Department of Measurement, Statistics and Evaluation, University of Maryland, College Park, United States of America. It is noted that it was developed over 20 years ago and when the software designer was contacted for assistance, he advised there was no current software support and unlikely to be monitoring to ensure the software is still operating as originally
Control Groups

Control groups for the sample for the meta analysis included untreated samples, those who were randomly allocated to a waitlist condition, those who completed an alternative programme and treatment dropouts. Each of these has the potential to distort effect size but the use of non completers as control groups was adjusted for in the analysis as set out below.

Non Completion

Not all studies reported non completion rates. In some studies the control groups were the non completers so to assess the effect of non completion on treatment effect sizes, these studies were excluded from the analysis concerned with understanding the effect of non completion rates on effect sizes. This resulted in six studies of the 30 being removed, the remaining were subjected to a regression analysis and then examined for any correlation to either attention to the therapeutic alliance or the flexibility of the programme.

Effect sizes which are calculated using completer data only are likely to be higher given what we know about the increased likelihood that treatment non completors are at increased risk of reoffending (McMurran & Theodosi, 2007). Not only does this understate reoffending rates for the treatment group but when the control group reoffending rates are compared in order to calculate the effect size of a treatment, there is an additional overstatement effect. This study design was used in the Dowden et al study (1999) which produced one of the better outcomes in effect sizes for both violent and general offending (Dowden et al, 1999).

The sanctions for non completion of a particular intervention also has relevance if it is particularly harsh as individuals may continue as completers but fail to fully engage with treatment. In the
ordinary way of things such individuals may have been recorded as a non completer. Where intention to treat designs are used, this variable does not become a confound but when only completers are sampled, this may result in a lower treatment outcome.

Coding

A coding protocol is attached in Appendix Two. Where data was not apparent from the original study but the meta analysis authors had presented information in tabular form relating to the original study, presumably from personal communication with the study authors, then this information was utilised for coding purposes.

An overall estimate of degree of flexibility of the programme was estimated based on high scores for Case Formulation, Extent of Assessment, Pre treatment intervention offered, Flexibility of Intensity, Style, Specific Goals, Manualisation, Procedures and Role of therapist. A similar estimate of attention to the therapeutic alliance was calculated by high scores on Offender/staff ratio, frequency, Duration, Total No of Hours, Individual support offered, style and role of therapist. Both of these estimates give equal weighting to each variable. Where information was missing from the study description 0 was allocated to reflect this, but this may have understated the programme's actual focus on each of these overall factors.

Although ideally inter coder variability checks would be carried out to avoid the author's coding reflecting personal bias or inconsistency, in this case logistical constraints prevented this occurring. Given this is an early exploration of the relationship of variables and the comprehensive disclosure of the coding and the inclusion of studies are appended to this thesis, it should enable simple replication by interested parties to establish the reliability and validity of such coding. A table of the
coding by study is included in Appendix One. Much of the treatment programme information was
not reported but where possible a conservative approach was taken.

There were difficulties in obtaining sufficient information from the studies to assess the degree of
flexibility between task and process and although not reported it is possible that many of these
programmes involved informal individual support or follow up after treatment which is not
reflected in the results. The lack of information provided in studies relating to risk differentiation
has already been noted elsewhere and potentially is a confound of the results. The inadequacy of the
information provided in individual studies has already been commented on (Palmer, 1992;
Martinson, 1975).

Given the very small sample and the heterogeneous nature of the interventions it is difficult to
assess the validity of the results. Given the above comments relating to limited information, as
mentioned previously, the results merely indicate areas for further investigation.
RESULTS

Effect sizes were calculated using r coefficient and entered directly into the Metastat database. Initial analyses of the 30 studies produced an overall weighted mean of 0.125 (sd= 0.094) with a range between 0.011 to 0.442.

Investigations into the relationships between the three variables (attention to the therapeutic relationship, flexibility and non completion) and unbiased effect size initially suggested that none of these impacted on effect sizes in the expected manner. High non completion rates were associated with higher effect sizes and there was no increase in effect size as therapeutic relationship and flexibility increased in scores.

To test the impact of the six studies that had used non completer participants as the control group for comparison purposes, the data from these studies was then excluded and investigations between the relationships and effect sizes on the 24 remaining studies were conducted. The resulting weighted mean produced was 0.110 (SD =0.076) with a range from 0.011 to 0.337.

The expected relationships for non completion rates with effect sizes were discovered with this refined sample ie that as non completion rates increased, mean effect sizes decreased. Non completion rates in the range 0-30% (n=19) weighted mean effect size = 0.115(sd=0.082); For non completion rates in the range of 31-50% (n=5) a reduced weighted mean effect size of 0.091 (sd=0.032) was produced.

As more attention was paid to the therapeutic alliance and flexibility of treatment, effect sizes increased significantly for higher scores. Medium and low scores appeared to be producing similar
weighted mean effect sizes.

High flexibility (n=8) WM 0.174 (sd=0.099)  Medium flexibility (n=8) WM 0.081 (sd=0.058)  Low flexibility (n=7) WM 0.093 (sd=0.046).

High Therapeutic Alliance (n=6) WM 0.198 (sd=0.087)  Medium Therapeutic Alliance (n=12) WM 0.08 (sd=0.057)  Low Therapeutic Alliance (n=6) WM 0.085 (sd=0.036).

The Hedge's Homogeneity Tests for each of the variables suggest that there is a high probability that the effect sizes are from the same population and this does limit the generalisability of the results (Lipsey, 1995 in McGuire, 1995) particularly as sample study numbers were so low.

The relationship of individual factors in each of the therapeutic alliance and the flexibility were then regressed against unbiased effect size to establish the degree of correlation.

High attention to therapeutic alliance was associated with beta 0.457 with standard error of 0.049 and flexibility produced beta of -0.049 with standard error of 0.039.

Further analysis was conducted from the composition of the factors presumed to make up each of the flexibility and therapeutic alliance variables in the search for any correlation of the contributing variables.

In the case of therapeutic alliance this included offender/staff ratio, frequency of programme per week, overall duration, total number of formal treatment hours, whether individual support was available, style of the programme and the role of therapist (authority, peer, collaborative). Collaborative Therapist styles (R = 0.7271); Authority Therapist Style (R = -0.4871) and a high level of individual support including counselling (R = 0.3837) variables indicated levels of

Variables contributing to flexibility of treatment included whether there was any individual case formulation for treatment, the extent of the initial assessment, whether any pre-treatment intervention was offered, whether the treatment length was flexible, the style of the programme, whether there were specific treatment goals to be covered, the degree of manualisation, whether there were specific procedures in how delivery of treatment was carried out and the role of the therapist.

For flexibility variables, regression coefficients were in the low range with the exception of manualisation and procedures. Correlation with effect sizes were as follows for no manual produced (R= 0.3022); a highly detailed and prescriptive manual (R= -0.3884), procedures specified (R= -0.1742) and no procedures specified (R= 0.4129). The Palmer (1992) study was an extremely positive outlier for manualisation. These values were not considered significant enough to warrant further analysis at this stage given the approximation of the coding due to incomplete information published in the studies.

Relationship of non completion rates with both flexibility and overall therapeutic alliance was regressed and produced very low R values for both variables. No discernable relationship was identified between non completion rates and general flexibility or therapeutic relationship, a result which was somewhat unexpected.
DISCUSSION

Once the studies using non completers as a control group were removed, the expected relationships between effect sizes and non completion rates emerged as predicted. Alternative explanations for the relationship could be that only two categories were used for the non completion rates and a more precise three category analysis may not have demonstrated a linear relationship.

However the expected relationship between non completion rates and the other two variables was not observed. The reasons for why this may be so are not immediately apparent. It could be that non completion relates to factors other than the therapeutic alliance or the degree of flexibility, such as affective readiness barriers (Howells & Day, 2006) which prevent individuals being able to engage with the material. One possibility that will be discussed in more detail under possibilities for future research is that unresolved early trauma from early adverse events is implicated.

Another possibility is that these variables are related but that the proxy variables do not accurately capture the construct and this would require further exploration. The large amount of missing programme details may have contributed to miscoding errors.

Interestingly the low and medium scores for therapeutic relationship and flexibility of the programme produced similar weighted mean scores. This was surprising but again may reflect the poor detail in individual studies with which to gauge the extent of the importance and it may have been easier to distinguish a high score from the other two categories rather than to disentangle low and medium scores.

The outliers in this case provide useful data for assistance should further exploration be desired.
As a random experiment, the Palmer study (1992) offers higher protection against selection confounds, the effect size reached significance and it only suffers from a small treatment sample size of 30. The programme although still psychoeducational was less structured and the delivery of the material was introduced as it arose naturally within the group process. Group attrition was relatively low and all participants attended a minimum of two sessions, 70% of all men being deemed to have completed the programme. The control group was a random group waitlisted. One possibility is the degree of flexibility and the low likelihood that rupture will occur in the therapeutic alliance when the programme is client centred around timing of need for material to be delivered, rather than imposed in an inflexible manner.

The Supportive therapy approach examined in the Morrell et al, 2003 study also was client centred, focussing on relationship issues and ending abusive behaviour within an initial minimum instruction about the use of time out but as much as possible utilising group therapy principles established by Yalom (1995). The authors hypothesize that the increased opportunities for informal practice of communication skills and relationship problem solving within the group may have contributed to the positive results of Supportive Therapy compared to Cognitive Behavioural treatment. The authors refer to the possibilities of utilising motivational enhancement techniques and dialectical behavior therapy to address emotion regulation difficulties for future programmes. They had also utilised retention enhancing techniques of contacting individuals personally if they missed a session (Taft et al, 2001) and recorded one of the lowest attrition rates in domestic violence studies (Babcock et al, 2004). In the Babcock et al(2004) study this study and the Waldo,1988 relationship enhancement study provided the highest effect sizes. The Waldo (1988) study was not included in the current analysis as the treatment sample had had no previous domestic violence offending and were considered a low risk sample. However Babcock et al(2004) suggest that the emotion-focussed relationship approaches may offer some potential for further exploration although no conclusions
can be drawn on the basis of a single study.

The Dunford C study which appeared as a negative outlier for high levels of individual support was an intervention called Rigorous Monitoring on an individual basis. Initially it was scored as high for therapeutic relationship on the grounds that individual counselling could be provided. However this “counselling” could be offered on a monthly basis and it is possible the “fishbowl effect” of the man being advised that he would be rigorously monitored may have acted as an authorian approach rather than a useful one. What was unclear from the description in the study as to the quality of the therapeutic relationship but it could realistically be presumed that a fishbowl effect is more likely to create a negative atmosphere than a positive therapeutic relationship. This is supported by evidence from work with sex offenders (Marshall & Serran, 2004).

The Newell A (1994) study produced a very positive outlier effect for individual counselling. One of the important assessment procedures involved a challenging interview with the client where they are confronted with the feminist principles of power and control in relationships and then placed on a waiting list typically for four to six weeks. Over this period they are seen individually and monitored and it could be that it is this individual focus which contributes to better engagement in group treatment and subsequent reductions in offending. It could also be a lower risk group and indeed two thirds had no previous domestic violence offending.

The Dowden (1999) study focussed on reducing aggressive behaviour by developing emotional management skills. Therapists were instructed to involve themselves in an active, directive and collaborative manner, to use positive reinforcement to change behaviour and were selected for their interpersonal skills. That these factors were reported on by the study's authors suggests that these were highly valued by the programme managers and possibly pivotal to the programme's success.
That the programme is recorded as a highly positive outlier for therapist style as collaborative is probably not surprising given that very few of the studies commented on staff characteristics or general behaviour at all.

More analysis would be useful but the coding on incomplete and often very different programmes does make further detailed analysis meaningless unless the raw data is seen as more fully accurate. In order for this to happen publishing of details of the treatment programme practice and quality of practice would noticeably enhance the analysis of such studies.

Limitations of the Study

There are a number of possible limitations arising from the attached meta analysis arising due to statistical limitations, the particular constructs utilised and the composition of both the sample and the control groups.

Statistical and Logistical Limitations

As advised earlier, the purpose of this study is largely exploratory. It has been conducted with relatively few studies, (n=30) but when studies using control groups are excluded this has been further reduced to 24 studies. The coding for the meta analysis has required significant assumptions be made, the accuracy of which could not easily be ascertained. At least one of the programmes had been closed down. In contrast more information was available about the two New Zealand programmes in the meta analysis. In particular, the writer is actually employed at Te Whare Manaakitanga Special Treatment Unit, formerly the Violence Prevention Unit at Rimutaka Prison, Wellington and the personal knowledge of the current programme may have unduly biased her coding of the earlier data raw data used.

For logistical reasons no inter rater reliability checks for coding of raw data took place. Although
this normally would be advisable in order to assess the extent of coder bias, it was thought preferable to make the coding process more transparent to the reader to reperform. The coding protocol and data coding details for the studies are therefore appended to the thesis. Further coding assumptions are outlined in the narrative review included in the main body of the thesis. Even in the process of transforming data from the original meta analyses, differences were observed in calculations and these have been noted in the narrative review.

Of the statistics obtained very few reach significance and this is likely due to the smallness of the sample. The small sample size for the meta analysis was due to difficulties in locating enough studies that met the criteria, which has in turn lead to compromises such as the inclusion of Henning & Frueh's (1996) study which included both violent and non violent offenders but doesn't report violent recidivism outcomes, only general reoffending (Henning & Frueh,1996). Other compromises have meant that studies have been included that include lower risk offenders and offending types which would otherwise have been excluded which has potential to confound the results.

As identified previously domestic violence programmes tend not to adhere to RNR principles, in particular the Risk principle (Dutton & Corvo, 2006) and treatment participants tend to be undifferentiated by risk. Some studies report recidivist offenders make up only 4-5% of the total sample (Dobash et al, 1999 ), the Dunford (2000) study reported a lack of diagnosed antisocial personality disorder in treatment participants which could indicate a low risk sample; and in another the control group had a 21.8% previous violent conviction rate compared to a treatment group with 25% (Chen et al,1989). In another study the percentages of first time domestic violence offenders was 89.5% in treatment group, 77.2 % in non completer group and 60% in the group incarcerated due to failure to complete the programme (Babcock & Steiner, 1999).
One study included small proportions of treated participants from sexual offending and a forensic treatment programme (DiPlacido et al, 2006), both offender types which were expressly excluded from the study but because the proportions were low and the treatment participants included gang members notoriously high risk offenders, this study was included.

It seemed unlikely that only one study could be located post 2009, that of Lin et al, 2009. However a comprehensive search strategy was carried out following the same procedure as Joliffe & Farrington (2009) and it may simply be the case that the trend of not publishing or possibly evaluating violence programmes continues as noticed previously (Howells, 2004; Joliffe and Farrington, 2009, Polaschek & Collie, 2004; Dowden & Andrews, 2000).

The lack of information recorded in individual studies as to therapist attributes, the amount of non structured programme time that was spent with individuals, details of how the programmes were actually run, the percentage of process and content in groups is a serious issue if the discipline is to explore the Responsivity principle fully. Details were sketchy or missing for on average two to three of the 26 items for each study.

The software Metastat was developed twenty years ago and may not have been more recently updated for potential faults, changes to the system. It is suggested the raw data is reperformed on a more modern meta analysis software programme.

Construct Issues

No validity tests were done on the various constructs to test they were actually measuring what it was thought they were measuring. Although there are measurement scales available which have
reasonable validity for measuring the strength of the therapeutic relationship, it would not be possible to apply them retrospectively. It is also conceivable that the relationship between effect sizes and the other variables are explained by confounds such as reinforcement from correctional officers in the prison setting for pro social behaviours (Ware, Frost & Hoy, 2009; Mullen, 2007, Wormith, 1984; Shine, 2007) and in the community, reintegrative support (Kilgour & Polaschak, 2012).

The construct of non completion offers some challenges. Different programmes assess adequate dosage of the programme differently. Palmer (1992) reports completion to be attendance at seven or more sessions of a ten session programme but completion of prison based programmes requires attendance throughout the full programme (Polaschak, 2010). There may be differences in recording non starters between studies, those who complete assessment but then do not go on to undertake the programme would not be considered programme non completers in the Violence Prevention Unit, New Zealand (Polaschak, ) nor the Montgomery House treatment programme (Berry, 1998). Programmes therefore with shorter assessment protocols may be producing higher non completers than those programmes with a lengthy assessment procedure.

Programmes with lengthier follow up periods are more likely to have higher recidivism rates than a programme with a six month follow up although the rates of reoffending are likely to reduce over time. Canadian data suggests that 60% of release “failures” occur within 6 months of the release date and 90% occur within a year (Nouwens, Motiuk & Boe, 1993). The participants in Dutton et al (1997) were followed up for recidivism purposes over a range of four months to eleven years.

Some reoffending statistics were reported as offences rather than as individuals who offended which can lead to the situation that occurred in Dutton study (1997) where one man in the treatment group
was responsible for 20% of the new assault charges. As mentioned above some studies only reported general offending which is likely to understate the relative effect size given that the construct of interest is that of violent reoffending.

Finally the differences in control groups. Treatment non completers as controls produces higher effect sizes than effect sizes produced from comparing two different treatments. There are inherent problems with treatment samples compared to waitlist groups or matched demographic offenders through a Corrections database as accumulation effects of other treatment are not identified nor measured. Forty two percent of high risk offenders in New Zealand reported they had attended previous anger or violence treatment programmes (Wilson, 2004). There was a great variation in the measures to ensure equivalence, from simple percentage comparisons to statistical.
CONCLUSIONS

This meta analysis and narrative review explores the Responsivity principle with a particular subgroup of offenders – the adult persistent/high risk violent offender. The reported effect sizes are in the very modest range and raises questions as to the reasons for this. One option is that some offenders will always remain treatment resistant and the best policy may be to assess them as early as possible and remove them from treatment before their disruptive behaviour can impact on other group member's treatment (Kilgour & Polaschek, 2012).

Another possibility is that treatment options do not really address the real readiness barriers. The extensive cognitive and behavioural skills delivered in treatment may not be able to be learned if early adverse experiences such as trauma impede learning. Intuitively given the characteristics of persisters and the adverse early life experiences identified earlier, future research exploring the impact of long term trauma on recidivist offenders would seem useful in considering the Responsivity principle for persisters. The symptomology for long term post traumatic of impulsivity, high vigilence for perceived threat, Axis II personality disorders, difficulties with intimacy and trust and often co-morbidity with substance abuse (Van der Kolk, MacFarlane & Weisaeth, 1996) would also describe the adult persistent violent offender population. A study of prisoners by Moskowitz (2004) found that 25% of prisoners studied scored over 30 on Dissociative Experiences Scale and of these 7-9.5% scored over 50, a score which usually indicates severe pathology.

Whilst these symptoms are treatment targets, high vigilence for perceived threat and difficulties with intimacy and trust in particular may also act as readiness barriers to treatment. In intensive forensic approaches a more intensive anger treatment which addresses early developmental issues could provide a model for persistent offender populations (Novaco et al, 2000 in Hollin, 2000).
Longer term treatment involves assisting the individual to integrate the traumatic experience cognitively (Van der Kolk et al, 1996) and traumatic affect must be experienced in order to modify cognitive schema (Padesky, 1994). In order to do this emotion recognition and awareness are addressed early in treatment before exposure to trauma memories are introduced (Day, Davey, Wanganeen, Casey, Howells & Nakata, 2008) as intense anxiety will bypass cognition by way of dissociation (Stein, 2007). Standard 20 hour anger management programmes are not sufficient duration to address early trauma (Day et al, 2008). The literature suggests that emotional attachment is seen as the greatest protective factor against trauma, supporting the desistance literature (Sampson & Laub, 2005 in Ward & Laws, 2010; Serin & Lloyd, 2009) and supportive groups can take up this role (Van der Kolk et al, 1996). This is the approach taken working with psychodrama at Grendon prison in the United Kingdom with some of the highest risk offenders (Jeffries, 2010 in Shuker & Sullivan, 2010; Baim, 2004 in Balfour, 2004) and has resulted in improvements in interpersonal relating following treatment (Shuker & Newberry, 2010 in Shuker & Sullivan, 2010).

Similarly trauma formulations may be useful to consider with ethnic populations who have experienced the effects of colonisation. Research with Aboriginal populations in Australian prisons suggests that higher rates of violence in Aboriginal populations is linked to trauma related to colonisation (Day, Davey, Wanganeen, Casey, Howells & Nakata, 2008). Further exploration of the extent that cultural and ethnic responsivity barriers operate over all offence types would be useful particularly in New Zealand where Treaty of Waitangi obligations operate.

The extreme positive outliers produced in this meta analysis provide some indications of further enquiry using larger sample sizes to assess the reliability of outcomes. The Palmer (1992) study’s relative success comparative to other treatment programmes suggests pilot programmes using a less structured delivery approach may offer some useful information about whether responsivity is
enhanced. Other writers have alluded to the need to increase the proportion of process to content in more intensive treatment approaches (Polaschek, 2011) but in practice the drive to ensure programme integrity through standardisation may predominate. Using RNR principles this would apply to a high risk sample. Babcock et al (2004) identified another study performing well in the domestic violence treatment to be a relationship enhancement programme reported by Waldo (1988) which was excluded for this study as treatment samples only included first time offenders. Similar to Palmer (1992), the treatment followed a relatively unstructured group therapy (Yalom, 1995) format but focussed on improving communication and social problem solving skills. Although unstructured interventions have been not supported by RNR empirical evidence in the past (Andrews et al, 1990b), these outliers warrant further investigation.

Likewise the positive outcomes reported in the Morrell et al study (2003) where individuals were personally followed up when they missed a session may provide useful procedures for future pilot studies aimed at improving treatment completion rates and hence reoffending outcomes. A similar need for follow up has been identified for Special Treatment graduates who remain within the prison system to improve reoffending rates on release (Kilgour & Polaschek, 2012).

The conclusions of the meta analysis and narrative review were always going to be of a exploratory nature given the current state of the literature in this area but the results do indicate the potential importance of considering the Responsivity principle particularly with a view to improving reoffending outcomes for this subgroup of offenders.
NARRATIVE REVIEW

Babcock & Steiner, 1999

Methodology
Quasi experimental study comparing domestic violence treatment completers (n= 106) to non completers (n = 178) and incarcerated group (n= 55). 89.5% of treatment group were first time offenders, 77.2% of non completers and 60% of incarcerated group for failure to attend domestic violence treatment.

Treatment Details
Court mandated treatment based in Seattle undertaken in a group format over six months (26 weeks) plus monthly for another 6 months. Topics include anger management, taking responsibility for violence, power & control tactics, problem solving, communication skills & alternative strategies to violence. The majority of the treatment 66%. Only 31% were considered to complete treatment. 43% also completed substance treatment. 58% of non completers did not attend any sessions at all

Process Factors
Little detail other than the majority of treatment was based on the Duluth model utilising a manual with a CBT approach. Scored medium for flexibility and therapeutic relationship on account of the length of the treatment.

Outcomes
Effects due to treatment modest. Recidivism data included for incarcerated offenders suggested it was a non equivalent group even when compared to non completers. Follow up period was 2 years.

Berry, 1998

Methodology
A quasi experimental study. Control group were matched offenders from programme commencers from the Violence Prevention Unit at Rimutaka Prison, New Zealand prior to 30.6.97. Little was known about the matched controls as to whether they had actually completed treatment and they can not be assumed to be a pure no treatment group. Equivalence on demographics and offending history was established statistically.

This study considered the 10 Montgomery House Violence Prevention group programmes delivered between Jan 1995 and December 1996. The sample of 82 comprised 22%(18) who did not complete the programme.

Programme Details

The programme was a residential high intensity programme in the community offering approximately 380 hours of treatment over approximately eight weeks. The programme was based on social learning principles and incorporated role play, self disclosure, didactic teaching, reading homework, role modelling and skills practice. The majority of participants were Maori and the programme was delivered with underlying kaupapa Maori values.

Process Variables

Initially was coded as using a highly prescriptive manual but this was recoded based on information that content and processes in resource books were suggestions and not required. The therapeutic community offered many therapeutic relationship opportunities and the study scored high for both flexibility and therapeutic alliance.

Outcomes

Rate of convictions for violence per year for treatment completers fell from 0.94 offences per year to 0.30 offences per year. For the matched completers control group the rate remained relatively unchanged from 0.75 to 0.70. The picture for non completers compared to their controls varied considerably. Control group rates for convictions for violence fell from 1.0 per annum to 0.54 but non completer rates increased from 1.02 to 1.23. The trends of the survival data for non completers
suggest that given larger sample sizes the shorter time to reoffending would be statistically significant.

Boe, Belcourt & Ishak, 1997

A quasi experimental study published of the Vancouver District Violent Offender Program, Canada compared the effectiveness of intensive community supervision for those identified as persistent offenders with the Regional Health Centre Pacific treatment programme evaluated by Motiuk et al (Joliffe & Farrington, 2009).

Methodology

This study compared 74 men who over two successive years joined the community supervision programme with 44 men who had completed the Regional Health Centre Pacific treatment programme and 45 men who had been matched as a control group with the Regional Health centre participants. The Regional Health Centre study is also reported on in this meta analysis by Motiuk, Smiley & Blanchette, 1996 but the comparison figures in this study are those men from treatment and matched groups who were at six month release point and excludes non completer data.

One offender was admitted a second time. Statistical information was provided in the study of index offending to underline the seriousness of the offending of treatment participants.

Programme Details

The programme required a minimum of at least two therapeutic sessions a week under community supervision but details of how this was facilitated were not provided.

Process factors

As the focus was providing supervision to offenders on release in the community, the therapeutic alliance had the potential to be highly valued. However lack of description of how this worked has required a conservative scoring of medium. Likewise a lack of information about how flexible the supervision was has lead to a conservative score of medium.
Recidivism Outcomes

Recidivism outcomes are reported as failures of individuals rather than rates of offending, probably a more accurate representation than rates of reoffending as one man may reoffend several times and this frequency is what we are interested in capturing. This study focusses on treatment being community supervision, therefore non completion of treatment and recidivism are the same variable, potentially the same issue for other community based programmes.

Failures uncontrolled for length of time in the community amounted to 17.5% of community supervision group which dropped when adjusted to be a standard first 6 months following release to 15%. No failures amongst participants scored as being good or very good risk – low risk.

What was unclear was whether programme participants in the community supervision programme had previously been treated. Evidence from New Zealand high risk offenders would suggest that most of them will have been exposed to some sort of treatment (Wilson, 2004) and the results of the study may equally reflect an accumulation effect. Equivalency of groups appeared to be dealt with solely by comparing previous offence types and risk levels.

Chen et al, 1989

Methodology

A quasi experimental design with two non equivalent groups. Control group (n= 101) was obtained by systemic sampling from court records matched based on dates. Control group contained 21.8% individuals with previous convictions for violence compared to 25% in treatment group (n= 120). Groups appear to have only been compared based on percentages, not statistically.

Programme Details

Programme conducted in two phases. The first phase comprised four two hour sessions for delivery of didatic content with use of videos of men in violent settings used to identify issues. The second phase of another four sessions of two hours was process driven and dealt with more affective
component. Skills taught for avoiding confrontation, self esteem, male roles/expectations and stress management.

Process Variables

Programme scored medium for flexibility and therapeutic alliance. Phase two involved a less directive approach but Phase one was educational in nature. The relatively short duration of the programme limited the development of therapeutic alliance.

Outcomes

37% of treatment group failed to attend 75% or more of programme. One third of this 37% did not attend any sessions. Only reduced recidivism for those attending 75% or more sessions.

Cortoni, Nunes & Latendresse, 2006

Methodology

Completion of the Violence Prevention Program of the Correctional Service in Canada lead to improvements in institutional behavior in 6 month & 1 yr follow up. Treatment completers were compared with a matched control group selected from custodial records. Control group selected to match the treatment completers based on risk of reoffending, need level, ethnicity, age and 2 or more convictions for violent offences with no statistically significant differences. Study design appears thorough and rigorous.

Treatment sample those who had completed the programme prior to 31.10.04.

Non completer data was reported at a third, (n=167) - 101 of these "dropped out" and 66 were removed for administrative/ release/hospitalised/segregation reasons. No significant differences were found other than non completers tended to be younger and single. It is not clear whether sexually violent offenders were included in this data.

Programme Details

Violence Prevention Program has three phases, assessment, intervention and post treatment
assessment. Ten modules are presented over 94 two hour sessions at rate of six sessions per week. There is a standardized manual and staff are trained in delivery of programme.

Process variables

The programme scores medium for flexibility with presence of manual but mediated by individual relapse prevention planning and individual session. A score of high for therapeutic relationship is based on the intensity and duration of the programme.

Outcomes

Rates of failure and violent recidivism were reported for completers, non completers and comparison groups as 8.5%, 24.5% & 21.8% respectively. Cox regressions implemented to eliminate previous treatment programme effects indicated statistically significant effects of treatment completion over comparison group and even more over non completers. Risk alone is non sufficient to explain non completion as equivalency of completers and non completers on risk. Initially results masked by non completion data.

Di Placido, Simon, Witte, Gu & Wong, 2006

Another treatment study not included by Joliffe & Farrington (2009) but considered by Polaschek and Collie (2004) is a 2x2 group quasi experimental study examining the efficacy of treatment particularly for gang members.

Programme Details

The treatment was undertaken by the Regional Psychiatric Centre in Saskatchewan, Canada. Treatment was either Aggressive Behavioral Control(ABC) program(78.8% of treatment participants); the Clearwater Sex Offender Program(7.5% of participants) or the Psychiatric Rehabilitation program(13.8% of participants). Although the latter two are treatments excluded from the meta analysis an exception was made because the overall proportions of the sample were low and the inclusion of what are assumed to be a higher risk of violence group was considered
very helpful.

Methodology

The assumption that gang membership requires the member to indulge in violent offending may not always be accurate. However 82.5% of the total sample were serving a sentence for a violent conviction. Control groups were identified from those who were either assessed only and untreated or were treatment dropouts from these programmes. Including treatment dropouts in the control group potentially means that the effect size was potentially overstated as treatment non completers research seems to suggest they are more likely to reoffend and at a higher rate than treatment completers (Polaschek, 2011). The effect size may then simply reflect a non completion effect and not a treatment effect. The inclusion of treatment completers from sex offender and psychiatric treatment programs may also confound treatment effects of the ABC programme.

Process Variables

Psychoeducational groups in addition to individual therapy and issues such as relationships with significant others, early abuse are addressed where appropriate. Detailed relapse prevention plans are produced by all participants. Scores high for flexibility and high for therapeutic alliance.

Recidivism

Over 2 years of follow up there was no statistical differences for violent recidivism but a statistical difference for non violent reconviction. Gang membership did not impact on reoffending rates.

Dobash, Dobash, Cavanagh & Lewis, 1999

Methodology

Quasi experimental design comparing two court sanctioned programmes with men sanctioned in other ways – fines, adminishment, probation and prison. Non equivalent groups. A small proportion of men in treatment groups (4%) had had no previous offending but all men in other group had at least one conviction and were more likely to be unemployed and in non state sanctioned
relationships. Low rates of programme attrition.

Programme details

The two court mandated programmes CHANGE and LDVPP varied in delivery rather than overall content or philosophy. Challenging group work on a weekly basis 24 wks(change) and 27 weeks (LDVPP). However little detail was provided on how the programmes actually operated.

Process Variables

Both flexibility and therapeutic relationship were scored medium based on a lack of information and an assumption that the programmes would be based on Duluth models, following a manual and following a psychoeducational approach.

Outcomes

Arrest, prosecution, sentencing and sanction appeared to have a short term effect on large proportion of men. Programmes only slightly more successful than court sanctions based on court records alone. Follow up was over 12 months.

Dowden, Blanchette & Serin, 1999

Methodology

Treatment completers from "Anger & Other Emotions Management" programme in Canada were compared with an untreated comparison group for all risk bands. Pre and post scores also indicated change on intermediate measures such as "state anger". The study design precludes non completion data, sampling as it does solely from completer information. Matching of groups was based on a release date of 15 July 1998 so there were some differences in length of time in community and therefore opportunity to reoffend. The groups were significantly different based on ethnicity – 27% of treatment group were Aboriginal compared to 6% of comparison group. No statistical differences between groups based on risk and criminogenic needs. Excluding non completer data likely skews the positive results and when compared with those studies that are examining an intention to treat
sample are not comparing like with like.

Programme Details

The focus of the programme whilst predominantly on anger also targeted other emotions such as anxiety, jealousy and frustration. The programme was a cognitive behavioural intervention, utilising both Rational emotive therapy and Self Instructional training (Meichenbaum) approaches. Twenty five two and half hour sessions, two to five times a week over a duration of five to twelve weeks. The programme had a focus on skills acquisition and building and staff involvement by discussion, modelling, practice in session then as homework.

Process Variables

The programme offered individual flexibility regarding relapse prevention planning and a difference in methods by different staff members but feedback on individual skills and homework. In addition staff members are encouraged to positively reinforce rather than criticise. This combined with smaller group numbers and a fifty hour programme is considered sufficient to warrant high scores for both flexibility and therapeutic alliance.

Outcomes

Significant reductions in both violent and non violent reoffending for higher risk offenders (56 of 110 sample) of 86% (3.6% violent reoffending compared to 25% control group) and 69%( 12.5% non violent reoffending and 39.3% control group) respectively. Differentiating the groups based on risk, statistical significance in reductions in violent and non violent recidivism for those at higher risk but non significant for lower risk violent offenders. Intermediate measures suggested that changes in insight into anger problems, increased knowledge of anger management skills and increased anger self competence were associated with significant reductions in violent offending.

Dunford, 2000

Random assignment to either mens group, a conjoint group for both victim and perpetrator or
individual rigorous monitoring condition. Control group received no treatment.

Programme details

Both groups ran over 26 weeks 1.5 hr with male & female co facilitators. Both had a CBT approach and same counsellors for both group conditions. After the completion of the group there was a follow up for six months of monthly meetings. The rigorous monitoring condition involved a monthly meeting with case manager and possibly individual counselling for one hour as well as six weekly checks for rearrest by the case manager who would make progress reports to commanding officers. 29% attrition – 15% discharged from navy. No antisocial personality disorder in treatment samples suggesting low risk group.

Process Variables

The two groups were coded as medium for both therapeutic relationship and flexibility. Little information was available. The rigorous monitoring was rated high for flexibility because of the individual orientation but low for therapeutic relationship because of the monitoring nature.

Outcomes

Reported by number of arrests so the possibility that one man was responsible for them all. Effect sizes Treatment 1 = 0.00, Treatment 2 = 0, Rigorous Monitoring -.09

Dutton et al, 1997

Methodology

518 individuals assessed for Vancouver Assaultive Husbands Program over the ten years from 1982-1992. Four groups formed from those criminal records – completers (12 or more(of 16) sessions), those that accepted but attended 0-11 sessions, those considered inappropriate for treatment and the "no shows". Rejected individuals differed on lack of motivation, denial of offending. Some voluntary referrals. Completers had lower rates of violent crimes and assaults than non completers. Precontact criminal history was higher in non completer group. "No show" group
showed the most appropriate equivalence with completer groups. Follow up period 4 months to 11 years. High scores on Millan avoidant or antisocial personality or borderline have poor treatment prognosis.

Programme Details

CBT approach with confrontative exercises about gender attitudes and early learning regarding violence. Lead by recovering man and woman professional counsellor. The programme ran for twelve weeks for Phase 1; Phase 2 early childhood and self esteem experiences minimum of 24 sessions and Phase 3 involved six months or longer of advanced therapy and training to be lay leader.

Process Variables

Again little information has lead to medium scores for both flexibility and therapeutic alliance.

Outcomes

Completers tended to commit fewer violent crimes, fewer assaults & fewer partner assaults than non completers. Differences were reduced when adjusted for time at risk. Voluntary non completers did worse than court ordered non completers. Voluntary men and no shows survived for longer before first offence. One man in completer group accounted for 20% of all posttreatment wife assaults. May be problems in system's ability to respond to those who are considered untreatable. The writers make the suggestion that one third of men desist from wife assault without any criminal justice intervention.

Flournoy, 1993

Methodology

A thesis dissertation comparing cognitive behavioural; supportive-educational anger management intervention with a waitlist group. Attrition rates from CBT group were 19% ; 38% of Supportive Educational group and 20% waitlist.
Programme Details

Comprehensive psychometric assessments. CBT group highly structured educational to teach anger management skills, some individual focus but predominantly standardised to group. Lead by one man and focussed on working out problems presented from checkin, role playing, clarification, confrontation, coaching, instructing and building of affective-behavioral bridges." Control plan & stress inoculation relaxation and coping self talk. Second treatment group offered education and skills in addition to informal self disclosure about relationship issues. Some of instructional content shared such as the use of videos but second treatment was facilitated by different man. Both conditions involved eight weekly 90 minute sessions.

Process Variables

Although there was some individual tailored intervention, the bulk of the treatment was group focussed and followed a set format. The relatively short treatment has contributed to a medium score for therapeutic alliance and flexibility.

Outcomes

In six months follow up, 2 men of CBT condition were arrested ( data only available for 13 of the 16 CBT group), and there had been no arrests from Supportive Education (data only available for 8 of the 13 Supportive Educational group) .Higher proportion of SEG were in relationships. Much higher levels of denial in CBT group about alcohol and drug use. Effect sizes  CBT -.03, SEG 0.33

Hamberger & Hastings,1988

Methodology

A quasi experimental study with non equivalent groups. Control group comprised program dropouts after at least 1 session.

Programme details

Fifteen week cognitive behavioural skills programme. Three hours of interview and psychometric
evaluation. Twelve two and half hour sessions of group therapy covering skills in cognitive restructuring, time outs, communication, assertiveness & active coping relaxation. Behavior practice encouraged in group, homework in vivo, discussion of homework comprises nearly half of following session.

Process Variables
Some individual focus with homework but set components teaching skills. Therapeutic relationship and flexibility both scored as medium.

Outcomes
Marginal statistical significance on recidivism. N = 32 completers. Control 36 dropouts, over 50% of intake.

Hatcher et al, 2008

Methodology
A quasi experimental design where 53 violent offenders referred by their probation officers were compared with 53 community sentenced violent offenders who were not allocated to the programme.

Programme Details
The treatment used was aggression replacement therapy to address deficits in personal, interpersonal and social-cognitive skills; reduce impulsive behaviour and low level anger and focuses on moral reasoning.

Process Factors
Both flexibility and therapeutic relationship were scored as low.

Outcomes
51% of comparison group were reconvicted compared to 39% of the experimental group, a result
which was not statistically significant.

Hughes 1993

Methodology

This was a very small quasi experimental scale study conducted with an initial sample of 52 offenders who attended at least 6 sessions of a 12 week anger management programme in a Canadian Federal prison. The initial comparison group comprised 19 dropouts and treatment refusers and were not statistically different on initial psychometric assessments measuring depression, anxiety, anger and hostility. No group equivalence tests appear to have been carried out for demographic data.

Programme Focus

The programme had a particular focus on anger education by building an awareness of arousal and recognition of physical symptoms, basic moral reasoning, rational emotive therapy techniques such as coping self statements and problem solving exercises and skills development in relaxation training, assertiveness and role play practice of different behavioural responses.

Process Factors

Very little information was provided in the published study relating to therapeutic alliance and due to the lack of information, therapeutic alliance was scored low. There was more information provided relating to the treatment delivery which allowed this study to be scored as medium for flexibility.

In this case the comparison group was treatment non completers and treatment refusers but no breakdown was provided of proportions of each. The comparison of the treatment group with this group is likely to provide inflated effect sizes given the general trend for non completers to recidivate at a higher rate than completers (McMurran & Theodosi, 2007).

Recidivism
Further general offending was undertaken by 56% of treated offenders who were released compared to 69% of the comparison group although this was not statistically significant. Violent reoffending was 40% for the treated group and 66% for the untreated men, again not reaching significance.

What is not clear from Hughes’ (1993) report is the proportion of the 41 released men who reoffended who had completed treatment. Joliffe & Farrington (2009) have provided details of the percentage of treated men who recidivated violently as 40% (translating to 17 men) and 63% of the control group (12 men) which calculates to a sample available for recidivism of 51. However the study says that only 40 men were released, after allowing for a releasee who later died. An assumption has been made for expediency that the same proportions exist as the published latency to rearrest figures. Based on that, reoffending rates for treatment participants are calculated at 56% (12 men) and 68.8% (11 men) for Non Participants. This calculated to a Pearson's r correlation coefficient of 0.2984.

Overall Assessment

The small numbers, the lack of matching of the 2 groups on more than simple pre treatment psychometric assessment tools, the use of a control group which comprises non completers and the lack of significance of the results indicates that the results must be viewed with caution.

Henning & Frueh, 1996

Programme Details

This Cognitive Self Change programme took place in a medium security Vermont prison. The programme comprised an initial 8 week phase where participants received knowledge about the theory, cognitive distortions and techniques to enable them to monitor their thoughts. The main treatment was then conducted in groups of 5-10 offenders plus staff which met 3-5 times per week, with each member presenting thought diaries for prior anti social events or offences. The final phase was conducted as a maintenance group in the community.
Methodology

The treatment sample reported by Henning & Frueh (1996) was 55 participants compared to 141 non participants which formed the control group in this quasi experimental study. The control group were 141 offenders who never received this treatment during their stay in the facility. It is unclear whether the comparison group chose not to take part in treatment, were waitlisted or were assessed as not suitable. In their narrative review Polaschek and Collie (2004) suggest that the results are questionable as the comparison group seemed to involve higher risk individuals. However the study reported that the two groups did not differ significantly in age at first conviction or number of adult felony convictions. Not all participants had violent convictions which suggests that not all of the treatment group were the target group of high risk persistent violent offenders however given that the study was included in all three reviews, it seems justified to also include it here. These group numbers were reduced to 28(treatment sample) and 96(comparison group) for recidivism data.

Process Factors

The assessment stage involved interview by treatment staff. The programme is considered intensive in terms of dosage and as the participants were living in a separate unit offers more opportunities for treatment encounters. In addition to the 3 to 5 weeks of treatment in groups, individuals were required to keep daily journals, complete homework assignments and meet regularly with treatment staff for ongoing evaluation of their individual treatment needs. The programme scored high on flexibility to the individual's needs. Only limited information was available about the importance of therapeutic relationship in the programme, however regular meetings with staff to work with individuals warrants a score of medium attention to therapeutic alliance.

Of the 55 treatment sample, approximately two thirds left when they were transferred for release. The treatment group had a 33% attrition rate.

Recidivism
Jolliffe & Farrington (2009) report in their meta analysis statistics that 50% of the 28 treatment completers who were released reoffended compared to 70.8% of the 96 offenders in the control group over the 2 years after release, a result which reached statistical significance even after statistically controlling for differences between the 2 groups. Results reported were only for general reoffending, not violent reoffending (Polaschek & Collie, 2004) which likely contributes to an artificially lowered effect size.

The writers acknowledge lack of random assignment, the sole use of recidivism as a measure of programme success and the homogeneity of the sample as limitations of the study. The small numbers of the final treatment sample, the strong possibility that the groups were not equivalent and the inclusion of non violent offenders in the treatment sample does impact on the validity of the results.

Lin, Su, Chou, Chen, Huang, Wu, Chen, Chao & Chen, 2009

Methodology
Taiwanese study focused on 70 high risk domestic violent offenders. Taiwan pre sentence evaluations focused on assessing risk by individual interview and group assessment. The control group (n = 231) were those only sentenced to a protective order and not mandated treatment over same period. All were non voluntary participants. Therefore potentially treatment group at higher risk. No significant demographic differences between groups. No non completers in treatment group.

Programme Details
Treatment format was Duluth model with elements of group therapy and cognitive behavioral therapy and was run in two psychiatric hospitals. The group leaders were psychiatrists, psychologists and social workers. Treatment duration was 12-18 weeks.

Process Variables
Cultural differences in Taiwan mean that assumptions from a Western perspective may not
necessarily hold. The programme flexibility was assessed as low due to particular topics being covered. However the programme being run in a psychiatric hospital suggests that therapeutic relationship could be coded as medium.

Outcomes
High recidivism rates in first three months for both groups but physical violence did reduce over time for those in treatment group.

Marquis, Bourgon & Pfaff, 1996

Methodology
This was a study comparing two groups of both violent and non-violent offenders who completed either substance abuse relapse prevention or this and an anger management programme at the Rideau Treatment Centre in Canada which has since been closed. The study extracted from 1991-1992 treatment completion statistics was included in the meta analysis. The treatment group was 216 offenders and although the study does not report this, a comparison group of 216 is assumed. This may not in fact be the case and not only the effect size for the individual study may be unduly influenced by such an assumption but the overall weighting in the meta analysis will likely be affected. The control group for each study was selected from those on the waiting list for the programme at that time. No significant statistical differences existed between the two groups based on risk of reoffending based on LSI scores (Andrews et al, 2009), past conviction history and substance abuse history. The non completion rate is not reported in the study but the results record the non completers' reoffending statistics separately.

The reporting of the methodology suggests that those in the control group were on the waiting list for treatment. However by the time the control group were released they presumably would have received treatment but their reconviction data is presented as untreated.

Programme Details
The programme follows a cognitive behavioural approach and runs 4-5 days a week for half a day for at least 20 days following a 2 week assessment period.

Process Factors
Marquis et al (1996) report that individual approaches to relevant situations and emotional states were possible within the programme framework suggesting a higher level of responsivity to individual learning needs than some other programmes. Although pre and post psychometric testing was completed, these results were not reported. For this reason programme flexibility is assessed as medium. Therapeutic relationship is assessed as medium because of the significant assessment period and contact time.

Recidivism
The substance abuse relapse prevention programme was judged to have little or no effect on those offenders considered to be violent offenders but the combination of relapse prevention and anger management and anger management alone was considered to have a statistically significant (p<.05) impact on reducing recidivism.

General recidivism outcomes for violent offenders receiving both treatments was 34% compared to 59% for the comparison group and violent reoffending was not reported separately (Polaschek & Collie, 2004). Of the non completers group, 58.2% were reimprisoned and 28.8% were reconvicted compared to 19.7% of treated group and 24.8% of control group.

Overall this study lacks some important details which would enable the data to be analysed and the closure of the programme makes it difficult to obtain further information. Some immediate issues are the failure to compare the treatment groups for equivalence (Dowden, Blanchette & Serin, 1999) and the high probability that the control group on the waitlist had also received treatment by the time they were released.

Morrel, Elliott, Murphy & Taft, 2003
Methodology

Comparison of CBT group therapy (n=48) and supportive therapy (n=38) with a two to three year follow up produced no significant differences. 33 in Supportive Therapy condition and 41 in CBT condition received 12 or more sessions.

Programme Details

Supportive therapy relatively unstructured compared to CBT approach. Therapists facilitate peer support, improve communication, express feelings appropriately, reduce isolation & humiliation & shame. CBT structured skill based modality. Both had male female co facilitators. 16 weekly 2 hour sessions Social learning theory incl CBT & motivational treatments. ST brief time out training but otherwise minimal therapist directed intervention. Creation of a therapeutic climate where men could discuss relationship issues. Group size 7-10 clients, 5 groups of each. Clinical psychology graduate trainee & 1 or 2 agency staff with masters level training. Treatment manuals used.

Process Variables

Scored high on both variables due to unstructured nature and client centred approach where therapist focussed on process issues.

Outcomes

Recidivism 22-36 months following treatment. 86% attended at least 75% of sessions, which is high for this population. No statistical significant differences between two modalities in outcomes. Approx 5% of sample were high rate reoffenders. More opportunity for Supportive Therapy groups to engage in informal practice. The effect sizes were calculated with only 63 from the original sample of 86 but no detail provided of the breakdown in the Morrel article and the Babcock meta analysis has calculated with reference to personal communication which they have not disclosed.

Motiuk et al, 1996

Canadian Federal Prison Regional Health Centre(Pacific) Intensive programme for Violent
Offenders was an 8 month intensive cognitive behavioural and psychosocial dynamic treatment programme for groups of 12-16 violent offenders.

Methodology

The treatment group of 60 was compared to 60 matched offenders who had not taken part in the programme as controls. The groups were matched by release date, age at release and sentence length from Correctional Service of Canada's Pacific region database. No significant differences were found between the 2 groups on risk of reoffending or history of violent offending. However the treatment group included nearly double the number of homicides than the comparison group particularly those men at higher risk of reoffending. Non completion rates are not reported as the group is treatment completers only. As for above this may have lead to artificially high effect sizes.

Programme Details and Process Variables

The length of the programme reported at 8 months suggests the development of a reasonable therapeutic alliance is possible. Group sizes of 12-16 impede facilitators' ability to adequately deal with individual needs in a group context. Two professional staff members lead each group. On the basis of this limited information, the importance of the therapeutic alliance is coded as medium. The information reported does not give enough indication of programme flexibility to individual responsivity barriers and as a consequence is scored as low. An assumption is made that the group numbers are larger in order to deliver psychoeducational material in a didactic fashion.

Recidivism

Two years after release 18% (9 offences) of those treated had been reconvicted for violent offending compared to 15% (9 offences) for the control group, differences which were considered not statistically significant. The study reported that the post treatment group offences comprised robbery and assault whereas the non treatment group included 2 homicides and 1 sex offences, potentially more serious offending as well as robbery and assaults. The risk of reoffending did not predict new violent offending for either group.
Small sample numbers and lack of matching within groups contribute to what may be a misleading picture of no treatment effect. The lack of reporting of the relevant proportion of lifers in the numbers released may also cloud the picture. The results also only include treatment completers and may also give a misleading picture of programme effectiveness or not.

Newell (1994)

Methodology

A thesis dissertation examined a feminist psychoeducational group versus other Treatment such as AA, couples or individual counselling versus control versus treatment dropouts. Control group =135. Approximately one third had a previous domestic violence conviction. Whilst Babcock et al reports an attrition rate of 57%, the study suggests this is actually at a rate of 43%

Programme Details

The men are interviewed for suitability for programme, assess relationship after meeting spouse & perpetrator separately & together. Confrontative interview and programme plus individual support and monitoring 4-6 weeks whilst on waitlist. Twelve weeks of 1 session a week for 90 minutes. Fairly structured format does allow for group process. Twelve men. One male counsellor leader. 2-4 weeks use of defense mechanisms, emotions especially anger, skills in time out and charting response to situations. Weeks 5-9 focus on power and control of women. Weeks 10-12 focus on healthy relationships.

Process Variables

Newell B(1994) study was unable to be scored as no details were provided of other treatment. Newell A(1994) was coded as medium for therapeutic relationship and flexibility as although at front end high levels of individual input, only a very short term programme of 18 hours over 12 weeks. Although there was flexibility for the group process, there was also quite a structured format to adhere to.
Outcomes

Effect sizes quoted for Treatment compared to control -.02; Alternative treatment option = 15%; compared to drop outs 0.29.

Palmer et al,1992

Methodology

Experimental design with random allocation to conditions. 10 week group treatment group (n=59) compared with no treatment group (n=15). Completion rates =70% attended 7 or more sessions. 13% 2-4 sessions

Programme Details

Psychoeducational, group discussion & provision of information. Format relatively unstructured. Provided by male group leader with masters in social work. 1.5hrs/week over 10 weeks. Teaching of anger management skills, reinforcing self esteem & improving relationships with women. Relaxation techniques & self talk. Initial checkin, unstructured format following client centred approach as topics were introduced.

Process variables

Scored high for therapeutic relationship and flexibility based on unstructured format and client centred approach

Outcomes

Recidivism significantly higher for controls 12-24 mths after treatment Control group subjects were ethically agreed that PO could refer elsewhere for treatment and 2 were removed from the study for this purposes. Court mandated treatment.

Polaschek, 2010

Methodology

An evaluation of the VPU, Rimutaka Prison, New Zealand an intensive 28 week programme
amounting to approximately 330 hours of group therapy in groups of 10. Sample of 112 men chronic violent offenders with a high ROC*ROI. Non completers amounted to 29% of total sample. 48% were disruptive, 36% volitional and 16% due to safety concerns. Follow up time in community averaged 3.5 years. Non completer data seemed to suggest no increase in risk of reoffending compared to their untreated matched controls and the writer suggests that comparing completers, non completers and combined control groups gives a skewed result (Polaschek, 2011). Matched control groups obtained from Corrections database.

Programme Details

Cognitive behavioural modular intervention covering offence chains, offence supportive thinking, mood management, victim empathy, moral reasoning, problem solving, communication and relationship skills and plan for post release.

Process Variables

Coded high for therapeutic relationship based on length of the programme and therapeutic community opportunities. Coded high for programme flexibility due to focus on treatment needs and individual assessment procedure. Some of coding based on writer's personal experience.

Outcomes

When results were dissected by risk – for the 86 higher risk offenders, only small statistical significance between high risk treatment completers and their controls on any reconviction. When medium risk offenders' results were separated out, no statistical differences between treatment, non completors and comparison groups. Survival analysis did indicate that first offence of any kind occurred more slowly. Small effect sizes of 0.08 for violent reconviction for high risk offenders and 0.15 for violent reconviction with medium risk offenders were recorded. The writer posits weakness in programme design based on the emphasis on relapse prevention and poor addressing criminogenic needs such as managing impulsive urges, substance abuse and no specialised aftercare. She also alludes to the sample recording high PCL-R scores suggestive of a
sample high in psychopathy and the difficulties in treatment (Rice et al, 1997).

Serin, Gobeil & Preston, 2009

Methodology

The Persistently Violent Offender Program in 2001 was a social information processing treatment programme for nonsexually violent offenders. The experimental group was 70 violent offenders who completed PVO treatment between 1997 and 2001, a group of 33 who although had met criteria for PVO treatment were assigned to 50 hour Anger and Emotional Management (AEM) treatment and a group of 105 who were referred normally to AEM. The final group was the attrition group of 48. The AEM only control group comprised of those convicted of fewer than 3 violent offences and also had fewer institutional misconducts as did the other AEM group.

Programme Details

The 16 week (144 hour) cognitive behavioral programme involved 4 group sessions and 1 individual session per week. Three modules are clearly described in a treatment manual. First module is motivational, second module to develop insight into problem and the third module skills acquisition. Co facilitated by psychologist and program delivery officer. Manuals provided and training in programme content.

Process Variables

Scored as low for flexibility given the manual and training materials for programme. Scored medium on therapeutic relationship due to the weekly individual session but a relatively short duration over 16 weeks.

Outcomes

Of the 256, 202 had been released by the study cutoff date including a non statistically significant smaller proportion of those in the attrition group. Violent reoffending for PVO group was 8%, AEM-PVO group 11%, AEM control 7% and Attrition group 21% but none of the results reached
statistical significance. The writers concluded that PVO lacked effectiveness and postulated that potentially social information processing model is only appropriate for certain populations, that the programme itself failed to address responsivity or specific site problems in implementation may have impeded effectiveness; possibly not of sufficient intensity for the population's needs, possibly evaluative design

Taylor, Davis & Maxwell, 2001

Methodology

Treatment participants offered plea for sentencing which included treatment or proceed to trial. May have filtered out less motivated ie those willing to gamble on a trial. Alternatives to Violence program. Random assignment to program or equivalent hours community work. Judges overruled random assignment but not considered to skew results

Programme Details

Duluth model – understand legal and cultural origins of imbalance of power. 1 male & 1 female leader Weekly group over at least 6 weeks. Combination of instruction and discussion.

Process Variables

Scored low on both flexibility and therapeutic relationship due to the Duluth model and lack of other information.

Outcomes

6 mth and 12 mth post sentencing. Failure rate is significantly smaller (50% approx) at 6 and 12 months based on official reports but only 2 statistically significant. Size of difference reduced by 12 months. Severe victimisation reports differences between the 2 groups was non significant. Sample size small and unrepresentative of those processed through courts. Unclear how many of the cases received imprisonment although 5% approx in Kings County Criminal Court recieve probation or a jail sentence.
## APPENDIX ONE

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**APPENDIX ONE**

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## APPENDIX TWO

### CODING PROTOCOLS

**Empirical quality:** High 03; Medium 02; Low 01 Random, controlled experiment = high, quasi experiment= low

**Control Group**
- Includes non completers 01
  - Other Modality 02
  - Other 03

**Case Formulation:**
- Yes 02; No 01
  - Degree of flexibility of programme to match with individual offence patterns, matching with programme

**Offender/Staff Ratio:**
- Ratio group size less than 10 = 02, Ratio more than 10 = 01.

**Extent of Assessment:**
- High criteria to be met, interview, psychometric testing = 03; medium criteria, interview = 02; no criteria, no interview = 01

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| Flexibility | Fixed | 01 |
|             | Dependent on Need | 03 |
|             | Dependent on release date | 02 |

| Total No of Hours | Less 50 hrs | 01 |
|                  | 51-199hrs | 02 |
|                  | 200 hrs | 03 |

| Individual Support | High(counselling) | 03 |
|                    | Medium(review, homework) | 02 |
|                    | No | 01 |

| Style | Psychoeducational | 01 (Instruction/task focus) |
|       | Primarily psychotherapeutic | 02 (Client centred, process focus) |

| Intervention Mode | Group | 01 |
|                  | Therapeutic community | 02 |
|                  | Individual | 03 |

| Specific goals/session | Specified | 01 |
|                        | Unspecified | 02 |

| Manualisation                   | None | 03 |
|                                  | Exists but flexibility | 02 |
|                                  | Highly detailed | 01 |
Procedures
- Specified 01
- None 02

Role of therapist
- Authority 01
- Peer Focus 02
- Collaborative 03

Staff
- Professional (psychologist) 01
- Paraprofession (social worker, case worker, probation officer) 02
- Correctional officer 03

Clients Age
- 18-27 years 01
- 27 years over 02
- unknown 03

Risk
- High 01
- Medium 02
- Low 03
- Not specified 04

Setting
- Prison 01
- Community (justice system) 02
- Community (non justice) 03
- Residential (secure) 04

Follow up period
- Less than 12 mths 01
- 12-24 months 02
- Over 24 months 03

Non Completion Rates
- 0-30% 01
- 31-50% 02
- 51-75% 03
- Over 76% 04

Type of violence
- Domestic Violence 01
- General 02

Global Location
- North America 01
- Europe 02
- Elsewhere incl Australasia 03

Overall flexibility
- High (13-16) 03
- Medium (9-12) 02
- Low (<9) 01

Overall relationship
- High >10 03
- Medium (8-9) 02
- Low (<8) 01


correctional treatment work? A clinically relevant and psychologically informed meta analysis. 

*Criminology, 28*(3), 369–404.


Bowen, E., Gilchrist, E., & Beech, A. R. (2007). Change in Treatment Has No Relationship With


Unpublished manuscript.


doi:10.1016/j.avb.2003.06.001


doi:10.1177/0093854890017001008


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Wilson, N. J. (2004). *New Zealand high-risk offenders: Who are they and what are the issues in their management and treatment?* Department of Corrections Psychological Service.


New York, NY, USA: Cambridge University Press.