## PRISON SERVICE OURRINAL May 2014 No 213



### Breaking the Cycle

# Does the Thinking Skills Programme have a positive effect on prison behaviour?

Melanie Merola is a Forensic Psychologist in Training working for South Central Psychological Services.

#### Introduction

Cognitive skills programmes have been delivered in the Prison Service for years and the impact of these programmes have been consistently evaluated to determine the effectiveness of the programmes on reducing re-offending. In 2009 the Thinking Skills Programme (TSP) was introduced across the prison estate.

Research has focused on previous cognitive skills programmes delivered by the Prison Service such as ETS and R&R. The majority of research has focused on evaluating the effect of the programme on re-offending rates. Friendship et al. (2003)<sup>1</sup> evaluated the effectiveness of R&R and ETS using re-conviction as an outcome measure. The findings showed a significant difference in reconviction rates for medium to low and medium to high risk offenders but no significant differences for low and high risk offenders. A factor not controlled for was motivation to change. The study was useful for identifying reconviction rates for those completing the R&R and ETS programmes but is now over 10 years old. A later study by Falshaw et al. (2004)<sup>2</sup> also looked at two year reconviction rates. It was found there were no statistically significant differences in reconviction rates between the two groups. These findings contradict previous findings and the authors give some possible explanations of this, such as lower motivation levels, expansion of the programme and matching of static factors only with the comparison group. Sadlier (2010)<sup>3</sup> examined the impact of ETS on one year reconviction rates. Three outcome measures were used, proportion of prisoners reconvicted, frequency of reoffending and proportion reconvicted of a severe offence. Findings indicated those who completed ETS had a significantly lower reconviction rate and frequency of general offending (Sadlier 2010: 19). However, once noncompleters were removed from the sample, the finding was no longer significant. There was no measure of motivation used in this study and despite the variables identified in both the treatment sample and the comparison group to ensure they are matched, none of these factors were used in the analysis.

Evaluation studies have also focused on psychometric results as an outcome measure. Blud et al. (2003)<sup>4</sup> evaluated the short term impact of those who attended R&R and ETS by using psychometrics. They found the majority of measures evidenced modest change and higher need offenders evidenced greater change. However, they did not identify if the change on the psychometrics was clinically significant change or not. No behaviour measures were used to identify any short term impact on behaviour. Therefore, although the psychometrics show short term change in some aspects, they cannot identify if change is translated into behaviour. One study that looked at the impact on prison behaviour also included outcomes of psychometrics, three additional questionnaires and environmental measures. McDougall et al. (2009)<sup>5</sup> found there was a statistically significant reduction in impulsivity and in frequency of security reports three months after the completion of ETS. However there were no significant differences in other measures of prison behaviour such as number of warnings, minor reports and adjudications (McDougall et al. 2009). This study did identify clinically significant change on the psychometrics. It uses several measures to evaluate the impact of ETS, including behaviour change. Prison behaviour three months after the course was also evaluated and discussed. These measures were not significant, perhaps indicating change on the psychometrics had not yet been translated into behaviour. One possible way of checking this is for future research to assess a longer term behaviour change.

In summary, the majority of research has focused on evaluating cognitive skills programmes using reconviction rates or psychometric change on ETS and R&R. No research has yet been conducted on TSP. Of the research that has incorporated prison behaviour, the follow up period has been three months. Previous research has also not taken into account treatment readiness and their behaviour prior to attending the course. Clinically significant change is also not taken into account in the majority of the studies conducted. It is unclear whether participants can be classed as 'treated' if they are still within offender norms and outside of non-offender norms as the ultimate goal is to 'treat' offenders so they behave in ways that do not lead them to offending (Friendship, Falshaw and Beech 2003:

<sup>1.</sup> Friendship, C., Blud, L., Erikson, M., Travers, R. and Thornton, D. (2003) 'Cognitive-behavioural treatment for imprisoned offenders; An evaluation of HM Prison Services' cognitive skills programmes.' *Legal and Criminological Psychology* 8, 103-114.

<sup>2.</sup> Falshaw, L., Friendship, C., Travers, R. and Nugent, F. (2004) 'Searching for 'What Works': HM Prison Service accredited cognitive skills programmes.' *The British Journal of Forensic Practice*, 6 (2) 3-13.

<sup>3.</sup> Sadlier, G. (2010) Evaluation of the impact of HM Prison Service Enhanced Thinking Skills programme on reoffending outcomes of the Surveying Prisoner Crime Reduction(SPCR) sample. London: Ministry of Justice.

<sup>4.</sup> Blud, L., Travers, R., Nugent, F. And Thornton, D. (2003) 'Accreditation of offending behaviour programmes in HM Prison Service: 'What Works' in practice' *Legal and Criminological Psychology* 8, 69-81.

<sup>5.</sup> McDougall, C., Perry, A. E., Clabour, J., Bowles, R. and Worthy, G. (2009) *Evaluation of HM Prison Service Enhanced Thinking Skills Programme: Report on the outcomes form a randomised controlled trial*. London: Ministry of Justice.

120).<sup>6</sup> As well as looking at reconviction data it is also useful to look at change in behaviour whilst still in prison. Friendship, Falshaw and Beech (2003) discuss the importance of problems with using reconviction data and suggest this should be supplemented with other outcome measures to give a better view of treatment effectiveness (p124). Many prisoners who complete offending behaviour courses will not be released for a considerable period of time after they have completed the courses. Behaviour change can begin in prison and is of use to the prison system as anti-social behaviour in prison also costs the Prison Service time and money.

A longer follow up period in terms of behaviour measures would also be useful. It will be helpful for research to take other factors into account that may impact on the effectiveness of TSP, for example, risk and need level of participants, motivation levels, offence and sentence type, as well as a starting point so the level of change can be evaluated. Finally, clinically significant change on the psychometrics should be considered and compared to the analysis of prison behaviour. Studying the results of psychometrics alone does not indicate whether any changes have translated to behaviour.

The aim of this study was to take the factors discussed above into consideration when evaluating the effect of TSP on prison behaviour and by exploring how other key factors, such as risk, need for the programme and treatment readiness relate to any outcomes. The relationship between psychometric results and short term behaviour is also explored. The hypotheses are therefore as follows:

- □ Hypothesis one When offenders complete TSP, their prison behaviour will improve.
- Hypothesis two Factors such as risk, need, treatment readiness, sentence type and offence type will impact on improvement in prison behaviour after completion of TSP.
- Hypothesis three Completion of TSP will result in Clinically Significant Change (CSC) being shown in the psychometrics of those who completed the course.
- Hypothesis four Factors such as risk, need, treatment readiness, sentence type and offence type will impact on CSC after completion of TSP.
- Hypothesis five There will be a positive correlation between improvement in prison behaviour and CSC shown in psychometrics.

#### Method

#### Participants

The sample in this study included all who completed TSP between April 2010 and March 2013 at a male Young Offenders Institution in England (n = 199). Of these, 103

were of white origin, whilst 95 were from another ethnic background and the ethnicity of two were unknown. 21 per cent of the sample had a sentence of Imprisonment for Public Protection (IPP), 11 per cent were life sentenced prisoners and 68 per cent were determinate sentenced prisoners. 57 per cent of the sample had been convicted of a violent offence, 27 per cent of a sexual offence and 16 per cent of another type of offence.

#### Procedure

The data was collected from sources including:

1. An existing database held by the programmes department, which records risk information, sentence and behaviour information.

2. An existing database held by the TSP Treatment Manager which records information regarding the need for the course, treatment readiness and offence.

3. PNOMIS — the prison system for recording notes on prisoners behaviour. This was used to gain missing data not included on the programmes database.

4. Interventions Unit (IU)<sup>7</sup> psychometric information. This includes pre and post treatment scores on psychometrics administered for each of the participants.

#### Assessment measures

Risk level

This was identified using the Offender Group Reconviction Scale version 3 (OGRS3).<sup>8</sup> In the majority of cases, offenders should score over 50 per cent to be suitable for TSP, although some clinical override is allowed by treatment managers. The average risk score of participants was 66 per cent.

Need score

Offenders are also assessed for TSP based on their need for the course. This is assessed using the Offender Assessment System (OASys) which identifies if the offender has deficits in the area covered by the course. The average score for participants was 9/13.

Treatment Readiness

Treatment Readiness was assessed using the Corrections Victoria Treatment Readiness Questionnaire (CVTRQ, Casey *et al.* 2007).<sup>9</sup> A provisional cut off score for treatment is less than 72/100 (Casey *et al.* 2007: 1436). No offenders were excluded from programmes based on their score on the CVTRQ. The average score for participants was 76. Treatment readiness scores were missing for 33 participants, either because they did not complete it or the information could not be found.

Behaviour measures

Prison behaviour was measured using the Prison Service Incentives and Earned Privileges (IEP) scheme. Offenders are allocated to basic, standard, or enhanced status, depending on their behaviour. At the establishment where the research

6. Friendship, C., Falshaw, L. and Beech, A, A. (2003) 'Measuring the real impact of accredited offending behaviour programmes' *Legal* and *Criminological Psychology* 8, 115-127.

7. IU – Interventions Unit is the department that oversees accredited interventions programmes delivered in the Prison and Probation service. They are responsible for the auditing of sites running the programmes and in the research and accreditation of programmes delivered.

8. Offenders are given a score out of 100% based on static information such as age at first offence. A higher score indicates a higher risk of reconviction and 2 year reconviction scores were used as this is the score used to determine suitability for TSP.

9. Casey, S., Day, A., Howells, A. and Ward, T. (2007) 'Assessing suitability for Offender Rehabilitation: Development and Validation of a Treatment Readiness Questionnaire'. *Criminal Justice and Behavior*, 34, 1427-440. The CVTRQ is a 40-item self-report questionnaire that assesses readiness to engage with a cognitive skills programme.

was undertaken, the level is determined by a behaviour score. Each offender starts each month with 50 points and points are taken away during the month for poor behaviour. At the end of the month a final score is given and the offender's IEP status decided. A behaviour score was gained for each offender who completed the course before the course started, at the end of the course and six months after the course was completed. Scores were unable to be obtained for the start stage for 4 of the participants, the end stage for 10 of the participants and the six month stage for 84 of the participants.<sup>10</sup>

#### Psychometric measures

Offenders participating in TSP complete psychometrics at the start and end of the course. A list of the different psychometrics administered can be found in Appendix A. Pre and post treatment scores on each of the psychometrics were obtained from Interventions Unit (IU) for each participant. These were unable to be obtained for the most recent TSP groups, meaning 19 participants were eliminated from this analysis.

#### Analysis

- □ Hypothesis one pre and post treatment prison behaviour scores were analysed using a one way repeated measures ANOVA.
- Hypothesis two A multiple regression was conducted to identify the impact of the factors listed on change identified.
- Hypothesis three Syntax provided by IU was used to analyse the psychometric data to identify if there was CSC<sup>11</sup> in psychometric scores.
- □ Hypothesis four Logistic regression was conducted to identify the impact of any of the factors on CSC.
- Hypothesis five The results from the analysis of the prison behaviour and analysis of the psychometrics was compared to identify if there were any correlations.

#### Results

#### Hypothesis one

A one way repeated measures ANOVA was conducted to compare behaviour scores at the start of TSP, at the end of TSP and six months after completing TSP. The means and standard deviation are presented in Table 1. There was a significant effect for time, Wilks Lambda = 0.92, F(2, 113) = 4.82, p < 0.05, multivariate partial eta squared = 0.08, indicating a moderate effect size. Post-hoc comparisons indicated the mean score for the six month behaviour score (M = 45.98, SD = 7.13) was significantly different from the behaviour score at the start of the course (M = 42.4, SD = 11.33). Cohen's d effect size was calculated as 0.38, indicating a small effect size. End of group behaviour scores (M = 44.4, SD = 8.7) did not differ significantly from either of the other groups, although Cohen's d effect sizes were small (0.2 for both comparisons).

#### Table 1

Descriptive statistics for prison behaviour scores at the start, end and six months after completing TSP.

Time period	Ν	Mean	Standard Deviation
Time 1 (pre TSP)	115	42.40	11.33
Time 2 (post TSP)	115	44.40	8.70
Time 3 (six months post TSP)	115	45.98	7.13

#### Hypothesis two

Standard multiple regression was conducted to explore the relationship between the six month behaviour scores and the other variables of risk, need, treatment readiness, offence type, sentence type and starting behaviour score. Preliminary analyses were conducted to ensure no violation of the assumptions of multiple regression. This revealed the data for behaviour scores and for risk scores were negatively skewed and violated the assumptions of normality. The data was transformed to modify the distribution which then did not violate the assumptions of normality. The results of the regression indicated the predictors explained 15.7 per cent of the variance  $(R_2 = .15, F(7, 92) = 2.45, p < 0.05)$ . End of course score significantly predicted change after six months  $(\beta = .23, p < .05)$  as did sentence type  $(\beta = .21, p < .05)$ . No other variables were significant in explaining the six month behaviour score. To identify what sentence type was explaining the difference the sample was split into sentence types and then paired samples t tests were conducted on each sentence type. This revealed determinate sentence prisoners were the group to show significant change in behaviour six months after TSP in comparison to before TSP (M = 1.67, SD = .90), t(57) = 3.671, p < .001.

#### Hypothesis three

IU provided a blank syntax code for SPSS which could be populated with data to identify if each participant had made a CSC from their pre to post psychometrics. The results are presented in Table 2.

#### Hypothesis four

Logistic regression was performed on each psychometric to assess the impact of the factors on the likelihood participants would show CSC on psychometrics.

Three psychometrics had independent variables that significantly predicted CSC. For the General Attitude to Offending (GAO) psychometric, Cox and Snell's R<sup>2</sup> of .11 and Nagelkerke's R<sup>2</sup> of .232 showed the model as a whole explained between 11 per cent and 23 per cent of the variance in change and correctly classified 90.1 per cent of cases. Goodness of fit statistics were calculated to assess the fit of the model. The Hosmer-Lemeshow statistic<sup>12</sup> was not significant indicating there was goodness of fit and support for the model (chi square = 4.600, df = 8, p = .80), therefore the model containing predictors is better than a constant only model in distinguishing between the outcomes.

<sup>10.</sup> This was mainly due to the data not being able to be obtained because records did not allow it due to the offender being released or recalled (meaning previous information was unable to be accessed). 19 participants had only just completed TSP at the time of the research, therefore six month data was unable to be gathered for them.

<sup>11.</sup> Statistical significance only shows the changes are real and not due to chance, it does not mean change is clinically relevant. When change means they have moved into the normal level of functioning it is 'clinically significant' (Jacobson and Traux, 1991).

<sup>12.</sup> The Hosmer – Lemeshow Goodness of Fit was used as SPSS states this is the most reliable test of model fit available in SPSS (Pallant 2005: 167)

#### Table 2

A table to show the percentage of participants who achieved CSC.

Psychometric	Percentage showing CSC
Eysenck's Impulsivity (Imp)	10.2
Locus of Control (Loc)	0
General Attitude to Offending (GAO)	7.1
Anticipation of Re-Offending (ARO)	6.1
Victim Hurt Denial (VHD)	0
Evaluation of Crime as Worthwhile (ECW)	3
Perception of current Life Problems (PLP)	0.5
Confusion (Conf)	4.6
Defensiveness (Def)	3.6
Mollification (Moll)	3.6
Cut Off (Cut)	4.6
Entitlement (Ent)	1
Power Orientation (Pow)	3
Sentimentality (Sen)	0.5
Superoptimism (Sup)	3.6
Cognitive Indolence (Cog)	7.6
Discontinuity (Dis)	4.6

The Wald criterion demonstrated only Treatment Readiness made a unique statistically significant contribution to the model (p = .020). The odds ratio (EXP(B)) of 0.91 for Treatment Readiness was less than 1, indicating for lower scores on the Treatment Readiness questionnaire, participants were 0.91 times less likely to show CSC, controlling for other factors in this model.<sup>13</sup> It did not improve the classification success rate which remained at 90.1 per cent for both models (*Table 3*).

For the Cognitive Indolence psychometric, Cox and Snell's R<sup>2</sup> of .076 and Nagelkerke's R<sup>2</sup> of .153 showed the model as a whole explained between 7.6 per cent and 15.3 per cent of the variance in change and correctly classified 89.2 per cent of cases. The Hosmer-Lemeshow statistic was not significant indicating there was goodness of fit and support for the model (chi square = 8.738, df = 8, p = .37).

The Wald criterion demonstrated Treatment Readiness (p = .040) and behaviour score at the start of the course (p = .029) made a unique statistically significant contribution to the model. The odds ratio for Treatment Readiness of 1.075, indicating participants who had higher motivational scores were nearly 1.1 times more likely to show CSC.<sup>15</sup> The odds ratio for the behaviour score at the start of the course was 1.52, indicating those with a higher behaviour score were 1.5 times more likely to show CSC.<sup>16</sup> It did not improve the classification success rate which remained at 89.2 per cent for both models (*Table 4*).

For the Discontinuity psychometric, Cox and Snell's R<sup>2</sup> of .141 and Nagelkerke's R<sup>2</sup> of .342 showed the model as a whole explained between 14.1 per cent and 34.2 per cent of the variance in change and correctly classified 93.4 per cent of cases. The Hosmer-Lemeshow statistic was not

significant indicating there was goodness of fit and support for the model (chi square = 4.065, df = 8, p = .85).

Sentence type (IPPs) made a statistically significant contribution to the model. An odds ratio is not recorded due to the categorical nature of sentence type.

No other factors significantly predicted CSC on any of the psychometrics (*Table 5*).

Hypothesis five The relationship between the six month behaviour score and CSC on the psychometrics was investigated using Pearson product-movement

A table to show logistic regression predicting CSC on the GAO psychometric from the factors analysed.

Table 3

Variables	В	S.E.	Wald X <sup>2</sup>	df	p	EXP(B) (Odds ratio) <sup>14</sup>
Constant	6.851	4.154	2.720	1	.099	944.728
Sentence (IPP)	-1.435	1.135	3.634	2	.163	-
Sentence (Life)	-1.635	1.243	1.731	1	.188	-
Sentence (Determinate)	-1.283	.721	3.161	1	.075	-
Treatment Readiness	098	.042	5.438	1	.020	.906
Need	203	.187	1.169	1	.280	.817
Offence (Violent)	1.467	.892	2.955	2	.228	-
Offence (Sexual)	1.163	.677	2.955	1	.086	-
Offence (Other)	-18.557	9033.715	.000	1	.998	-
Start score	.002	.219	.000	1	.994	1.002
Risk	.119	.202	.346	1	.556	1.127

13. There is a 95% confidence that the odds ratio will fall between 0.84 and 0.98.

14. Odds ratios are not available for sentence type or offence type due to the categorical nature of the data.

15. There is a 95% confidence that the odds ratio will fall between 1.0 and 1.15.

16. There is a 95% confidence that the odds ratio will fall between 1.04 and 2.21.

#### Table 4

A table to show logistic regression predicting CSC on the Cognitive Indolence psychometric from the factors analysed.

Variables	В	S.E.	Wald X <sup>2</sup>	df	р	Odds Ratio
Constant	-11.15	3.792	8.648	1	.003	.000
Sentence (IPP)	.591	1.137	.828	2	.661	-
Sentence (Life)	.607	1.048	.335	1	.563	-
Sentence (Determinate)	.719	.796	.816	1	.366	-
Treatment Readiness	.073	.035	4.225	1	.040	1.075
Need	.130	.149	.759	1	.384	1.139
Offence (Violent)	.625	1.059	1.214	2	.545	-
Offence (Sexual)	.586	.726	.651	1	.420	-
Offence (Other)	669	1.178	.322	1	.570	-
Start score	.419	.192	4.770	1	.029	1.520
Risk	.119	.193	.346	1	.556	1.127

correlation co-efficient. Correlations were conducted between the six month score and each psychometric. There were only very small correlations found between the six month scores and the psychometrics. Of these the strongest, although not significant, was a small, positive correlation between the six month scores and ARO, r(81) = .16, n = 83, p > 0.05.

#### Discussion

#### Hypothesis one

This hypothesis was supported for behaviour change after six months but not immediately after the course had finished. The finding there was a significant difference between prison behaviour at the start of TSP and six months after TSP but not at the end of TSP suggests some time is needed for change to be implemented by those completing the course. It suggests there is not going to be an immediate effect of attending the course which could help those working with ex-group members have realistic expectations about their behaviour at the end of the course. Professionals can sometimes dismiss the course as not working for a group member if they do not use the skills once the course has finished whereas this finding suggests, in the case of Young Offenders (YOs) at least, time needs to given before be а judgement is made. There

are also implications for putting group members on a TSP course just before they are released as this finding suggests they may not implement change immediately and therefore may not use the skills immediately upon release. This is supported by research that suggests change is not maintained until an individual has maintained behaviour for at least six months (DiClemente, Schlundt and Gemmell 2004<sup>17</sup>). Until this point, relapse into problem behaviour is more likely, which supports prison behaviour scores only being significant after six months, as participants would have to maintain at least a month of changed behaviour. However, caution needs to be taken when interpreting these results, due to the lack of a control group and other factors (such as other programmes completed, time spent in prison,

			Table 5	5				
	A table to show I	ogistic regre	ession predicti	ing CSC on t	he Co	gnitive Ir	ndolence	
psychometric from the factors analysed.								
	Variables	В	S.E.	Wald X <sup>2</sup>	df	p	Odds Ratio	
	Constant	-21.995	6697.130	.000	1	.997	.000	
	Sentence (IPP)	.082	0.043	6.525	2	.038	-	
	Sentence (Life)	20.935	6697.128	.000	1	.998	-	
	Sentence (Determinate)	18.579	6697.128	.000	1	.998	-	
	Treatment Readiness	047	.051	.833	1	.361	.955	
	Need	.004	.236	.000	1	.986	1.004	
	Offence (Violent)	.127	1.212	.053	2	.974	-	
	Offence (Sexual)	213	1.048	.041	1	.839	-	
	Offence (Other)	.075	1.334	.003	1	.955	-	
	Start score	.374	.261	2.047	1	.153	1.453	
	Risk	.495	.272	3.318	1	.069	1.640	

maturation etc) that have not been accounted for. It is likely these could all influence change in behaviour after completing TSP and therefore it cannot be said with certainty that TSP caused the behaviour change found. This is discussed further in the Limitation section.

Hypothesis two

This hypothesis was only supported in regards to the factors of sentence type. The finding that only the sentence type and end of course score are the only variables statistically significant in explaining the difference in the six month behaviour, is a little

17. DiClemente, C.C., Schlundt, D., & Gemmell, L. (2004). ,Readiness and stages of change in addiction treatment'. American Journal on Addictions, 13(2), 103-119.

surprising. It was expected that, based on previous research, factors such as risk, need and treatment readiness may also contribute to it. The sentence type explaining the difference was determinate sentence prisoners. This can be explained by Life sentenced prisoners having higher behaviour scores to start with and being a smaller sample so any changes would be difficult to identify. IPPs are likely to be a higher risk group with more problems due to the fact they are an IPP so perhaps one intervention such as TSP was not enough to sufficiently address problems and show behaviour change, whereas it may have been for determinate sentence prisoners who are likely to have less serious crimes and fewer risk areas to address.

In regards to risk and need not being statistically significant in explaining the change, this could be a result of the participants in the study mainly being at the higher end of the risk and need measurements. This was shown by the skewed distribution and it also fits with the population of the prison. However, it does fit with the 'What works' principle as the finding has shown the programme is effective for those with higher risk and higher need as all participants who attend TSP have a risk above 50 per cent (except in a few override cases) and all have a certain level of need, therefore the participants included were generally higher risk and higher need than people not suitable for TSP. However, it does not account for why there are no differences between those in the medium risk range and those in the higher risk range. Most previous research in the determination of 'What works' focuses on adult offenders. However, it may be this is not as applicable to YOs and those assessed as medium risk/need, benefit as much as those assessed as high risk/need and vice versa.

In regards to Treatment Readiness, the average score of 76 was above the suggested cut off point of 72 (Casey *et al.* 2007: 1436). This could suggest this is a useful cut off point because of the fact Treatment Readiness did not contribute significantly to the finding. If the sample had included more with lower scores on the CVTRQ, significance may have been found as the lower scores may have resulted in showing those with lower scores do not significantly change their behaviour. Therefore through the lack of a finding in this area, it does help to confirm participants with higher CVTRQ scores are more likely to benefit from the course.

That behaviour at the start of the course did not significantly explain change is also a positive finding. This would suggest prisoners with all types of behaviour benefit from the course and therefore should not be excluded from the course, based on poor wing behaviour. It also suggests, even if their wing behaviour is poor at the start of the course, TSP can help them to change this. This is particularly useful information for YOs. Their behaviour can typically be worse than adults and therefore it is positive that programmes such as TSP can help them improve this.

Hypothesis three

This hypothesis was supported for 4 of the 17 scales measured, based on a percentage of CSC being 6 per cent of the sample or more.<sup>18</sup> The psychometric that showed the most CSC was Eysenck's Impulsivity scale. This is consistent with the

areas TSP addresses as well as the population of the prison of YOs who tend to be characterised by impulsivity. Victim Hurt Denial and Locus of Control showed no CSC, which is not surprising given TSP does not directly address these areas and the nature of the population means being defensive and blaming of others is quite a common issue, likely due to the young age. General Attitude to Offending (GAO) and Anticipation of Re-offending (ARO) were also areas which showed some CSC. This may fit with the finding Treatment Readiness of the sample was quite high as Treatment Readiness reflects motivation and the GAO and ARO are also likely to be affected by this. Cognitive Indolence<sup>19</sup> also showed some CSC. Again this could be related to the Treatment Readiness of those participating as well as the course content, which teaches the issues with taking short cuts and not thinking of consequences. The results are similar to previous ETS research which found modest improvement on impulsivity scales, cognitive indolence and also Locus of control (Blud et al. 2003) and CSC on impulsivity and significant change on Locus of Control (McDougall et al. 2009). As discussed, the Locus of Control finding may be due to the difference in the programme or, more likely a difference in the population, with YOs perhaps more likely to attribute blame to others than themselves.

One factor which may help to explain there only being a small number of participants who showed CSC is the timing of the psychometrics. These were completed immediately post course and, as the findings from the behaviour scores show, there is less likely to be an effect at this time. If psychometrics are implemented six months post course, a bigger change may be found. The quality of programme delivery should not be a factor in this case as the TSP programme at the establishment was recently audited and received an 'exceeded' marking. However the method used to determine CSC, by using the Reliable Change Index (RCI), has been suggested that it may be a 'too stringent criterion for determining clinically meaningful change' (Eisen *et al.* 2007: 286). It may be that the criterion reduced the likelihood of finding CSC.

#### Hypothesis four

This hypothesis was only supported by two factors, Treatment Readiness and sentence type (IPPs), significantly contributing to three psychometric measures. Treatment Readiness significantly contributing to the GAO is not necessarily surprising as a high Treatment Readiness score reflects a positive attitude towards changing offending behaviour. Treatment Readiness and good behaviour at the start of the course, contributed significantly towards clinical change on Cognitive Indolence. This may indicate those with treatment ready attitudes and already good behaviour are less likely to want to take short cuts and more ready to improve this. In regards to Discontinuity, IPPs being the factor that contributes towards clinical change also makes sense as Discontinuity measures ability to keep goals in mind and remain focused, which is something that is important for IPPs in order to gain release.

The fact no other factors contributed significantly to CSC may be due to timing of the administration of psychometrics and can also be related back to the same

<sup>18.</sup> Advice taken from Interventions Unit was that 10% of the sample achieving clinically significant change would be what they would expect to see – only Eysenck's Impulsivity scale achieved this percentage.

<sup>19.</sup> Those who take short cuts and the easy way and are lazy, unmotivated and irresponsible.

reasoning as to why more factors were to found to contribute to behaviour change.

#### Hypothesis five

This hypothesis was not supported as only very small correlations were found between the six month behaviour change and CSC on the psychometrics. Of these, the ARO was the largest which measures optimism of behaviour change so it appears those that were optimistic in their attitude, did show some behaviour change. The lack of correlations may be to do with the different timings of the measures and six month psychometric scores may correlate better. Psychometrics are not administered as standard six months post TSP but it may be useful for this to be investigated further as it may give a more accurate representation of change achieved, for YOs at least.

#### Limitations

One of the main limitations of this study is there was no comparison group. A comparison group was not used as it was felt to retrospectively match the participants to those who had not completed treatment would be problematic. Previous research has cited the problem with retrospective matching and, due to the nature of the data, this would have been the only way to gain a comparison group. A comparison group may have helped give more confidence that any findings were as a result of completing TSP, however this would have still been difficult to ascertain due to the nature of the population and the many issues that affect behaviour change that cannot be controlled for. One such issue is the completion of other programmes after TSP, which was not accounted for in the current research. Of the sample, approximately 47 went on to complete the Controlling Anger and Learning to Manage it (CALM) programme at the establishment, although this was not always within six months of completing TSP and does not account for those completing it at another establishment or completing a programme of a different type. There could be many other factors that could also have contributed to

change that could not be controlled for, such as movement to an adult prison, moving of wings or a significant event happening. As the research only took place in one prison, the results could have been limited by staff-prisoner relationships.<sup>20</sup> At a prison where these are more positive and consistent, a different effect on behaviour change may be found. A further limitation was the missing data for the six month behaviour scores. A more robust follow up of behaviour for this type of individual would be useful.

#### **Conclusion and recommendations**

In conclusion this research has analysed the impact of TSP on short term behaviour change in prison and shown prison behaviour is improved six months after completing TSP. This is an important point as much previous research has focused on re-offending but many prisoners still spend periods of time in prison after completing TSP so a change in their behaviour in prison is still useful to the criminal justice system. This has been conducted with YOs and is helpful in considering what the specific issues are with them and any differences compared to adult prisoners. It also included the use of CSC when looking at the outcome of the psychometrics, which is important as it indicates whether participants are improving to the extent that they are functioning in a way similar to non-offending populations. Finally the comparison between behaviour change and psychometric change has been useful in identifying how useful the psychometric outcome measures are. Further research should concentrate on psychometric measures a period of time after the course has finished, as well as taking into account other factors that could impact on change, such as other programmes completed. It would be useful if future research can incorporate a comparison group into its design, looking at non-completers and their behaviour. It may also be useful to look at their pre-course psychometric scores and other characteristics to identify if there are common factors between non-completers.

#### References

- Blud, L., Travers, R., Nugent, F. And Thornton, D. (2003) 'Accreditation of offending behaviour programmes in HM Prison Service: 'What Works' in practice' Legal and Criminological Psychology 8, 69-81.
- Casey, S., Day, A., Howells, A. and Ward, T. (2007) 'Assessing suitability for Offender Rehabilitation: Development and Validation of a Treatment Readiness Questionnaire'. Criminal Justice and Behavior, 34, 1427-1440.
- DiClemente, C.C., Schlundt, D., and Gemmell, L. (2004). ,Readiness and stages of change in addiction treatment'. American Journal on Addictions, 13(2), 103-119.
- Eisen, S. V., Ranganathan, G., Seal, P., and Spiro, A. (2007) 'Measuring Clinically Meaningful Change Following Mental Health Treatment'. Journal of Behavioral Health Services and Research 34 (3), 272-289.
- Falshaw, L., Friendship, C., Travers, R. and Nugent, F. (2004) 'Searching for 'What Works': HM Prison Service accredited cognitive skills programmes.' The British Journal of Forensic Practice, 6 (2) 3-13.
- Friendship, C., Blud, L., Erikson, M., Travers, R. and Thornton, D. (2003) 'Cognitive-behavioural treatment for imprisoned offenders; An evaluation of HM Prison Services' cognitive skills programmes.' *Legal and Criminological Psychology* 8, 103-114.
- Friendship, C., Falshaw, L. and Beech, A, A. (2003) 'Measuring the real impact of accredited offending behaviour programmes' *Legal and Criminological Psychology* 8, 115-127.

HM Chief Inspector of Prisons (2013) Report on an announced inspection of HMYOI Establishment London: HM Chief Inspector of Prisons.
Hollin, C. R. (2008) 'Evaluating offending behaviour programmes: Does only randomization glister?' Criminology and Criminal Justice 8, 89-106.
McDougall, C., Perry, A. E., Clabour, J., Bowles, R. and Worthy, G. (2009) Evaluation of HM Prison Service Enhanced Thinking Skills Programme: Report on the outcomes form a randomised controlled trial. London: Ministry of Justice.
Ministry of Justice (2013) About HM Prison Service [online] available from < http://www.justice.gov.uk/about/hmps> [04/03/13]

Ministry of Justice (2013) About HM Prison Service (online) available from < http://www.justice.gov.uk/about/hmps> [04/03/13] Ministry of Justice (2010) Thinking Skills Programme: Theory Manual. London: Ministry of Justice.

Pallant, J. (2005) SPSS Survival Manual: A step by step guide to data analysis using SPSS for windows (Version 12). Australia: Allen and Unwin. Sadlier, G. (2010) Evaluation of the impact of HM Prison Service Enhanced Thinking Skills programme on reoffending outcomes of the Surveying Prisoner Crime Reduction(SPCR) sample. London: Ministry of Justice.

20. The recent HMCIP (April 2013) found that staff-prisoner relationships at the establishment showed 'some positive and caring staff, but also too many who were indifferent. Personal officers focused mainly on prisoners' behaviour rather than on a holistic approach to their sentence'.