

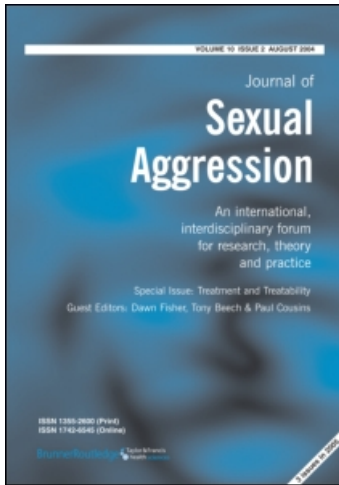
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# Does treatment work with internet sex offenders? Emerging findings from the Internet Sex Offender Treatment Programme (i-SOTP)

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**Abstract** *The increase in convictions for internet-related sexual offending has led to new challenges for treatment providers. By 2005 nearly one-third of all sexual convictions in England and Wales were for internet-related sexual offending. In late 2006 a treatment programme for internet-related sexual offending (the i-SOTP) was given accreditation for use in the community by the National Probation Service (England and Wales). This paper reports on the clinical impact as assessed following completion of psychometric assessments pre- and post-treatment by a sample of 264 convicted offenders. Findings suggest an improvement in deficits concerning socio-affective functioning and a decrease in pro-offending attitudes. These changes are encouraging and support the view that widescale delivery of the programme should be continued.*

**Keywords** *Internet; sexual offending; treatment change*

## Introduction

This paper gives a brief overview of the development of a treatment response to the needs of internet-related sex offenders. It is apparent from literature reviews (e.g. Middleton, in press) that there are currently few treatment responses to the growth of internet-related sex offending and even fewer which have examined the clinical impact on offenders of treatment intervention. In the hope of stimulating interest and further development treatment approaches to this offender group, this paper will report findings from a UK sample of convicted offenders. The authors seek to test the hypothesis that treatment is effective in the short term in producing positive changes in the offenders' levels of socio-affective functioning and pro-offending attitudes, as measured by the use of a psychometric test battery.

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## Developing a response to internet-related sexual offending

There is little doubt that the rapid development of internet usage, while in many respects beneficial and benign, has also led to a significant increase in the production and distribution of child pornography (Taylor & Quayle, 2006). It also seems clear that computers can act as an aid for those who are sexually interested in children and allow for the production, viewing, storage and distribution of child pornography. The medium also allows paedophiles to communicate with each other and acts as a conduit for contact with potential victims (Gallagher, Fraser, Christman, & Hodgson, 2006; Wolak, Finkelhor & Mitchell, 2005). Significant features driving the expansion of online sexual activity may be said to be its “affordability, accessibility and anonymity”, described as the “triple ‘A’ engine” (Cooper, 1998, p. 24). It is suggested that most child pornography is free, and users can access material in quantities and at a speed hitherto not possible and without great expense. Furthermore, rather than venturing into a bookshop or ordering through magazines, users can access indecent material online with a lower risk of detection than associated previously with such behaviour. Carr (2003, p. 11) reports that “collecting, cataloguing, trading and swapping is itself part of the pleasure for many of the men who get involved with child abuse images on the internet”.

It is necessary to recognize that the term “child pornography” has been used often in legislation and in the literature to refer to indecent images of children. This term does not seem appropriate, as it may mislead the reader into an assumption that pornography is produced with the consent of those taking part. Where children are concerned this clearly is not the case, and indeed it is likely that the actual production of such images involves abuse of the child sexually, emotionally and psychologically. In this paper the term is used only in citing authors who have used the term “pornography” in their work.

The development of treatment response to generic forms of sexual offending in both prison and probation services in England and Wales has made significant advances during the last 20 years. In 1992, the HM Prison Service (England & Wales) Sex Offender Treatment Programme (SOTP) was established, in response to the 1991 UK government strategy for the containment and treatment of sexual offenders. In 2001 the National Probation Service (England & Wales) began national implementation of community-based sex offender treatment programmes in a move to apply research evidence of effectiveness in a consistent manner. Each of the 42 probation “areas” in the service would run one of three programmes which had been accredited as conforming to standards of design, range of methods used, appropriate targeting, sequencing, motivation and evaluation (Home Office, 2002; Middleton, 2002). All probation areas were delivering community programmes by 2003, achieving 1,301 annual completions by 2007 (NOMS, 2008a, p. 6). An initial clinical impact study reports short-term changes in socio-affective functioning and pro-offending attitudes, as measured by psychometric assessments that were administered at the beginning of treatment, and again after the offenders had completed treatment (Mandeville-Norden, Beech & Hayes, *in press*). In addition to clinical assessment, short-term reconviction data from a sample of 1,584 sex offenders who completed the programmes found that 121 (7.6%) were reconvicted of a sexual offence on a two- to four-year follow-up (NOMS, 2008b, p. 6). In commenting on these data the report states:

the emerging findings are very promising and provide a positive indication that accredited SOGP’s may be impacting on sex offender attitudes and behaviour. As no suitable comparison group was used in this study it is not possible to say conclusively at this time that it was the programme which was instrumental in these changes since other factors may have played a role (e.g. offenders who attended the programmes may have been

more motivated to stop offending anyway). However the results remain positive” (NOMS 2008b, p. 6).

While the development and implementation of these programmes is a significant achievement, the accredited programmes were designed for male sex offenders aged 21 years or over and (with the exception of the adapted programme for sex offenders with learning difficulties in custodial settings) within the normal range of IQ. While differing offending types (e.g. rapists, child molesters, expositors) were accommodated within the programmes, a need to move beyond a “one size fits all” approach became apparent (Allam, Middleton & Browne, 1997; Middleton, 2002). In particular, the needs of sex offenders with learning difficulties and the growth in internet sex offender convictions required the development of new treatment programmes (Home Office, 2004).

For England and Wales in 1999, there were 238 convictions for publication, possession or distribution of obscene matter and indecent photographs of children. By 2005 they had reached 1,296 (Hansard, 2008)—an almost 500% increase in convictions. The total sexual offence convictions (all sexual offences) in 2005 was 4,800 (Home Office, 2006). Therefore, in this year convictions for internet-related sexual offences accounted for almost one-third of all sexual offence convictions. This level of convictions had a significant effect on the proportion of sex offenders entering or waiting to commence treatment programmes, leading to questions of suitability of the treatment programme content, appropriate treatment dosage and possible “contamination effects” of exposure to contact child sex offenders.

The design of the Internet Sex Offender Treatment Programme (i-SOTP) was a direct response to this phenomenal growth of internet sex offenders in the criminal justice system (Middleton & Hayes, 2006). In the development phase the programme developers reviewed the literature on both the use of the internet by sex offenders, and the risk of escalation from viewing behaviour to committing contact sex offences (for a detailed explanation see Middleton, 2008; Middleton, in press; Middleton & Hayes, 2006).

### **Identifying treatment targets**

Middleton, Beech, and Mandeville-Norden (2005) and Middleton, Elliot, Mandeville-Norden, and Beech (2006) sought to examine whether there was evidence that dynamic risk factors were congruent between internet offenders and contact child sex offenders. A sample of 213 offenders convicted of sexualized behaviour associated with internet use was compared with a sample of 191 sex offenders convicted of contact offences against children. All offenders completed the standard psychometric sex offender assessment battery used in the UK national probation service (Mandeville-Norden, Beech & Middleton, 2006). The results suggest a number of similarities, and in particular the largest clusters for both groups were characterized by intimacy deficits and problems with emotional regulation. Both these factors have been identified with a higher risk of sexual recidivism (Hanson & Morton-Bourgon, 2004). It was suggested that the behaviour of those in the intimacy deficits cluster reflects a need to engage in a sexual relationship with another person to alleviate loneliness and to compensate for a lack of intimacy, while individuals in the emotional dysregulation group may offend in the presence of strong negative mood states which, in conjunction with the use of sex as a coping or soothing strategy, lead them to seek sexualized images of children to meet their sexual needs. Such offenders will often describe viewing behaviour which includes a wide variety of adult pornography, and is not exclusively child abuse images. Unlike those in the intimacy deficits cluster, those in the emotional dysregulation

cluster were often in relationships. However, those relationships were often lacking intimacy, and there was also evidence of negative reaction to stress either in the relationship, or work situations, or both.

Support for findings that internet offenders report higher levels of intimacy deficits or emotional dysregulation comes from Laulik, Allam, and Sheridan (2006), who found that there were significant differences between internet offenders and a normative population in both interpersonal functioning and affective difficulties. The study also found higher than usual levels of depression among the sample and in particular that this corresponded with increased usage of the internet for accessing indecent images. This correlation supports Morahan-Martin and Schumacher's (2000) assertions that viewing indecent images of children may be used as a mechanism to escape from negative mood states and provide individuals with, albeit temporary, psychological and physical relief from unpleasant feelings. The implications for treatment appear to be that a functional analysis must be conducted with each individual that explores the context of the behaviour and the needs that were being met by this behavior. Once these needs are identified, then the treatment programme should seek to develop skills within the offender to meet them in a pro-social way.

The programme developers also incorporated feedback from practitioners on their views of the problems of applying current programme content to internet offenders. For example, feedback from piloting the programme suggested that most internet offenders, once victim awareness has been established, do not experience difficulties in demonstrating appropriate empathy. Indeed, it appears that many offenders had not considered previously their viewing behaviour to be an example of child abuse. Therefore, exercises aimed at developing victim awareness were incorporated into the programme. Finally, it seemed appropriate to incorporate material designed to address sexual compulsivity, obsessional thinking and problematic internet use that arises from collecting behaviour. However, as not every offender will have these behavioural characteristics, the programme needed to be flexible in design.

### **The structure and content of the i-SOTP**

The "model of change" used in the general sex offender treatment programmes within the probation service was developed by Fisher, and Beech in 1998. While this remains a strong influence on the model used in the i-SOTP, the developers also took cognizance of the "Model of Problematic Internet Use" developed by Quayle and Taylor (2003) and the "Good Lives Model" (Ward & Stewart 2003). All three of these models are reflected in the i-SOTP model of change. Therefore the revised model of change incorporates:

- Increase motivation, decrease denial and identify and reduce discrepancy between perceived pro-social values and behaviour (addressing distorted attitudes).
- Challenge offence supportive attitudes and behaviours (addressing distorted attitudes).
- Build an empathic response to identifying that children depicted in the indecent images are real victims of child abuse (addressing distorted attitudes and socio-affective functioning).
- Reduce use of sex as a coping strategy and emotional avoidance, replacing it with effective problem solving strategies (addressing socio-affective functioning and self-management).
- Develop adequate relationship, intimacy and coping skills; improve self-esteem and internal locus of control (social adequacy factors and self-management).

- Develop realistic relapse prevention strategies and new pro-social lifestyle goals (addressing self-management and socio-affective functioning).

The i-SOTP is designed for offenders convicted of an internet-related offence who have been assessed as low, medium or high risk using the Risk Matrix 2000 (Thornton et al., 2003), as well as being categorized as “low deviance” (Beech, 1998), based on an assessment of their pre-stage psychometric responses (Mandeville-Norden et al., 2006). Offenders assessed as at very high risk and high deviance are more likely to have treatment needs that will require referral to a longer, generic sex offender treatment programme, as is the case for offenders who have used the internet as a means of facilitating meetings with children for (contact) sexual abuse purposes.

The programme was designed originally to be delivered on an individual basis in which the exercises are selected according to treatment need. In this format the six-module programme lasts for between 20 and 30 sessions of 90 minutes duration. Following piloting and feedback, the programme was developed further to be delivered in a group format comprising 35 two-hour sessions, again broken into six modules. Both formats were accredited for implementation in the community in December 2006. Provisional accreditation was awarded for implementation in custodial regimes from December 2007 (NOMS, 2008b).

The i-SOTP begins with a number of exercises designed to help the offender to identify values that they believe are important for themselves, and how their behaviour has, in some aspect, conflicted with these values. Building on the cognitive dissonance resulting from this process enables a focus on new goal-setting which can assist the offender in meeting their desired values. The second module includes a functional analysis of the offence behaviour and an opportunity to examine and challenge offence-supportive cognitions. The third module examines the victims’ experience and seeks to develop the offenders’ level of victim awareness. In these exercises it is important that the offender understands the link between the production of images that they viewed and child abuse.

The longest section of the programme (module four) is concerned with the “skills practice” that is required to deal with intimacy or emotional self-regulation deficits. Module five deals with the recognition of, and appropriate responses to, “collecting and compulsivity” issues. This module also provides an opportunity to examine the offenders’ needs that are met through joining pseudo-communities online and how these needs may be met more appropriately. Finally, a number of exercises are undertaken to deal with deviant sexual fantasy. The final module draws the new learning together, and incorporates this into relapse prevention strategies or the offenders’ “New Life Plan”.

Following initial training for probation staff, the programme was introduced in all probation areas (across England & Wales) in 2006. The programme is delivered by facilitators who have been assessed as competent to deliver accredited sex offender treatment programmes. Facilitators work under the supervision of a treatment manager who is also responsible for the assessment and selection of offenders to participate in the programme. All offenders are assessed prior to commencement on the programme using Risk Matrix 2000 (Thornton et al., 2003) and the standard psychometric assessment battery (Beech, 1998; Beech, Fisher & Beckett, 1999; Beech & Ford, 2006; Mandeville-Norden et al., 2006). After the final module of the programme, the offenders complete the same psychometric assessment battery, together with the relapse prevention (RP) questionnaire (Beckett, Fisher, Mann & Thornton (1997). These data are collated electronically by the National Research Officer via the Sex Offender Psychometric Scoring System (SOPSSys; Mandeville-Norden et al., 2006) and forms the data set used in this study.

## Sample characteristics

The sample used in this study consisted of 264 convicted offenders being supervised across the National Probation Service. All offenders commenced the i-SOTP between 2006 and 2008. Offender age ranged from 19 years to 73 years [mean = 41.5 years; standard deviation (s.d.) = 11.27 years]. Fifteen per cent ( $n = 39$ ) of the sample were divorced; 25% ( $n = 66$ ) were married; 7% ( $n = 19$ ) were separated; 1% ( $n = 3$ ) were widowed; and 52% ( $n = 137$ ) were single.

Risk of sexual offence reconviction data was available on 161 offenders in the sample who were assessed using the Risk Matrix 2000 risk prediction instrument (Thornton et al., 2003). Fifty-one per cent ( $n = 133$ ) were assessed as low risk; 39% ( $n = 102$ ) were assessed as medium risk; 9% ( $n = 23$ ) were assessed as high risk; and 1% ( $n = 3$ ) were very high risk. Offenders were also assessed using the Home Office Offender Assessment system (OASys), which assesses known criminogenic risk factors such as education, employment, accommodation, etc. The mean score on this measure was 28.33 (range 2–117; s.d. = 18.81), which indicates low criminogenic needs in terms of stability. However, OASys is known to produce low scores for most sexual offenders because these criminogenic factors are not typically prevalent among this group (e.g. Mandeville-Norden & Beech, 2004), and this study provides further confirmatory evidence of this. Offenders were also classified by the Home Office Offender Reconviction Group Scale (ORGS), which is used to give an offence reconviction probability. The mean score was 9.18 (range 1–72; s.d. = 10.97).

Psychometric profiles of convicted sex offenders have revealed two distinct groups, which Beech (1998) labelled as high and low deviancy. High deviancy offenders tend to demonstrate global difficulties in having both high levels of pro-offending attitudes and low levels of socio-affective functioning. Low deviancy offenders tend to demonstrate less pronounced difficulties, yet still compare negatively with non-offenders (Fisher, Beech & Browne, 1999). Using this method, deviance classification (Beech, 1998) was available for 148 offenders [deviancy data are not available for the entire sample due to one of two reasons: (i) a failure on the part of the psychometric administrator to administer all nine of the psychometric measures that contribute to the deviancy equation; (ii) the offender failing to complete in full all of these nine measures. Indeed, the absence of a score from just one of the nine measures means that the deviancy equation cannot be undertaken, and therefore, the offender is not assigned a deviancy classification]. Of these, 70% ( $n = 104$ ) were assessed as low deviance and 30% ( $n = 44$ ) were assessed as high deviance. It is noted that the programme designers considered “high deviance” offenders unsuitable for this programme as their range of criminogenic needs were likely to be greater than low deviance offenders, and thus require a longer intervention programme. It is possible to surmise that, faced with the need to make expedient decisions with offenders who had insufficient time under statutory supervision to undertake a longer programme, some treatment managers decided that “some treatment was better than no treatment”. It is also of note that 10% ( $n = 26$ ) of offenders had participated in previous sex offender treatment programmes and that some of these were in the high deviance category. It is possible that if these offenders had convictions for internet-related sex offending, treatment managers took the decision to add attendance on the i-SOTP to their total treatment package.

In terms of victim data, it is recorded (by probation staff based on evidence presented to the sentencing court) that children portrayed in images ranged in age from 1 to 15 years, with a mean of 8.23 years. Information was available on the gender of victims which featured in the convictions of offenders, with 55% ( $n = 145$ ) female, 12% ( $n = 31$ ) male and 33% ( $n = 88$ ) described as both male and female. Most of the offenders were viewing images of children

outside their family (88%;  $n = 232$ ), although 12% ( $n = 32$ ) were viewing images of children within the family.

## Method

### *Design and procedure*

Administration of the standardized battery of psychometric assessments took place both prior to the commencement of treatment and again after the treatment had ended. The psychometric test results of offenders assessed from 2006 to 2008 were included in the analysis. All psychometric assessments were scored locally within each of the 42 probation areas using the SOPSSys (Mandeville-Norden et al., 2006), which provides a system for scoring the assessments both quickly and efficiently. The individual item-level scores on all of the measures were entered into SOPSSys, which generates total scores and range scores. These data were captured using Microsoft Excel in the first instance, and entered into SOPSSys locally by programmes staff. The scoring system is simplistic and requires minimal work by the staff, thus reducing dramatically the possibility of errors. All staff must be trained and accredited to use this system, and thus the requirements for formal data quality checks are minimal. The spreadsheet is then sent to the national researcher to collate the information into a national database, and exported into SPSS version 15 (SPSS, Inc., Chicago, IL, USA) for further analysis. During this analysis the individual results are combined to produce a group mean for pre-treatment and post-treatment on each of the psychometric measures.

After completing the treatment programme, the psychometric assessments are also considered in a composite manner, known as the treated profile equation, in order to establish whether the offender is deemed to be “treated”, or psychometrically indistinguishable from the non-offending population. There are three parts to the equation, all of which must be satisfied. Specifically, the offender must score within the required range on all three pro-offending measures *and* score within the required range of a minimum of three of the five scales that measure socio-affective functioning *and* score within the required range on the relapse prevention measure. Should the requirements in all three criteria be satisfied, the offender is deemed to be “treated”. Because the relapse prevention measure is only completed post-treatment it is not possible to examine if any offender began the treatment programme within the treated profile range.

### *Measures*

Eight scales were used to assess treatment change and pre-treatment problems (e.g. Mandeville-Norden, & Beech, 2004). Scales 1–3 were used to measure pro-offending attitudes (Thornton, 2002). Scales 4–8 were used to measure the level of socio-affective functioning (Thornton, 2002). Scale 9 is not used in the calculation of the “treated profile” but is used to measure impulsivity, as it relates to the effectiveness of self-management by the offender.

*Cognitive Distortions Scale (Children and Sex Questionnaire; Beckett, 1987).* This scale is designed to measure the extent to which abusers portray their victims as in some way responsible for encouraging or initiating sexual contact. Beech (1998) found the test-retest reliability to be 0.77 in 45 untreated child abusers. The range for this measure is 0–60, with higher scores reflecting greater cognitive distortions. The normative range of functioning is 5–21 (details of scores for all measures from Beech et al., 1999).

*Emotional identification with children (Children and Sex Questionnaire; Beckett, 1987).* This scale is designed to measure the emotional significance of children to the offender, or the extent to which an offender can be regarded as fixated emotionally upon children. Beech (1998) reported the test–retest reliability to be 0.63 in 45 untreated child abusers. The range for this measure is 0–60, with higher scores reflecting greater emotional fixation on children. The normative range of functioning is 7–34.

*Victim empathy distortions (Beckett & Fisher, 1994).* The questions contained in this scale relate to how the victim might have felt about the offence, at both the point at which the offence occurred as well as the later consequences in terms of guilt, shame, etc. In addition, there are questions that cover the lead-up to the offence, as well as questions that aim to assess the offender's perceptions regarding whether the victim was in any way to blame for its occurrence. It is a given that in instances of sexual abuse, the consequences will most probably be profoundly negative, in that the child victim will not have “enjoyed” the experience, was not to blame for the abuse, and will most probably experience emotions surrounding guilt and regret after the event.

For an offender to demonstrate victim empathy distortions in this scale, he would be required to respond to a significant number of questions in a manner that goes against the accepted view, and would most probably report that the child enjoyed the experience, or that they had “led him on”, and thus had been somewhat responsible for the abuse. Such responses could be viewed, therefore, as reflective of cognitive distortions, as they contradict the evidence that exists which relates to the impact of sexual offences on child victims (e.g. Browne & Finkelhor, 1986), and as such it is not deemed to be necessary to understand the consequences for each individual victim in order to make this assertion.

Beech (1998) reported the internal reliability of this scale to be high (Cronbach's alpha = 0.89) in 140 untreated child abusers and the test–retest reliability to be 0.95 in 46 untreated child abusers. The range for this measure is 0–100, with higher scores reflecting limited victim empathy abilities. The normative range of functioning is 9–27.

*Short Self-Esteem Scale (Webster, Mann, Thornton, & Wakeling, 2006).* This questionnaire measures an offender's level of self-esteem or self-worth, covering issues pertaining to self-image, and the extent to which one values oneself. Beech (1998) reported the test–retest reliability of this scale to be 0.75 in a group of 40 untreated child abusers. The range for this measure is 0–8, with higher scores reflecting greater self-esteem. The normative range of functioning is 6–8.

*UCLA Emotional Loneliness Scale (Russell, Peplau, & Cutrona, 1980).* This scale measures the ability to be appropriately intimate with other adults. Russell et al. (1980) reported an internal consistency of 0.91. Beech (1998) reported the test–retest reliability of this scale to be 0.70 over a seven-month period in a group of 44 treated child abusers. The range for this measure is 0–80, with higher scores reflecting greater emotional loneliness. The normative range of functioning is 27–40.

*Under-assertiveness/Over-assertiveness Scale (from the Social Response Inventory, SRI; Keltner, Marshall & Marshall, 1981).* This scale measures self-reported levels of under-assertiveness and over-assertiveness. Specifically, the ability to express oneself and act in a direct manner, and whether the offender is able to do so in a way that is appropriate and acceptable to all parties, without being passive or aggressive. Beech (1998) reported the test–retest reliability of

the under-assertiveness and over-assertiveness subscales of the SRI to be around 0.80 over a seven-month period in a group of 44 treated child abusers.

The range for the under-assertiveness scale is 0–44, with higher scores reflecting poorer functioning in this area. The normative range of functioning is 4–14. The range for the over-assertiveness scale is 0–8, with higher scores reflecting poorer functioning in this area. The normative range of functioning is 0–4.

*Personal Distress Scale (from the Interpersonal Reactivity Index; Davis, 1983).* This scale measures the ability to cope with negative feelings (Salter, 1988). Davis reported a coefficient alpha of 0.78 and a test–retest reliability of 0.68 in 56 males over a period of two-and-a-half months.

The range for this measure is 0–28, with higher scores reflecting poorer functioning in this area. The normative range of functioning is 4–11.

*Nowicki–Strickland Locus of Control Scale (Nowicki, 1976).* This scale measures the extent to which an individual feels that events are contingent upon their own behaviour or that events are outside of their control. Nowicki and Duke (1974) reported test–retest reliability of 0.83 in 158 subjects over a six-week period. Nowicki and Duke (1982) reported the internal consistency of this scale as 0.69. The range for this measure is 0–27, with higher scores reflecting poorer functioning in this area (i.e. an external locus of control). The normative range of functioning is 5–16.

*BIS-II Impulsivity Measure (Patton et al., 1995).* This measure consists of three subscales, each of which considers the offender's level of impulsivity. The Motor Impulsivity Scale measures the extent to which individuals act without prior thinking—the range for this scale is 10–40, with a normative range of 11–19; the Cognitive Impulsivity Scale assesses whether the individual makes quick cognitive decisions—the range for this scale is 10–40 with a normative range of 11–21; and the Non-Planning Scale measures an individual's lack of concern for their future—the range for this scale is 10–40 with a normative range of 13–22.

### *Calculating treatment change*

Treatment impact was examined by looking at whether the offenders in the sample had changed in the desired direction, assessed by the psychometrics following treatment. Basic statistical analyses were undertaken to investigate pre-treatment to post-treatment change. Change was determined to have taken place on a measure if there was a significant difference at  $p = 0.005$  level.

## **Results**

The key treatment targets can be grouped into two main categories: addressing socio-affective functioning (such as self-esteem issues and emotional loneliness problems) and changing pro-offending attitudes (which include victim empathy deficits and cognitive distortions that relate to attitudes and beliefs that minimize and justify offending behaviour). Table I shows the results for the socio-affective factors assessed across 12 measures incorporated into the psychometric battery. In 11 of these measures offenders were assessed to have changed post-treatment in the desired direction. These results indicate that the offenders' level of self-esteem increased over time, and that they were better able to accept responsibility for their behaviour following the completion of the programme. In addition, improvements were

**Table I.** Psychometric results—Socio-affective functioning by Internet Sex Offender Treatment Programme (i-SOTP)

Measure	Stage	i-SOTP		
		Mean	Change <sup>1</sup>	Sign <sup>2</sup>
Self-esteem n = 263	Pre-	4.77	Yes	Yes
	Post-	6.35		
Emotional loneliness n = 263	Pre-	40.95	Yes	Yes
	Post-	36.19		
Locus of control n = 264	Pre-	11.46	Yes	Yes
	Post-	9.64		
Perspective-taking n = 263	Pre-	18.50	Yes	Yes
	Post-	20.09		
Empathic concern n = 264	Pre-	20.46	Yes	No
	Post-	21.07		
Personal distress n = 264	Pre-	11.92	Yes	Yes
	Post-	9.51		
Fantasy n = 264	Pre-	13.26	Yes	No
	Post-	13.89		
Under-assertiveness n = 264	Pre-	36.06	Yes	Yes
	Post-	24.75		
Over-assertiveness n = 263	Pre-	5.32	Yes	Yes
	Post-	2.49		
Motor impulsivity n = 264	Pre-	21.31	Yes	Yes
	Post-	20.27		
Cognitive impulsivity n = 251	Pre-	22.37	Yes	Yes
	Post-	21.80		
Non-planning n = 260	Pre-	20.02	Yes	Yes
	Post-	18.11		

<sup>1</sup>Change: refers to whether the post-score changed from the pre-score in the desired direction; <sup>2</sup>Sign: refers to whether the mean pre- and post-scores are statistically significantly different,  $p = 0.005$ .

recorded in respect of self-management issues such as the control of impulsive behaviour as well as levels of both over- and under-assertiveness. The average post-stage score on the fantasy subscale of the Interpersonal Reactivity Inventory (Davis, 1983) rose slightly from the pre-stage score (13.26–13.89 within a normative range of 5–16). This scale assesses the degree to which offenders over-identify with fictional characters and it may be that these results indicate that this is a particularly difficult trait to change in those who seek pseudo-intimacy through online interactions.

Table II shows the results for the pro-offending attitude scales that are contained within the psychometric battery. The change across these scales is in the desired direction. The largest change can be seen in the offenders' responses to the victim empathy scale (Beckett & Fisher, 1994), where offenders at the post-stage demonstrated a significant improvement in their victim empathy abilities. It should be noted, however, that prior to treatment the average score on this measure fell within the normative range of functioning, which suggests that victim empathy deficits are not a defining treatment need among this group. Offenders also demonstrated a positive change in respect of both a reduction in cognitive distortions which are supportive of child sexual abuse, as well emotional over-identification with children. Again, the pre-stage scores on these scales fell within the normative ranges.

Table III reports the mean scores achieved on the RP questionnaire (Becket et al., 1997). This scale consists of mainly open-ended questions designed to assess offender insight into their own offending and their capacity to identify effective strategies for dealing with future

**Table II.** Psychometric results—Pro-offending attitudes by Internet Sex Offender Treatment Programme (i-SOTP)

Measure	Stage	i-SOTP		
		Mean	Change <sup>1</sup>	Sign. <sup>2</sup>
Victim empathy n = 209	Pre-	20.99	Yes	Yes
	Post-	8.82		
Cognitive distortions n = 263	Pre-	18.67	Yes	Yes
	Post-	14.64		
Emotional congruence n = 234	Pre-	9.19	Yes	No
	Post-	7.90		

<sup>1</sup>Change: refers to whether the post-score changed from the pre-score in the desired direction; <sup>2</sup>Sign.: refers to whether the mean pre- and post-scores are statistically significantly different,  $p = 0.005$ .

risk situations. The scores on both the awareness subscale and the strategies subscale fell within the normative range of functioning. However, the RP questionnaire was developed for use with contact sex offenders and the required responses may not be particularly suitable for internet-related sexual offending.

Table IV reports the results in relation to the achievement of a “treated profile”. In order to achieve a treated profile, it is necessary for the offenders to present themselves as psychometrically indistinguishable from a non-offending normative sample across a number key measures that consider both socio-affective functioning and pro-offending attitudes (Mandeville-Norden & Beech, 2004). It can be seen that 53% of the sample were assessed as having achieved a treated profile. Tables V and VI report the treated profile achieved by level of risk and by level of deviance. It can be seen that when inappropriate referrals (i.e. very high risk offenders and high deviance offenders—for whom this programme was not designed to accommodate) are removed from the sample, the treated profile rises to 57%.

It should be noted that a feature of attempting to collect data on a multisite study (in this case across 42 administrative areas within the National Probation Service) has led to an attrition in the data for certain tests such as RM 2000. In addition, there are missing data on the RP and the victim empathy scales, and as these measures are required to calculate the “treated profile”, this has impacted upon the data available for on measures required to calculate treated profile.

## Discussion

These data suggest that the i-SOTP has been successful in assisting some offenders in making the required changes in key factors which have been associated with the continuance of their offending. It appears that a shorter treatment intervention (albeit one that is more focused

**Table III.** Psychometric results—Relapse prevention (post-stage only)

Relapse prevention	i-SOTP	
	Mean	Sample
Awareness	13.90	244
Strategies	12.91	244

Total sample: 244; i-SOTP: Internet Sex Offender Treatment Programme (i-SOTP).

**Table IV.** *Treated profile statistics (post-stage)*

Treated profile	i-SOTP	
	Sample	Percentage
Yes	105	53%
No	94	47%

Total sample: 199; i-SOTP: Internet Sex Offender Treatment Programme.

upon appropriate criminogenic risk factors) has been successful in promoting this required change.

In addition, these data appear to support the approach of the i-SOTP with regard to the choice of treatment targets and methods that are employed. It is suggested that the degree of change in the development of appropriate victim empathy, over a reduced proportion of the overall treatment dose, supports the hypothesis that internet offenders do not generally lack appropriate empathic responses to child sexual abuse, and develop such empathic responses when they are able to make the cognitive link that the images they were viewing are the result of child sexual abuse. These data also support the view that offenders with differing treatment pathways, such as those with intimacy deficits or those whose primary deficit are associated with emotional dysregulation, can be accommodated within the same programme.

It is evident that these changes in psychometric scores are a useful indicator of treatment change, and have been used among other samples of child sex abusers to demonstrate improvements over time (e.g. Mandeville-Norden et al., in press). There are limitations of the use of psychometrics with sex offenders, as they rely on self-completion by the offender. In addition, in this study, as in other psychometric assessment of sex offenders, it is not unusual for offenders to fall within the normative range of the pre-treatment measure. In such cases the treatment effect reported may be that post-treatment the offender falls more securely within the normative range. This may be a reflection that the normative attitudes have become

**Table V.** *Risk matrix 2000 by treated profile*

Risk matrix	Treated profile		Total
	Yes	No	
Low risk			
Number	54	46	100
Percentage of total	27.6%	23.5%	51%
Medium risk			
Number	40	35	75
Percentage of total	20.4%	17.9%	38.3%
High risk			
Number	7	12	19
Percentage of total	3.6%	6.1%	9.7%
Very high risk			
Number	1	1	2
Percentage of total	0.5%	0.5%	1%
Total			
Number	102	94	196
Percentage of total	52%	48%	100%

**Table VI.** *Deviancy by treated profile*

Deviancy	Treated profile		Total
	Yes	No	
Low deviancy			
Number	47	35	82
Percentage of total	43.5%	32.4%	75.9%
High deviancy			
Number	10	16	26
Percentage of total	9.3%	14.8%	24.1%
Total			
Number	57	51	108
Percentage of total	52.8%	47.2%	100%

more entrenched within the individual. However, it is also necessary to examine whether the psychometrics used to measure change against the treatment targets are appropriate for purpose and it is possible that these data will lead to a review of the measures used for this offender group. The data also support the possibility that the use of the deviancy calculation and treated profile calculation with this offender group may need revision. Indeed, this study provides further support to the view of Mandeville-Norden and Beech (in press), who argue that this categorization may be too simplistic to describe lower-risk sex offenders (who have been sentenced to attend a community-based treatment programme). As the internet programme is still in its relative infancy, this type of detailed psychometric profiling is similarly in the development stage.

Undoubtedly a reconviction study conducted on this sample, matched by a non-treatment control group, would add significantly to these findings. The feasibility of such research is, however, hampered by both the practical and ethical implications of establishing a sufficiently representative control group of sex offenders who have not undertaken such treatment. It may be of use to compare internet sex offenders who completed the generic programme which was available to them prior to the accreditation of the i-SOTP, with the i-SOTP results reported here in order to assess the relative contribution made by each programme. It is also possible that the reported reduction in offence-supportive attitudes and improvements in socio-affective functioning could have occurred due to other factors than participation on the treatment programme (i.e. by criminal justice responses such as prosecution, conviction, offender supervision or by other influences such as offender maturation and increased social support). However, this study is a first step in assessing the clinical impact of treatment on an offender group which is currently under-researched.

## Conclusion

These emerging data from the clinical impact of the i-SOTP appears to be sufficiently encouraging to justify the continuation of the wide-scale delivery of the treatment programme. However, a long-term reconviction study will be required to assess whether the programme is effective in not only changing attitudes and behaviour positively but also in establishing whether the strategies for the development of a new lifestyle and risk reduction behaviour results in both reduced recidivism for internet sexual offending in particular, and for reduced reconvictions for any offence type. It is hoped that this study may stimulate the establishment

of more robust clinical impact studies to assess treatment impact with this large sex offender population.

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