**What works with adult deliberate firesetters? Where have we come from and where do we go from here?**

In forensic psychology there has been a distinct movement from surmising that ‘nothing works’ to determining ‘what works best’ in the treatment of offending behaviour (McGuire, 2002). This shift has necessitated embracing evidence-based practice as the ‘gold standard’ for providing effective and meaningful treatment (Gannon & Ward, 2014). Evidence-based practice involves practitioners combining the best available research evidence with clinical expertise and service users’ preferences (DiLillo & McChargue, 2007). Consistent with this, having a strong empirical evidence base to consult for treatment decision making and provision is fundamental for guiding responsible and ethical clinical practice in forensic psychology (Forde, 2018; Gannon & Ward, 2014). In forensic settings demonstrating the effectiveness of the interventions provided is particularly important as ineffective psychological treatments may result in serious adverse outcomes that may have implications for society, such as increased reoffending (e.g., Farabee, Hser, Anglin, & Huang, 2004; Lowenkamp, Pealer, Smith, & Latessa, 2006). Consequently, ensuring interventions are effective, as evidenced by empirical research, should be a key priority for policy makers, commissioners and treatment providers, including forensic psychologists.

**Deliberate firesetting: An under-recognised and under-researched issue**

Despite the widely recognised importance of engaging in evidence-based practice, deliberate firesetting has been significantly under-examined in terms of establishing ‘what works best’ for this behaviour, compared to other offending behaviours, with little evidence available to guide practitioners on appropriate treatment approaches with this population (Fritzon, Doley, & Clark, 2013). This is concerning since in England alone there has been a continued increase in the number of deliberately set fires, with reported incidents rising 17% since 2012/13 to around 80,758 fires per year (Home Office, 2018a). Further, deliberately set fires result in a significant number of injuries and fatalities, as well as huge costs to the economy (see Home Office, 2018b). In addition to the public harm caused, deliberate firesetting should be of particular concern to forensic psychologists as adults who have a history of this behaviour are frequently encountered by professionals working in criminal justice and forensic mental health settings. For example, individuals with a history of firesetting have been shown to represent between 10% and 54.4% of admissions to medium secure services (convicted or unconvicted; Tyler, Gannon, Lockerbie, & Ó Ciardha, 2018) and in 2014 it was reported that there were 670 adults in custody for an offence of arson (Ministry of Justice, 2015). Whilst these figures provide an indication of the prevalence of firesetting in forensic populations, they are likely to under-represent the extent of the issue as fire-related offences do not always result in a charge of arson. Nevertheless, these statistics highlight that adult deliberate firesetting is a prevalent and persistent issue that requires attention from both academics and practitioners to develop best practice guidance on effective ways to address this behaviour.

**Treating deliberate firesetting: Where are we now?**

Given deliberate firesetting has received relatively little attention compared to other offending behaviours, it is unsurprising there has been little work to develop and evaluate psychological interventions to address this behaviour (Gannon, Lockerbie, & Tyler, 2012). As a result, until recently no standardised specialist interventions have been available internationally to address firesetting behaviour. In response to this, two specialist psychological treatment programmes for adults with a history of firesetting or fire-related risk behaviours were developed by The Centre of Research and Education in Forensic Psychology (CORE-FP) at the University of Kent and Kent and Medway NHS and Social Care Partnership Trust (KMPT). *The Firesetting Intervention Programme for Prisoners* (FIPP; Gannon, 2012) and *The Firesetting Intervention Programme for Mentally Disordered Offenders* (FIP-MO; Gannon & Lockerbie, 2014) are semi-structured interventions which aim to target key treatment needs associated with adult deliberate firesetting, as identified within the research literature – for example, fire-related factors, offence supportive attitudes, self and emotional regulation, and communication. The programmes are theoretically underpinned by rehabilitation principles drawn from *the Risk Need Responsivity Model* (Andrews & Bonta, 2014) and *the Good Lives Model* (Ward & Stewart, 2003), as well as principles from the latest theoretical model of adult firesetting: *The Multi-Trajectory Theory of Adult Firesetting* (Gannon, Ó Ciardha, Doley, & Alleyne, 2012).

Both the FIPP and FIP-MO have been evaluated to establish their effectiveness in reducing key areas of need associated with deliberate firesetting. In both evaluations, individuals with a history of firesetting who completed the programmes were compared to a comparison group who were considered treatment eligible, but residing at establishments where the programmes were not available. All participants completed psychometric measures pre- and post-treatment that assessed each of the key treatment targets within the programmes. In the FIPP evaluation, Gannon et al. (2015) found that, relative to the comparison group of firesetters who did not receive the specialist firesetting treatment, firesetters who completed the FIPP significantly improved on measures of inappropriate fire interest and associations with fire, and offence-supportive attitudes. Individuals with the greatest number of self-reported adult firesetting incidents made the largest improvements, and all key improvements were maintained three months’ post-treatment. Similarly, results from the FIP-MO evaluation (Tyler et al., 2018) showed that following completion of the FIP-MO, mentally disordered firesetters significantly improved on measures of their interests, attitudes and associations with fire and anger expression, relative to the comparison group. These initial evaluations of the FIPP and FIP-MO are currently the most rigorous, high-quality evaluations of specialist treatment for deliberate firesetting, and provide a starting point for providing evidence-based treatment for adults with a history of firesetting. However, further research is needed to develop our understanding of the effectiveness of these interventions so as to establish “what works best” in the treatment of deliberate firesetting.

**Deliberate firesetting: Where do we go from here?**

To advance the evidence base on effective treatment for deliberate firesetting, we need to continually improve the rigour and quality of evaluations through addressing the limitations of previous studies and extending the types of treatment outcomes assessed. Thus, whilst the initial evaluations of the FIPP and FIP-MO currently represent the strongest evidence for effective treatment, there are several key limitations with these studies which require addressing through further research. First, the initial evaluations only focused on short-term treatment gains (i.e., immediately pre-post treatment) and when the programmes were delivered in a group format. Second, the impact of non-completion of the FIPP and FIP-MO is yet to be established. These limitations mean that at present it is not possible to draw any meaningful conclusions about the impact of the programmes on actual behavioural change (i.e., whether they result in a reduction in firesetting incidents), if there are any differences in treatment outcomes if they are delivered on an individual basis compared to in a group, or if there are any adverse effects associated with partial or non-completion of treatment.

These limitations are important to address for several reasons. First, given that the primary aim of most offending behaviour programmes is to reduce reoffending post-treatment, we need to know if the within-treatment change observed in the initial FIPP and FIP-MO evaluations translates to actual behavioural change. As a result, there is a need for long-term prospective follow-up studies to establish the impact of the FIPP and FIP-MO on firesetting behaviour (i.e., recidivism). Second, clinical need often influences whether interventions can be offered on a group or individual basis. It is therefore vital that any outcome differences in group and individual delivery of the FIPP and FIP-MO are explored to ascertain whether the treatment delivery method impacts upon the effectiveness of the interventions. Finally, it is important for responsible and ethical practice to understand if there are any negative side effects associated with completion and non-completion of the FIPP and FIP-MO. It is now widely recognised there is potential for some individuals to experience adverse effects following psychological interventions (Lilienfeld, 2007). Further, in forensic settings, these adverse effects may have serious consequences for both the individual and wider society – for example, reluctance to engage in other rehabilitative activities, re-traumatisation through discussion of offending behaviour and adverse childhood experiences, and an increase in reoffending (e.g., Farabee et al., 2004; Lowenkamp et al., 2006; Mews, DiBella, & Purver, 2017). There is also growing evidence to suggest that failure to complete offending behaviour programmes may lead to poorer outcomes, including increased recidivism, in comparison to having never received treatment (McIntosh, McMurran, Taylor, & Thomson, 2019; McMurran & Theodosi, 2007). Ethically, all practitioners are obliged to avoid delivering treatments that may place clients at undue risk of harm (Lilienfeld, 2007) and to inform clients about the potential risks and benefits associated with any treatment (Blease, Lilienfeld, & Kelley, 2016). It is therefore imperative that further research is undertaken to establish whether there are any potentially harmful effects of the FIPP and FIP-MO, as well as exploring the effects of treatment non-completion.

Aside from addressing the limitations of previous evaluation studies, there is also an ethical obligation for treatment providers to engage in regular re-evaluation of treatment programmes so as to continually improve and monitor treatment provision. The need for timely evaluation of offending behaviour programmes has recently been emphasised by Mews et al.’s (2017) evaluation of the Core Sex Offender Treatment Programme (Core SOTP). Whilst the pre-2000 version of the programme was evaluated after two years of use (see Friendship, Mann, & Beech, 2003), the revised and updated format was not evaluated until 12 years after its implementation. When Mews et al. (2017) evaluated the revised Core SOTP they found that, over an average follow-up period of 8.2 years, more sexual offenders that had commenced Core SOTP reoffended with another sexual offence compared to those that did not receive the treatment (10.0% vs 8.0%), and concluded it is possible completing the Core SOTP increased participants’ propensity to sexually reoffend. These findings emphasise the importance of evaluations being conducted at the earliest opportunity and the need to undertake re-evaluations in a timely manner, to ensure individuals are receiving the best and most effective available treatment. Given we only have a single evaluation of the FIPP and FIP-MO at present and our knowledge of the psychological factors associated with this behaviour is growing, it is critical that we continue to develop the evidence for ‘what works best’ with adults who deliberately set fires.

**Developing the evidence base: Further evaluation**

Since the original evaluations, the FIPP and FIP-MO have been implemented across prisons and forensic mental health services in the UK. This provides a valuable opportunity to naturalistically examine the effectiveness of these interventions further. The University of Kent and KMPT are therefore running a new evaluation of the FIPP and FIP-MO that aims to extend the previous evaluations in a number of key ways: 1) by examining any differences in treatment outcomes when the specialist treatment is delivered in a group versus an individual format, 2) by conducting the first ever longitudinal examination of the effectiveness of specialist treatment for adult firesetting in bringing about actual behavioural change, and 3) by investigating the effect of the treatment on non-completers.

We are currently inviting prisons and mental health services to participate in this research. If you are already running the FIPP or FIP-MO in your service or planning to in the near future, either as a group intervention or on an individual basis, you can participate**.** Participation in the research simply involves completing a short background information sheet and asking participants for their consent to release an anonymised copy of their pre-post treatment questionnaires (completed as part of standard FIPP/FIP-MO delivery), and for the research team to collect conviction data on them. If you are interested in participating in this research or would like further information, please email fipmoprogramme@kent.ac.uk.

To be able to run the FIPP or FIP-MO, facilitators need to attend a one-day training workshop, which provides attendees with the theoretical and practical knowledge to successfully deliver the programmes within their own services. The next training, which is approved by the British Psychological Society for the purposes of Continuing Professional Development, will be held in Kent on Wednesday 17th July 2019. If you would like to book a place, please email Katie Sambrooks at katie.sambrooks@nhs.net.

Katie Sambrooks is a Research Associate at the Centre of Research and Education in Forensic Psychology, University of Kent and Kent and Medway NHS and Social Care Partnership Trust. Email: k.l.sambrooks@kent.ac.uk

Nichola Tyler is a Lecturer in Psychology and a Forensic Psychologist in Training at the Centre of Research and Education in Forensic Psychology, University of Kent and Kent and Medway NHS and Social Care Partnership Trust. Email: n.f.tyler@kent.ac.uk

Word Count: 1999 words.

References

Andrews, D. A., & Bonta, J. (2014). *The Psychology of Criminal Conduct.* Routledge.

Blease, C. R., Lilienfeld, S. O., & Kelley, J. M. (2016). Evidence-based practice and psychological treatments: the imperatives of informed consent. *Frontiers in Psychology*, *7*, 1170. doi:10.3389/fpsyg.2016.01170

DiLillo, D.K., & McChargue, D.E. (2007). Implementing elements of evidence-based practice into scientist-practitioner training at the University of Nebraska-Lincoln. *Journal of Clinical Psychology, 63*(7)*,* 673-685. doi:10.1002/jclp.20375

Farabee, D., Hser, Y. I., Anglin, M. D., & Huang, D. (2004). Recidivism among an early cohort of California’s Proposition 36 offenders. *Criminology and Public Policy, 3,* 563-584. doi: 10.1111/j.1745-9133.2004.tb00063.x

Forde, R. A. (2018). *Bad Psychology: How Forensic Psychology Left Science Behind.* London: Jessica Kingsley Publishers.

Friendship, C., Mann, R. M., & Beech, A. B. (2003). Evaluation of a national prison-based treatment program for sexual offenders in England and Wales. *Journal of Interpersonal Violence, 18*(7), 744-759. doi:10.1177/0886260503253236

Fritzon, K., Doley, R., & Clark, F. (2013). What Works in Reducing Arson‐Related Offending. In L. A. Craig, L. Dixon, & T. A. Gannon (Ed.) *What Works in Offender Rehabilitation: An Evidence‐Based Approach to Assessment and Treatment* (pp. 255-270). West Sussex, UK: Wiley-Blakwell.

Gannon, T. A. (2012). *The Firesetting Intervention Programme for Prisoners*. Unpublished Manual. CORE-FP: University of Kent.

Gannon, T. A., & Lockerbie, L. (2014). *Firesetting Intervention Programme for Mentally Disordered Offenders (FIP-MO)* Version 2.0*.* CORE-FP, University of Kent and Kent Forensic Psychiatry Services, NHS.

Gannon, T. A., & Ward, T. (2014). Where has all the psychology gone? A critical review of evidence-based practice in correctional settings? *Aggression and Violent Behavior, 19*(4)*,* 435-446. doi:10.1016/j.avb.2014.06.006

Gannon, T. A., Alleyne, E., Butler, H., Danby, H., Kapoor, A., Lovell, T., … & Ó Ciardha, C. (2015). Specialist group therapy for psychological factors associated with firesetting: Evidence of a treatment effect from a non-randomised trial with male prisoners. Behaviour Research and Therapy, 73, 42-51. doi:10.1016/j.brat.2015.07.007

Gannon, T. A., Lockerbie, L., & Tyler, N. (2012). A long time coming? The Firesetting Intervention Programme for Mentally Disordered Offenders (FIP-MO). Forensic Update, 116, 1-9.

Gannon, T. A., Ó Ciardha, C., Doley, R., & Alleyne, E. K. A. (2012). The Multi-Trajectory Theory of Adult Firesetting (M-TTAF). *Aggression and Violent Behavior, 17*(2), 107-121. doi:10.1016/j.avb.2011.08.001

Home Office (2018a). *FIRE0401: Deliberate fires attended by the Fire and Rescue Services.* Retrieved from https://www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

Home Office (2018b). *FIRE0402: Fatalities and non-fatal casualties in deliberate fires attended.* Retrieved from https://www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

Lilienfeld, S. O. (2007). Psychological treatments that cause harm. *Perspectives on Psychological Science, 2*(1), 53-70. doi: 10.1111/j.1745-6916.2007.00029.x

Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Cautin, R. L., & Latzman, R. D. (2013). Why many clinical psychologists are resistant to evidence-based practice: Root causes and constructive remedies. *Clinical Psychology Review, 33*(7)*,* 883-900. doi:10.1016/j.cpr.2012.09.008

Lowenkamp, C. T., Pealer, J., Smith, P., & Latessa, E. J. (2006). Adhering to the risk and need principles: Does it matter for supervision-based programs? *Federal Probation, 70,* 3-8.

McGuire, J. (2002). Integrating findings from research reviews. In J. McGuire (Ed.) *Offender Rehabilitation and Treatment: Effective Programmes and Policies to Reduce Reoffending* (pp. 3-38). Chichester: John Wiley & Sons Ltd.

McIntosh, L. G., McMurran, M., Taylor, P. J., & Thomson, L. D. G. (2019). Gaps in measures of adverse outcomes relating to psychological interventions. *Criminal Behaviour and Mental Health,* 1-6. doi: 10.1002/cbm.2100

McMurran, M., & Theodosi, E. (2007). Is treatment non-completion associated with increased reconviction over no treatment? *Psychology, Crime & Law, 13*(4), 333-343. doi: 10.1080/1068360601060374

Mews, A., Di Bella, L., & Purver, M. (2017). *Impact evaluation of the prison-based core sex offender treatment programme.* London, UK: Ministry of Justice.

Ministry of Justice (2015). *Freedom of Information Request: 92479.* Justice Statistics Analytical Services.

Tyler, N., Gannon, T. A., Lockerbie, L., & Ó Ciardha, C. (2018). An evaluation of a specialist firesetting treatment programme for male and female mentally disordered offenders (the FIP-MO). Clinical Psychology & Psychotherapy, 25(3), 388-400. doi:10.1002/cpp.2172

Ward, T., & Stewart, C. A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research and Practice, 34*(4), 353-360. doi:10.1037/0735-7028.34.4.353