

Institution: University of Kent

Unit of Assessment: A4: Psychology, Psychiatry and Neuroscience

Title of case study: The first comprehensive theory-based treatment of firesetting

1. Summary of the impact

Every week, criminal firesetting in the UK causes 65 casualties or deaths (3,380 per year) and costs £42 million (£2.2 billion per year; Arson Prevention Bureau, 2009). Remarkably, no standardised offender treatment programmes have been developed for this common, costly and tragic offence. Responding to this need, psychologists from the School of Psychology at the University of Kent have recently developed the first empirically informed comprehensive theory of firesetting, and from their theory, they have derived the first standardised treatment programmes for firesetters. Already, the research is being used across the UK and Australia in the training, assessment, and treatment practices of clinical professionals who work with adult firesetters. Clinicians in the USA have also been trained in a treatment programme derived from the research. As a result, enhanced, specialised treatment of firesetters is being provided in secure establishments and community settings for the first time. Further, the assessment and treatment programmes developed by our researchers now play a central role in the care, sentence planning and parole decisions for firesetters in the UK.

2. Underpinning research

Considering its human and economic cost, psychologists have given the problem of firesetting scant research attention. Specifically, there has been little or no systematic investigation of differences between firesetters and other offenders. Nor has there been a comprehensive theory of firesetting that integrates research knowledge about types of firesetters (typology) and the causes of their offending (aetiology). No standardised treatments for firesetters have been published or empirically validated. With the aid of a major grant awarded by the ESRC in 2011, psychologists from the University of Kent have generated groundbreaking advances in theory, research, and treatments of firesetting. Researchers in these projects include several members of the Centre for Research and Education in Forensic Psychology (CORE-FP) who were, and still are at the University of Kent: Professor Theresa Gannon, Dr Caoilte Ó Ciardha, Dr Emma Alleyne, CORE-FP research students: Ms Magali Barnoux, Ms Nichola Tyler and Ms Katarina Mozova, and affiliate Dr Rebekah Doley.

The researchers conducted the world's first controlled study examining the clinical treatment needs of firesetters vs. other offenders (Gannon et al., in press). They interviewed 68 imprisoned firesetters and a control group of 68 non-firesetting offenders from ten UK prisons. The groups were carefully matched on relevant factors such as age, sentence length, and number of previous convictions. Prisoners were assessed using validated measures of several psychological variables, and a statistical procedure (discriminant function analysis) was used to identify which of these variables make firesetters psychologically different from other offenders. The results demonstrated that firesetters do indeed have unique psychological characteristics that require attention in theory and treatment, and point to fire-specific and general psychological factors that need to be targeted in order to change firesetting behaviour. So, while firesetters were found to differ from other offenders on fire-specific variables (e.g., identification with fire, poor fire safety awareness, interest in fires, and normalisation of fire), they also differed in other important ways. The single most powerfully differentiating feature of firesetters was that they experienced more angry thoughts than other offenders. Their self-esteem and sense of control were also lower.

Building on this research, the researchers published the first comprehensive theory of firesetting – namely the Multi-Trajectory Theory of Adult Firesetting (M-TTAF; Gannon et al., 2012). The theory integrated the most clinically useful and empirically validated aspects of previous theoretical accounts of firesetting. It also built on a range of empirical evidence including findings emerging from the research then in progress by CORE-FP (e.g., Gannon & Barrowcliffe, 2012). The theory is the first to integrate typological and aetiological accounts of firesetting. That is, it provides a



comprehensive framework for the analysis of both the *types* of firesetter who present in legal and clinical settings, and the *causes* of their offending.

In so doing, the M-TTAF identifies five causal pathways that lead to offending, which include interest in fires and also antisocial cognition, grievance, the need for recognition/expression of emotion, and a multi-faceted pathway which characterises offenders with complex, serious problems (e.g., abusive experiences and a developing interest in fire during childhood, impulsivity, and attitudes that support criminal offending). Thus, unlike other theories, it recognises the importance of fire-specific variables, but also accounts for firesetting by offenders who are not particularly interested in fire (e.g., those who use fire to express anger or to conceal other crimes). Uniquely, it considers both the proximal (i.e., immediately recent) and distal (i.e., personality and life history) causes of firesetting, and explicitly details how they interact. It proposes that in general, distal factors do not themselves cause firesetting directly, but rather moderate the effect of proximal factors. For example, for a person with depressive and impulsive tendencies (distal personality factors), a relationship breakdown (a proximal factor) will be more likely to trigger firesetting in order to punish or seek recognition from their ex-partner. In sum, the M-TTAF provides professionals with a new way of conceptualising the cluster of motivations and risk factors leading to firesetting. It has been integral to the development of new assessment and treatment programmes by psychologists at the University of Kent and in Australia.

3. References to the research

Gannon, T.A., & Pina, A. (2010). Firesetting: Psychopathology, theory and treatment. *Aggression and Violent Behavior, 15*, 224-238. doi: 10.1016/j.avb.2010.01.001

Gannon, T.A., & Barrowcliffe, E. (2012). Firesetting in the general population: The development and validation of the Fire Setting and Fire Proclivity scales. *Legal and Criminological Psychology*, 17, 105-122. doi: 10.1348/135532510X523203

Gannon, T.A., Ó Ciardha, C., Doley, R.M., & Alleyne, E.K.A. (2012). The Multi-Trajectory Theory of Adult Firesetting. *Aggression and Violent Behavior, 17*, 107-121. doi: 10.1016/j.avb.2011.08.001 (see REF2)

Gannon, T.A., Ó Ciardha, C., Barnoux, M.F.L., Tyler, N., Mozova, K., & Alleyne, E.K.A. (in press). Male imprisoned firesetters have different characteristics than other imprisoned offenders and require specialist treatment. *Psychiatry: Interpersonal and Biological Processes.*

Research Funding:

Gannon, T. A.; ESRC; *The development and evaluation of a treatment programme for firesetters.* (RES-062-23-2522); 31 Jan 2011 – 1 Feb 2014; Award made; £563,311.

4. Details of the impact

In the absence of a comprehensive aetiological and typological account of firesetting, offenders who had set fires did not generally receive treatment. When they did, it was developed 'in house' and was unable to target less prototypical yet commonly seen firesetters. Professor Gannon encountered this problem in 2008 during the course of her clinical practice, where she was asked to develop an in-house treatment for sexual offenders who also set fires. At this point, Professor Gannon and her colleagues at the University of Kent began to formulate the theory and research specified in this case study (e.g., Gannon & Pina, 2010).

Later, once the M-TTAF had been developed and additional research evidence into the specialist treatment needs of firesetters had been gathered (e.g., Gannon et al., in press), two key treatment manuals were developed. One of these manuals was developed for the assessment and treatment of firesetters within secure mental health services (the Fire Intervention Programme for Mentally Disordered Offenders (FIP-MO); section 5, item 1) and one was developed for the assessment and treatment of firesetters within the prison service (the Fire Intervention Programme for Prisoners (FIPP; section 5, item 2). The aim of these manuals was to provide empirically informed standardised clinical assessment and treatment procedures for adult firesetters in the absence of any accepted protocol. In these manuals, treatment needs are formulated according to the M-TTAF theory, enabling clinicians to provide a suite of individualised interventions tailored for each firesetter.



Through these treatment manuals, the theory and research developed by our researchers has informed (1) the training, assessment, and treatment practices of clinical professionals who work with adult firesetters, both within secure establishments and community settings (FIP-MO), and (2) the sentence and care-planning structures provided for incarcerated adult firesetters (FIPP).

The FIP-MO in mental health settings:

Within both private and NHS secure mental health services, the FIP-MO is being utilised by psychologists, assistant psychologists and multidisciplinary professionals who have been specifically trained by Professor Gannon using a training package derived from her research (see section 3). The FIP-MO is being implemented across 12 establishments run by 9 NHS or private health care trusts nationally:

Allington Centre (Kent and Medway NHS and Social Care Partnership Trust)

Alpha Hospital Bury (Nottinghamshire Healthcare)

Arnold Lodge (Nottinghamshire Healthcare)

Broadmoor Hospital (West London Mental Health NHS Trust)

Brockfield House (South Essex NHS University Partnership Trust),

Guild Lodge (Lancashire Care NHS Foundation Trust)

Hellingly Centre (Sussex NHS Partnership Trust)

Newton Lodge (South West Yorkshire Partnership NHS Foundation Trust)

Ravenswood House (Southern Health NHS Foundation Trust)

Roseberry Park (Tees, Esk, and Wear Valleys NHS Foundation Trust)

St Andrews Hospital (St Andrews Healthcare)

Trevor Gibbens Unit (Kent and Medway NHS and Social Care Partnership Trust)

By 31st July 2013, a total of 50 patients had been assessed and treated using the FIP-MO. The treatment of these patients is complete and controlled evaluation research comparing these patients to a treatment-as-usual group, and is due to complete in 2014. Professionals from the establishments implementing the FIP-MO have verified that the FIP-MO has: developed a care pathway for deliberate firesetters which did not exist in secure mental health services previously (section 5, item 4); provided increased confidence to professionals working with deliberate firesetters; and improved overall treatment provision for this client group (section 5, items 5, 6).

The FIPP in prisons:

Within HM Prison Service, the FIPP is being utilised by psychologists and assistant psychologists across four prison establishments in the South of England (HMP Elmley, HMP Isle of Wight, HMP Sheppey, HMP Stanford Hill). All psychologists are trained in full by Professor Gannon using a training package derived from her research. Notably, prisoner transfers have been taking place since January 2013 from prisons nationally to both Sheppey and Elmley prisons to ensure that firesetters are having their particular needs met. By 31st July 2013, a total of 75 prisoners had been assessed using the FIPP, 45 had received FIPP treatment, and a further 20 are currently receiving FIPP treatment. Similarly to the FIP-MO, controlled evaluation research for the FIPP is due to complete in 2014. However, professionals from the establishments implementing the FIPP have verified that the FIPP is playing a key role in sentence planning and parole board hearings for firesetting prisoners (section 5, item 7) and is currently meeting a need that is not being met by existing treatment programmes within HM Prison Service (section 5, item 8). For example, the FIPP has been described as representing, "a significant step forward in the treatment of this specialised population" (section 5, item 8) the results of which make up the "final Dossier disclosed to the offender, parole board, solicitors, and probation" (section 5, item 10).

In addition to the standardised FIP-MO and FIPP assessment and treatment programmes currently being utilised, the comprehensive aetiological account of firesetting (i.e., the M-TTAF; Gannon et al., 2012) has been used by practitioner professionals both nationally and internationally in other assessment and intervention initiatives. For example, in Australia, Fritzon and colleagues (2013) have developed a treatment manual for individualised intervention with firesetters in the Australian community (section 5, items 3, 11), and are beginning to implement the intervention. Most notably, treatment provision within this intervention is planned according to one of the five identifiable pathways outlined by the M-TTAF developed by our researchers (section 5, item 9).



Furthermore, within the prison service and private practice in the UK, psychologists are also using the M-TTAF model as an empirically informed guide to undertake risk assessments with deliberate firesetters. There are currently no validated risk assessments for use with firesetters and so in the absence of such a tool, professionals are using the M-TTAF in a clinically structured manner to develop their knowledge of this client group and to guide appropriate questioning for risk assessment purposes (section 5, item 11).

5. Sources to corroborate the impact

Sources can be obtained by emailing psychref@kent.ac.uk.

Treatment manuals that utilise the M-TTAF and/or the treatment needs research:

- 1. Gannon, T. A., & Lockerbie, L. (2012). *The Fire Intervention Programme for Mentally Disordered Offenders (FIP-MO)*. Treatment manual for clinical provision in the Health Services. CORE-FP, University of Kent and Kent Forensic Psychiatry Service, NHS.
- 2. Gannon, T. A. (2012). *The Fire Intervention Programme for Prisoners (FIPP)*. Treatment manual for clinical provision in the Prison Service. CORE-FP: University of Kent.
- 3. Fritzon, K., Doley, R., Davey, L., & McEwan, T. (2013). Firesetter treatment program clinician manual. *Australian Centre for Arson Research and Treatment*, Bond University, Gold Coast, QLD.

Corroboration from prison/health service users:

- 4. Statement confirming that the Fire Intervention Programme for Mentally Disordered Offenders plays a key role in the care pathway of mentally disordered firesetting patients. Alpha Hospitals.
- 5. Statement confirming the role of the Fire Intervention Programme for Mentally Disordered Offenders within Sussex Partnership NHS Foundation Trust. Trainee Forensic Psychologist, Sussex Partnership NHS Foundation Trust.
- 6. Statement confirming that the Fire Intervention Programme for Mentally Disordered Offenders plays a key role in the care pathway and treatment of mentally disordered firesetting patients. Trainee Forensic Psychologist, Sussex Partnership NHS Foundation Trust.
- 7. Statement confirming that the Fire Intervention Programme for Prisoners plays a key role in sentence planning and parole board hearings. Senior Officer/Offender Supervisor, HMP Swaleside.
- 8. Statement confirming that the Fire Intervention Programme for Prisoners plays a key role in meeting the unmet needs of prisoners within the prison service. CALM Treatment Manager, HMP Guys Marsh, South West Psychological Services, Eastern Cluster.
- 9. Statement confirming that the M-TTAF has informed treatment intervention manual and practice with firesetters in the Australian community. Registered Psychologist, Bond University.
- 10. Statement confirming that the M-TTAF has informed risk assessment and thinking and development regarding firesetters. Trainee Forensic Psychologist, HMP Wakefield.

Publication for practitioners detailing the use of research in treatment:

11. Fritzon, K., Doley, R., & Clark, F. (2013). What works in reducing arson-related offending. In Craig, L., Dixon, L., & Gannon, T. A. (Eds), *What works in offender rehabilitation: An evidence based approach to assessment and treatment* (pp. 255-270). Chichester, UK: Wiley-Blackwell.