Process Evaluation of an Educational Programme for Preventing Recidivism by Adult Firesetters

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Purpose. Fire-related offences are costly in human and financial terms. Fire education is widely used with juveniles and with adults in forensic psychiatric settings, however with prison/probation clients there has been a lack of focus on its potential. We asked participants of a structured fire education programme for adults how they experienced it, and its impact on their feelings about firesetting.

Design. Participants were 15 programme completers, including 10 males and 5 females. All were adults that had attended the programme during their sentence; either in the community or whilst in custody.

Findings. Using an inductive thematic analysis we interpreted the following themes: A Supportive and Responsive Approach, Impactful Learning Materials and Methods, A New Way of Thinking, and Picking Up the Pieces. We propose that the intervention may activate change through its powerful methods including fact-based arguments and support from legitimate experts.

Practical implications. FIRE-P is a novel example of a specialist structured fire education programme for adult firesetters. This is the first paper to outline its structure and content. Understanding how change occurs in FIRE-P has implications for intervention design and delivery with this client group.

Originality. This is the first qualitative study of a structured fire education programme for adults, and provides researchers and practitioners with insight into the ingredients of a successful fire education programme.

Keywords: arson treatment; fire safety education; firesetting; realistic evaluation; treatment delivery.

In England, the location of the current study, deliberate firesetting represents nearly one-half (45%) of all fires attended (Home Office, 2021). Each year in England, there are more than 1,000 injuries and 50 fatalities due to deliberate firesetting[1] (Home Office, 2021), and insurance companies pay out up to £450m in arson-related claims (Arson Prevention Forum, 2017). Given these harms, one function of Fire Services is to prevent recidivism by known firesetters, and national surveys have confirmed that with juveniles fire safety education is the most commonly used agency intervention (Kolko *et al*., 2008; Palmer *et al*., 2007). With

adults however, Palmer and her colleagues (2007) reported a general absence of standardised firesetter interventions or specialist provision in prison and probation services. Regarding specialist educational provision this situation persists, to our knowledge, fifteen years since that survey. The current study was motivated by the need to develop interventions for adult firesetting offenders, and to this end, drew on the experiences of participants of a structured intervention programme for adult firesetters.

What is Fire Education and How Might it Prevent Firesetting

Educational awareness-raising approaches to firesetting prevention teach the dangers and unpredictability of fire, recognising fire, fire safety skills, and when to seek help. Such intervention may challenge assumptions, germane to firesetters, regarding the use of fire. In Gannon *et al*. (2013), fire-related factors, including an interest in serious fires and poor fire safety awareness, discriminated adult firesetters from matched non-firesetter peers. Attesting to its perceived relevance in inhibiting firesetting behaviour, fire education is widely used in treatment plans for preventing adult firesetting in forensic psychiatric samples (e.g., Annesley *et al*., 2017; Taylor *et al*., 2006). Surprisingly however, the use of fire education with adults has not been empirically validated.

The clinical appeal of fire education coincides with theories suggesting firesetting behaviour is the product of social learning and reinforcement contingencies, particularly a need to gain environmental control in the context of developmental disadvantage (Jackson *et al*., 1987; Vreeland and Levin, 1980). Alongside sensory excitement, manipulating fire confers an intrinsically reinforcing and previously lacked sense of personal effectiveness. Notably, social learning theory emphasises the expectancies developed by experiencing the behaviour. Cognitions may either support offending generally or firesetting specifically. Empirically-based examples of the latter may include a belief that fire is controllable, and that the dangerousness and unpredictability of fire can be managed (see Gannon *et al*., 2013;

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Ó Ciardha and Gannon, 2012). Individuals holding these beliefs may be more likely to employ fire as a tool to achieve their aims: a process that Ó Ciardha and Gannon (2012) propose may occur due to cognitive deficits or poor education. Consequently, education regarding the uncontrollability of fire and its potential consequences may be an essential feature of successful intervention.

Bringing together previous theories and integrating contemporary research, the most recent model is the Multi-Trajectory Theory of Adult Firesetting (M-TTAF: Gannon *et al*., 2012). The M-TTAF posits five trajectories: a fascination with fire; a need to express emotion; grievance against others; antisocial cognition; and, a multifaceted pathway that includes a traumatic childhood and offence-supporting attitudes. The model predicts that the thoughts and feelings experienced around the time of firesetting will determine whether or not the behaviour becomes reinforced (Gannon *et al*., 2012, p.116). As acknowledged by this model and emphasised above, by changing knowledge structures fire education may play an important role.

Even in the wider literature, the rationale linking educational intervention and reducing recidivism is unclear: whether to increase employability skills to reduce dependency on illegitimate income, or, to reduce criminogenic identities and cognitions. Meta-analytic reviews find support for the effectiveness of educational programmes with adults (e.g., Bozick *et al.*, 2018; Ellison *et al.*, 2017; MacKenzie, 2006; Wilson *et al.*, 2000). A consistent finding however is that the information provided in the primary studies is insufficient to discern the characteristics of effective educational programmes (e.g., dosage, training of the teachers). Therefore, too often, we do not know *how* educational programmes work – a point echoing a conclusion by MacKenzie and Farrington (2015) in their review of reviews.

The Current Study

Recognising the shortage, highlighted at the outset, of fire education programmes for adult offenders subject to prison or probation, Hampshire Fire & Rescue Service developed a structured course to be delivered by experienced fire officers: the Firesetters' Integrated Responsive Educational Programme (FIRE-P; described below). At the time of writing, FIRE-P is only delivered in Hampshire and the Isle of Wight, where it is a sentencing option. However, across the UK, FIRE-P is a unique example of a structured educational programme for preventing firesetting by adults.

The current study was the second stage of a sequential process of programme evaluation. Stage one aimed to measure effectiveness (see <Authors, submitted>) while stage two sought to explain why outcomes appear as they do. Process evaluation enhances the explanatory power of outcome evaluation (Medical Research Council, 2008), and qualitative analyses offer an ideal way to discover the processes that lead to change. Asking the participants themselves to discuss their perception of the programme and its delivery enables a better understanding of when and how changes occurred. This is consistent with 'realistic evaluation' (Pawson and Tilley, 1997) which seeks to explain the processes in open systems, including not only the characteristics of the intervention but also the context and mechanisms occurring between the intervention being introduced and the outcomes observed.

Given the potential benefit of fire education, discussed above, our study aimed to answer two research questions: (1) How is the programme experienced by its participants, and (2) What were the mechanisms of positive or negative change during the process of programme completion?

Method

Participants

Sampling involved writing to potential participants with up-to-date contact details followed by number contacting with reference to fire service and probation records. No

reward/incentive for participation was offered. Fifteen participants were identified: five females, ten males. Participant ages ranged between 24 - 71 years (M=47.86, SD=13.26) and all completed FIRE-P between 2014 and 2018. Six participants engaged in a custodial setting (five in group format); and nine while in the community (seven in individual format). Two prison participants engaged on a voluntary basis; the remaining participants whether in prison or in the community were mandated as part of their sentence plan/licence conditions. At the time of interview three participants had completed within the past year, but on average slightly over two years (M_{months}=28.60, SD_{months}=20.73) had elapsed since programme completion.

Design and Analysis

To investigate how the programme is experienced that might contribute to positive/negative change, we used semi-structured interviews underpinned by a qualitative approach. As discussed earlier, qualitative research offers advantages in being open to the processes and contexts that support therapeutic change; aspects constrained by more closed quantitative methodologies.

Interview data were transcribed and subjected to thematic analysis (TA) using the six-phase process that systematically builds from data familiarisation to coding and theme development (see Braun & Clarke, 2006). TA was chosen as we wished to remain anchored in the data, with a realist stance, without being tied to an explicit theoretical assumption or position. To ensure interpretations were reliably data-driven, the second author coded the transcripts, then formed themes, and presented these to the first author. Although there were no disagreements, this process led to a strengthening of the theme labels.

Materials

The Intervention Programme

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FIRE-P comprises seven two hour sessions focusing on educating service users to prevent fire recidivism. Sessions are supported by a range of modalities, such as slideshows, film clips, workbooks, and - where permitted - the introduction of a dog to demonstrate its effectiveness in finding traces of accelerants. The educational topics cover basic fire knowledge, the speed and intensity of fire, motives for arson, and immediate consequences. Table I provides a session-by-session programme outline. By encouraging a holistic perspective using the cognitive triad of self, other, and future (Beck *et al.*, 1979) FIRE-P may develop more adaptive ways of thinking.

[Table I near here]

The programme is delivered by two fire service staff, either with an individual participant or in small groups of up to eight. The overwhelming majority of referrals are from the National Probation Service. Referral criteria include: convicted of, and recognising own culpability for, a deliberate firesetting offence; IQ ≥70; not actively psychotic; no diagnosis of psychopathic disorder; and not convicted of intentional homicide by arson, i.e., murder[2]. Suitability is assessed case-by-case; referrals with precluding factors such as substance abuse may be required to complete treatment before commencement.

In being developed by a Fire Service, the principles of effective intervention (risk-needs-responsivity, Andrews *et al.*, 1990) were not considered. Intervention dosage was unmatched to participants' risk levels and only fire-specific factors were targeted. However, consistent with the responsivity principle, the client is placed at the heart of the intervention plan, ensuring that the working relationship is built on interpersonal respect and the intervention is structured to respond to the specific learning style of the client.

Interview Schedule

Interviews aimed to elicit detailed responses to questions within four categories, including 'Background' (e.g., 'What offence led to your FIRE-P referral?'), 'Programme

Perceptions' (e.g., 'What did you think you would learn from the experience?'), 'During the Course' (e.g., 'How did you find the delivery of the sessions?') and Life after the Programme' (e.g., 'How has FIRE-P made you feel about your firesetting behaviour?'). To maximise responses, all questions had supplementary 'probes'. For instance, the first question, 'What offence led to your referral?' could easily be answered with 'arson'; and so probing about context and victims resulted in a more in-depth account.

Ethical Considerations

Approval for the study was given by a University Ethics Committee. All participants were reminded verbally and in writing that their participation was voluntary and that they could withdraw at any time from the process. They were assured that, to ensure confidentiality, any identifying information that they might disclose would be redacted during the transcription process.

Procedure

Following receipt of an invitation letter giving information about the research, participants received a follow-up phone call. If they were interested, a mutually convenient time and location was arranged for their interviews. Interviews took place in a variety of settings ranging from prison and probation offices, to participants' homes. Interviewees were advised to allow up to one hour for the interviews, although all lasted approximately 30 minutes (range = 27-39).

After reading a participant information sheet and discussing any questions relating to the study, participants signed a consent form. Each was reminded that they could decline to answer any questions that might cause distress and that the interview could be terminated at any time. At the end of the interview, participants were debriefed and asked if they wanted to take up the option of receiving a project summary, when available.

Owing to restrictions on taking electronic devices into some prisons, data collection regarding imprisoned clients was confined to extensive note-taking. For these clients (*n*=5) a transcript was compiled from contemporaneous notes. For all others audio-recording was the basis for transcripts, with all participant names and identifiable institutional details removed.

Results

The analysis generated four themes: i) A supportive and responsive approach, ii) Impactful learning materials and methods; iii) A new way of thinking, and iv) Picking up the pieces. Theme 1 and 2 addressed the first research question (what was participants' experience of the programme?), while themes 2, 3, and 4 answered the second research question (what were the mechanisms of change during the process of programme completion?). Each main theme was comprised of sub-themes, discussed below within each main theme.

Theme 1: A Supportive and Responsive Approach

Discussion of programme perceptions revealed a main theme of the programme being A Supportive and Responsive Approach, underpinned by four sub-themes: 'non-judgemental and reassuring'; 'individualised support'; 'responsive to my offending'; and, 'internalised motivation to engage'.

Non-judgemental and Reassuring

Participants reported having experienced the facilitators as non-judgemental and reassuring. This was critical for people who had seriously endangered others in the process of their offending, and had to live with the stigma of arson. Participant 11 for instance thought he might be judged, but was "put at ease and felt comfortable". Similarly, Participant 7 had a history of low self-esteem and depression, and felt supported despite feeling anxious

before starting group, stating: "They didn't judge you. They made you feel, 'ok, you've done this, you're going to learn from it'. They made you feel ok."

Individualised Support

Most participants highlighted the individualised support due to the high tutor-to-learner ratio. Participant 7 was one of eight in this sample that experienced the programme in group format. The programme was always facilitated by two fire service staff, and due to limited referral numbers, groups frequently comprised just two or three learners thereby allowing scope for individual attention. Nevertheless, a number of participants mentioned that they would have preferred the individualised version (e.g., "you don't know who you might be associating with", Participant 2). Although Participant 8 felt his experience was affected because his co-participant had drugs problems and was 'slower' than him, he explained that the facilitators were clear and the session content responded to both of their differing offence circumstances.

Responsive to My Offending

It is interesting that Participant 8 thought that the sessions matched his and his co-participant's needs despite the contrast between their offences: arson in a suicide attempt, versus in an act of retribution. Indeed, all participants felt that the programme was responsive to their offending despite the differing motives for firesetting in the sample interviewed, ranging from self-immolation to insurance fraud. Of the 15 participants, the offending of 10 could be characterised as following the 'emotionally expressive/need for recognition' pathway (M-TTAF: Gannon *et al*., 2012), with four participants stating an intention to complete suicide. Within the M-TTAF, stressful life events, such as breakdown of family relationships, can exacerbate pre-existing vulnerabilities such as problems with communication and emotional regulation. Unprotected by good mental health and self-esteem, a need to express emotion results in the firesetting offence – a message of distress;

sometimes a cry for help. The participants' accounts suggested that the facilitators worked alongside the offence characteristics to increase participants' knowledge of fire safety.

Internalised Motivation to Engage

Although the programme was mandatory for the large majority (13/15) of participants, it was evident that the programme engendered an internalised motivation to engage. Mandating intervention, notwithstanding the ethical considerations, may have a negative effect particularly in custodial settings (Parhar *et al*., 2008). However, when asked for their feelings about the course being compulsory, participants agreed that this turned out to be positive, as without it they would have declined participation. Indeed, initial reticence often dissipated after starting ("although I was reluctant at first, once I started the course, I just joined in and engaged with it", Participant 4). Participant 11 who had started many courses in prison commented: "It was compulsory, but I would have gone anyway, because I wanted to learn… I've done a lot of courses in prison… I've never completed anything before. It felt good. Since doing the course, it's given me confidence".

Theme 2: Impactful Learning Methods and Materials

The second theme captured participants' impressions of the programme fabric with sub-themes of 'diversity of teaching materials', 'points that stay with you'*,* and 'fire officers as facilitators' supporting a superordinate theme of Impactful Learning Methods and Materials.

Diversity of Teaching Materials

The range of modalities supporting the programme was introduced earlier. Although engaging involuntary clients can be challenging, there were several positive comments regarding course methods and materials. For instance, Participant 10 felt that building up a course-work portfolio developed a sense of achievement and progress: "booklets themselves were spot on. Also given leaflets and handouts. Made yourself a folder over the course to

take away." Participants also mentioned the programme's use of video clips. Accordingly, participants appreciated the diversity of teaching materials. The homework tasks allowed participants to engage further, consolidating their knowledge, and contributing to a sense of ownership of learning.

Points that Stay with You

The use of video clips about the effects of fire is an experiential learning activity, as is the demonstration by the fire dog. Evidence suggested that these were points that stay with you (e.g., "videos about the effects of fire. They really stand out." Participant 9). Many participants cited the visual materials and hands-on activities as helping to imprint in memory the dangers of fire. For instance, Participant 14 was struck by the film clips showing "how quick the fire spread and got really bad, how much danger people were in." Experiential enhancements can bring to life course concepts, enhancing learning for all students but particularly for those with more concrete learning styles (Belisle *et al*., 2020). Drawing on learners' reflective accounts Belisle and colleagues proposed that experiential activities help change perspectives and cultivate empathy, motivating students to transformative action.

Fire Officers as Facilitators

The benefit of fire officers as facilitators was also apparent in participants' responses in that, using their specialist experience and knowledge, the fire officers could focus the impact from the film clips and other content. Participant 9 found that one of the facilitators had attended her fire scene, and this had really helped in discussing her case. More generally, Participant 7 expressed "You have to hear it in a structured way and you have to hear it from a firefighter. You can read things in the newspaper, but to hear things from the horse's mouth, it's worth more really". Participants appreciated the effective use of authority, a serious but collaborative style, in the practice of fire officer facilitators.

Theme 3: A New Way of Thinking

The third theme, A New Way of Thinking, reflected a wider impact of the educational intervention and was represented by the subthemes 'we thought we knew it all', and 'changing perspective'. Many participants shared a sense of surprise about what they had learned. Low level of fire safety awareness has been identified as a key factor that discriminates firesetters from general non-firesetting prisoners (Gannon *et al.*, 2013).

'We Thought We Knew It All'

Although at commencement some participants thought that they did not stand to learn much from the programme due to their self-assessed high pre-existing knowledge about fire, more than one-half expressed shock from learning just how fast a fire can take hold and how little control one subsequently has. For example, Participant 2, after learning about the speed and spread of fire, expressed astonishment at "just how quickly – how fast, the velocity and how fast it accelerates." This came despite acknowledging that at the outset he thought he would teach the fire professionals about fire.

Changing Perspective

Relatedly there was a sub-theme of changing perspective due to the programme. Years before his offence (insurance fraud), Participant 5 reported having completed a firefighter's course and said that his crime had been carefully planned so that no-one would get hurt. Yet he expressed surprise by what he had learned: "There's more victims than I initially thought. You forget there's firefighters who go in and risk their lives for it, there's the clean-up crews who risk stuff collapsing on them. There's hundreds of people that could be affected potentially." Participant 11 following discussion of his learning about the lethal effect of smoke, commented that it "made me realise how lucky they were to get out", illustrating the impact on him of changing his perspective.

Theme 4: Picking Up the Pieces

This final main theme was identified from the discussion of life after the programme, and comprised two underpinning sub-themes: caring and repairing, and moving forward without fire.

Caring and Repairing

This subtheme captured the function, in building participants' recovery, of restoring and maintaining relationships and social networks. Participants whose families had been traumatised were humbled by the post-programme support they had received from fire officers. Participant 8 for example discussed his daughter's fear that she was not safe from fire anywhere. He explained that fire intervention officers had already been to visit her at the home, allaying some of her fears, and a visit to her school was being planned to talk to her class. Another participant, more aware of and concerned about the dangers of domestic fire, explained: "At the end of the course, fire officers offered to fit fire alarms at my daughter's house." Participant 10). This not only reflects the facilitators' empathy, but reinforces a collaborative alliance based on respect and caring. The fire officers were seen to be not just 'doing a job'; they were perceived to be listening to, and acting on, participants' concerns.

Moving Forward Without Fire

In moving forward, rebuilding relationships had proven difficult for many participants. Some had irrevocably ruptured relationships and others had been able to return to their families, but could not forgive themselves (e.g., "That's going to affect people for the rest of their lives. My kids are now affected by soaps, memories, fireworks." Participant 11). Arson offenders have difficulty securing rented accommodation, but one benefit of the course that participants mentioned is the Fire Service Certificate distributed at programme completion (e.g., "achieve a certificate that helped with housing." Participant 12). Linked to the changed perspective discussed above and the related realisation that events could have

transpired differently in terms of fatalities, some participants made unambiguous remarks about the prospect of arson re-offending. Representative of these was the comment by Participant 13: "absolutely no desire [to set fire], had a lighter when I smoked and never set fire to anything."

Discussion

Arson is a devastating offence, and fire education by fire professionals lacks standardisation and is under-employed in criminal justice contexts. No evaluations of educational interventions for adults are available in the public domain, and the limited provision in criminal justice services may reflect this lack of published evaluation. Since outcome patterns are a function of intervention context and mechanisms (Pawson and Tilley, 1997), the current study aimed to explore with participants how they experienced the programme, and whether any related mechanisms of change could be identified. This was important since clients do not passively receive interventions; rather they interact with the content, the materials, and the staff facilitating them. Indeed, the theoretical explanation for the connection between education and changes in behaviour has been "conspicuously absent" from the criminological research literature (MacKenzie and Farrington, 2015, p.585). The mechanisms (themes) identified in the current study indicate, without precedent in the literature, the ingredients of successful fire education.

The interpretation of results, as with any study, must be in the context of the sample derivation. All participants approached did respond and were keen to participate, even though reaching some required perseverance. Relatedly, all but three participants completed the programme more than 12 months previously. Nevertheless participants retained vivid memories of their experiences. Although we argue that this signifies the force of the programme's messages, maintenance of the same telephone contact details since participation may indicate a relatively stable and conformist lifestyle, and a corresponding respect for

officials/programmes. It is therefore important to consider that a wider sample may include untraceable or unresponsive characters, and such participants may have had alternative experiences of the programme or fewer to recount.

Review of Results and Theoretical Integration

The interviews suggested that participants appreciated the non-judgemental and individualised support from specialist professionals. Individualised support was beneficial in responding to participants' learning needs, including the need to avoid being exposed to social judgement. Relatedly, participants considered each offence to be totally different, whether in terms of motivation or technical factors at play. Participants seemingly valued the ability of the facilitators to tailor the programme to their individual offence circumstances. Therefore, on the evidence of the interviewed participants, a measure of success in modifying teaching strategies to maximise learning is apparent - consistent with specific responsivity from the principles of effective intervention (Bonta and Andrews, 2017).

Individualised support from non-judgemental and reassuring facilitators may have provided a context that opened up participant engagement. Indeed within our first theme we identified a sub-theme 'internalised motivation to engage'. Many referrals may be interested in fire and therefore primed to pay attention to the programme's messages. Considered within the Elaboration Likelihood Model of persuasion (Petty *et al*., 1981), this involves a central route to persuasion. Here the person engages in careful thinking about the content, with fact-based arguments being most persuasive. Other participants less inherently interested in the content detail may take a peripheral route to persuasion. This route emphasises the credentials of the teacher, i.e., whether they are perceived to be a genuine expert on the topic. FIRE-P may be persuasive whether a participant is seeking fact-based arguments or credentialed experts (in service uniform).

The specific focus of the programme may contribute to its perceived helpfulness. Referrals know that they will receive fire safety education and a certificate if they complete. Correctional interventions focussing on the specific needs of an offender are thought more likely to have an impact on the particular problem (Inciardi *et al*., 2004; Koons *et al*., 1997). Indeed, serial arsonists have specifically requested educational intervention on fire (Haines et al., 2006, cited by Bell, 2016). When Haines and colleagues asked what intervention would be helpful to address firesetting, many participants reportedly stated that learning about the consequences of fire would be beneficial, including education about how dangerous fire can be. Participants considered irrelevant those generalised interventions such as anger management and other cognitive-based therapies, as they failed to make clear the link between the skills taught and the original offending behaviour. The face validity of the FIRE-P may explain its high completion rate: 100% in the current participants, and 79% in the outcome evaluation (<Authors, submitted>).

The above discussion offers insight into the context for change. Interestingly, participants rarely mentioned contextual organisational factors in prison and probation services that facilitated the success of the programme. In fact, one of the community participants regretted that they had not been offered such a programme while in custody where there were fewer obstacles to his attendance. Perhaps obliviated by the length of the intervening period, it is unknown what, if any, other therapeutic interventions the current participants attended. Certainly, the role of other interventions was only mentioned indirectly - in the context of FIRE-P being more offence-relevant and therefore engaging.

On the question of what were the mechanisms of change during the process of programme completion, analysis indicated 'a new way of thinking' in participants brought by their increased awareness and new perspective. Some were shaken by the potential seriousness of their offence (what might have been); and some were remorseful for the people

affected. Formulations of the literature (Ó Ciardha and Gannon, 2012; Prins, 1995) suggest that firesetters have limited awareness of the actual dangers of fire. The current intervention therefore may, as proposed at the outset, undermine knowledge structures supporting the use of fire as a tool for solving problems – a key target of intervention according to the multi-trajectory theory (Gannon *et al*., 2012). The extent to which educational programmes can measurably change such knowledge structures awaits further research.

The results suggested that the methods and materials stayed with participants, cultivated a broader view, and in many cases, inspired action in terms of their safety and that of their families. Inculcating the broader view is an effect of education that might influence judgements and decisions. This is consistent with construal level theory (CLT; Trope and Liberman, 2003). Within CLT, the same event can be construed at multiple levels of psychological distance, most commonly either a high-(abstract/distant) or low-(concrete/near) level. Thinking about a situation with high-level construal entails emphasising the global, superordinate, central features of an event (i.e.*,* stepping back to look at the big picture), whereas thinking about a situation with low-level construal entails focusing on its unique and specific features. Thus, thinking about firesetting with high-level construal one might describe this activity as 'hazardous to others' or 'self-centred', whereas with a low-level construal one might focus instead on fire colours, or on removing unpleasant feelings. Altering the construal level may alter the situational decision-making.

Serin *et al*. (2016) argue that for any positive factor to be protective an individual must exercise some agency when faced with opportunity to offend. Internal change must exert more influence than prevailing criminal risk. Impactful education provides one such internal change; a cognitive transformation that activates agency to self-intervene in one's life. It is possible therefore that the injection of fire safety awareness combined with broader/consequential thinking may unsettle prior feelings of mastery and buffer risk in those

with a propensity to use fire as a tool: that is, the intervention interacts with a risk factor to nullify its effect (Lösel and Farrington, 2012). The capacity to teach individuals to think about their offending situations in a different way may partly explain the success of cognitive behavioural therapy in reducing general recidivism (Andrews and Bonta, 2010; Landenberger and Lipsey, 2005), and provides a mechanism by which education may be rehabilitative in correctional populations.

Implications for Policy and Practice

In the present context of a system-wide absence of specialist standardised educational programmes for adult firesetters (Palmer et al., 2007), our results have implications for the design of such intervention or indeed the adoption of FIRE-P itself. Considering the lack of standardisation and accompanying wide variation in provision for children and young people (Foster, 2020), learning may also be drawn by providers of fire safety work with juveniles. In the UK, this is particularly germane given the Government's expectation that Fire and Rescue Services target their fire safety, prevention and protection resources on those most likely engage in deliberate firesetting (Home Office, 2018).

An advantage of FIRE-P, for users and providers, is its short duration. Other brief offending-focussed motivational programmes have shown effectiveness in controlled studies (e.g., Anstiss *et al*., 2011; Pearson *et al*., 2011). Brief interventions minimise the risk of non-completion, which may be harmful (McMurren and Theodosi, 2007). Focus on fire safety and awareness of consequences via FIRE-P is, however, likely only one part of a sentence plan for these offenders. For some interview participants with emotionally expressive offences it was clear that they had taken their offence as a major warning sign and following the programme were self-monitoring their affective states as well as the safety of their environment. Judging by the near-absence of post-programme fire recidivism, many of these individuals may be able to use their new awareness to manage their socio-affective

functioning. To address clients' risk of general recidivism and to help them further manage their thoughts and feelings, some may however benefit from onward referral, e.g., for longer-term cognitive-behavioural therapy. Likewise, unless offending is limited to instrumental firesetting onward referral might be beneficial in cases where the motive is to conceal another crime. Here FIRE-P's educational content may play the important role of changing cost-to-benefit ratios for arson; increasing salience of costs generally, considering the damaging effects of fire, and/or specifically, when hearing about the traceability of accelerants.

Conclusion

This article contributes to the literature by offering the first process evaluation related to a structured fire education programme (FIRE-P). The educational approach may have worked by sensitively but authoritatively delivering factual arguments using powerful experiential techniques that sparked an internal change or 'new way of thinking' in participants. Arguably the success of the programme reflects the extent to which this internal change undermines prior cognitions supporting the use of fire as a tool in critical situations. Given the potential protection afforded by brief educational intervention sensitively delivered by specialists in this high-stakes area, further research into such programmes and their proposed underpinning mechanisms is warranted. This includes fidelity in adhering to the features of successful fire education, identified in this paper. Renewed focus in this area would benefit stakeholders including not only service-providers and their referrals, but also the range of people affected by the consequences of deliberately set fires.

Notes

1. Firesetting is a broad term comprising any deliberate act of setting a fire, including but not limited to behaviours resulting in conviction for arson (Dickens and Sugarman, 2012).
2. Since FIRE-P is an educational intervention teaching the hazards and dangers of fire, it is not suitable for those not accepting responsibility for their firesetting offence. Also, due to delivery

being by professionals from the fire service rather than from a mental health service it was decided that murder by arson cases were not suitable for this intervention.

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(attached with submission)

Table I. Overview of the Firesetters' Integrated Responsive Educational Programme

Session	Outline
1.	Introduction and assessment questionnaires.
2.	Mechanics of fire. Raising awareness of elements of combustion, physiological effects and hidden dangers. Accurate identification of how fire can spread.
3.	Motives for deliberate firesetting. Exploring and understanding potential motives and personal thoughts and feelings when setting fires. Understanding diverse reasons for setting fires and considering own motives.
4.	Human behaviour and fire. Behaviour in fire situations and the different influences on behaviour in an emergency. Formulating an escape plan.
5.	Consequences. The effects of firesetting to all those involved including social and economic costs. Gaining a better understanding of the true impact of deliberate firesetting.
6.	How victims are affected. Developing empathic responses via role reversal exercises and victim letters.
7.	Conclusion and overview. Recapping and reinforcing key learning points.